

# GALLAUDET UNIVERSITY ANNUAL REPORT OF ACHIEVEMENTS October 1, 2015-September 30, 2016 FISCAL YEAR 2016





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#### OFFICE OF THE PRESIDENT

The Honorable John King Secretary U.S. Department of Education 400 Maryland Avenue, SW Washington, DC 20202

Dear Secretary King:

On behalf of Gallaudet University and the Laurent Clerc National Deaf Education Center (the "Clerc Center), I am pleased to submit this Annual Report of Achievements for Fiscal Year 2016. This report is submitted in accordance with the requirements of the Education of the Deaf Act, which provides in two separate sections that we will:

"... prepare and submit an annual report to the Secretary, and to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate ..." (regarding the University)

"... make an annual report ... to the Secretary of the operations and traditional mission activities of the elementary and secondary education programs ... (regarding the Clerc Center)

Over the course of my first year as president, I have had the opportunity to see firsthand the groundbreaking research by our faculty and the innovative academic offerings provided to deaf, hard of hearing, and deaf-blind students here on our campus.

- Our Visual Language and Visual Learning (VL2) Lab and Brain & Language Laboratory for Neuroimaging (BL2), which
  includes one of the world's most advanced brain imaging systems, functional Near Infrared Spectroscopy (fNIRS), are
  well-positioned to be at the forefront of research into the human capacity to learn and convey language, achieve
  reading mastery, and become a skilled bilingual. This research has the potential to impact not only our students here
  at Gallaudet but bilingual and multilingual students, both hearing and deaf, nationwide.
- Our 6<sup>th</sup> Street redevelopment project, in collaboration with the development firm of The JBG Companies, incorporates DeafSpace design principles to enrich the human experience through architectural design elements that enhance community building, visual language, and the promotion of personal safety and well-being. The development of these principles is an ongoing collaboration between our Office of Campus Design and Planning and the academic programs to promote interest in architecture as a means to improve the experience of people interacting with their environment in a variety of settings through landscape, lighting, and textural design. The ultimate project will incorporate entrepreneurial opportunities for students and interactive and educational space with our neighbors in Northeast D.C., and the city at large.

On behalf of our students, faculty, staff, and alumni, I'd like to thank the Department and Congress for the continued support for the good work being done at Gallaudet University and the Clerc Center.

With our appreciation and warm regards,

Colan

Roberta J. Cordano President



At the New Student BBQ on August 24, 2016, this year's newest additions to Kendall Green enjoyed good food, great company, and a beautiful late afternoon on the plaza. This year had the biggest class in recent history, with the undergraduate class reaching 358 new students.

Photo by: Trent Harper

## **Fiscal Year 2017 Highlights**

All of the data contained in this chapter was collected for the fall semester of Academic Year 2016-2017, which is the first quarter of Fiscal Year (FY) 2017. The data in subsequent chapters covers FY 2016. This chapter contains a variety of numeric tables highlighting the activities of Gallaudet during the current year. Included are data on enrollment, demographics of undergraduate and graduate students, home states of students, international students by country, and data on entering students—including ACT scores, applied/accepted/enrolled students, declared majors and minors.

## **Definitions of Terms Used**

Academic career – Academic career is a student's type of academic pursuit—graduate, undergraduate, professional studies, consortium, or English Language Institute.

Academic year – At Gallaudet, the academic year is considered to be the fall, spring, and summer (September 1 through August 30), unless otherwise noted. Academic Year is the calendar by which courses are offered.

Accepted – See "Admitted"

**Admitted** – A description of the subset of applicants offered admission to a degree-granting or certificate program.

**Alumni** – Students who received a degree, certificate, or other formal award.

**Applied** – A description of a prospective student who has completed an application for enrollment.

**Bachelor of Arts in Interpretation (BAI)** – The Bachelor of Arts in interpretation program is open to deaf, hard of hearing, and hearing undergraduates. Hearing undergraduates apply directly to the BAI program, and are not counted toward the hearing undergraduate cap, which limits the number of the entering class who may be hearing.

**Census date** – At Gallaudet the census date is the fifteenth calendar day, including weekends, from the first day of class in the fall and spring semesters, and is the day on which formal student counts are produced.

**Clerc Center** – The Laurent Clerc National Deaf Education Center is comprised of the Kendall Demonstration Elementary School (KDES), the Model Secondary School for the Deaf (MSSD), and the national mission of improving the quality of education afforded to deaf and hard of hearing students from birth to age 21 throughout the United States.

**Cohort** – A specific group of students established for tracking purposes, such as calculating retention and graduation rates. An example is the six-year graduation rate of the full-time, first-time freshmen cohort.

**Completer** – A student who receives a degree, diploma, certificate, or other formal award that is actually conferred.

**Degree-seeking** – For the purpose of this report, a student enrolled and pursuing a course of study for a formal degree or certificate program.

**Distinct headcount** – Enrollment determined by counting each student only once.

**Dual program enrollments** – Those enrolled in two or more programs.

**English Language Institute (ELI)** – The English Language Institute provides comprehensive immersion programs in English as a Second Language to international students.

**Enrolled** – Enrolled students are those registered in any course(s) offered by the university.

**Enroute enrollment** – Students completing a set of requirements for a second program while pursuing completion of their primary program.

**First-time freshman** – A completely new student at the undergraduate level, including students enrolled in the fall term who attended college for the first time in the prior summer term, and including students who entered with advanced standing (college credits earned before graduation from high school).

**Full-time** – An undergraduate student enrolled for 12 or more semester credits or 24 or more contact hours a week during the fall, spring, or summer. Graduate students are considered full-time if they are enrolled in nine or more semester credits.

**Graduate** – A student who holds a bachelor's degree or equivalent, and is taking courses at the post-baccalaureate level.

**Graduation rate** – Calculated, as required under the Student Right-to-Know Act, as the total number of completers within 150% of normal time divided by the number in the cohort; for example, those who complete a four-year degree within six years.

**Hearing Undergraduate (HUG)** – HUGs are hearing undergraduates enrolled in a degree-seeking undergraduate program. Gallaudet adjusts the slots for potential newly enrolled hearing undergraduate students, by increasing or decreasing the number of new applicants admitted, so that overall numbers of

undergraduate students who are hearing does not exceed a 5% limit for FY 2013, 6% for FY 2014, 7% for FY 2015, and 8% for FY 2016. The cap does not include hearing undergraduates accepted into the Bachelor of Arts in Interpretation program.

**New to career** – An individual who is a graduate student, undergraduate student, professional studies student, or English Language Institute student who is in one of those programs for the first time.

**New to program** – An individual in a course of study for the first time, regardless of whether the student is new or returning from another academic career or program.

**Persistence** – A measure of how many students return one semester from a previous term.

**Professional Studies (PST)** – An array of professional development and outreach programs and services designed to promote career development, advocacy and leadership abilities, and other life-long learning. Programs and courses may be offered for graduate, undergraduate, or non-degree professional studies credit and are held on-campus, online, or at sites across the United States through collaboration with sponsoring schools, programs, agencies, and Gallaudet regional centers.

**Program** – A course of study within an academic career that leads toward a bachelor's, master's, doctorate, or first-professional degree, or resulting in credits that can be applied to one of these degrees.

**Retention rate** – The percentage of first-time bachelor's (or equivalent) degree-seeking undergraduates from the previous fall who are enrolled in the current fall.

**Second degree** – An undergraduate student who has already received a bachelor's degree, and is pursuing another bachelor's degree.

**Students of Color**– Another term used for Traditionally Underrepreseented Groups (TUG). A member of one of the following racial or ethnic groups: African American/Black, Asian, American Indian/Alaska Native, Native Hawaiian/ Other Pacific Islander, Hispanic/Latino, or Two or More.

**Traditionally Underrepresented Groups (TUG)** – Another term for Students of Color (SOC). A member of one of the following racial or ethnic groups: African American/Black, Asian, American Indian/Alaska Native, Native Hawaiian/ Other Pacific Islander, Hispanic/Latino, or Two or More.

**Undergraduate** – A student enrolled in a bachelor's degree program.

Data in this annual report cover several different "years." Primarily the report covers Fiscal Year 2016 (from October 1, 2015 to September 30, 2016). However, this one chapter ("FISCAL YEAR 2017 HIGHLIGHTS,") covers the beginning quarter of fiscal year 2017. Both of these periods are shown in the table below.

Partial Calendar Year 2014 Calendar Year 2015 (by month) (by month					Calendar Year 2016 (by month																							
Α	S	0	Ν	D	J	F	М	Α	М	J	J	Α	S	ο	Ν	D	J	F	М	A	М	J	J	Α	s	ο	Ν	D
Par Fis Ye 20	rtial scal sar 14					Fisc	cal Ye	ear 2	2015					Fiscal Year 2016 (Note: This report primarily this time period.)							/ cov	ers	Partia cal Y 7 (N cha imar cover is tin erioc	al Year ote: pter ily rs ne I.)				
Academic Year 2014-2015					Academic Year 2015-2016 Partial Acade Year 2016-20						dem -201	ic 7																
Fa	Fall Semester 2014     Spring Semester 2015     Summer 2015       Spring Semester 2015     Summer 2015				15	S	prin	g Se 2010	mes S	ter	Si n 2	um- ner 016	Fa	ll Se	mest	er 2(	)16											

#### Fall 2016 Census University and Clerc Center Enrollment

	Full-time	Part-time	TOTAL	% of Enrollment
Undergraduate Degree-seeking	1,082	30	1,112	
Freshmen	348	3	351	
Sophomores	218	2	220	
Juniors	246	3	249	
Seniors	260	19	279	
Second degree	10	3	13	
Undergraduate Non Degree-seeking		9	9	
TOTAL UNDERGRADUATE	1,082	39	1,121	59%
Graduate Degree-seeking	297	129	426	
Graduate Non Degree-seeking		19	19	
TOTAL GRADUATE	297	148	445	23%
English Language Institute	57		57	3%
TOTAL UNDERGRADUATE, GRADUATE, ELI & CONSORTIUM	1,436	187	1,623	
Kendall Demonstration Elementary School	111		111	
Model Secondary School for the Deaf	166		166	
TOTAL CLERC CENTER	277		277	15%
TOTAL UNDERGRADUATE, GRADUATE, ELI, & CLERC CENTER			1,900	100%
Professional Studies1		151	151	

<sup>1</sup>Professional Studies students can enroll continuously throughout the semester. Therefore, the one-time snapshot of Professional Studies enrollment shown on this line does not provide an accurate picture. The snapshot of Professional Studies enrollment is used, however, in reporting enrollment in the Government Performance and Results Act (GPRA) Report.

	Undergraduate	Graduate	TOTAL
RACE/ETHNICITY			
International/Nonresident Alien	79	22	101
American Indian/Alaska Native	7		7
Asian	41	20	61
Black/African American	173	35	208
Hispanic of any race	111	39	150
Native Hawaiian/Other Pacific Islander	6		6
Two or more	39	11	50
White	589	242	831
Race and ethnicity unknown	67	57	124
GENDER			
Male	540	98	638
Female	572	328	900
HEARING STATUS			
Deaf/Hard of hearing	998	199	1,197
Hearing	114	221	335
Unknown		6	6
ACADEMIC LOAD			
Full-time	1,082	297	1,379
Part-time	30	129	159
TOTAL FOR EACH CATEGORY	1,112	426	1,538

## Fall 2016 Degree-seeking Diversity by Career Level

## Fall 2016 Undergraduate Degree-seeking Diversity by Class Year

	Freshmen	Sophomores	Juniors	Seniors	Second Degree	TOTAL
RACE/ETHNICITY						
International/Nonresident Alien	22	13	18	23	3	79
American Indian/Alaska Native	2	2	3			7
Asian	14	9	11	6	1	41
Black/African American	74	28	36	33	2	173
Hispanic of any race	22	24	30	35		111
Native Hawaiian/Other Pacific Islander	4	1		1		6
Two or more	5	13	11	10		39
White	176	118	130	159	6	589
Race and ethnicity unknown	32	12	10	12	1	67
GENDER						
Male	184	114	106	133	3	540
Female	167	106	143	146	10	572
HEARING STATUS						
Deaf/Hard of hearing	336	208	206	236	12	998
Hearing	15	12	43	43	1	114
Hearing Undergraduate (HUG)	9	10	29	29		77
Non-HUG	6	2	14	14	1	37
ACADEMIC LOAD						
Full-time	348	218	246	260	10	1,082
Part-time	3	2	3	19	3	30
TOTAL FOR EACH CATEGORY	351	220	249	279	13	1,112

	Certificates	Masters	Specialists	Doctorates	TOTAL
RACE/ETHNICITY					
International/Nonresident Alien		15	2	5	22
American Indian/Alaska Native					
Asian		16		4	20
Black/African American		20	3	12	35
Hispanic of any race	1	21	3	14	39
Native Hawaiian/Other Pacific Islander					
Two or more		6	2	3	11
White	4	138	8	92	242
Race and ethnicity unknown		31	2	24	57
GENDER					
Male		56	3	39	98
Female	5	191	17	115	328
HEARING STATUS					
Deaf/Hard of hearing	3	146	9	41	199
Hearing	2	99	10	110	221
Unknown		2	1	3	6
ACADEMIC LOAD					
Full-time		207	13	77	297
Part-time	5	40	7	77	129
TOTAL FOR EACH CATEGORY	5	247	20	154	426

## Fall 2016 Graduate Degree-seeking Diversity by Degree Level



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## Fall 2016 U.S. Degree-seeking Students by State/Territory

	Undergraduate	Graduate	TOTAL
Alabama	12		12
Alaska	2		2
Arizona	31	5	36
Arkansas	4	1	5
California	108	41	149
Colorado	12	6	18
Connecticut	7	12	19
Delaware	5		5
District of Columbia	35	50	85
Florida	66	21	87
Georgia	28	11	39
Guam			
Hawaii	6	2	8
Idaho	2	1	3
Illinois	35	9	44
Indiana	27	3	30
Iowa	3	1	4
Kansas	11	2	13
Kentucky	13	2	15
Louisiana	8	2	10
Maine			
Maryland	120	69	189
Massachusetts	22	8	30
Michigan	19	6	25
Minnesota	23	4	27
Mississippi	9		9
Missouri	12	7	19
Montana	4		4

	Undergraduate	Graduate	TOTAL
Nebraska	5		5
Nevada	3	5	8
New Hampshire	4		4
New Jersey	34	13	47
New Mexico	11	6	17
New York	84	20	104
North Carolina	20	7	27
North Dakota	1		1
Ohio	15	3	18
Oklahoma	3	2	5
Oregon	5	4	9
Pennsylvania	19	18	37
Puerto Rico	1	2	3
Rhode Island	2		2
South Carolina	5	3	8
South Dakota	3		3
Tennessee	15	2	17
Texas	71	14	85
Utah	10		10
Vermont	1	2	3
Virginia	64	28	92
Virgin Islands			
Washington	15	9	24
West Virginia	1		1
Wisconsin	13	3	16
Wyoming	2		2
Unknown	2		2
TOTAL	1,033	404	1,437

	Undergraduate	Graduate	TOTAL
Australia		1	1
Botswana	5		5
Canada	25	5	30
Cayman Islands	1		1
Chad		1	1
China	9	1	10
Egypt		1	1
France	1		1
Germany	1		1
Hong Kong	1	1	2
Iceland		1	1
Iran		1	1
Japan	1	2	3
Korea, Republic of		1	1
Malaysia		1	1
Mexico	1		1
Mongolia	1		1
Nigeria	5	1	6
Pakistan	1		1
Panama		1	1
Paraguay	1		1
Qatar	1		1
Russian Federation	1		1
Saudi Arabia	15	3	18
Sri Lanka	1		1
Sweden	1		1
Taiwan	2		2
United Arab Emirates	4		4
Venezuela		1	1
Vietnam	1		1
TOTAL	79	22	101

## Fall 2016 International Undergraduate Degree-seeking Enrollment by Country

#### Fall 2016 Degree-seeking Hearing Undergraduates

	2016
Hearing undergraduate (HUG)	77
Percentage of new undergraduate enrollment	7%
Bachelors of Interpretation (BAI)	46
Adult Degree Completion Program (ADCP)	0
TOTAL HEARING STUDENTS	114
Percentage of new undergraduate enrollment	10%

#### Fall 2016 Hearing Undergraduate (HUG) Enrollment by Declared Majors

	2016
Communication Studies	2
Deaf Studies	7
Education	4
Government	2
International Studies	1
Interpretation	9
Mathematics	1
Psychology	3
Social Work	1
Undeclared	47
TOTAL MAJORS DECLARED	77
TOTAL HEADCOUNT <sup>2</sup>	77

<sup>1</sup>Dual program enrollments are included.

<sup>2</sup>HUG headcount includes students who haven't yet declared a major.

	Majors	Minors		Majors	Minors
Accounting	25		History	11	
American Sign Language	17	1	Information Technology	14	4
Art		9	International Studies	24	
Art and Media Design	19		Interpretation	46	
Athletic Coaching		14	Linguistics		16
Biology		2	Mathematics		2
Biology, B.A.	3		Mathematics, B.A.	7	
Biology, B.S.	12		Mathematics, B.S.	8	
Business Administration	32	2	Philosophy	1	
Chemistry		1	Photography		
Chemistry, B.A.	1		Physical Education		
Chemistry, B.S.	5		Physical Education & Recreation	46	
Communication Studies	47	5	Psychology	40	6
Dance		4	Recreation and Sports Program		
Deaf Studies	32	6	Self-directed Major	2	
Digital Media			Social Work	40	
Economics & Finance			Sociology	5	5
Education	20	1	Spanish	6	9
English	12	6	Studio Art		
Family & Child Studies		19	Theatre Arts	5	5
French			Undeclared	636	
Government	24	1		1,140	118
Graphic Design			HEADCOUNT	1,112	110

#### Fall 2016 Undergraduate Degree-seeking Enrollment Trend by Declared Majors and Minors

<sup>1</sup>Dual degree enrollments are included, but students who haven't declared a major are not; this is not a headcount.

#### Fall 2016 Graduate Degree-seeking Enrollment by Degree Program and Discipline

	2016
CERTIFICATES	
ASL/Deaf Studies	
ASL/English Bilingual Early Childhood Education	2
Deaf and Hard of Hearing Infants, Toddlers, and Families	14
Deaf Students with Disabilities	1
CERTIFICATES TOTAL	17
MASTERS	
Counseling: Mental Health	9
Counseling: School	10
Deaf Studies	9
Deaf Education: Advanced Studies	3
Deaf Education: Special Programs	3
Developmental Psychology	
Education	20
International Development	14
Interpretation	18
Interpreting Research	2
Linguistics	11
Public Administration	50
Sign Language Education	33
Sign Language Teaching	
Social Work	42
Speech-Language Pathology	29
MASTERS TOTAL	253

	2016
SPECIALISTS	
Deaf Education	3
School Psychology	17
SPECIALISTS TOTAL	20
DOCTORATES	
Audiology, Au.D.	43
Audiology, Ph.D.	1
Clinical Psychology	41
Critical Studies in the Education of Deaf Learners	12
Deaf Education	1
Educational Neuroscience	7
Hearing, Speech, and Language Sciences	7
Interpretation	33
Linguistics	9
DOCTORATES TOTAL	154
TOTAL PROGRAM ENROLLMENT	444
HEADCOUNT	426

<sup>1</sup>Dual program enrollments are included. Enroute enrollment counted while student is pursuing another program.

	Applied	Admitted	Enrolled
RACE/ETHNICITY			
International/Nonresident Alien	55	22	19
American Indian/Alaska Native	12	5	3
Asian	36	27	19
Black/African American	138	83	61
Hispanic of any race	26	24	22
Native Hawaiian/Other Pacific Islander	6	5	4
Two or more	22	13	10
White	360	243	185
Race and ethnicity unknown	97	60	35
GENDER			
Male	316	214	170
Female	436	268	188
Unknown			
HEARING STATUS			
Deaf/Hard of Hearing	592	423	306
Hearing	160	61	52
APPLICATION TYPE			
First-time Freshmen	511	338	245
Transfers	233	141	111
Second Degree	8	3	2
TOTAL FOR EACH CATEGORY	752	482	358

#### Fall 2016 New Undergraduate Degree-seeking by Applied, Admitted, and Enrolled



Fall 2016 New Undergraduate Degree-seeking Average ACT

	All New	First-time Freshmen
ENGLISH	15.9	16.0
MATH	17.7	17.7
READING	18.9	19.0

#### Fall 2016 New Degree-seeking Hearing Undergraduates

	2016
Hearing undergraduate (HUG)	30
Percentage of new undergraduate enrollment	8%
Bachelors of Interpretation (BAI)	21
Adult Degree Completion	1
TOTAL HEARING STUDENTS	52
Percentage of new undergraduate enrollment	15%

	Applied	Admitted	Enrolled
RACE/ETHNICITY			
International/Nonresident Alien	27	15	7
American Indian/Alaska Native	1		
Asian	20	10	8
Black/African American	34	17	14
Hispanic of any race	50	23	13
Native Hawaiian/Other Pacific Islander	1		
Two or more	7	2	1
White	224	132	84
Race and ethnicity unknown	107	46	20
GENDER			
Male	83	42	31
Female	388	203	116
Unknown			
HEARING STATUS			
Deaf/Hard of hearing	159	108	79
Hearing	302	135	66
Unknown	10	2	2
TOTAL FOR EACH CATEGORY	471	245	147

## Fall 2016 New-to-Graduate Career Degree-seeking Diversity by Applied, Admitted, and Enrolled



Jumpstart 2016 kicked off with new students, parents, and staff in Andrew Foster Auditorium, where Jumpstart students were introduced to the program.

Photo by: Zhee Chatmon

	Applied	Admitted	Enrolled
CERTIFICATES			
ASL/English Bilingual Early Childhood Education	4	3	1
ASL/Deaf Studies	1		
Deaf and Hard of Hearing Infants, Toddlers, and Families	8	8	5
Deaf Students with Disabilities	2	2	
MASTERS			
Counseling: Mental Health	16	6	5
Counseling: School	6	3	
Deaf Education: Advanced Studies	3	2	2
Deaf Education: Special Programs	3	1	
Deaf Studies	4		
Education	29	11	9
International Development	11	9	7
Interpretation	26	14	10
Linguistics	8	7	4
Public Administration	33	29	23
Social Work	38	26	17
Sign Language Teaching	60	34	28
Speech-Language Pathology	131	42	14
SPECIALISTS			
Deaf Education	4	4	3
School Psychology	11	11	5
DOCTORATES			
Audiology	79	37	11
Clinical Psychology	25	7	5
Critical Studies in the Education of Deaf Learners			
Educational Neuroscience	8	3	3
Hearing, Speech, and Language Sciences	2	2	2
Interpretation	11	6	6
Linguistics	6	6	5
TOTAL PROGRAM ENROLLMENT	529	273	165
HEADCOUNT	495	265	164

#### Fall 2016 New-to-Program Degree-seeking Graduate Students by Applied, Admitted, and Enrolled

<sup>1</sup>Dual program enrollments are included.



To kickoff International Awareness Week, students from the English Language Institute Student Organization (ELISO) paraded to Hall Memorial Building on Monday, February 22, 2016, showing off the diversity of Gallaudet University. Throughout the week, ELISO has served up tasty dishes representing food from Lebanon, India, Malaysia, Denmark, and Spain, along with some American soul food.

Photo by: Zhee Chatmon

## **About Gallaudet University**

Gallaudet University is the world leader in liberal education and career development for deaf and hard of hearing students. The University enjoys an international reputation for the outstanding undergraduate and graduate programs it provides deaf, hard of hearing, and hearing students, as well as for the quality of the research it conducts on the history, language, culture, and other topics related to people who are deaf. In addition, the University's Laurent Clerc National Deaf Education Center serves deaf and hard of hearing children at its two demonstration schools—Kendall Demonstration Elementary School and Model Secondary School for the Deaf—and throughout the country through its national mission by developing, implementing, and disseminating innovative educational strategies.

Gallaudet University was founded more than 150 years ago in 1864 by an Act of Congress (its Charter) which was signed into law by President Abraham Lincoln.

This introductory section includes: the Mission, Vision, and Credo statements, a brief history of the University, information on accreditations, a basic set of facts about the University, and a listing of the members of the Board of Trustees.

## I. Mission Statement

Gallaudet University, federally chartered in 1864, is a bilingual, diverse, multicultural institution of higher education that ensures the intellectual and professional advancement of deaf and hard of hearing individuals through American Sign Language and English. Gallaudet maintains a proud tradition of research and scholarly activity and prepares its graduates for career opportunities in a highly competitive, technological, and rapidly changing world.

Approved by the Board of Trustees, November 2007

## **II. Vision Statement**

Gallaudet University will build upon its rich history as the world's premier higher education institution serving deaf and hard of hearing people to become the university of first choice for the most qualified, diverse group of deaf and hard of hearing students in the world, as well as hearing students pursuing careers related to deaf and hard of hearing people. Gallaudet will empower its graduates with the knowledge and practical skills vital to achieving personal and professional success in the changing local and global communities in which they live and work. Gallaudet will also strive to become the leading international resource for research, innovation and outreach related to deaf and hard of hearing people.

Gallaudet will achieve these outcomes through:

- A bilingual learning environment, featuring American Sign Language and English, that provides full access for all students to learning and communication
- A commitment to excellence in learning and student service
- A world-class campus in the nation's capital
- Creation of a virtual campus that expands Gallaudet's reach to a broader audience of visual learners
- An environment in which research can grow, develop, and improve the lives and knowledge of all deaf and hard of hearing people worldwide.

Approved by the Board of Trustees, May 2009



On Friday, March 25, 2016, this dance, specifically for women on campus, was held at Peikoff Alumni House, hosted by the Saudi Students Organization. Middle Eastern food was provided, along with dancing alongside Khaleeji (modern Arabic) music. Women from several different countries gathered together and danced in accordance to traditional customs. Pictured here is a large group of attendees, including President Cordano and current Student Body Government president Mary Harman.

Photo by: Zhee Chatmon

## III. The Gallaudet Credo

Gallaudet's Vision Statement expresses what the University aspires to become and achieve as the world's premier academic institution for deaf and hard of hearing people. Implicit in our vision are core values that serve as guiding principles for the way members of the campus community teach, study, work and live. The Gallaudet Credo identifies and realizes those core values.

The Gallaudet University campus community includes students, faculty, teachers and staff, all of whom share certain common goals and values that we all believe enrich our academic environment. The community's primary goal is to prepare students to be informed, literate, productive and responsible citizens. In pursuit of this goal, community members pledge to uphold the following values:

> We believe that education is a dominant influence on our lives and recognize that learning is a lifelong quest. Therefore we will practice academic and personal integrity and work to create a positive and welcoming environment that is open to the free exchange of ideas among members of our community.

We believe that every person should be treated with civility and that our community is strengthened by the broad diversity of its members. Therefore, we will promote and applaud behaviors that support the dignity of individuals and groups and are respectful of others' opinions. We will especially discourage behaviors and attitudes that disrespect the diversity of individuals and groups for any reason including religion, race, ethnicity, gender, age, sexual orientation, disability, hearing status, or language and communication preference.

We believe that as members of the Gallaudet community we are the recipients of a proud and rich heritage, as well as contributors to and benefactors of our institution's bright future. Therefore, we will strive to bring credit to our community and ensure that the institution flourishes and succeeds in its mission.

Gallaudet University's Class of 2016 revealed its class banner at the "Ole Jim!" (Peikoff Alumni House). Many class banners from over the years can be seen at the Peikoff Alumni House.

Photo by: Danielle Seiss



#### **IV. History of Gallaudet**

#### The first 100 years

In 1856, Amos Kendall, a postmaster general during two presidential administrations, donated two acres of his estate in northeast Washington, D.C. to establish a school and housing for 12 deaf and six blind students. The following year, Kendall persuaded Congress to incorporate the new school, which was called the Columbia Institution for the Instruction of the Deaf and Dumb and Blind. Edward Miner Gallaudet, the son of Thomas Hopkins Gallaudet, founder of the first school for deaf students in the United States, became the superintendent of the new school.

Congress authorized the institution to confer college degrees in 1864, and President Abraham Lincoln signed the bill into law. Edward Miner Gallaudet was made president of the institution, including the college, which that year had eight students enrolled. He presided over the first commencement in June 1869 when three young men received diplomas. Their diplomas were signed by President Ulysses S. Grant, and to this day the diplomas of all Gallaudet graduates are signed by the presiding U.S. president.

Through an act of Congress in 1954, the name of the institution was changed to Gallaudet College in honor of Thomas Hopkins Gallaudet.

#### A time of expansion

In 1969, President Lyndon Johnson signed an act to create the Model Secondary School for the Deaf (MSSD). That same year, the secretary of the U.S. Department of Health, Education and Welfare and Gallaudet President Leonard Elstad signed an agreement authorizing the establishment and operation of MSSD on the Gallaudet campus. A year later, President Richard Nixon signed the bill that authorized the establishment of Kendall Demonstration Elementary School. Today, the two schools are part of Gallaudet's Laurent Clerc National Deaf Education Center, which is devoted to the creation and dissemination of educational opportunities for deaf students nationwide.

By an act of the U.S. Congress, Gallaudet was granted university status in October 1986. Two years later, in March 1988, the Deaf President Now (DPN) movement led to the appointment of the University's first deaf president, Dr. I. King Jordan, '70 and the Board of Trustees first deaf chair, Philip Bravin, '66. Since then, DPN has become synonymous with self-determination and empowerment for deaf and hard of hearing people everywhere.

In the 1990s, a generous contribution from the W.K. Kellogg Foundation enabled the University to construct the Kellogg Conference Hotel at Gallaudet University, which has become a popular venue for meetings, seminars, receptions, and other events for both on- and off-campus groups. Since then, additional buildings have been constructed, including the technology-rich Student Academic Center and, thanks to the generosity of James Lee Sorenson, chair of Sorenson Development, Inc., the James Lee Sorenson Language and Communication Center, a unique facility that provides an inclusive learning environment totally compatible with the visu-centric "deaf way of being."

The University's undergraduate students can choose from more than 40 majors leading to bachelor of arts or bachelor of science degrees. A small number of hearing undergraduate students—5% limit for FY 2013, 6% for FY 2014, 7% for FY 2015, and 8% for FY 2016—are also admitted to the University each year. Graduate programs at Gallaudet are open to deaf, hard of hearing, and hearing students and offer certificates and master of arts, master of science, doctoral, and specialist degrees in a variety of fields involving professional service to deaf and hard of hearing people.

Through the University Career Center, students receive internships that provide a wealth of experiential learning opportunities. Recent internships were offered at Merrill Lynch, National Aeronautics and Space Administration, National Institutes of Health, and the World Bank. Students also benefit from an array of services provided by such campus units as the Gallaudet Leadership Institute, Language Planning Institute, Hearing and Speech Center, Cochlear Implant Education Center, and the Center for International Programs and Services.

Gallaudet is also viewed by deaf and hearing people alike as a primary resource for all things related to deaf people, including: educational and career opportunities; open communication and visual learning; deaf history and culture; American Sign Language; research; and the impact of technology on the deaf community.

In January 2016, Roberta J. Cordano became the first woman to serve as president of Gallaudet University.

#### About Gallaudet University

## V. Institutional Name

Since 1864, when President signed the enabling legislation to authorize the establishment of a college for deaf and hard of hearing students in Washington, D.C., all of the diplomas and degrees conferred by the institution have been signed by the President of the United States. These pages provide a pictorial retrospective of this unique honor bestowed upon this institution's graduates as well as a chronology of the names of the University since its founding.

- 1. The **Columbia Institution for the Instruction of the Deaf and Dumb and Blind** was incorporated in 1857, with Edward Miner Gallaudet serving as the school's president.
- 2. The **National College for the Deaf and Dumb** was established seven years later in 1864 with the signing of its charter by President Lincoln.
- 3. The **National Deaf-Mute College** became the name of the college one year later in 1865 when blind students were transferred to the Maryland Institution for the Blind. This name remained in effect until 1893.
- The Columbia Institution for the Deaf and Dumb became the corporate name in 1865, including both the National Deaf-Mute College and the Primary Department.
- 5. The **Kendall School** became the name of the **Primary Department** in 1885, in honor of Amos Kendall, the philanthropist who initially donated the land for the establishment of the school.

- 6. **Gallaudet College** became the name in 1894 and remained the name until 1985. This renaming honored the Rev. Thomas Hopkins Gallaudet, the father of Edward Miner Gallaudet.
- 7. The **Columbia Institution for the Deaf** became the corporate name in 1911.
- 8. Gallaudet College became the corporate name in 1954.
- 9. The **Model Secondary School for the Deaf (MSSD)**, authorized by Congress in 1966, opened on campus in 1969.
- The Kendall Demonstration Elementary School (KDES) became the name of the Kendall School in 1970 with the signing of Public Law 91-587 by President Richard Nixon.
- 11. Gallaudet University became the name of Gallaudet College in 1986, and has remained the name to the present, when President Ronald Reagan signed the Education of the Deaf Act (Public Law 99-371).
- 12. Today, the Laurent Clerc National Deaf Education Center is comprised of KDES, MSSD, and the school's national mission to improve the quality of education provided to deaf and hard of hearing students across the United States.

Edward Miner and Thomas Hopkins Gallaudet's two direct descendants, Edson Gallaudet IV (age 12) and Charlotte Gallaudet (age 11) came to Gallaudet on Friday, March 11, 2016, for a campus tour, along with their mother, Julie Gallaudet. "We wanted to tour the campus because my children are direct descendants, and they wanted to see the incredible legacy of their lives," said Julie. Edward's son, Edson, is the children's great-great grandfather. The campus tour was led by student ambassador Jaddua Johnston (not pictured).

Photo by: Zhee Chatmon



## VI. Fast Facts

#### Location

800 Florida Avenue, NE, Washington, DC 20002

#### Website

www.gallaudet.edu

#### Founded

Gallaudet University, the world's only university in which all programs and services are specifically designed to accommodate deaf and hard of hearing students, was founded in 1864 by an Act of Congress (its Charter), which was signed into law by President Abraham Lincoln.

#### Programs

Deaf and hard of hearing undergraduate students can choose from more than 40 majors leading to a bachelor of arts or a bachelor of science degree. The University also admits a small number of hearing, degree-seeking undergraduate students—6% limit for FY 2014, 7% limit for FY 2015, and 8% limit for FY 2016. Undergraduate students also have the option of designing their own majors, called "self-directed majors," in which they select classes from a variety of departments at Gallaudet or take courses offered at 12 other institutions of higher learning that are members of the Consortium of Universities of the Washington Metropolitan Area.

Graduate programs, open to deaf, hard of hearing, and hearing students, include a master of arts and a master of science degree, specialist degree, certificates, and doctoral degrees in a variety of fields involving professional service provision to deaf and hard of hearing people.

Gallaudet University offers exemplary educational programs to deaf and hard of hearing students at all learning levels. The Kendall Demonstration Elementary School (KDES) serves infants and their parents and continues service through the eighth grade. The Model Secondary School for the Deaf (MSSD) offers programs for students in grades nine through 12. Both of these schools [KDES and MSSD] are part of the Laurent Clerc National Deaf Education Center, which has a federal mandate to serve the nation by developing and disseminating innovative curriculum, materials, and teaching strategies to schools and programs nationwide.

#### Technology

Gallaudet is a leader in uses of technology in its academic programs and services. Approximately 94 percent of courses at Gallaudet have an online component and virtually all students take at least one course using an online learning system. Such technology integration is higher than the average of universities nationwide. Many courses make extensive use of video, including video recordings of classes. Students are encouraged to bring a computer to campus, and popular software is available at a discounted price.

For students interested in technology careers, majors in graphic arts, digital media, computer science, and computer information systems are available. Students have access to two central computer labs, as well as more than 15 departmental computer labs. Most classrooms are outfitted with computers, projectors, DVD/VCRs, and other technologies. All buildings on campus have wireless network access.

#### Research

Gallaudet has a unique obligation to contribute knowledge and scholarship likely to benefit deaf and hard of hearing people, especially in the areas of education and human services. Accordingly, the Gallaudet Research Institute conducts studies related to demographics and assessment of deaf and hard of hearing people in the educational system, as well as language and learning processes, and engages students in research, while stimulating and supporting work directed towards priorities consistent with Gallaudet's national mission and internal strategic objectives.

Research is a key component of Gallaudet's mission as a university and has a prominent role as a major goal in the current Gallaudet Strategic Plan. Faculty pursue a full range of research interests related to their own academic disciplines. Major grant support includes research, development, and training programs in visual language and learning, access to communication for deaf and hard of hearing people, genetics, and technology assessment.

#### **Public Service**

Last year, Gallaudet served tens of thousands of individuals through conferences, leadership institutes, professional studies and extension courses, sign language classes, American Sign Language (ASL)/English bilingual education, enrichment and youth programs, international programs, and its regional centers (East – Northern Essex Community College, Mass.; Midwest – John A. Logan College, Ill.; South – Austin Community College, Texas; West – Ohlone College, Calif.; and Pacific Initiatives – Gallaudet University Office of National Outreach, Washington, D.C.).

In fulfilling its national service role via training and technical assistance, information dissemination, and exhibits and performances, the Clerc Center served tens of thousands of individuals and disseminated over 100,000 products and publications this year.

#### Enrollment

In the fall of academic year 2016-2017, the institution experienced the following enrollments:

UNIVERSITY	
Undergraduate (degree/non-degree, full- and part-time)	1,121
Graduate (degree/non-degree, full- and part-time)	445
English Language Institute/Consortium	57
UNIVERSITY SUBTOTAL	1,623
CLERC CENTER	
Kendall Demonstration Elementary School	111
Model Secondary School for the Deaf	
CLERC CENTER SUBTOTAL	277
TOTAL FALL ACADEMIC YEAR 2016-2017 ENROLLMENT	1,900

In addition, on the fall census date, we had 151 students enrolled in Professional Studies activities.

International students comprise seven percent of the degreeseeking student body.

#### Alumni

Gallaudet University has more than 21,000 alumni around the world. The Gallaudet University Alumni Association, organized in 1889, has 53 chapters.

According to a survey conducted by the University, 94 percent of the undergraduate student respondents who graduated between December 2013 and August 2014 are either employed or furthering their education. One hundred percent of the survey respondents who graduated with graduate degrees during the same time frame are employed or furthering their education.

During the same period, 83 percent of the Model Secondary School for the Deaf graduates are in advanced education or training programs within one year after graduation.

#### **Employees**

The University and the Clerc Center have 941 employees, 486 of whom are deaf or hard of hearing. A total of 228 employees are faculty members or teachers.

#### Annual University Tuition and Room and Board (Academic Year 2016-2017)

Tuition and room and board are charged as below. Additional charges are applied for student activities and health-related fees. For a full explanation of the details of all charges including those below refer to the Gallaudet University website.

	Undergraduate	Graduate
U.S. Student Tuition	\$15,552	\$17,100
International Student Tuition (non-developing countries)	\$31,104	\$34,200
International Student Tuition (developing countries)	\$23,328	\$25,650
Room and Board	\$13,040	\$13,040

No tuition is charged for students at Kendall Demonstration Elementary School or the Model Secondary School for the Deaf.
# Funding

Total revenues and other support for FY 2016 were \$198,619,514.

## Endowment

As of the end of FY 2016, the University's endowment was approximate \$170.5 million.

## Fundraising

Gallaudet welcomes tax-deductible contributions from individuals, businesses, foundations, and organizations in support of University initiatives and priorities, including scholarships, program enhancements and development, and renovation projects. Please visit the Development Office website (giving. gallaudet.edu) for more information about philanthropic support for Gallaudet, including opportunities to make a gift in memory or in honor of a loved one.

## **Community Impact**

Gallaudet is one of the area's largest businesses, with direct salaries, wages, and benefits totaling more than \$113.2 million in FY 2016. The University spent another \$66.3 million on goods and services, and \$35 million on capital improvements.

Since 2012, Gallaudet has constructed two new residence halls and renovated 12 buildings. In 2013, the District of Columbia's Zoning Commission approved the Gallaudet University 2022 Campus Plan, the university's vision for campus development for 2012 to 2022.

The Holiday Market, hosted by Campus Activities, a unit of Student Affairs and Academic Support on December 4, 2015, was full of festive booths offering various items on sale for the community.

Photo by: Zhee Chatmon



# VII. Accreditation

Gallaudet University is accredited by:

Middle States Commission on Higher Education (MSCHE) http://msche.org/institutions\_view.asp?idinstitution=237 3624 Market Street, Second Floor West Philadelphia, PA 19104 Telephone: (267) 284-5000 E-Mail: info@msche.org

The Middle States Commission on Higher Education is a regional institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Many of the University's programs are also accredited by professional accrediting bodies, including:

- American Psychological Association (APA)
- American Speech-Language-Hearing Association's Council on Academic Accreditation (ASHA / CAA)
- Association of Collegiate Business Schools and Programs (ACBSP)
- Council on Accreditation of Counseling and Related Programs (CACREP)
- Council on Social Work Education (CSWE)

Our Deaf Education program is approved by, and allows graduates to become CED certified through the Council on the Education of the Deaf (CED)

Programs that prepare graduates to be a licensed professional in schools are approved by the District of Columbia State Education Agency (SEA) These same programs, along with the master's in School Social Work program, are part of Gallaudet's Professional Education Unit which is accredited by the National Council for the Accreditation of Teacher Education (NCATE)

In addition, many programs are reviewed by the following specialized professional associations (SPAs) as part of NCATE's reaccreditation process:

- Association for Childhood Education International (ACEI)
- Council for Exceptional Children (CEC)
- National Association for the Education of young Children (NAEYC)
- National Association of School Psychologists (NASP)
- National Council for Social Studies (NCSS)
- National Council of Teachers of English (NCTE)
- National Council of Teachers of Mathematics (NCTM)
- National Science Teachers Association (NSTA)

The Kendall Demonstration Elementary School and the Model Secondary School for the Deaf are the demonstration schools of the Laurent Clerc National Deaf Education Center at Gallaudet University. Both schools are fully accredited by two organizations: The Middle States Association of Colleges and Schools (MSA), and the Conference of Educational Administrators of the Schools and Programs for the Deaf (CEASD).

# **VIII. Board of Trustees**

# **Executive Committee**



Tiffany Williams, '89 Chair Washington



Claire Bugen Vice Chair Texas



Duane Halliburton, '85 Secretary Maryland



Seth Bravin, '96 Member-at-Large Maryland



Jeffrey L. Humber, Jr. Member-at-Large Washington, D.C.



President Roberta J. Cordano, J.D. Ex-Officio

# **Additional Members**



Dr. Linda Campbell Canada



Jose "Pepe" Cervantes, '05 Washington, D.C.



Jameson Crane, Jr. Ohio



Dr. Jorge L. Díaz-Herrera New York



Dr. Charlene Dwyer Wisconsin



Dr. Tom Humphries, '68 & G-'72 California



James R. Macfadden, '62 Maryland



Dr. Harvey Goodstein, '65 Arizona



Nancy Kelly-Jones, '72 G-'75 Illinois



Wilma Newhoudt-Druchen, '92, G-'05 & H-'09 South Africa



James F.X. Payne Washington, D.C.



Claudia L. Gordon, Esq. Washington, D.C.



Lawrence R. Kinney Wisconsin

# **Public Members**



The Honorable G.K. Butterfield North Carolina



Gregory L. Hlibok, Esq., '90 Maryland



Dr. Richard Ladner Washington



The Honorable Sherrod Brown Ohio



The Honorable Kevin Yoder Kansas

# IX. The Office of Diversity and Inclusion

The Office for Diversity and Inclusion (ODI) is charged with providing leadership to foster and advance a strategic and integrated approach to diversity in all aspects of University life. As such, ODI works to ensure the community is knowledgeable about issues of diversity and inclusion and understands how diversity and academic excellence are intricately woven into patterns of student success.

ODI supports a diverse student, faculty, and staff population and is committed to creating a climate that is inclusive and accessible so all members of the community can succeed. To that end, ODI sponsors and co-sponsors multiple and varied programs for the community including lecture series, pedagogical workshops, cultural competency training, diversity dialogues, and cultural events. In particular, the University's Diversity Dialogue series has brought together diverse members of the community to discuss challenging topics.

ODI's many activities during FY 2016 included special presentations; educational and professional development offerings; internal studies and institutional activities; and campus events.



During Black History Month's kickoff event on February 1, 2016, a group poses for a group picture. From left: Paul Borgeois, student, Edgar Palmer, executive director of the Office of Diversity and Equity for Students (ODES), Jada Brown, student, Aubrey Moorman, student, 'Bunmi Aina, director of Keeping the Promise, Catherine O'Brien, Ed.D., Ericka Baylor, president of Black Student Union, Syed Ahmed, ODES paraprofessional, and Mary Dakim, ELI instructor. The front row from left to right features Vanessa Slade, executive secretary of ODES, and Elvia Guillermo, coordinator of Multicultural Student programs. Seated are Judith Mounty, Ed.D. and research scientist of ODES, President Roberta "Bobbi" Cordano, Derrick "DJ" Joynes, ODES paraprofessional, Cara Miller, coordinator, LG-BTQA Resource Cente, and Jeremy Smith, ODES paraprofessional.

Photo by: Zhee Chatmon



On September 30, 2016, Roberta J. Cordano was installed as the 11th president of Gallaudet University.

Photo by: Zhee Chatmon

# **Performance Requirements**

The Education of the Deaf Act (EDA) states that Gallaudet University will provide "... an annual report" to the Secretary of the U.S. Department of Education and to committees of the Congress; this entire document satisfies that requirement. In addition the EDA also details requirements of that reporting. In this section of the annual report, we quote the relevant reporting requirements of the EDA and cross-reference the relevant submittal of material in this document or in separate documents.

In addition, Gallaudet University does other major required reporting of annual performance indicators established for the University by the U.S. Department of Education under the Government Performance and Results Act of 1993. That report, previously submitted to the Department, is also included in this section of the annual report.

# I. Education of the Deaf Act Reporting Requirements

The material below is quoted directly from section 4354 of the Education of the Deaf Act entitled "Reports." For each item, a cross-reference is indicated describing where the required material can be found. Wording from this section of the EDA that does not apply to Gallaudet has been removed and an ellipsis (...) has been substituted.

Note that a separate chapter of this report on the Laurent Clerc National Deaf Education Center (Clerc Center) contains the details of the reporting required by the EDA for the Clerc Center.

## From the EDA

"The Board of Trustees of Gallaudet University ... shall prepare and submit an annual report to the Secretary, and to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate, not later than 100 days after the end of each fiscal year, which shall include the following:

(1) "The number of students during the preceding academic year who enrolled and whether these were first-time enrollments, who graduated, who found employment, or who left without completing a program of study, reported under each of the programs of the University (elementary, secondary, undergraduate, and graduate) ..."

Refer to the next section of this chapter, *Government Performance and Results Act Report.* (Additional information is available in the chapters entitled *Strategic Plan Goal A: Enrollment* and *Strategic Plan Goal B: Persistence and Graduation.*)

- (2) "For the preceding academic year, and to the extent possible, the following data on individuals who are deaf and from minority backgrounds and who are students (at all educational levels) or employees:
  - A. "The number of students enrolled full- and parttime."

Refer to the next section of this chapter, *Government Performance and Results Act Report.* (Additional information is available in the chapter entitled *Strategic Plan Goal A: Enrollment.*) B. "The number of these students who completed or graduated from each of the educational programs."

Refer to the next section of this report, *Government Performance and Results Act Report*. (Additional information is available in the chapter entitled *Strategic Plan Goal B: Persistence and Graduation*.)

C. "The disposition of these students on the date that is one year after the date of graduation or completion of programs ... at the University and its elementary and secondary schools in comparison to students from non-minority backgrounds."

Refer to the next section of this report, *Government Performance and Results Act Report.* (Additional information is available in the chapter entitled *Strategic Plan Goal B: Persistence and Graduation.*)

D. "The number of students needing and receiving support services (such as tutoring and counseling) at all educational levels."

Detailed information is available on these support services, for Gallaudet University and the Clerc Center and is provided in the chapter entitled *Strategic Plan Goal B: Persistence and Graduation* and *Laurent Clerc National Deaf Education Center (Clerc Center)* respectively.

E. "The number of recruitment activities by type and location for all educational levels."

Refer to the chapter entitled *Strategic Plan Goal A: Enrollment.* 

F. "Employment openings/vacancies and grade level/type of job and number of these individuals that applied and that were hired."

Refer to the chapter entitled *Strategic Plan Goal C: Resource Efficiency* for available data.

G. "Strategies (such as parent groups and training classes in the development of individualized education programs) used by the elementary and secondary programs and the extension centers to reach and actively involve minority parents in

the educational programs of their children who are deaf or hard of hearing and the number of parents who have been served as a result of these activities."

Detailed information is available on these strategies for the Clerc Center and is provided in the chapter *Laurent Clerc National Deaf Education Center (Clerc Center)*.

(3) "(A) summary of the annual audited financial statements and auditor's report of the University, as required under section 4353 of this title …"

Refer to our audited financial statements, submitted separately.

(4) "For the preceding fiscal year, a statement showing the receipts of the University ... and from what Federal sources, and a statement showing the expenditures ... by function, activity, and administrative and academic unit."

Refer to our audited financial statements, submitted separately.

(5) "A statement showing the use of funds (both corpus and income) provided by the Federal Endowment Program under section 4357 of this title."

Refer to our audited financial statements, submitted separately.

(6) "A statement showing how such Endowment Program funds are invested, what the gains or losses (both realized and unrealized) on such investments were for the most recent fiscal year, and what changes were made in investments during that year."

Refer to our audited financial statements, submitted separately.

(7) "Such additional information as the Secretary may consider necessary."

## From the EDA on Research

(a) "Research priorities

"Gallaudet University ... shall ... establish and disseminate priorities for [its] national mission with respect to deafness related research, development, and demonstration activities, that reflect public input, through a process that includes consumers, constituent groups, and the heads of other federally funded programs. The priorities for the University shall include activities conducted as part of the University's elementary and secondary education programs under section 4304 of this title.

Refer to the chapter *Strategic Plan Goal E: Research and Outreach* 

(b) "Research reports

"The University ... shall each prepare and submit an annual research report, to the Secretary, the Committee on Education and Labor of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate, not later than January 10 of each year, that shall include—

> "a summary of the public input received as part of the establishment and dissemination of priorities required by subsection (a) of this section, and the University's ... response to the input; and"

Refer to the chapters *Strategic Plan Goal E: Re*search and Outreach and Laurent Clerc National Deaf Education Center (Clerc Center).

(2) "a summary description of the research undertaken by the University ..., the start and projected end dates for each research project, the projected cost and source or sources of funding for each project, and any products resulting from research completed in the prior fiscal year."

Refer to the chapter *Strategic Plan Goal E: Research and Outreach*; this summary has been incorporated into the annual report.

# II. Government Performance Results Act Report

This section contains the performance indicators for both the University and for the Clerc Center for FY 2016, as submitted to the U.S. Department of Education. This material was submitted as specified in the Government Performance Results Act (GPRA) of 1993. The purposes of the act, paraphrased here, are to: hold Federal agencies accountable for achieving results; set goals, measure performance, and reporting publicly on progress; improve effectiveness and public accountability; help Federal managers improve services; improve Congressional decision making on Federal programs; and improve internal management of the Federal Government. (For additional information, refer to the Office of Management and Budget's website at: www.whitehouse.gov/omb/mgmt-gpra/gplaw2m).

# **Program Goal**

To challenge students who are deaf, graduate students who are deaf, and graduate students who are hearing to achieve their academic goals and obtain productive employment, and provide leadership in setting the national standard for best practices in education of the deaf and hard of hearing.

#### Objective 1 of 4:

The University Programs and the Model Secondary School for the Deaf and the Kendall Demonstration Elementary School will optimize the number of students completing programs of study.

**Measure 1.1 of 12:** The number of full-time, degree-seeking undergraduate students enrolled at Gallaudet University. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	1,099	Historical Actual
2004	Not available.	1,120	Historical Actual
2005	Not available.	1,098	Historical Actual
2006	Not available.	1,174	Historical Actual
2007	Not available.	1,101	Historical Actual
2008	1,180.0	973	Target Not Met
2009	1,020.0	927	Target Not Met
2010	1,020.0	1,002	Target Not Met but Improved
2011	1,020.0	1,012	Target Not Met but Improved
2012	1,020.0	1,029	Target Exceeded
2013	1,020.0	1,045	Target Exceeded
2014	1,020.0	1,006	Target Not Met
2015	1,020.0	951	Target Not Met
2016	1,020.0	959	Target Not Met but Improved
2017	1,020.0	1,082	Target Exceeded
2018	1,020.0	(October, 2017)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

#### Frequency of Data Collection: Annual

**Data Quality.** Gallaudet University reported a total of 1,082 full-time, degree-seeking undergraduate students enrolled in the fall of 2016 (FY 2017), an increase of 123 students from the previous year. The number of full-time, degree-seeking undergraduate students enrolled at Gallaudet University includes students who are deaf and hard of hearing, as well as hearing undergraduate students (HUGS) and hearing undergraduate students in the bachelor's of interpreting program. This measure does not include part-time students or non-degree seeking

undergraduate students. This measure is consistent with Integrated Postsecondary Education Data System (IPEDS) methodology in reporting only full-time, degree-seeking undergraduates. Census data is collected in the fall of each year, and does not include new students who enroll in the spring of the same academic year.

The next table reports disaggregated data on the number of full-time, degree-seeking undergraduate students enrolled in a campus based program or in an on-line program

The table below reports disaggregated data on the number of full-time, degree-seeking undergraduate students enrolled in a campus-based program or in an online program.

Year	On-campus	Online	TOTAL
2011	1,004	8	1,012
2012	1,025	4	1,029
2013	1,033	12	1,045
2014	997	9	1,006
2015	946	5	951
2016	951	8	959
2017	1,071	11	1,082

\*Online: students who are enrolled in an online program and no other program at Gallaudet University

**Target Context.** The target for the number of full-time, degree-seeking undergraduate students enrolled at Gallaudet University was reduced in FY 2009 from 1,180 students to 1,020 students. At that time, the decision to reduce the enrollment target was based on the anticipated impact from policy changes in the University's admission requirements and the implementation of more rigorous academic standards.

**Explanation.** Gallaudet University did not meet the Measure 1.1 target in FY 2008 through FY 2011, but met and exceeded the target in FY 2012 and FY 2013. From FY 2014 to FY 2016, Gallaudet University did not meet the target, but met and exceeded the target in FY 2017 (2016-2017 academic year).

In the fall of 2016 (FY 2017), the number of full-time, degreeseeking undergraduate students enrolled at Gallaudet University increased by 123 students compared to the previous year. This number exceeded our target of 1,020 by 62 students. This is our highest reported number of full-time degree-seeking undergraduate students since fall of 2006 (FY 2007). Gallaudet University reported that this significant increase occurred as a result of several factors. One of which was a result of the implementation of recommendations made after an intensive audit and review of enrollment and admissions practices initiated in 2015. With the guidance of an enrollment consultant, areas that were addressed included restructuring and filling staff vacancies in both Admissions and Financial Aid. With new staff on board, staff training and professional development focused on new initiatives in improving recruitment and admissions operations. Various new recruitment initiatives were implemented such as Gallaudet 101 information sessions provided to school personnel and tailored to specific sites and audiences to provide current information about Gallaudet and dispel common misconceptions. Other recruitment initiative focused on Academic Bowl outreach; changes in Open House formats, including specialty programs such as Transfer Student Open House; expansion of Youth Programs; and a stronger alignment with the Regional Centers. Another factor was an increased focus on staff training and professional development in working with, retaining, and preparing our current students for success at Gallaudet. For example, the Retention Coordinator working in collaboration with the Director of Academic

Advising and Tutoring as well as the Faculty Development Fellow, continued to focus on maximizing the use of the early alert system and connecting students to the appropriate resources and support programs. The next table reports the total enrollment each fall for Gallaudet University (e.g., FY 2007 is the fall of the 2006-2007 academic year), which includes the number of full-time, degree-seeking undergraduate students, students enrolled parttime in degree programs or in non-degree granting programs, and graduate students.

Fiscal Year	Full-time, degree-seeking undergraduate students	Part-time, degree-seeking or non-degree-seeking undergraduate students	Full-time and part-time graduate students	TOTAL ENROLLMENT
2007	1,101	318	430	1,849
2008	973	277	383	1,633
2009	927	277	377	1,581
2010	1,002	460	408	1,870
2011	1,012	368	413	1,793
2012	1,029	274	410	1,713
2013	1,045	330	446	1,821
2014	1,006	278	469	1,753
2015	951	297	443	1,691
2016	959	267	444	1,670
2017	1,082	266	426	1,774

The Clerc Center partnered with pepnet2 to publish its issue of Odyssey magazine entitled, "The Power and Potential of Collaboration". The issue address the importance of building collaborations at the national and state levels.



University. (Desired direction: increase)			
Year	Target	Actual (or date expected)	Status
2004	Not available.	287	Historical Actual
2005	Not available.	311	Historical Actual
2006	Not available.	320	Historical Actual
2007	Not available.	318	Historical Actual
2008	295.0	277	Target Not Met
2009	295.0	277	Target Not Met
2010	295.0	460	Target Exceeded
2011	295.0	368	Target Exceeded
2012	295.0	274	Target Not Met
2013	295.0	330	Target Exceeded
2014	295.0	278	Target Not Met
2015	295.0	297	Target Exceeded
2016	295.0	267	Target Not Met
2017	295.0	266	Target Not Met
2018	295.0	(October, 2017)	Pending

Measure 1.2 of 12: The number of students enrolled part-time in degree programs or in non-degree-granting programs at Gallaudet University. (Desired direction: increase)

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

#### Frequency of Data Collection: Annual

**Data Quality.** This measure includes all students not counted in IPEDS, including students enrolled in the English Language Institute, students taking on-line courses, and graduate students enrolled in the professional studies program that grant continuing education credit, and non-degree seeking undergraduate and graduate students taking other courses that cannot be applied to a degree, or who have not been admitted into a degree-seeking program. This indicator also includes part-time, degree-seeking undergraduates that were not counted in Measure 1.1 on full-time degree-seeking undergraduate students. Census data is collected in the fall of each year and does not include new students who enroll in the spring of the same academic year.

The next table reports disaggregated data on the number of students not counted in IPEDS; including students enrolled in the English Language Institute; part-time, degree-seeking undergraduate students; and non-degree undergraduate and graduate students enrolled in a campus-based program or in an online program.

Year	On-campus	Online	TOTAL
2011	366	2	368
2012	263	11	274
2013	320	10	330
2014	268	10	278
2015	289	8	297
2016	257	10	267
2017	249	18	267

**Target Context.** The target represents the total enrollment of a varied group of students; thus, a decrease or increase in enrollment in any one subgroup would impact the overall enrollment reported for this measure.

**Explanation.** The number of students enrolled part-time in degree programs or in non-degree granting programs at Gallaudet University in fall 2016 (FY 2017) was a decrease of 1 student compared to the previous year. This number did not meet the target of 295. Gallaudet University reported that in fall 2016, there was a decrease of 59% (13 students), 22% (16 students), and 14% (3 students) from fall 2015 in the enrollment of non-degree-seeking undergraduate students, English Language Institute (ELI) students, and non-degree-seeking graduate students respectively. In addition, for fall 2016, there was a 31% (36 students) increase and no change (30 students) from the fall 2015 enrollment of Professional Studies (PST) and part-time, degree-seeking undergraduate students, respectively.



Board members of the Korea's Seoul Association of the Deaf were given a tour by the Visitor's Center as well as a visit at the museum on February 8, 2016. They also met with various staff members of RSIA, ELI, admission offices, and faculty members of the Department of Interpretation. Most importantly, they met with Dr. Charles Reilly and Danilo E. Torres V. to establish a Memorandum of Understanding between Gallaudet and the Korea Nazarene University. Pictured left to right: Kim Su Yun, interpreter at State Government; Frank Laura, professor at Korea Nazarene University; Muu Byong Kil, president of the Seoul Association of the Deaf; President Roberta "Bobbi" Cordano; Park Jeoung Ja, vice president of the Seoul Association of the Deaf; and Seo Do Won, director of the Seoul Association of the Deaf.

Photo by: Zhee Chatmon

Measure 1.3 of 12: The number of students enrolled in graduate programs at Gallaudet University. (Desired direction: increase)			
Year	Target	Actual (or date expected)	Status
2003	Not available.	617	Historical Actual
2004	Not available.	506	Historical Actual
2005	Not available.	451	Historical Actual
2006	Not available.	466	Historical Actual
2007	Not available.	430	Historical Actual
2008	425.0	383	Target Not Met
2009	425.0	377	Target Not Met
2010	425.0	408	Target Not Met but Improved
2011	425.0	413	Target Not Met but Improved
2012	425.0	410	Target Not Met
2013	425.0	446	Target Exceeded
2014	425.0	469	Target Exceeded
2015	425.0	443	Target Exceeded
2016	440.0	444	Target Exceeded
2017	440.0	426	Target Not Met
2018	440.0	(October, 2017)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

#### Frequency of Data Collection: Annual

**Data Quality.** The number of students enrolled in graduate programs at Gallaudet University includes all full- and part-time students enrolled in degree-granting programs at the certificate, master's, specialist, and doctoral levels. The Integrated Postsecondary Education Data System (IPEDS) defines a certificate as a formal award along with other degree awards conferred by an institution. The IPEDS definition of a degree is an award conferred as official recognition for the successful completion of a program of studies. Gallaudet University noted that IPEDS surveys often ask for enrollment figures that are "degree/certificate seeking."

Census data is collected in the fall of each year and does not include new students who enroll in the spring of the same academic year.

The next table reports disaggregated data on the number of full- and part-time degree-seeking graduate students enrolled in a campus-based program or an online program at the certificate, master's, specialist, or doctoral level.

Year	On-campus	Online	TOTAL
2011	413	n/a	413
2012	382	28	410
2013	410	36	446
2014	437	32	469
2015	390	53	443
2016	390	54	444
2017	377	49	426

**Target Context.** In FY 2008, the definition of graduate enrollment was changed to include only degree-seeking enrollment. Non-degree graduate enrollment is counted in Measure 1.2. Since Gallaudet University exceeded the target for this measure in fall 2012 (FY 2013), fall 2013 (FY 2014), and again in fall 2014 (FY 2015), the Department increased the target to 440 graduate students for fall 2015 (FY 2016) and subsequent years. In fall 2015 (FY 2016) Gallaudet University exceeded the target. However, in fall 2016 (FY 2017) Gallaudet did not meet the target.

**Explanation.** Gallaudet University reported that many graduate programs are successful in recruiting and retaining a high percentage of their students, thus maintaining their overall enrollment from the previous year (e.g. MA in Sign Language

Education, PhD in Interpretation and MPA in Public Administration, among others). The decrease in new graduate degreeseeking enrollment can be attributed mainly to increased competition from other universities offering similar graduate programs (e.g. MA in Interpretation) as well as a decrease in applications for a number of graduate programs due to an improving employment rate. The Graduate School has hired a new graduate admissions counselor to assist graduate programs with recruitment through social media, with the goal of increasing qualified applications. The Graduate School has also hired a new assistant dean for graduate education to strengthen programming in several areas for current graduate students to assist with their retention. In addition to these efforts, departments are exploring new delivery methods (e.g. online, hybrid) and new graduate programs that will attract more students.

(Desired direction: increase)			
Year	Target	Actual (or date expected)	Status
2003	225.0	190	Target Not Met
2004	225.0	186	Target Not Met
2005	225.0	182	Target Not Met
2006	225.0	226	Target Exceeded
2007	225.0	218	Target Not Met
2008	225.0	164	Target Not Met
2009	225.0	149	Target Not Met
2010	225.0	151	Target Not Met but Improved
2011	225.0	140	Target Not Met
2012	165.0	165	Target Met
2013	165.0	150	Target Not Met
2014	165.0	149	Target Not Met
2015	165.0	165	Target Met
2016	165.0	166	Target Met
2017	165.0	166	Target Met
2018	165.0	(October, 2017)	Pending

Measure 1.4 of 12: The enrollment in the Model Secondary School for the Deaf established by Gallaudet University

Source. Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Power School student database; Annual Report.

#### Frequency of Data Collection: Annual

Data Quality. On September 15 of each school year, census data is collected on the number of students enrolled at the Model Secondary School for the Deaf (MSSD). Gallaudet University states that this number is reviewed by both the Clerc Center's research and evaluation team, as well as by school administrators to ensure accuracy. This data does not include new students who enroll in the spring of the same academic year.

Target Context. The target was reduced to 165 students in September 2011 (FY 2012) to more closely reflect actual enrollment trends. MSSD stated that, with an average enrollment of 40 students per grade, it can effectively provide and evaluate programs, as well as report statistically relevant data.

Explanation. MSSD serves the local tri-state area (Maryland, Virginia, and the District of Columbia) and all 50 states, as well as U.S. territories. Gallaudet University states that a trend analysis over the past five years indicates that MSSD continues to receive a steady stream of inquiries and requests for applications, with the goal of ensuring a higher percentage of inquiries and applications to become enrollments.

In FY 2013, the Clerc Center hired an enrollment coordinator to lead enrollment goals of: (1) working closely with District of Columbia Public Schools to increase awareness with school officials about services available at MSSD for students who are deaf and hard of hearing; (2) increasing awareness of and disseminating user friendly information about the programs; (3) improving admissions processes to improve efficiency and to ensure the process is easily navigated by prospective families; (4) improving data collection and analysis processes to review exit interview data and analyze retention; and (5) improving academic programs through rigorous standards-based curriculum, early intervention, after school programs, and collabora-

tions with other programs and service providers. Gallaudet University stated that work in these areas, along with strong academic and student life programs, has resulted in on-target student enrollment at MSSD for academic years 2014-2015, 2015-2016, and 2016-2017.

Measure 1.5 of 12: The enrollment in the Kendall Demonstration Elementary School established by Gallaudet University. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	140.0	152	Target Exceeded
2004	140.0	145	Target Exceeded
2005	140.0	142	Target Exceeded
2006	140.0	141	Target Exceeded
2007	140.0	128	Target Not Met
2008	140.0	127	Target Not Met
2009	140.0	120	Target Not Met
2010	140.0	105	Target Not Met
2011	140.0	99	Target Not Met
2012	115.0	97	Target Not Met
2013	115.0	94	Target Not Met
2014	115.0	92	Target Not Met
2015	115.0	87	Target Not Met
2016	115.0	106	Target Not Met
2017	115.0	111	Target Not Met
2018	115.0	(October, 2017)	Pending

**Source.** Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Power School student database; Annual Report.

#### Frequency of Data Collection: Annual

**Data Quality.** On September 15 of each school year, census data is collected on the number of students enrolled at the Kendall Demonstration Elementary School (KDES). Gal-laudet University states that this number is reviewed by both the Clerc Center's research and evaluation team, as well as by school administrators to ensure accuracy. This data does not include new students who enroll in the spring of the same academic year.

**Target Context.** The target was reduced to 115 students in September 2011 (FY 2012) to more close reflect actual enrollment trends.

**Explanation.** KDES serves the local tri-state area (Maryland, Virginia, and the District of Columbia). Students at KDES from Maryland and Virginia are exclusively parentally placed, as local education authorities (LEA) do not refer students to out-of-state programs. Students at KDES residing in the District may be either parentally placed or placed by the District of Columbia LEA. At this time, almost all of KDES students are parentally placed.

Gallaudet University stated that a trend analysis over the past five years indicates that KDES continues to receive a steady stream of inquiries and requests for applications. The Clerc Center is more closely monitoring inquiry rates and improved its data collection process. This enables the Clerc Center to review reasons given by prospective families on why they chose not to enroll after beginning the application process. The goal is to ensure a higher percentage of inquiries and applications becoming enrollments.

In FY 2013, the Clerc Center hired an enrollment coordinator to lead enrollment goals of: (1) working closely with District of Columbia Public Schools to increase awareness with school officials about services available at KDES for students who are deaf and hard of hearing; (2) increasing awareness of and disseminating user friendly information about the programs; (3) improving admissions processes to improve efficiency and to ensure the process is easily navigated by prospective families; (4) improving data collection and analysis processes to review exit interview data and analyze retention; and (5) improving academic programs through rigorous standards-based curriculum, early intervention, after school programs, and collaborations with other programs and service providers.

Since FY 2015, KDES enrollment has continued to increase. From FY 2015 to FY 2017, enrollment has increased 28%.

**Measure 1.6 of 12:** The percentage of first-time, full-time degree seeking undergraduate students who were in their first year of postsecondary enrollment in the previous year and who are enrolled in the current year. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	60	Historical Actual
2004	Not available.	70	Historical Actual
2005	Not available.	75	Historical Actual
2006	Not available.	64	Historical Actual
2007	Not available.	54	Historical Actual
2008	75.0	60	Target Not Met but Improved
2009	70.0	75	Target Exceeded
2010	70.0	73	Target Exceeded
2011	70.0	70	Target Met
2012	72.0	77	Target Exceeded
2013	73.0	69	Target Not Met
2014	74.0	67	Target Not Met
2015	75.0	67	Target Not Met
2016	75.0	80	Target Exceeded
2017	75.0	(October, 2017)	Pending
2018	75.0	(October, 2018)	Pending

**Source.** Gallaudet University Office of Institutional Research, Data Warehouse.

#### Frequency of Data Collection: Annual

**Data Quality.** The calculation for this measure on the persistence of first-time, full-time freshmen students from one fall semester to the next fall semester is consistent with the Integrated Postsecondary Education Data System (IPEDS) methodology

**Target Context.** Gallaudet University's 2010-2015 Strategic Plan identified a goal for retaining 75% of its first-time, fulltime degree seeking freshmen cohort by FY 2015; that is, 75% of the entering cohort would return from their first fall semester to their second fall semester. In order to meet this goal, the targets for FY 2012 through FY 2015 were incrementally raised to 72%, 73%, 74%, and 75%, respectively.

In comparison, the most recent National Center for Educational Statistics report indicated that student retention of firsttime, full-time students at 4-year public colleges and universities had an average persistence rate of 81%, with a range from 62% at least selective open-admissions institutions to 96% at the most selective institutions. Similarly, retention at 4-year private colleges and universities showed an average persistence rate of 81%, with a range of 61% at least selective open admission institutions and 96% at the most selective schools (The Condition of Education 2016, Institutional Retention and Graduation Rates for Undergraduate Students (Cohort 2013 to 2014 data)).

**Explanation.** This measure was designated as a long-term measure.

Gallaudet University's first-year persistence rate increased to 80%, an increase of 13 percentage points compared to the previous year at 67%.

During FY 2016, improvements were implemented with the early alert system for students whose behaviors indicated attrition risk, including expansion of early alert interventions and improvement in specific processes used by staff, faculty, and administrators to respond to alerts. Based on this reexamination and expansion, Gallaudet University offered campus-wide training and coaching on best practices for providing early alert interventions. In addition, the institution implemented an Academic Intervention Team (AIT) in FY 2016 to support and monitor efforts toward timely interventions to students at risk, as well as to intervene with those students who did not respond to initial outreach and intervention efforts. The early alert system continues to expand with the involvement of additional support services such as the Office of Diversity and Equity, the Office of Student Success, Residence Life, and the Registrar's Office in the early alert system. New efforts include a continued expansion of the early alert system and an increased focus on the needs of historically underserved students/students of color, transfer students, and readmit students, including examining institutional structures to better support these students and their success.

Measure 1.7 of 12: The Gallaudet University graduate student persistence rate. (Desired direction: increase)			
Year	Target	Actual (or date expected)	Status
2006	Not available.	77	Historical Actual
2007	Not available.	77	Historical Actual
2008	Not available.	80	Historical Actual
2009	Not available.	76	Historical Actual
2010	Not available.	77	Historical Actual
2011	Not available.	73	Historical Actual
2012	77.0	81	Target Exceeded
2013	77.0	83	Target Exceeded
2014	77.0	79	Target Exceeded
2015	80.0	84	Target Exceeded
2016	80.0	84	Target Exceeded
2017	80.0	(October, 2017)	Pending
2018	80.0	(October, 2018)	Pending

Source. Gallaudet University, Office of Institutional Research, Data Warehouse.

Frequency of Data Collection: Annual

**Data Quality.** Gallaudet University calculates the persistence based on a cohort formula to include all students enrolled at the master's level at the University each fall, as the master's enrollment has a more consistent enrollment period than students at other graduate degree levels. Specifically, the persistence rate is calculated as the number of enrolled master's degree students who return the next fall, divided by the number who were enrolled in the previous fall, after subtracting the number of students who graduated from the denominator. This method of calculating the graduate persistence rate is comparable to the method of calculating the undergraduate persistence rate. **Target Context.** Based on historical data, the Department set the target for the graduate student persistence rate at 77% for FY 2012, FY 2013, and FY 2014. This target was increased by the Department to 80% for FY 2015 and subsequent years, as Gallaudet University exceeded the target each year from FY 2012 to FY 2014. In FY 2015 and FY 2016, Gallaudet University exceeded its graduate persistence target of 80%.

**Explanation.** This measure was designated as a long-term measure. Gallaudet University is consistently exceeding the target for this measure.

Target	Actual	Status
	(of date expected)	Status
Not available.	11	Historical Actual
Not available.	6	Historical Actual
Not available.	5	Historical Actual
Not available.	2	Historical Actual
Set Baseline	13	Baseline
13.0	3	Target Exceeded
6.0	3	Target Exceeded
6.0	3	Target Exceeded
6.0	1	Target Exceeded
6.0	1	Target Exceeded
6.0	4	Target Exceeded
6.0	6	Target Met
6.0	3	Target Exceeded
4.0	(October, 2017)	Pending
4.0	(October, 2018)	Pending
	Not available.   Not available.   Not available.   Not available.   Set Baseline   13.0   6.0   6.0   6.0   6.0   6.0   6.0   6.0   6.0   4.0   4.0	Not available. 11   Not available. 6   Not available. 5   Not available. 2   Set Baseline 13   13.0 3   6.0 3   6.0 1   6.0 1   6.0 3   6.0 1   6.0 3   6.0 1   6.0 1   6.0 3   6.0 3   6.0 3   6.0 3   4.0 (October, 2017)   4.0 (October, 2018)

Measure 1.8 of 12: The dropout rate for students in Model Secondary School for the Deaf. (Desired direction: decrease)

**Source.** Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Admissions, Office of Planning, Development, and Dissemination.

#### Frequency of Data Collection: Annual

**Data Quality.** The MSSD dropout rate was calculated from data obtained from the PowerSchool databases, withdrawal forms from the Clerc Center Admissions Office, transcript requests from the MSSD Principal's Office, and Admissions Office follow-up with parents.

**Target Context.** The Clerc Center reported that the dropout rate for MSSD students has ranged from 2% to 13% from FY 2004 to 2008, with an average of 7% dropout rate over the five years. The year-to-year variability in the dropout rate is due to the small population of students at MSSD. The Clerc Center also noted that NCES reported that the national event dropout rate for students in public schools in grades 9-12 in 2003-2004 was 3.9%. Based on the analysis of the national data and MSSD historical data, the target of 6% dropout rate was determined to be an ambitious, yet achievable goal. Given that MSSD achieved the dropout rate of 1% for 2012 and 2013 and 4% for 2014, this target is being reduced to 4%, beginning in 2017.

**Explanation.** The U.S. Department of Education's Common Core of Data (CCD) defines a dropout as "a student who was enrolled at any time during the previous school year who is not enrolled at the beginning of the current school year and who has not successfully completed school. Students who have transferred to another school, died, moved to another country, or who are out of school due to illness are not considered dropouts." This method of calculating the dropout rate allows the Clerc Center to track annual changes in the dropout behavior of students.

In determining MSSD's dropout rate, the Clerc Center calculates the percentage of MSSD students included in the official September 15 enrollment report, who indicated that they were dropping out of school, who withdrew from the program, who did not return from the previous year, who did not transfer to another high school program, or whose disposition after leaving MSSD could not be determined. The following equation is used by the Clerc Center to calculate the event dropout rate at MSSD:

Dropout rate =

September 15 enrollment -(# of transfers + # of other exclusions)

The denominator of the equation is the official enrollment list for September 15 of the previous year, minus those leavers who are not classified as dropouts. The numerator of the equation is the number of dropouts for that year; that is, the number of leavers minus transfers and those who meet other exclusion criteria.

Exclusions to the dropout rate include those leavers who met any of the following conditions:

1. Transferred - The student transferred to and is attending another educational institution leading toward a high school diploma or its equivalent.

- 2. Completed program The student received a high school diploma from MSSD or another high school program or its equivalent.
- 3. Early college enrollment The student enrolled in and is attending a college offering a degree program, without first receiving a high school diploma.
- 4. Moved to another country The student voluntarily or involuntarily moved out of the United States.
- Temporary absence The student has a temporary schoolrecognized absence due to suspension, illness, or unresolved immigration issues.
- 6. Late enrollment The student is planning to enroll shortly after September 15.
- 7. Death The student is deceased.

Dropouts also include leavers who met any of the following criteria:

- 1. Incomplete graduation requirements the student completed all course requirements for graduation, but did not meet other graduation requirements.
- 2. Declared dropout The student declares himself/herself to be dropping out of school.
- 3. Re-enrollment The student dropped out during the previous school year, but re-enrolled by September 15th of the current school year.
- 4. Multiple events The student dropped out multiple times during a school year is reported as a dropout only once for a single school year.

The Clerc Center has met the target for this measure each year from FY 2009 to FY 2016.

Measure 1.9 of 12: The average daily attendance rate for students in Kendall Demonstration Elementary School for the Deaf. (Desired direction: increase)			
Year	Target	Actual (or date expected)	Status
2009	Not available.	94	Historical Actual
2010	Set Baseline	94	Baseline
2011	94.0	95	Target Exceeded
2012	95.0	95	Target Met
2013	95.0	95	Target Met
2014	95.0	96	Target Exceeded
2015	95.0	95	Target Met
2016	95.0	93	Target Not Met
2017	95.0	(October, 2017)	Pending
2018	95.0	(October, 2018)	Pending

Source. Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Power School student database on daily attendance data and the Office of Planning, Development, and Dissemination.

#### Frequency of Data Collection: Annual

Data Quality. Teachers at KDES record daily attendance in Power Teacher database program, a web-based student information system. Daily attendance is then calculated, based on enrollment dates for each students, in Power School database program. The Clerc Center merges data from these two database to generate a baseline average attendance rate for the year for KDES.

Target Context. The average daily K-8 grade attendance rates at KDES for the 2008-2009, 2009-2010, and 2010-2011 school years (FY 2009, 2010, and 2011) were 94%, 94%, and 95% respectively. Based on this data, the target was established in September 2011 at 95%.

Explanation. In 2008, the Clerc Center proposed a new measure for persistence of KDES students, using the average daily attendance rate. This is frequently used by elementary schools

as a non-academic indicator of adequate yearly progress when reporting data as required under the Elementary and Secondary Education Act accountability mandates. With this measure, daily attendance includes students who are enrolled on any particular day and who would be expected to be in school. This includes students who are in attendance, have excused absences, and have unexcused absences. The Clerc Center calculates the average daily attendance rate aggregating student attendance for the year and dividing that by the aggregated daily membership for the year, as follows:

	Aggregate attendance of K - 8
Average daily attendance rate =	Aggregate membership of
	K - 8 students

The Clerc Center has met the target for this measure each year from FY 2011 to FY 2015. However, the target was not met for FY 2016.

enrollment. (Desired direction: increase)			
Year	Target	Actual (or date expected)	Status
2003	Not available.	29	Historical Actual
2004	Not available.	26	Historical Actual
2005	Not available.	28	Historical Actual
2006	Not available.	32	Historical Actual
2007	31.0	25	Target Not Met
2008	32.0	28	Target Not Met but Improved
2009	32.0	39	Target Exceeded
2010	32.0	35	Target Exceeded
2011	32.0	41	Target Exceeded
2012	32.0	33	Target Exceeded
2013	35.0	47	Target Exceeded
2014	39.0	46	Target Exceeded
2015	40.0	46	Target Exceeded
2016	42.0	43	Target Exceeded
2017	45.0	(October, 2017)	Pending
2018	45.0	(October, 2018)	Pending

Measure 1.10 of 12: The percentage of first-time, full-time, degree-seeking undergraduate students who graduate within six years of enrollment. (Desired direction: increase)

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

#### Frequency of Data Collection: Annual

**Data Quality.** This measure is consistent with the standard Integrated Postsecondary Education Data System (IPEDS) methodology that uses a six-year cohort graduation rate, based on the same entering cohort as the IPEDS first-year persistence indicator; that is, the percentage of all incoming first-time, full-time freshmen students in one semester who have graduated by the end of six years after entry. Using the IPEDS methodology of calculating this graduation rate allows for comparisons with other colleges and universities. Gallaudet University reported the FY 2015 data on the percentage of first-time, full-time degree-seeking undergraduate students who graduate within six years of enrollment (that is, those who initially enrolled in the 2009-2010 academic year).

**Target Context.** Gallaudet University's 2010-2015 Strategic Plan identified a goal for improving the graduation rate of its undergraduate students to 50% by FY 2015. In order to get closer to meeting this goal, the targets for FY 2013 through FY 2016 were incrementally raised from 32% to 35%, 39%, 40%, and 42%, respectively. The target is being raised again in FY 2017 and subsequent years to 45%.

Comparisons with the National Center for Education Statistics data for 4-year public and private colleges and universities indicate that 4-year public colleges have a six-year graduation rate of 58% and private colleges at 65% respectively. Gallaudet University reports that similar data from ACT Educational Services indicates that institutions with Open Admissions (ACT scores in the range of 16-21) at 4-year public colleges and universities have an average six-year graduation rate of 29%, and 4-year private colleges and universities have an average six-year graduation rate of 61.6%.

**Explanation.** This is a long-term measure.

Gallaudet University's six-year graduation rate of first-time, full-time, degree-seeking undergraduate students typically follow the same trends as the student persistence rate of the first-time, full-time degree-seeking undergraduate students. Between FY 2010 and FY 2011, the student persistence rate of the first-time, full-time degree-seeking undergraduate students dropped by 3 percentage points (73% to 70%), which gave reason to expect a drop from FY 2015 to FY 2016 in the sixyear graduation rate of the first-time, full-time degree-seeking undergraduate students. Between FY 2015 and FY 2016, the six-year graduation rate of the first-time, full-time degreeseeking undergraduate students also dropped by 3 percentage points (46% to 43%). While Gallaudet University's six-year

graduation rate of first-time, full-time, degree-seeking undergraduate students continues to exceed the target, Gallaudet continues to focus on implementing action plans outlined in Strategic Goal B in an effort to increase the six-year undergraduate rate to 50%. Some of these action plans correspond to the plans tied to improving the persistence rate of students, such as expanding the early alert system, increasing the number of students declaring their major by their third year, and focusing on faculty advising in the major.

Measure 1.11 of 12: The graduation rate of Gallaudet University graduate students. (Desired direction: increase)				
Year	Target	Actual (or date expected)	Status	
2006	Not available.	74	Historical Actual	
2007	Not available.	78	Historical Actual	
2008	Not available.	63	Historical Actual	
2009	Not available.	74	Historical Actual	
2010	Not available.	74	Historical Actual	
2011	Not available.	72	Target Not In Place	
2012	74.0	72	Target Not Met	
2013	74.0	75	Target Exceeded	
2014	74.0	81	Target Exceeded	
2015	74.0	83	Target Exceeded	
2016	74.0	76	Target Exceeded	
2017	74.0	(October, 2017)	Pending	
2018	74.0	(October, 2018)	Pending	

Source. Gallaudet University, Office of Graduate Admissions database.

#### Frequency of Data Collection: Annual

Data Quality. Gallaudet University calculates the graduate rate based on a cohort formula to include all new students enrolled at the master's level at the University each fall who complete their program within a three year period. The calculation includes master's students who were already enrolled in a graduate program at the University and transferred to a different graduate program as a new student. This methodology parallels established formulas used to calculate undergraduate graduation rates.

Target Context. Based on historical data, the Department set the target at 74% for FY 2012 and subsequent years. In FY 2016, the graduation rate of University's graduate students at 76% exceeded the target.

**Explanation.** This measure was designated as a long-term measure. Gallaudet University is consistently exceeding the target for this measure. However, between FY 2015 and FY 2016, the graduation rate of graduate students dropped by 7 percentage points (83% to 76%). Gallaudet University's graduation rate of graduate students typically follow the same trends as the student persistence rate of graduate students. Between FY 2013 and FY 2014, the persistence rate of graduate students dropped by 4 percentage points (83% to 79%), which gave

reason to expect a drop from FY 2015 to FY 2016 in the graduation rate of graduate students. Gallaudet University also reported that there were a few graduate students who were still enrolled in their MA programs during FY 2016. If they had

graduated within three years, the graduation rate of graduate students would have matched the student persistence rate of 79%, which would have matched the drop in the student persistence rate of graduate students.

Measure 1.12 of 12: The annual graduation rate of the Model Secondary School for the Deaf students. (Desired direction: increase) Actual Year Target Status (or date expected 2014 Set Baseline 72 Baseline 2015 65.0 73 Target Exceeded 2016 65.0 79 Target Exceeded 2017 65.0 (October, 2017) Pending 2018 65.0 (October, 2018) Pending

**Source.** Gallaudet University, Clerc Center Office of Planning, Development, and Dissemination.

#### Frequency of Data Collection: Annual

**Data Quality.** In determining the four-year adjusted cohort graduation rate (ACGR), the Clerc Center is using the Department's definition as the percentage of students who graduate from secondary school with a regular diploma in the standard number of years, which is set at four, and is referred to as the "on-time graduation rate." The cohort is "adjusted" by adding any student transferring into the cohort and by subtracting any student who transfer out, emigrate to another country, or die during the years covered by the rate. This methodology allows for the movement of transfer of students into or out of the Clerc Center.

The following formula shows how the 4-year ACGR would be calculated for the cohort entering the 9th grade for the first time in school year 2010-2011 and graduating by the end of school year 2013-2014.

Number of cohort members who earned a regular high school diploma by the end of school year 2013-2014 (divided by)

Number of first-time 9th-graders in fall 2010 (starting cohort), plus students who transferred in, minus students who transferred out, emigrated, or died during school years 2010-2011, 2011-2012, 2012-2013 and 2013-2014

MSSD previously reported it's graduation rates using a two year senior cohort (formula = # of students graduating in year A + # of students graduating in year B / total # of students in cohort - the # of cohort students who transferred).

This calculation did not require tracking of transfer students in and out of the program for students who were not in the twoyear cohort (underclassmen). MSSD calculated graduation rates based on first time seniors. This was limited to first time seniors at MSSD, as systems were not yet in place to track if a student had been classified as a senior at another school/program. Documentation of diploma type was also not included, as is required to successfully calculate the ACGR.

When attempting to do retrospective calculations some of the variables needed to calculate the ACGR data points were not available on a large percentage of the graduating students from 2012 and 2013. Therefore, retroactively calculating the graduation rates of MSSD from 2012 and 2013 with validity using the ACGR is not an accurate reflection of program performance (due to missing data, rather than low graduation rates).

**Target Context.** The new measure is a four-year adjusted cohort graduation rate (ACGR), based on first-time 9th grade cohorts, and uses the data definitions approved by the U.S. Department of Education and is consistent with how states are now uniformly reporting graduation rates as required by the Every Student Succeeds Act (ESSA). It replaces the two-year cumulative senior graduation rate (a cohort of seniors who completed their fourth year of high school and graduate and seniors from the same group who return for a fifth year of school before graduating.

In 2014, the National Center for Education Statistics (NCES) reported that national graduation rates for students with disabilities in 2010-2011 and in 2011-2012 were 59% and 61%,

respectively. At that time in 2014, the most recent data available was from 2011-2012, the Clerc Center proposed to use the 61% as a reference point in setting an appropriate target for its students.

The target for 2015 and subsequent years is set at 65% and will be adjusted accordingly as new data on the national graduation rate of students with disabilities from NCES becomes available. (The NCES reported that the national graduation rates for students with disabilities in 2012-2013 and in 2013-2014 were 62% and 63%, respectively.)

**Explanation.** This measure will allow for direct comparison with the national graduation rates of students with disabilities, as reported by the Institute of Education Sciences' National Center for Education Statistics.

#### Objective 2 of 4:

Gallaudet works in partnership with others to develop and disseminate educational programs and materials for deaf and hard-of-hearing students.

**Measure 2.1 of 1:** The number of other programs and/or institutions adopting MSSD/Kendall innovative strategies/curricula or modifying their strategies as a result of MSSD and Kendall's leadership. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	41.0	54	Target Exceeded
2004	50.0	91	Target Exceeded
2005	55.0	56	Target Exceeded
2006	55.0	84	Target Exceeded
2007	55.0	89	Target Exceeded
2008	55.0	54	Target Not Met
2009	55.0	43	Target Not Met
2010	55.0	34	Target Not Met
2011	55.0	31	Target Not Met
2012	55.0	181	Target Exceeded
2013	55.0	113	Target Exceeded
2014	120.0	187	Target Exceeded
2015	120.0	77	Target Not Met
2016	120.0	360	Target Exceeded
2017	140.0	(October, 2017)	Pending
2018	140.0	(October, 2018)	Pending

**Source.** Gallaudet University, Clerc Center, Office of Planning, Development, and Dissemination.

#### Frequency of Data Collection: Annual

**Data Quality.** The Clerc Center noted that this measure, starting in FY 2012, is a reflection of the sum of the number

of programs that invested considerable resources in Clerc Center products, reported to the Clerc Center that they were using Clerc Center resources, and had multiple viewers for a Clerc Center webinar. Any program that may have been in more than one category or appeared multiple times within a category was counted only once. **Target Context.** The Department is working with the Clerc Center to develop more meaningful measures related to its national mission activities as alternatives to this measure. The alternative measure(s) would assess the impact of evidence-based research projects, other scholarly activities, and demonstration and program development activities on improving national educational outcomes for students who are deaf and hard of hearing. The time frame for developing new measures is uncertain.

**Explanation.** The Clerc Center's strategic plan is designed to engage programs in different ways and to disseminate information using mechanisms that can reach a broader audi-

ence. The Clerc Center is engaged in a process to revise this indicator with the Department that would better measure the outcomes of this work. This indicator was expanded by the Clerc Center in FY 2012 to include 112 schools and organizations that arranged, for multiple individuals, viewings of four online webinars offered by the Clerc Center. In FY 2013, the Clerc Center offered one online webinar, which included 64 schools and organizations. In FY 2014, the Clerc Center offered two online webinars, which included 150 schools and organizations. In FY 2015, the Clerc Center did not host any webinars; but in FY 2016, the Clerc Center offered two online webinars, which included 316 schools and organizations.

#### Objective 3 of 4:

Curriculum and extracurricular activities prepare students to meet the skill requirements of the workplace or to continue their studies.

**Measure 3.1 of 5:** The percentage of Gallaudet University Bachelor graduates who are employed during their first year after graduation. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	73	Historical Actual
2004	80.0	69	Target Not Met
2005	81.0	84	Target Exceeded
2006	82.0	73	Target Not Met
2007	82.0	70	Target Not Met
2008	82.0	80	Target Not Met but Improved
2009	82.0	83	Target Exceeded
2010	82.0	72	Target Not Met
2011	75.0	50	Target Not Met
2012	50.0	63	Target Exceeded
2013	50.0	59	Target Exceeded
2014	50.0	77	Target Exceeded
2015	53.0	67	Target Exceeded
2016	53.0	(October, 2017)	Pending
2017	53.0	(October, 2018)	Pending
2018	53.0	(October, 2019)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Annual Alumni Survey (of recent graduates).

Frequency of Data Collection: Annual

**Data Quality.** The source of this data is from an annual standardized survey to graduates one year after graduation. This survey asks questions about advanced education or training status, types of employment, salary, satisfaction with the employment, and qualifications for the job. The employment rate reported in this indicator is defined as those working full-time and those working part-time divided by the total respondents to this survey.

In previous years, about 30 to 35% of the graduates (approximately 50 students) responded to the survey. To improve the response rate, the University began in the 2011-2012 academic year to collect new addresses immediately after graduation and to send out a Web-based survey with electronic reminders, as well as the mailed survey. At the same time, the University also sought information about its recent alumni through the National Clearinghouse's Student Tracker service on alumni attendance at other universities. The additional information impacted the distribution of alumni between this category and 3.2.

**Target Context.** In FY 2011, the target for this measure was revised to 75% to reflect changes made in Measure 3.2 and the fact that each alumnus would be counted only once. This allows the total percentage across all three categories (Measures 3.1, 3.2 and 3.3) to equal 100% of the alumni who submitted responses to the survey or who were identified in the Student Tracker service. The target was revised again in FY 2012 (data for this fiscal year was submitted in October 2013) to reflect the impact of collecting data from various sources, including Student Tracker's information on enrolled students at other colleges and universities. The target was increased to 53% for FY 2015 and forward.

**Explanation.** Gallaudet University reports each alumnus in only one category—either employed, pursuing additional education, or neither employed nor pursing additional education, resulting in a lower number of those pursuing additional education when those employed were removed from this category.

Each alumnus is counted once in their primary category as: (1) working fulltime; (2) seeking work; (3) working part-time; (4) not seeking work; (5) pursuing education full-time; (6) pursuing further education part-time; and (7) taking internships, practicums, and other unpaid educational experiences. Using these categories, Gallaudet prioritized and ranked respondents of the 2014 graduates when their answers indicated they fit the qualifications of more than one category.

Survey Respondents	
Employed	100
Education	40
Neither	10
TOTAL RESPONDENTS	150
Unknown/not responded	53
Total Graduates	203

(Some bachelors-level graduates who were employed during their first year after graduation were also pursuing additional education that matched the qualifications for Measure 3.2, but they are counted only in this category on employment.)

The percentage of Gallaudet University's undergraduate students who graduated in 2014 and who are employed during their first year after graduation decreased 10% from the previous year. Gallaudet University stated that this might be due to an increase percentage of students pursuing additional education. Gallaudet is addressing this target with the inclusion of workforce preparedness as one of the priorities of the new Gallaudet President. Internal targets and metrics are being developed along with intensified strategies to address this area.

inst year and graduation. (Desired direction. increase)				
Year	Target	Actual (or date expected)	Status	
2003	Not available.	38	Historical Actual	
2004	40.0	36	Target Not Met	
2005	41.0	36	Target Not Met	
2006	41.0	13	Target Not Met	
2007	37.0	14	Target Not Met but Improved	
2008	37.0	12	Target Not Met	
2009	38.0	7	Target Not Met	
2010	38.0	18	Target Not Met but Improved	
2011	15.0	45	Target Exceeded	
2012	45.0	35	Target Not Met	
2013	45.0	38	Target Not Met but Improved	
2014	45.0	19	Target Not Met	
2015	45.0	27	Target Not Met but Improved	
2016	45.0	(October, 2017)	Pending	
2017	45.0	(October, 2018)	Pending	
2018	45.0	(October, 2019)	Pending	

Measure 3.2 of 5: The percentage of Gallaudet University Bachelor graduates who are in advanced education or training during their first year after graduation. (Desired direction: increase)

**Source.** Gallaudet University, Office of Institutional Research, Annual Alumni Survey (of recent graduates).

#### Frequency of Data Collection: Annual

**Data Quality.** The source of this data is from an annual standardized survey to graduates one year after graduation. This survey asks questions about advanced education or training status, types of employment, salary, satisfaction with the employment, and qualifications for the job. The advanced education or training rate reported in this indicator is defined as those in full-time education, in part-time education, and in internships, practicum, and other unpaid educational experiences, divided by the total number of respondents to the survey. Advanced education or training includes students enrolled in a master's or Ph.D. program, a vocational or technical program or another type of program (e.g., law school or medical school).

In previous years, about 30 to 35% of the graduates (approximately 50 students) responded to the survey. To improve the response rate, the University began in the 2011-2012 academic year to collect new addresses immediately after graduation and to send out a Web-based survey with electronic reminders, as well as the mailed survey. At the same time, the University also sought information about its recent alumni through the National Clearinghouse's Student Tracker service on alumni attendance at other universities. The additional information likely impacted the distribution of alumni between this category and 3.1.

**Target Context.** In 2011, the target for this measure be revised to 15% to reflect changes made in Measure 3.1 and the fact that each alumnus would be counted only once. This allows the total percentage across all three categories (Measures 3.1, 3.2 and 3.3) to equal 100% of the alumni who submitted responses to the survey or were who identified in the Student Tracker service. The target was revised again in FY 2012 (data for this fiscal year was submitted in October 2013) to reflect the impact of collecting data from various sources, including

Student Tracker's information on enrolled students at other colleges and universities.

**Explanation.** Gallaudet University reports each alumnus in only one category—either employed, pursuing additional education, or neither employed nor pursing additional education, resulting in a lower number of those pursuing additional education when those employed were removed from this category.

Each alumnus is counted once in their primary category as: (1) working fulltime; (2) seeking work; (3) working part-time; (4) not seeking work; (5) pursuing education full-time; (6) pursuing further education part-time; and (7) taking internships, practicums, and other unpaid educational experiences. Using these categories, Gallaudet prioritized and ranked respondents of the 2014 graduates when their answers indicated they fit the qualifications of more than one category.

Survey Respondents	
Employed	100
Education	40
Neither	10
TOTAL RESPONDENTS	150
Unknown/not responded	53
Total Graduates	203

(Some bachelors-level graduates who were employed during their first year after graduation were also pursuing additional education that matched the qualifications for Measure 3.2, but they are counted only in this category on employment.)

The percentage of Gallaudet University undergraduate students who graduated in 2014 and who are in advanced education or training during their first year after graduation increased 8% compared to the previous year. Gallaudet University states that this increase is due to the decrease of graduates who are employed during their first year after graduation. Gallaudet is addressing this target with the inclusion of workforce preparedness as one of the priorities of the new Gallaudet President. Internal targets and metrics are being developed along with intensified strategies to address this area.



The 10th annual College Bowl Challenge was held October 23, 2015, at the Kellogg Conference Hotel's Swindells Auditorium. The Alumni team from the Classes of 1965 and 1990, and the Gallaudet University College Bowl Team faced off in the tworound, 20-question competition. From the left: Renca Dunn, '11, the emcee of this year's College Bowl; Megan Majocha, a freshman from Pennsylvania, proctor; and alumni team members Bob Bergan, '65; David Peterson, '65; Darryl Hackett, '90; and Stephanie Gemmill Naeyaert, '90.

Photo by: Zhee Chatmon

training during their first year after graduation. (Desired direction, decrease)			
Year	Target	Actual (or date expected)	Status
2003	Not available.	11	Historical Actual
2004	Not available.	15	Historical Actual
2005	Not available.	11	Historical Actual
2006	Set Baseline	15	Baseline
2007	10.0	16	Target Not Met
2008	10.0	8	Target Exceeded
2009	10.0	10	Target Met
2010	10.0	10	Target Met
2011	10.0	5	Target Exceeded
2012	5.0	2	Target Exceeded
2013	5.0	3	Target Exceeded
2014	5.0	4	Target Exceeded
2015	2.0	7	Target Not Met
2016	2.0	(October, 2017)	Pending
2017	2.0	(October, 2018)	Pending
2018	2.0	(October, 2019)	Pending

Measure 3.3 of 5: The percentage of Gallaudet University Bachelor graduates who are not employed nor in advanced education or training during their first year after graduation. (Desired direction: decrease)

**Source.** Gallaudet University, Office of Institutional Research, Annual Alumni Survey (of recent graduates).

#### Frequency of Data Collection: Annual

**Data Quality.** The source of this data is from an annual standardized survey to graduates one year after graduation. This survey asks questions about advanced education or training status, types of employment, salary, satisfaction with the employment, and qualifications for the job. The rate reported in this indicator is defined as those who are not employed (both those seeking work and those not seeking work) nor in advanced education or training, divided by the total respondents to this survey.

In previous years, about 30 to 35% of the graduates (approximately 50 students) responded to the survey. To improve the response rate, the University now collects new addresses immediately after graduation and sends out a Web-based survey with electronic reminders, in addition to the mailed survey. In the 2011-2012 and 2012-2013 academic years, the University also sought information about its recent alumni through the National Clearinghouse's Student Tracker service on alumni attendance at other universities. This information likely impacted the distribution of alumni between 3.1 and 3.2. Measure 3.3 is the remaining percentage of alumni who are looking for work, not employed, not pursuing employment or additional education, or unknown.

**Target Context.** In 2012, the target for this measure is being revised to 5% to reflect changes made in the two previous indicators on the percentage of students employed and/or in advanced education or training during their first year after graduation and each alumnus being counted only once. This allows the total percentage across all three categories (Measures 3.1, 3.2 and 3.3) to equal 100% of the alumni who submitted responses to the survey or were who identified in the Student Tracker service. The target is being revised downward to 2% for FY 2015 and subsequent years.

**Explanation.** Gallaudet University reports each alumnus in only one category—either employed, pursuing additional education, or neither employed (including those seeking em-

ployment or not seeking employment) nor pursing additional education.

Each alumnus is counted once in their primary category as: (1) working fulltime; (2) seeking work; (3) working part-time; (4) not seeking work; (5) pursuing education full-time; (6) pursuing further education part-time; and (7) taking internships, practicums, and other unpaid educational experiences. Using these categories, Gallaudet prioritized and ranked respondents of the 2014 graduates when their answers indicated they fit the qualifications of more than one category.

Survey Respondents	
Employed	100
Education	40
Neither	10
TOTAL RESPONDENTS	150
Unknown/not responded	53
Total Graduates	203

Gallaudet is addressing this target with the inclusion of workforce preparedness as one of the priorities of the new Gallaudet president. Internal targets and metrics are being developed along with intensified strategies to address this area.

**Measure 3.4 of 5:** The percentage of Model Secondary School for the Deaf graduates who are not in jobs nor postsecondary (advanced education or training) programs within one year after graduation. (Desired direction: decrease)

Year	Target	Actual (or date expected)	Status
2007	Not available.	0	Historical Actual
2008	Set Baseline	7	Baseline
2009	7.0	0	Target Exceeded
2010	7.0	7	Target Met
2011	0.0	7	Target Not Met
2012	0.0	7	Target Not Met
2013	0.0	24	Target Not Met
2014	25.0	7	Target Exceeded
2015	25.0	17	Target Exceeded
2016	25.0	(October, 2017)	Pending
2017	25.0	(October, 2018)	Pending
2018	25.0	(September, 2019)	Pending

**Source.** Gallaudet University, Clerc Center Office of Program Monitoring and Evaluation, survey of graduates' status.

#### Frequency of Data Collection: Annual

**Data Quality.** Since FY 2008, the Clerc Center has been conducting one-year follow-up survey during the following summer of each MSSD graduating class, on the percentages of graduates in postsecondary education, employed, and doing

neither. Starting in FY 2014, the Clerc Center implemented a new method of collecting data from its graduates to address the historically low response rates to the surveys. Through a combination of contacting each graduate or graduate's family directly or getting results from a query in the National Student Clearinghouse's Student Tracker service, the Clerc Center was able to get one-year follow-up data on 79% of the 2015 graduating class.

**Target Context.** Starting in FY 2014, the Department merged two previous Measures to form a new measure, Measure 3.5, combining the percentage of students reporting whether they are employed or are enrolled in college or other post-secondary education or training within one year after graduation. However, the Clerc Center stated that it is unable to use historical data as a baseline for a new target, as in previous years the Center had much lower response rates to surveys from its graduates.

Since FY 2014, the Clerc Center has achieved a significantly higher response rate to the survey and has acquired data from the National Student Clearinghouse's Student Tracker service. This data provided a more complete and accurate picture of the Clerc Center's post-school outcomes, and, for the first time, captures those graduates who are not employed or in higher education.

This data is comparable to date provided by the Office of Special Education in its *Part B State Performance Plan/Annual* 

*Performance Reports: 2013 Indicator Analysis* for 2009, 2010, 2011. Using the OSEP measure as a reference point, the target for this measure was set at 25% for 2014 and subsequent years. As new data becomes available from OSEP and the Clerc Center, this target can be adjusted accordingly.

**Explanation.** The percentages for the two current measures on post-school outcomes (Measures 3.6 and 3.7) will total 100%.

Survey Respondents		
Employed or in higher education one year after graduation		
Doing neither one year after graduation		
TOTAL RESPONDENTS	30	
Unknown/not responded		
TOTAL CLERC CENTER 2015 GRADUATES	38	

Measure 3.5 of 5: The percentage of Model Secondary School for the Deaf graduates who are enrolled in college or other post-secondary education or training, and/or who are competitively employed within one year after graduation. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2013	100.0	76	Target Not Met
2014	75.0	93	Target Exceeded
2015	75.0	83	Target Exceeded
2016	75.0	(October, 2017)	Pending
2017	75.0	(October, 2018)	Pending
2018	75.0	(October, 2019)	Pending

**Source.** Gallaudet University's Clerc Center Office of Planning, Development, and Dissemination survey on graduates' status.

**Data Quality.** This is a new measure, combining the percentage of MSSD graduates who are in jobs and/or who are in advanced education or training within one year after graduation. To address the previous low response rates, the Clerc Center revised its data collection methods in FY 2014 and achieved a higher response rate than that of previous years. For this new measure, the data on the outcomes of Model Secondary school graduates will be collected each year through both a one-year graduate follow-up contact with the graduate or the graduate's family and results from a query with the National Student Clearinghouse's Student Tracker service. These results will include graduates enrolled at colleges and universities and/ or competitively employed.

In FY 2016, the Clerc Center was able to get one-year followup data on 79% of the 2015 graduating class.

**Target Context.** Starting in FY 2014, the Department merged two previous Measures to form a new measure, Measure 3.5, combining the percentage of students reporting they are employed or are enrolled in college or other post-secondary education or training within one year after graduation. However, the Clerc Center stated that it is unable to use historical data as a baseline for a new target, as in previous years the Center had much lower response rates to surveys from its graduates.

Since FY 2014, the Clerc Center has achieved a significantly higher response rate to the survey and has acquired data from the National Student Clearinghouse's Student Tracker service since. This data provided a more complete and accurate picture of the Clerc Center's post-school outcomes, and is comparable to data provided by the Office of Special Education for 2009, 2010, 2011 at 72.5%, 72.5%, and 73.5%, respectively. Using the OSEP measure as a reference point, the target for this measure was set at 75% for 2014 and subsequent years. As new data becomes available from OSEP and the Clerc Center, this target can be adjusted accordingly. (OSEP reported that the national percentage of high school graduates either enrolled in college or post-secondary education or training or employed in 2012 and 2013 was 73% and 76%, respectively.)

**Explanation.** This measure combines and replaces the two previous measures—"the percentage of Model Secondary School graduates who are in jobs within one year after graduation" and "the percentage of Model Secondary School

graduates who are in advanced education or training programs within one year after graduation." An aggregated indicator is a better measure of outcomes, as students who graduate from high school are often engaged in competitive employment and enrolled in a post-secondary program at the same time. This is also more consistent with the indicator used by the Department's Office of Special Education Programs on the outcomes of students with disabilities one year after graduating from high school.

Survey Respondents		
Employed or in higher education one year after graduation		
Doing neither one year after graduation		
TOTAL RESPONDENTS	30	
Unknown/not responded		
TOTAL CLERC CENTER 2015 GRADUATES	38	



On March 2, 2016, Gallaudet signed a collaborative agreement with Ohlone College in Fremont, California, to advance educational opportunities for future sign language interpreters. The partnership allows students in the two-year Interpreter Preparation Program at Ohlone to transfer credits into Gallaudet's fouryear Bachelor of Arts in Interpretation (BAI) program. Gallaudet has similar agreements with Central Piedmont Community College in Charlotte, N.C., Austin Community College in Austin, Texas, and Front Range Community College in Westminster, Colo. Pictured from Fuze, a teleconferencing software used to showcase the signing ceremony here at Gallaudet, are President Roberta "Bobbi" Cordano, Dr. Genie Gertz, dean of the College of Arts and

Sciences, Dr. Beth Benedict, faculty fellow for Undergraduate Admissions and Outreach, and Lisa Jacobs, director of National Outreach, who all attended the signing ceremony in Fremont. Cordano signed the agreement alongside Ohlone President Gari Browning. From left: Ohlone alumni/current Gallaudet students Miyuki Nakagawa, Lingyu Kong, Ayano Yamanoto, Dary Berke, and Ganbayar Ganbaatar, Coordinator of Public and Media Relations Kaitlin Luna, Department of Interpretation Chair Dr. Melanie Metzger, Provost Carol Erting, Department of Interpretation Instructor/BAI Field Experience Coordinator Paul Harrelson, Department of Interpretation BAI Program Coordinator/Associate Professor Dr. Keith Cagle, Department of Interpretation Coordinator of ASL Support and Deaf Interpretation/Assistant Professor Dr. Steven Collins, Department of Interpretation Instructor and Master of Arts in Interpretation Program Coordinator Danielle Hunt, Department of Interpretation Technology Support Specialist Tony Ellis, and Department of Interpretation professor Dr. Valerie Dively.

Photo by: Zhee Chatmon
#### Objective 4 of 4:

Improve the efficiency of operations at Gallaudet as defined by the cost per successful student outcome, where the successful outcome is graduation.

Measure 4.1 of 2: Federal cost per Gallaudet graduate. (Desired direction: decrease)					
Year	Target	Actual (or date expected)	Status		
2003	Not available.	227,487	Historical Actual		
2004	Not available.	227,453	Historical Actual		
2005	Not available.	219,897	Historical Actual		
2006	Not available.	230,214	Historical Actual		
2007	Set Baseline	245,356	Baseline		
2008	245,356.0	227,940	Target Exceeded		
2009	245,356.0	264,523	Target Not Met		
2010	237,969.0	257,875	Target Not Met but Improved		
2011	243,204.0	252,501	Target Not Met but Improved		
2012	248,554.0	241,894	Target Exceeded		
2013	253,277.0	232,117	Target Exceeded		
2014	258,343.0	222,140	Target Exceeded		
2015	263,768.0	238,197	Target Exceeded		
2016	269,307.0	(January, 2017)	Pending		
2017	269,307.0	(January, 2018)	Pending		
2018	269,307.0	(January, 2019)	Pending		

#### Source. Gallaudet University, Budget Office.

#### Frequency of Data Collection: Annual

**Data Quality.** The FY 2014 data on the Federal cost per graduate, as reported by Gallaudet University, is an average of the cost per graduate from FY 2009 to FY 2014. The Federal cost per graduate includes graduates who receive bachelor, master's, and doctoral degrees, and graduate and specialist certificates from Gallaudet University.

**Target Context.** In determining the appropriate target each year for the Federal cost per graduate, future inflation must be taken into account, as well as the variation in the number of students who graduate each year from Gallaudet University. When the Department originally set the targets for the two efficiency measures (Federal cost per graduate and total cost

per graduate) for FY 2010, 2011, and 2012, the Consumer Price Index (CPI) projections of inflation - as calculated by the Congressional Budget Office (CBO) - at a rate of 2.2% per year was used to guide target setting, with the overall goal for Gallaudet University to record increases in the efficiency measures that are at or less than the CPI rate each year.

In 2012, the Department chose to use the CPI-U estimates, as calculated by the Office of Management of Budget (instead of the CBO), to set the targets for FY 2013, 2014, 2015, which would be nnually adjusted for the next fiscal year, based on the most recent projected and agreed-on assumed inflation rate. The targets that were set for 2013 to 2015 are as follows:

2013:	1.9%
2014:	2.0%
2015:	2.0%

#### **Performance Requirements**

In August 2014, the targets were updated to align with current CPI-U estimates, August 2014 as follows:

Based on the declining Federal cost per graduate from \$264,523 in 2009 to \$222,140 in 2014, the 2017 and 2018 targets are set to be consistent with the 2016 target at \$269,307.

**Explanation.** This measure is calculated by adding the Federal appropriations for the current year and the five preceding years, which is then averaged. The average (from six years of Federal appropriations) is divided by the number of graduates in the current year, both undergraduate and graduate students. Federal students' financial aid, vocational rehabilitation payments, other Federal support for students, Federal grants and

contracts, the Federal Endowment Grant Program, tuition payments, and other private funds received by the University are not included in this calculation.

Gallaudet University reported that, over the past five years, the average 6-year educational expenses and the average 6-year Federal appropriations have increased by 5% and 9%, respectively; while the number of students graduating increased by 26%. With the rate of students graduating growing faster than the rate of increases in educational expenses and the Federal appropriations, the Federal and total educational costs per graduate decreased over the same period. Gallaudet University also stated that, with the predicted decrease in the number of students graduating in 2015 and future years, along with inflationary increases in educational costs and higher Federal appropriations, the Federal and total educational costs per graduate in 2015 and subsequent years will increase.

Measure 4.2 of 2: Total educational cost per graduate. (Desired direction: decrease)					
Year	Target	Actual (or date expected)	Status		
2003	Not available.	271,735	Historical Actual		
2004	Not available.	272,294	Historical Actual		
2005	Not available.	263,088	Historical Actual		
2006	Not available.	273,068	Historical Actual		
2007	Set Baseline	292,279	Baseline		
2008	292,279.0	272,094	Target Exceeded		
2009	292,279.0	313,142	Target Not Met		
2010	284,066.0	301,652	Target Not Met but Improved		
2011	290,315.0	291,548	Target Not Met but Improved		
2012	296,702.0	276,785	Target Exceeded		
2013	302,339.0	263,927	Target Exceeded		
2014	308,386.0	250,882	Target Exceeded		
2015	314,862.0	270,652	Target Exceeded		
2016	321,474.0	(January, 2017)	Pending		
2017	321,474.0	(January, 2018)	Pending		
2018	321,474.0	(January, 2019)	Pending		

Source. Gallaudet University, Budget Office.

#### Frequency of Data Collection: Annual

**Data Quality.** The FY 2014 data on the total educational cost per graduate, as reported by Gallaudet University, is an average of the cost per graduate from FY 2009 to FY 2014. The total educational cost per graduate includes graduates who receive bachelor, master's, and doctoral degrees, and graduate and specialist certificates from Gallaudet University.

**Target Context.** In determining the appropriate target each year for the Federal cost per graduate, future inflation must be taken into account, as well as the variation in the number of students who graduate each year from Gallaudet University. When the Department originally set the targets for the two efficiency measures (Federal cost per graduate and total cost per graduate) for FY 2010, 2011, and 2012, the Consumer Price Index (CPI) projections of inflation - as calculated by the Congressional Budget Office (CBO) - at a rate of 2.2% per year was used to guide target setting, with the overall goal for Gallaudet University to record increases in the efficiency measures that are at or less than the CPI rate each year.

In 2012, the Department chose to use the CPI-U estimates, as calculated by the Office of Management of Budget (instead of the CBO), to set the targets for FY 2013, 2014, 2015, which would be nnually adjusted for the next fiscal year, based on the most recent projected and agreed-on assumed inflation rate. The targets that were set for 2013 to 2015 are as follows:

2013:	1.9%
2014:	2.0%
2015:	2.0

In August 2014, the targets were updated to align with current CPI-U estimates, August 2014 as follows:

2015: 2.1% 2016: 2.1%

Based on the declining total cost per graduate from \$313,142 in 2009 to \$250,882 in 2014, the 2017 and 2018 targets are set to be consistent with the 2016 target at \$321,474.

**Explanation.** This measure is calculated by adding the Federal appropriations for the current year and the five preceding years, which is then averaged. The average (from six years of Federal appropriations) is divided by the number of graduates in the current year, both undergraduate and graduate students. Costs associated with public services, auxiliary enterprises, and construction, are excluded from this calculation.

Gallaudet University reported that, over the past five years, the average 6-year educational expenses and the average 6-year Federal appropriations have increased by 5% and 9%, respectively; while the number of students graduating increased by 26%. With the rate of students graduating growing faster than the rate of increases in educational expenses and the Federal appropriations, the Federal and total educational costs per graduate decreased over the same period. Gallaudet University also stated that, with the predicted decrease in the number of students graduating in 2015 and future years, along with inflationary increases in educational costs and higher Federal appropriations, the Federal and total educational costs per graduate in 2015 and subsequent years will increase.



The Clerc Center exhibited at the Clarke Schools 36th Annual Conference on Mainstreaming held in Marlborough, Massachusetts from October 22-23. Mary Lightfoot (right), project manager for Planning, Development and Dissemination, shared some information with Aimed Stevens, GURC coordinator, Northeast region, Haverhill, Massachusetts.

Photo by: Mary Lightfoot



In January 2016, the Martin Luther King, Jr. Memorial Library displayed the student-created exhibit "Social Justice Sneakers: Walk in Someone Else's Shoes." The exhibit, which officially opened on October 28, 2015 at the Jordan Student Academic Center, was at the library's Great Hall until February 28, 2016.

Photo by: Zhee Chatmon

# **Strategic Plan Goal A: Enrollment**

The university continues to strive to increase student enrollment, including enrollment of undergraduate, graduate, and continuing education students. This chapter includes date on university enrollment and on recruitment activity directed to individuals who are deaf or hard of hearing from minority backgrounds. (Separate data are contained in the Clerc Center chapter for their students.) Included are enrollment data for the fiscal year; trend data for the last five years; by undergraduate, graduate, and professional studies status; by race/ethnicity, gender, deaf/hearing, and full-time/part-time status; by state or international country; by numbers applied, admitted, and enrolled; and by ACT scores. The contents of this chapter reflect the major accomplishments performed during FY 2016 in support of Goal A of the Gallaudet Strategic Plan.

## I. Enrollment

	Full-time	Part-time	Total	% of Enrollment
Undergraduate Degree-seeking	959	30	989	
Freshmen	293	0	293	
Sophomores	179	1	180	
Juniors	217	3	220	
Seniors	258	26	284	
Second degree	12	0	12	
Undergraduate Non Degree-seeking		22	22	
TOTAL UNDERGRADUATE	959	52	1,011	55%
Graduate Degree-seeking	295	149	444	
Graduate Non Degree-seeking		22	22	
TOTAL GRADUATE	295	171	466	26%
English Language Institute	73		73	4%
Consortium		5	5	
TOTAL UNDERGRADUATE, GRADUATE, ELI & CONSORTIUM	1,327	228	1,555	
Kendall Demonstration Elementary School	106		106	
Model Secondary School for the Deaf	166		166	
TOTAL CLERC CENTER	272		272	15%
TOTAL UNDERGRADUATE, GRADUATE, ELI, & CLERC CENTER			1,827	100%
Professional Studies <sup>1</sup>		115	115	

#### Fall 2015 Census University and Clerc Center Enrollment

<sup>1</sup>Professional Studies students can enroll continuously throughout the semester. Therefore, a one-time snapshot of Professional Studies enrollment does not provide an accurate picture. The snapshot of Professional Studies enrollment is used, however, in reporting enrollment in the Government Performance and Results (GPRA) Report.

#### End-of-Year University Enrollment with Dual Enrollment

	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Undergraduates	1,204	1,200	1,160	1,100	1,163
Graduates	491	535	567	513	515
English Language Institute	92	109	100	115	84
Consortium		11	12	5	*
Professional Studies	842	751	708	681	592
TOTAL UNIVERSITY	2,629	2,606	2,547	2,414	2,354
DISTINCT HEADCOUNT ENROLLMENT	2,438	2,463	2,419	2,306	2,274
ENROLLED IN MORE THAN ONE CATEGORY	191	143	128	108	80

#### Fall Census University and Clerc Center Enrollment

	2011	2012	2013	2014	2015
Undergraduate Degree-seeking	1,078	1,097	1,053	1,001	989
Undergraduate Non Degree-seeking	40	20	24	30	22
TOTAL UNDERGRADUATE	1,118	1,117	1,077	1,031	1,011
Graduate Degree-seeking	410	446	469	443	444
Graduate Non Degree-seeking	18	17	15	14	22
TOTAL GRADUATE	428	463	484	457	466
English Language Institute	65	90	63	81	73
Consortium		4	7	3	5
TOTAL UNDERGRADUATE, GRADUATE, ELI & CONSORTIUM	1,611	1,674	1,631	1,572	1,555
Kendall Demonstration Elementary School	97	94	92	87	106
Model Secondary School for the Deaf	165	150	149	165	166
TOTAL CLERC CENTER	262	244	241	252	272
TOTAL UNDERGRADUATE, GRADUATE, ELI, & CLERC CENTER	1,873	1,918	1,872	1,824	1,827
Professional Studies <sup>1</sup>	102	147	122	119	115

<sup>1</sup> Professional Studies students can enroll continuously throughout the semester. Therefore, a one-time snapshot of Professional Studies enrollment does not provide an accurate picture. The snapshot of Professional Studies enrollment is used, however, in reporting enrollment in the Government Performance and Results (GPRA) Report.

	Undergraduate	Graduate	Total
RACE/ETHNICITY			
International/Nonresident Alien	79	26	105
American Indian/Alaska Native	6	2	8
Asian	30	14	44
Black/African American	126	32	158
Hispanic of any race	120	35	155
Native Hawaiian/Other Pacific Islander	1	0	1
Two or more	113	44	157
White	481	235	716
Race and ethnicity unknown	33	56	89
GENDER			
Male	474	111	585
Female	515	333	848
HEARING STATUS			
Deaf/Hard of hearing	892	201	1,093
Hearing	97	237	334
Unknown	0	6	6
ACADEMIC LOAD			
Full-time	959	295	1,254
Part-time	30	149	179
TOTAL FOR EACH CATEGORY	989	444	1,433

### Fall 2015 Degree-seeking Diversity by Career Level

### Fall Degree-seeking Diversity Trend

	2011	2012	2013	2014	2015
RACE/ETHNICITY					
International/Nonresident Alien	79	98	106	110	105
American Indian/Alaska Native	4	5	5	3	8
Asian	57	53	52	57	44
Black/African American	149	161	156	165	158
Hispanic of any race	114	179	182	171	155
Native Hawaiian/Other Pacific Islander	2	3	3	3	1
Two or more	78	35	37	43	157
White	963	960	916	826	716
Race and ethnicity unknown	42	49	65	66	89
GENDER					
Male	590	592	607	561	585
Female	898	951	915	883	848
Unknown					
HEARING STATUS					
Deaf/Hard of hearing	1,180	1,198	1,176	1,118	1,093
Hearing	299	335	338	319	334
Unknown	9	10	8	7	6
ACADEMIC LOAD					
Full-time	1,329	1,366	1,367	1,276	1,254
Part-time	159	177	155	168	179
TOTAL FOR EACH CATEGORY	1,488	1,543	1,522	1,444	1,433

### Fall 2015 Undergraduate Degree-seeking Diversity by Class Year

	Freshmen	Sophomores	Juniors	Seniors	Second Degree	TOTAL
RACE/ETHNICITY						
International/Nonresident Alien	20	18	18	22	1	79
American Indian/Alaska Native	4	1	0	1	0	6
Asian	7	6	6	9	2	30
Black/African American	48	24	25	26	3	126
Hispanic of any race	26	24	28	42	0	120
Native Hawaiian/Other Pacific Islander	0	0	0	1	0	1
Two or more	29	19	33	31	1	113
White	138	87	105	148	3	481
Race and ethnicity unknown	21	1	5	4	2	33
GENDER						
Male	152	81	104	134	3	474
Female	141	99	116	150	9	515
HEARING STATUS						
Deaf/Hard of hearing	269	169	199	244	11	892
Hearing	24	11	21	40	1	97
Hearing Undergraduate (HUG)	18	10	13	25	0	66
Non-HUG	6	1	8	15	1	31
ACADEMIC LOAD						
Full-time	293	179	217	258	12	959
Part-time	0	1	3	26	0	30
TOTAL FOR EACH CATEGORY	293	180	220	284	12	989

	2011	2012	2013	2014	2015
RACE/ETHNICITY					
International/Nonresident Alien	55	72	75	82	79
American Indian/Alaska Native	3	3	4	2	6
Asian	46	43	40	43	30
Black/African American	122	125	117	124	126
Hispanic of any race	89	144	146	146	120
Native Hawaiian/Other Pacific Islander	1	2	2	3	1
Two or more	63	29	28	33	113
White	689	676	636	562	481
Race and ethnicity unknown	10	3	5	6	33
GENDER					
Male	508	509	490	459	474
Female	570	588	563	542	515
Unknown					
HEARING STATUS					
Deaf/Hard of hearing	997	1,011	962	917	892
Hearing	81	86	91	84	97
ACADEMIC LOAD					
Full-time	1,029	1,045	1,006	951	959
Part-time	49	52	47	50	30
TOTAL FOR EACH CATEGORY	1,078	1,097	1,053	1,001	989

### Fall Undergraduate Degree-seeking Diversity Trend



Students from Denton High School in Denton, Texas, came to Gallaudet for a four-day visit. On February 26, 2016, students gathered together for a group photo on the Gallaudet Mall. This group of deaf and hearing students were led by their teacher, Jamie Covey, who has brought students to visit Gallaudet and Washington, D.C. biennially for the past 14 years (seven times). The group stayed at the Kellogg Conference Center Hotel during their four days in D.C.

Photo by: Zhee Chatmon



	Certificates	Masters	Specialists	Doctorates	TOTAL
RACE/ETHNICITY					
International/Nonresident Alien		21	1	4	26
American Indian/Alaska Native		1		1	2
Asian		9		5	14
Black/African American	1	19	3	9	32
Hispanic of any race		19	3	13	35
Native Hawaiian/Other Pacific Islander					
Two or more		28	4	12	44
White	3	137	6	89	235
Race and ethnicity unknown	1	32	1	22	56
GENDER					
Male	1	71	2	37	111
Female	4	195	16	118	333
HEARING STATUS					
Deaf/Hard of hearing	3	153	9	36	201
Hearing	2	111	8	116	237
Unknown		2	1	3	6
ACADEMIC LOAD					
Full-time	2	205	12	76	295
Part-time	3	61	6	79	149
TOTAL FOR EACH CATEGORY	5	266	18	155	444

### Fall 2015 Graduate Degree-seeking Diversity by Degree Level

	2011	2012	2013	2014	2015
RACE/ETHNICITY					
International/Nonresident Alien	24	26	31	28	26
American Indian/Alaska Native	1	2	1	1	2
Asian	11	10	12	14	14
Black/African American	27	36	39	41	32
Hispanic of any race	27	35	36	25	35
Native Hawaiian/Other Pacific Islander	1	1	1		0
Two or more	15	6	9	10	44
White	274	284	280	264	235
Race and ethnicity unknown	32	46	60	60	56
GENDER					
Male	82	83	117	102	111
Female	328	363	352	341	333
Unknown					
HEARING STATUS					
Deaf/Hard of hearing	183	187	214	201	201
Hearing	218	249	247	235	237
Unknown	9	10	8	7	6
ACADEMIC LOAD					
Full-time	300	321	361	325	295
Part-time	110	125	108	118	149
TOTAL FOR EACH CATEGORY	410	446	469	443	444

### Fall Graduate Degree-seeking Diversity Trend

### Online and Hybrid Courses Enrollment Trend

	AY 2011	AY 2012	AY 2013	AY 2014	AY 2015
Online and Hybrid enrollment	1,246	1,606	1,611	1,207	1,353



#### Fall Degree-seeking Hearing Undergraduate Trend

	2011	2012	2013	2014	2015
Hearing undergraduate (HUG)	43	47	43	49	66
Percentage of undergraduate enrollment	4%	4%	4%	5%	6%
Bachelors of Interpretation (BAI)	38	39	42	32	29
Adult Degree Completion Program (ADCP)			6	3	4
TOTAL HEARING STUDENTS	81	86	91	84	97
Percentage of undergraduate enrollment	8%	8%	9%	8%	10%

### Fall 2015 U.S. Degree-seeking Students by State/Territory

	Undergraduate	Graduate	Total		Undergraduate	Graduate	Total
Alabama	13	1	14	Nebraska	6	1	7
Alaska	2		2	Nevada	2	2	4
Arizona	23		23	New Hampshire	4	1	5
Arkansas	4	3	7	New Jersey	23	11	34
California	90	34	124	New Mexico	10	5	15
Colorado	10	7	17	New York	63	24	87
Connecticut	9	11	20	North Carolina	22	9	31
Delaware	3		3	North Dakota	1		1
District of Columbia	36	59	95	Ohio	17	7	24
Florida	51	22	73	Oklahoma	5	4	9
Georgia	20	9	29	Oregon	2	5	7
Guam	1		1	Pennsylvania	21	17	38
Hawaii	4		4	Puerto Rico	2	2	4
Idaho	2		2	Rhode Island	4		4
Illinois	30	8	38	South Carolina	6	3	9
Indiana	24	5	29	South Dakota	2		2
Iowa	1	1	2	Tennessee	11	3	14
Kansas	12	1	13	Texas	45	15	60
Kentucky	9	2	11	Utah	10	3	13
Louisiana	11	2	13	Vermont	1	3	4
Maine	1	1	2	Virginia	60	31	91
Maryland	121	64	185	Virgin Islands	0	0	0
Massachusetts	22	8	30	Washington	15	5	20
Michigan	18	8	26	West Virginia	1		1
Minnesota	28	9	37	Wisconsin	12	5	17
Mississippi	4		4	Wyoming	1	0	1
Missouri	10	5	15	Unknown	3	2	5
Montana	2		2	TOTAL	910	418	1,328

	2011	2012	2013	2014	201
Alabama	13	20	13	13	14
Alaska	4	5	5	3	2
Arizona	21	22	17	21	23
Arkansas	7	4	6	3	7
California	146	140	121	131	124
Colorado	22	25	19	14	17
Connecticut	14	8	11	15	20
Delaware	6	4	5	3	3
District of Columbia	86	73	99	85	95
Florida	70	57	66	65	73
Georgia	29	28	37	32	29
Guam			1		1
Hawaii	8	7	5	7	4
Idaho	1	1	1	1	2
Illinois	42	43	44	39	38
Indiana	22	22	20	26	29
Iowa	7	7	7	6	2
Kansas	15	16	19	12	13
Kentucky	13	17	11	11	11
Louisiana	14	11	14	12	13
Maine	7	10	7	5	2
Maryland	188	213	198	185	185
Massachusetts	31	33	32	33	30
Michigan	29	34	31	29	26
Minnesota	36	31	35	44	37
Mississippi	2	3	2	3	4
Missouri	21	23	24	26	15
Montana	1		3	1	2

#### Fall U.S. Degree-seeking Students by State/Territory Trend

1,334 1,328

	2011	2012	2013	2014	2015
Alabama	13	19	12	12	13
Alaska	3	4	4	3	2
Arizona	16	15	14	20	23
Arkansas	6	3	4	3	4
California	109	108	96	102	90
Colorado	17	17	14	11	10
Connecticut	9	6	7	9	9
Delaware	5	4	5	3	3
District of Columbia	45	34	29	32	36
Florida	53	40	54	52	51
Georgia	23	24	30	24	20
Guam					1
Hawaii	8	6	4	6	4
Idaho	1	1	1	1	2
Illinois	29	29	33	27	30
Indiana	20	21	18	21	24
Iowa	5	6	6	5	1
Kansas	13	15	17	12	12
Kentucky	10	9	6	7	9
Louisiana	12	11	10	9	11
Maine	6	6	5	4	1
Maryland	130	137	128	112	121
Massachusetts	23	28	25	22	22
Michigan	20	22	19	20	18
Minnesota	26	24	24	32	28
Mississippi	2	3	2	3	4
Missouri	15	17	17	16	10

### Fall U.S. Degree-seeking Undergraduates by State/Territory Trend

	2011	2012	2013	2014	2015
Montana	1		3	1	2
Nebraska	6	6	8	8	6
Nevada	3	3	4	3	2
New Hampshire	4	5	2	1	4
New Jersey	36	39	30	25	23
New Mexico	6	7	9	9	10
New York	55	59	57	65	63
North Carolina	18	22	25	17	22
North Dakota			1	1	1
Ohio	34	33	30	24	17
Oklahoma	10	12	12	7	5
Oregon	5	7	4	4	2
Pennsylvania	25	31	31	21	21
Puerto Rico	1	1	3	3	2
Rhode Island	3	3	3	3	4
South Carolina	7	7	9	6	6
South Dakota		1	1	1	2
Tennessee	17	19	18	11	11
Texas	70	61	48	46	45
Utah	8	6	9	7	10
Vermont	2	1	2		1
Virginia	56	66	60	60	60
Washington	13	14	11	10	15
West Virginia	7	4	5	3	1
Wisconsin	13	8	6	10	12
Wyoming				1	1
Unknown	4	1	3	4	
TOTAL	1,023	1,025	978	919	910

	2011	2012	2013	2014	2015			2011	2012	2013	2014
Alabama		1	1	1	1		Nebraska	2	2	1	1
Alaska	1	1	1				Nevada	1			1
Arizona	5	7	3	1		1	New Hampshire	2	2	2	1
Arkansas	1	1	2		3	1	New Jersey	20	18	23	16
California	37	32	25	29	34	1	New Mexico	2	3	1	3
Colorado	5	8	5	3	7	1	New York	25	35	30	27
Connecticut	5	2	4	6	11		North Carolina	8	9	5	9
Delaware	1					1	North Dakota				1
District of Columbia	41	39	70	53	59	1	Ohio	8	8	9	9
Florida	17	17	12	13	22		Oklahoma	1	1		1
Georgia	6	4	7	8	9		Oregon	3	3	4	3
Guam			1			1	Pennsylvania	14	9	9	18
Hawaii		1	1	1		1	Puerto Rico	1	1	5	
Idaho						1	Rhode Island	3	2	1	
Illinois	13	14	11	12	8	1	South Carolina	2	2	3	3
Indiana	2	1	2	5	5		South Dakota			1	
Iowa	2	1	1	1	1	1	Tennessee	1	2	2	3
Kansas	2	1	2		1	1	Texas	14	11	19	16
Kentucky	3	8	5	4	2	1	Utah		9	5	5
Louisiana	2		4	3	2	1	Vermont	3	1	1	1
Maine	1	4	2	1	1	1	Virginia	30	38	37	26
Maryland	58	76	70	73	64	1	Virgin Islands				
Massachusetts	8	5	7	11	8		Washington	3	8	6	3
Michigan	9	12	12	9	8	1	West Virginia	1	1	1	1
Minnesota	10	7	11	12	9		Wisconsin	3	3	5	6
Mississippi							Wyoming				
Missouri	6	6	7	10	5		Unknown	4	4	2	5
Montana						]	TOTAL	386	420	438	415

### Fall U.S. Degree-seeking Graduate Students by State/Territory Trend

### Cumulative U.S. University Enrollment since 1864<sup>1</sup>

Alabama	217
Alaska	31
Arizona	297
Arkansas	180
California	1,794
Colorado	257
Connecticut	394
Delaware	82
District of Columbia	495
Florida	759
Georgia	371
Guam	7
Hawaii	93
Idaho	85
Illinois	1,022
Indiana	508
Iowa	315
Kansas	311
Kentucky	251

Louisiana	258
Maine	111
Maryland	1,665
Massachusetts	552
Michigan	459
Minnesota	612
Mississippi	83
Missouri	405
Montana	83
Nebraska	206
Nevada	39
New Hampshire	91
New Jersey	611
New Mexico	145
New York	1,579
North Carolina	501
North Dakota	111
Ohio	715

West Virginia Wisconsin Wyoming	971 6 429 157 466 24
West Virginia Wisconsin	971 6 429 157 466
West Virginia	971 6 429 157
	971 6 429
Washington	6
Virgin Islands	971
Virginia	071
Vermont	61
Utah	123
Texas	873
Tennessee	238
South Dakota	136
South Carolina	199
Rhode Island	79
Puerto Rico	32
Pennsylvania	1,078
Oregon	217
Oklahoma	123

<sup>1</sup>Includes enrollment through summer 2016.

	Undergraduate	Graduate	Total
Argentina		1	1
Australia		1	1
Botswana	5		5
Canada	31	3	34
China	10	3	13
France	1		1
Germany	1		1
Ghana	1		1
Hong Kong	1	2	3
Iceland		1	1
India	1	1	2
Iran	1		1
Italy		1	1
Japan	1	3	4
Korea, Republic of		2	2
Malaysia		1	1
Mexico	1		1
Mongolia	1		1
Netherlands		1	1
Nigeria	5	2	7
Panama		1	1
Paraguay	1		1
Qatar	1		1
Russian Federation	1		1
Saudi Arabia	9	1	10
Spain		1	1
Sri Lanka	1		1
Sweden	3		3
Taiwan	2		2
Vietnam	1	1	2
TOTAL	79	26	105

### Fall 2015 International Undergraduate Degree-seeking Enrollment by Country

	2011	2012	2013	2014	2015
Argentina	1				
Bahamas	1	1	1	1	
Belgium	1	1			
Botswana	1	5	5	4	5
Brazil	1				
Canada	22	32	33	29	31
China	2	4	6	9	10
Denmark	1				
Fiji	1	1	1		
France	1	1	2	2	1
Germany			2	2	1
Ghana			1	1	1
Hong Kong					1
India	4	3	4	3	1
Iran				1	1
Italy	1	1			
Japan	1	1	2	1	1

#### Fall International Undergraduate Degree-seeking Enrollment by Country Trend

	2011	2012	2013	2014	2015
Mali	1	1	1	1	
Mexico					1
Mongolia				1	1
Nepal	1	1	1	1	
Netherlands	1	1	1		
Nigeria	2	5	4	6	5
Paraguay		1	2	2	1
Peru	1	2	1	1	
Qatar				1	1
Russian Federation				1	1
Saudi Arabia	2	3	3	8	9
Slovenia	1				
Sri Lanka	1	1	2	2	1
Sweden		4	3	4	3
Taiwan				1	2
Vietnam					1
Unknown	7	3			
TOTAL	55	72	75	82	79

Students from GSR 300.04 Black Lives Matter held a campus-wide event on April 19, 2016, during common time, to engage the community in discussion for dignity and human rights for black and brown people. The presentation entitled, "ENOUGH racism at Gallaudet: Activism at Gallaudet from DPN to BLM" interactive. The Capstone students asked the audience to participate in an activity that helped people recognize and discuss privilege. Here, Letesha Dixon addresses the audience.

Photo by: Zhee Chatmon



	2011	2012	2013	2014	2015
Argentina			1	1	1
Australia					1
Cameroon			1		
Canada	3	5	6	3	3
Chad			1		
China	1		2	4	3
Hong Kong				1	2
Iceland					1
India			1		1
Italy			1	1	1
Japan	3	3	5	4	3
Kenya	1	1	1	1	
Korea, Republic of	1	1	2	3	2
Kuwait		1	1	1	
Malaysia	1	2	2	1	1
Mongolia	1	1			
Morocco		1	1		
Netherlands				1	1
Nigeria	1	1	3	4	2
Panama					1
Philippines		1	1		
Saudi Arabia	1	1			1
Singapore				1	
Spain	1	1	1	2	1
Thailand	1	2	1		
Vietnam					1
Unknown	9	5			
TOTAL	24	26	31	28	26

### Fall International Graduate Student Degree-seeking Enrollment by Country Trend

#### Cumulative International Enrollment since 1864<sup>1</sup>

Argentina	4	El Salvador	2	Kenya	10	Sierra Leone	2
Australia	19	Eritrea	1	Korea, Republic of	21	Singapore	21
Austria	2	Ethiopia	5	Kuwait	2	Slovakia	2
Bahamas	4	Fiji	1	Lebanon	3	Slovenia	1
Bangladesh	1	Finland	7	Liberia	1	South Africa	19
Barbados	2	France	11	Malaysia	19	Spain	9
Belgium	13	Gabon	2	Mali	1	Sri Lanka	7
Benin	1	Germany	17	Mexico	10	Sweden	44
Bermuda	1	Ghana	18	Mongolia	3	Switzerland	5
Bolivia	1	Greece	5	Nepal	1		
Botswana	9	Guatemala	3	Netherlands	14	Taiwan, Republic of China	20
Brazil	20	Guyana	2	New Zealand	4	Tanzania	1
Bulgaria	1	Haiti	1	Nigeria	75	Thailand	10
Burkina Faso	1	Honduras	1	Norway	15	Trinidad and Tobago	3
Cameroon	5	Hong Kong	4	Pakistan	3	Turkey	1
Canada	868	Hungary	2	Panama	1	Uganda	4
Chile	3	Iceland	4	Paraguay	2	United Arab Emirates	8
China	75	India	62	Peru	3	United Kingdom	22
Colombia	2	Indonesia	3	Philippines	20	Uzbekistan	1
Costa Rica	6	Iran	3	Poland	1	Venezuela	3
Cote D'Ivoire	1	Ireland	15	Portugal	1	Vietnam	3
Croatia	2	Israel	16	Qatar	1	Yugoslavia	1
Cyprus	1	Italy	11	Russian Federation	3	Zambia	2
Czech Republic	1	Jamaica	6	Rwanda	1	Zimbabwe	1
Denmark	10	Japan	59	Samoa	1	TOTAL	1,749
Egypt	1	Jordan	4	Saudi Arabia	24	COUNTRIES	101

<sup>1</sup>Includes enrollment through summer 2016.

	Applied	Admitted	Enrolled
RACE/ETHNICITY			
International/Nonresident Alien	44	27	14
American Indian/Alaska Native	9	5	4
Asian	23	13	6
Black/African American	134	63	46
Hispanic of any race	38	28	21
Native Hawaiian/Other Pacific Islander	3	1	0
Two or more	19	12	20
White	303	198	141
Race and ethnicity unknown	66	40	24
GENDER			
Male	291	180	140
Female	348	207	136
Unknown			
HEARING STATUS			
Deaf/Hard of hearing	507	335	232
Hearing	132	52	44
APPLICATION TYPE			
First-time Freshmen	408	251	178
Transfers	221	129	96
Second Degree	10	7	2
TOTAL FOR EACH CATEGORY	640	387	276

#### Fall 2015 New Undergraduate Degree-seeking by Applied, Admitted, and Enrolled

#### Fall New Undergraduate Degree-seeking by Applied, Admitted, and Enrolled Trend

	2011	2012	2013	2014	2015
Applied	630	727	732	736	638
Admitted	411	434	468	466	387
Enrolled	302	298	286	281	276
ENROLLMENT YIELD	73%	69%	61%	60%	71%

	2011	2012	2013	2014	2015
RACE/ETHNICITY					
International/Nonresident Alien	7	23	14	21	14
American Indian/Alaska Native		1	2	1	4
Asian	14	9	9	7	6
Black/African American	41	34	32	47	46
Hispanic of any race	34	45	45	45	21
Native Hawaiian/Other Pacific Islander		1	1	1	
Two or more	21	12	12	13	20
White	180	172	170	143	141
Race and ethnicity unknown	5	1	1	3	24
GENDER					
Male	161	130	119	122	140
Female	141	168	167	159	136
Unknown					
HEARING STATUS					
Deaf/Hard of hearing	273	264	254	247	232
Hearing	29	34	32	34	44
APPLICATION TYPE					
First-time Freshmen	201	213	201	182	178
Transfers	99	82	83	96	96
Second Degree	2	3	2	3	2
TOTAL FOR EACH CATEGORY	302	298	286	281	276

### Fall New Undergraduate Degree-seeking Diversity Trend

#### Fall New Undergraduate Degree-seeking Average ACT Trend

	2011	2012	2013	2014	2015
English	17.6	17.2	17.2	16.7	16.9
Math	17.9	18.0	18.3	17.7	18.1
Reading	19.8	19.7	20.1	19.4	20.3



#### Fall New Degree-seeking Hearing Undergraduate Trend

	2011	2012	2013	2014	2015
Hearing undergraduate (HUG)	13	17	18	25	29
Percentage of new undergraduate enrollment	4%	6%	6%	9%	11%
Bachelors of Interpretation (BAI)	16	17	13	9	12
Adult Degree Completion (ADCP)			1		
TOTAL HEARING STUDENTS	29	34	32	34	44
Percentage of new undergraduate enrollment	10%	11%	11%	12%	16%

### Fall 2015 New-to-Program Degree-seeking Graduate Students by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
CERTIFICATES			
ASL/English Bilingual Early Childhood Education			
ASL/Deaf Studies	1	1	1
Deaf and Hard of Hearing Infants, Toddlers, and Families	7	7	4
Deaf Students with Disabilities	1	1	
MASTERS			
Counseling: Mental Health	14	5	4
Counseling: School	8	4	3
Deaf Education: Advanced Studies	9	5	5
Deaf Education: Special Programs	12	5	3
Deaf Studies	15	7	7
Education	22	12	10
International Development	20	11	6
Interpretation	39	20	15
Linguistics	15	9	7
Public Administration	41	35	22

	Applied	Admitted	Enrolled
Social Work	37	30	15
Sign Language Teaching	62	36	29
Speech-Language Pathology	156	31	15
SPECIALISTS			
Deaf Education	2		
School Psychology	12	9	5
DOCTORATES			
Audiology	75	29	10
Clinical Psychology	29	7	5
Critical Studies in the Education of Deaf Learners	1		
Educational Neuroscience	4	3	1
Hearing, Speech, and Language Sciences	1	1	1
Interpretation	9	6	5
Linguistics	6	6	2
TOTAL PROGRAM ENROLLMENT	598	280	175
HEADCOUNT	559	269	172

<sup>1</sup>Dual program enrollments are included.

	Applied	Admitted	Enrolled
RACE/ETHNICITY			
International/Nonresident Alien	49	19	10
American Indian/Alaska Native	2	1	1
Asian	31	13	9
Black/African American	50	17	12
Hispanic of any race	55	25	15
Native Hawaiian/Other Pacific Islander			
Two or more	28	18	12
White	264	143	79
Race and ethnicity unknown	119	44	20
GENDER			
Male	117	67	43
Female	443	190	115
Unknown	38	23	0
HEARING STATUS			
Deaf/Hard of hearing	212	141	84
Hearing	378	136	72
Unknown	8	3	2
TOTAL FOR EACH CATEGORY	598	280	158

#### Fall 2015 New-to-Graduate Career Degree-seeking Diversity by Applied, Admitted, and Enrolled

	2011	2012	2013	2014	2015
Applied	498	595	602	617	598
Admitted	225	287	296	257	280
Enrolled	168	190	177	171	158
ENROLLMENT YIELD	75%	66%	60%	67%	56%

#### Fall New Graduate Student Degree-seeking by Applied, Admitted, and Enrolled Trend

#### Fall New-to-Graduate Career Degree-seeking Diversity Trend

	2011	2012	2013	2014	2015
RACE/ETHNICITY					
International/Nonresident Alien	10	7	15	10	10
American Indian/Alaska Native		1			1
Asian	5	3	8	7	9
Black/African American	10	17	13	12	12
Hispanic of any race	9	14	12	7	15
Native Hawaiian/Other Pacific Islander					
Two or more	6	1	4	3	12
White	110	121	95	105	79
Race and ethnicity unknown	18	26	30	27	20
GENDER					
Male	29	46	53	37	43
Female	139	144	124	134	115
Unknown					
HEARING STATUS					
Deaf/Hard of hearing	82	88	97	95	84
Hearing	83	99	77	75	72
Unknown	3	3	3	1	2
TOTAL FOR EACH CATEGORY	168	190	177	171	158

## II. Recruitment of a Diverse Student Body

The Office of Admissions and Outreach works to recruit, retain and graduate a diverse and academically talented group of students. To accomplish this goal, targeted recruitment visits were scheduled. In addition, specific campus programs have been designed and implemented to attract and retain these students. Refer to the "Support Programs and Strategies" section of the "Goal B Persistence and Graduation" chapter in this report for a description of the programs intended to retain students, including specific programs to retain a diverse student body.

#### Percent New U.S. Degree-seeking Undergraduate from Students of Color (SOC<sup>1</sup>)

	2012	2013	2014	2015	2016
% New SOC Enrollment	37%	35%	44%	34%	35%

<sup>1</sup>Students of Color (SOC) includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

In an effort to recruit academically talented students from diverse backgrounds, the financial aid structure was redesigned to recognize talents and abilities across a number of dimensions. Gallaudet awarded a total of 206 merit scholarships, including twenty (20) students in this cohort who did not disclose ethnicity. Of the 186 merit scholarships awarded to students with known ethnicity, 68 (37%) went to students from traditionally underrepresented groups.

#### Fall 2016 Scholarships Awarded by Race/Ethnicity

	President's Distinguished Honors	President's Excellence	Provost's Honors Excellence	Dean's Prestige	Academic Recognition	TOTAL
American Indian/Alaska Native					1	1
Asian	1		1	7	7	16
Black/African American	1	2	5	4	17	29
Hispanic of any race			1	1	9	11
Native Hawaiian/Other Pacific Islander		1			2	3
Two or More			2	4	2	8
TOTAL SOC <sup>1</sup>	2	3	9	16	38	68
White	6	7	17	29	59	118
TOTAL AWARDS	8	10	26	45	97	186
PERCENTAGE SOC <sup>1</sup>	25%	30%	35%	36%	39%	37%

<sup>1</sup>Students of Color (SOC) includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

Recruitment efforts for cultivating a diverse student body continue to focus on financial aid, scholarships, and special programs. In addition, recruitment activities target states with the highest concentration of students of color: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Illinois, Louisiana, Maryland, New Jersey, New Mexico, New York, North Carolina, South Carolina, Texas, and Virginia. Gallaudet continues its recruiting efforts in residential schools for the deaf, mainstream schools, and two-year programs attended by deaf and hard of hearing students. Schools are selected for a visit based on criteria that include the number of applications received, the number of current prospects and inquiries, participation in our Academic Bowl program, location, diversity considerations, recommendations, and new leads.

	FY 2012	FY 2013	FY 2014 <sup>2</sup>	FY 2015 <sup>3</sup>	FY 2016
Schools for the Deaf	57	51	55	32	63
Mainstream/Public schools – Deaf/Hard of Hearing prospects	259	82¹	149	55	116
Public Schools – Hearing (BAI/HUG prospects)	N/A	N/A	31	11	8
Postsecondary programs – Deaf/Hard of Hearing prospects	52	16	18	8	10
Postsecondary programs – Hearing (BAI/HUG prospects)	N/A	N/A	20	5	5
Conventions/Conferences/Fairs	29	30	28	20	47
High School/Vocational Rehabilitation Counselor meetings	7	7	23	15	10
Parent events	4	6	4	3	5
Athletic events	8	2	2	1	2
Open Houses	7	8	8	9	6
Camps	2	7	5	4	11
Community Relations/Alumni/Youth	N/A	N/A	11	3	19
How to Apply Webinar	N/A	4			
Home Visits	21		20	10	4
TOTAL	425	213	374	176	306

#### **Recruitment Visits by Location Trend**

<sup>1</sup>The admissions office implemented recruitment webinars in place of actual school visits.

<sup>2</sup>FY 2014 data includes a breakdown of activities and visits to schools by prospect type.

<sup>3</sup>The admissions office experienced unusually high staff turnover during the 2014 fall travel season.



A proud student gave the "I love you" sign to the camera during Commencement 2016.

Photo by: Bilal Chinoy

# **Strategic Plan Goal B: Persistence and Graduation**

The University's goal is to improve and increase the graduation rate of undergraduate students. This chapter includes data on University persistence and graduation, with separate data contained in the Clerc Center chapter for their students. Included are data for persistence from year to year as well as for graduation: for the fiscal year and trend data for the last five years; for all students; for traditionally underrepresented groups; by undergraduate and graduate discipline/majors; and by disposition (returned, graduated, academically dismissed, or withdrawn). The chapter ends with narrative regarding activities that support persistence and graduation, as well as the number of contact hours spent engaging students for each of these support activities. The contents of this chapter reflect the major accomplishments performed during FY 2016 in support of Goal B of the Gallaudet Strategic Plan.
# I. Persistence and Graduation Data

# Undergraduate Degree-seeking Fall 2015 to Fall 2016 Attrition/Persistence by Diversity

	Fall 2015 Enrollment	Graduated	Academically Dismissed	Withdrew	Returned Fall 2016
RACE/ETHNICITY					
International/Nonresident Alien	79	18	1	4	56
American Indian/Alaska Native	6	1	1	0	4
Asian	30	8	0	4	18
Black/African American	126	18	1	16	91
Hispanic of any race	120	26	1	14	79
Native Hawaiian/Other Pacific Islander	1	0		0	1
Two or more	113	28	2	8	75
White	481	116	5	47	313
Race and ethnicity unknown	33	1	1	5	26
GENDER					
Male	474	92	9	47	326
Female	515	124	3	51	337
HEARING STATUS					
Deaf/Hard of Hearing	892	187	10	86	609
Hearing	97	29	2	12	54
Hearing Undergraduate (HUG)	66	15	2	9	40
Non-HUG	31	14	0	3	14
CLASS					
Freshmen	293	0	8	55	230
Sophomores	180	0	2	11	167
Juniors	220	24	2	16	178
Seniors	284	187	0	14	83
Second Degree	12	5	0	2	5
ACADEMIC LOAD					
Full-time	959	194	12	92	661
Part-time	30	22	0	6	2
TOTAL FOR EACH CATEGORY	989	216	12	98	663

	Fall 2015 Enrollment	Graduated	Withdrew	Returned Fall 2016
RACE/ETHNICITY				
International/Nonresident Alien	26	10	3	13
American Indian/Alaska Native	2	2	0	0
Asian	14	3	2	9
Black/African American	32	10	4	18
Hispanic of any race	35	9	3	23
Native Hawaiian/Other Pacific Islander	0	0	0	0
Two or more	44	17	0	27
White	235	82	25	128
Race and ethnicity unknown	56	18	4	34
GENDER				
Male	111	38	13	60
Female	333	113	28	192
HEARING STATUS				
Deaf/Hard of Hearing	201	70	23	108
Hearing	237	79	18	140
Unknown	6	2	0	4
DEGREE				
Certificates	5	1	3	1
Masters	266	111	25	130
Specialists	18	11	0	7
Doctorates	155	28	13	114
ACADEMIC LOAD				
Full-time	295	83	24	188
Part-time	149	68	17	64
TOTAL FOR EACH CATEGORY	444	151	41	252

# Graduate Degree-seeking Fall 2015 to Fall 2016 Attrition/Persistence by Diversity

Group in the Cohort	Cohort 2011	Cohort 2012	Cohort 2013	Cohort 2014	Cohort 2015
# IN COHORT	200	212	200	181	178
Male	114	91	86	83	99
Female	86	121	114	98	79
Students of Color <sup>1</sup>	76	70	74	77	75
White	115	122	116	93	91
Deaf/Hard of Hearing	195	205	196	174	172
Hearing	5	7	4	7	6
Hearing Undergraduate (HUG)	3	3	3	6	6
Non-HUG	2	4	1	1	0
% RETAINED TO YEAR 2	77%	69%	67%	67%	80%
Male	72%	67%	66%	59%	79%
Female	84%	70%	67%	74%	82%
Students of Color <sup>1</sup>	72%	67%	62%	64%	79%
White	81%	68%	69%	70%	81%
Deaf/Hard of Hearing	77%	69%	66%	67%	80%
Hearing	80%	71%	100%	71%	83%
Hearing Undergraduate (HUG)	67%	67%	100%	67%	83%
Non-HUG	100%	75%	100%	100%	N/A
% RETAINED TO YEAR 3	64%	57%	55%	60%	
Male	61%	52%	52%	55%	
Female	69%	60%	58%	63%	
Students of Color <sup>1</sup>	59%	56%	47%	58%	
White	67%	57%	60%	59%	
Deaf/Hard of Hearing	64%	57%	55%	60%	
Hearing	60%	57%	75%	57%	
Hearing Undergraduate (HUG)	67%	33%	100%	50%	
Non-HUG	50%	75%	0%	100%	

# Persistence of First-time Freshmen by Diversity

<sup>1</sup>Students of Color (SOC) includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

Group in the Cohort	Cohort 2011	Cohort 2012	Cohort 2013	Cohort 2014	Cohort 2015
% RETAINED TO YEAR 4	60%	53%	57%		
Male	54%	51%	56%		
Female	67%	55%	58%		
Students of Color <sup>1</sup>	58%	46%	53%	-	
White	61%	54%	61%	-	
Deaf/Hard of Hearing	60%	53%	57%	-	
Hearing	60%	43%	50%	-	
Hearing Undergraduate (HUG)	67%	33%	67%	-	
Non-HUG	50%	50%	0%	-	
% RETAINED TO YEAR 5	33%	29%		4	
Male	39%	30%			
Female	26%	29%			
Students of Color <sup>1</sup>	33%	27%			
White	34%	27%			
Deaf/Hard of Hearing	33%	29%			
Hearing	20%	29%			
Hearing Undergraduate (HUG)	0%	0%			
Non-HUG	50%	50%			
% RETAINED TO YEAR 6	10%				
Male	12%				
Female	6%	-			
Students of Color <sup>1</sup>	9%	-			
White	10%	-			
Deaf/Hard of Hearing	19%				
Hearing	0%	1			
Hearing Undergraduate (HUG)	0%	1			
Non-HUG	0%	1			

## Persistence of First-time Freshman by Diversity (continued)

<sup>1</sup>Students of Color includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races



The Career Center held its 2016 Fall Internship and Job Fair at the Field House on October 7. Employers representing over 50 companies and agencies were on hand to talk and recruit potential student candidates for internships and jobs. Held twice a year, the fair brings in several hundred attendees.

Photo by: Danielle Seiss



Group in the Cohort	Cohor	t 2008	Cohor	t 2009	Cohor	t 2010	Cohor	rt 2011	Cohor	t 2012
	#	%	#	%	#	%	#	%	#	%
GENDER										
Male	83	11%	99	13%	91	11%	114	13%	91	22%
Female	98	20%	112	34%	107	27%	86	38%	121	30%
RACE/ETHNICITY										
International/Nonresident Alien	9	22%	12	50%	12	25%	6	50%	20	25%
Male	5	0%	6	33%	3	33%	4	50%	11	27%
Female	4	50%	6	67%	9	22%	2	50%	9	22%
American Indian/Alaska Native	2	0%	1	0%	0	N/A	0	N/A	0	N/A
Male	2	0%	0	N/A	0	N/A	0	N/A	0	N/A
Female	0	N/A	1	0%	0	N/A	0	N/A	0	N/A
Asian	7	29%	9	11%	9	22%	10	50%	6	33%
Male	2	0%	5	0%	4	25%	5	60%	6	33%
Female	4	50%	4	25%	5	20%	5	40%	0	N/A
Black/African American	26	8%	28	11%	24	4%	33	12%	23	17%
Male	11	9%	12	0%	13	0%	20	10%	10	10%
Female	15	7%	16	19%	11	9%	13	15%	13	23%
Hispanic of any race	14	7%	19	11%	27	11%	20	20%	30	20%
Male	4	0%	12	8%	11	0%	13	8%	12	17%
Female	10	10%	7	14%	16	19%	7	43%	18	22%
White	120	18%	140	28%	120	25%	115	26%	122	32%
Male	60	13%	63	16%	56	14%	64	9%	46	26%
Female	60	22%	77	38%	64	45%	51	47%	76	36%
Students of Color <sup>1</sup>	49	10%	57	11%	66	9%	76	20%	70	17%
Male	18	6%	30	3%	32	3%	44	16%	34	15%
Female	31	13%	27	19%	34	15%	32	25%	36	19%
HEARING STATUS										
Deaf/Hard of Hearing	177	16%	206	25%	193	20%	195	24%	205	26%
Hearing	4	0%	5	0%	5	0%	5	20%	7	43%
Hearing Undergraduate (HUG)	4	0%	2	0%	5	0%	3	33%	3	0%
Non-HUG	0	N/A	3	0%	0	N/A	2	0%	4	75%
TOTAL WITHIN THE COHORT	181	16%	211	24%	198	20%	200	24%	212	26%

## Four-year Graduation Rate of Full-time, First-time Freshmen by Diversity

<sup>1</sup>Students of Color includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races

Group in the Cohort	Cohor	t 2006	Coho	rt 2007	Cohort	2008	Cohort	2009	Cohor	t 2010
	#	%	#	%	#	%	#	%	#	%
GENDER										
Male	113	27%	79	46%	83	48%	99	37%	91	35%
Female	96	42%	97	48%	98	44%	112	55%	107	50%
RACE/ETHNICITY										
International/Nonresident Alien	12	50%	6	67%	9	33%	12	67%	12	67%
Male	6	33%	4	75%	5	20%	6	50%	3	100%
Female	6	67%	2	50%	4	50%	6	83%	9	56%
American Indian/Alaska Native	2	0%	0	N/A	2	50%	1	0%	0	N/A
Male	2	0%	0	N/A	0	N/A	1	0%	0	N/A
Female	0	N/A	0	N/A	2	50%	0	N/A	0	N/A
Asian	9	56%	7	57%	7	43%	9	33%	9	89%
Male	5	60%	2	0%	3	33%	5	20%	4	100%
Female	4	50%	5	80%	4	50%	4	50%	5	80%
Black/African American	26	19%	21	19%	26	23%	28	29%	24	4%
Male	15	13%	12	17%	11	36%	12	17%	13	0%
Female	11	27%	9	22%	15	13%	16	38%	11	9%
Hispanic of any race	12	25%	16	19%	14	64%	19	32%	27	41%
Male	4	0%	6	17%	4	100%	12	25%	11	27%
Female	8	38%	10	20%	10	50%	7	43%	16	50%
White	148	34%	126	54%	120	49%	140	52%	120	46%
Male	81	28%	55	55%	60	50%	63	44%	56	38%
Female	67	42%	71	54%	60	48%	77	58%	64	53%
Students of Color <sup>1</sup>	49	27%	44	25%	49	39%	57	30%	66	33%
Male	26	19%	20	15%	18	50%	30	20%	32	25%
Female	23	35%	24	33%	31	32%	27	41%	34	41%
HEARING STATUS										
Deaf/Hard of Hearing	205	34%	175	47%	177	38%	206	47%	193	44%
Hearing	4	25%	1	0%	4	75%	5	40%	5	0%
Hearing Undergraduate (HUG)	3	33%	1	0%	4	75%	2	50%	5	0%
Non-HUG	1	0%	0	N/A	0	N/A	3	33%	0	N/A
TOTAL WITHIN THE COHORT	209	33%	176	47%	181	46%	211	46%	198	43%

# Six-year Graduation Rate of Full-time, First-time Freshmen by Diversity

<sup>1</sup>Students of Color includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races



#### Six-year Graduation Rate of All<sup>1</sup> New Undergraduate Students Cohort

Group in the Cohort	Cohort	Cohort 2006 Cohort 2007		Cohor	Cohort 2008		Cohort 2009		Cohort 2010	
	#	%	#	%	#	%	#	%	#	%
GENDER										
Male	143	27%	94	47%	99	45%	56	43%	136	44%
Female	137	43%	132	54%	131	45%	83	49%	153	58%
ADMIT TYPE										
First-time Freshmen	212	33%	176	47%	181	46%	98	46%	198	43%
Transfer/Second-Degree	68	41%	50	66%	49	43%	41	46%	91	69%
HEARING STATUS										
Deaf/Hard of Hearing	265	35%	218	50%	215	44%	126	48%	261	49%
Hearing	15	40%	8	63%	15	60%	13	37%	28	68%
Hearing Undergraduate (HUG)	8	50%	7	71%	15	60%	5	33%	15	67%
Non-HUG	7	29%	1	100%	0	N/A	8	40%	13	69%
TOTAL WITHIN THE COHORT	280	35%	226	51%	230	45%	300	46%	289	51%
TOTAL GRADUATED		98		115		104		139		148

<sup>1</sup>Includes part-time students, transfers, and second-degree seeking students.

	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Accounting	3	11	6	3	7
American Sign Language	12	9	6	4	5
Art					
Art and Media Design			6	16	13
Art History		1			
Biology, B.A.	4	2	5	9	4
Biology, B.S.	2	1	6	5	4
Business Administration	9	9	20	16	19
Chemistry, B.A.			1		
Chemistry, B.S.	3	1	2		1
Communication Studies	21	17	11	16	28
Computer Information Systems	1				
Computer Science, B.A.		1			
Computer Science, B.S.	1	1			
Deaf Studies	15	14	17	23	13
Digital Media	7	3	1		
Education	11	7	3	7	11
English	5	7	7	6	7
Family & Child Studies	12	11	3	1	
Finance					
French					
Government	4	6	10	5	10
Graphic Design	8	5	4	1	
History	7	10	7	3	7
Information Technology	5	8	3	5	6
International Studies	3	8	5	11	9
Interpretation	16	11	17	14	16
Liberal Studies	1	1			

# Undergraduate Degrees Awarded by Major Trend

	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Mathematics, B.A.	5	4	1	4	4
Mathematics, B.S.	3	1	3		3
Philosophy				1	2
Photography	5	3	3		
Physical Education	8	8	7	4	1
Physical Education & Recreation			4	13	21
Psychology	19	20	29	10	21
Recreation & Leisure Studies	1	1			
Recreation & Sports	6	8	7	4	
Self-directed Major	2		2	4	
Social Work	16	17	13	17	19
Sociology	4	6	1	5	3
Spanish	1		1	1	2
Studio Art	2	2	1		
Theatre Arts	4	8	5	3	1
TOTAL DEGREES AWARDED	227	222	217	211	237
DISTINCT HEADCOUNT OF GRADUATES	204	206	203	201	218

## Undergraduate Degrees Awarded by Major Trend (continued)

Note: Includes programs awarding dual degrees to single graduates. Cut-off dates for each year as follows: 2011-12 (9/11/12), 2012-13 (9/10/13), 2013-14 (9/9/14), 2014-15 (10/28/15), and 2015-16 (9/13/16).

The fifth annual Lavender Graduation ceremony, a celebration featuring the 2016 graduates from the LGBTQA community, including allies, was held May 11.

Photo by: Zhee Chatmon



	2011- 2012 <sup>1</sup>	2012- 2013²	2013- 2014 <sup>3</sup>	2014- 2015	2015- 2016⁴
American Sign Language	3	1			
Biology, B.S.			1		
Communication Studies	1	1			1
Deaf Studies	2	3	3	7	4
Education	2	1		1	1
English			1		
Family and Child Studies	1				
History	1	1			
International Studies		1			2
Interpretation	3	2	1	1	3
Philosophy				1	
Photography	1				
Psychology	1		2		3
Recreation and Sports Program		1			
Self-directed Major	1		1		
Social Work		1		1	
Sociology		1	1	1	
TOTAL DEGREES AWARDED	16	13	10	12	14
DISTINCT HEADCOUNT OF GRADUATES	14	13	10	12	14

#### Degrees Awarded to Hearing Undergraduates (HUG) by Major Trend

Note: Includes programs awarding dual degrees to single graduates. Cut-off dates for each year as follows: 2010-11 (9/21/11), 2011-12 (9/11/12), 2012-13 (9/10/13), 2013-14 (9/9/14), 2014-15 (10/28/15), and 2015-16 (9/13/16).

<sup>1</sup>Twelve additional hearing undergraduates graduated in 2011-12 with degrees in Interpretation. These students are not considered HUGs and had applied directly to the Bachelor of Interpretation (BAI) program. Since this program is new, this is the first year of graduates for the direct-admit to the BAI program.

<sup>2</sup>Eight additional hearing undergraduates graduated in 2012-13 with degrees in Interpretation; one also doublemajored in Studio Art. These students are not considered HUGs and had applied directly to the Bachelor of Interpretation (BAI) program.

<sup>3</sup>Nineteen additional hearing undergraduates graduated in 2013-14 who are not considered HUGs. Fifteen graduated from the Bachelors of Interpretation (BAI) with degrees in Interpretation. Four additional hearing undergraduate students graduated from the Adult Degree Completion program in 2013-14 with degrees in Deaf Studies.

<sup>4</sup>Eleven additional hearing undergraduates graduated in 2015-16 with degrees in Interpretation. These students are not considered HUGs and had graduated from the Bachelor of Interpretation (BAI) program.

# Graduate Degrees Awarded by Program Trend

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
CERTIFICATES					
ASL/Deaf Studies		1		1	1
ASL/English Bilingual ECE				1	
Deaf/HOH Infants, Toddlers, and Families		6	9	6	2
Deaf History					
Educating Deaf Students with Disabilities					1
Cultural Diversity and Human Services					
International Development					
Management	3				
CERTIFICATES TOTAL	3	7	9	8	4
MASTERS					
Administration	6	2			
Audiology					
Counseling: Mental Health	8	10	5	3	4
Counseling: School	6	4	12	4	
Deaf Education: Advanced Studies	2	1	1	2	3
Deaf Education: Special Programs		1		2	1
Deaf Studies	6	4	13	5	2
Developmental Psychology	4	6	3	6	5
Education	11	19	9	10	6
Hearing, Speech, and Language: Non-clinical	8	12	8	11	10
International Development	7	4	8	4	3
Interpretation	10	8	18	7	12
Leisure Studies	5				
Linguistics	9	8	7	11	6
Psychology	4	4	3	4	9
Public Administration				15	14
Sign Language Education			21	27	29
Sign Language Teaching	18	26	9	1	

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Social Work	11	14	14	14	17
Speech-Language Pathology	10	13	16	14	17
MASTERS TOTAL	125	136	160	140	138
SPECIALISTS					
Change Leadership in Education, Ed.S.					
Deaf Education, Ed.S.					6
School Psychology, Psy.S.	2	4	2	6	4
SPECIALISTS TOTAL	2	4	2	6	10
DOCTORATES					
Administration, Special Education	2	6			
Audiology, Au.D.	8	8	11	8	12
Audiology, Ph.D.	1	2	3		
Critical Studies				2	
Deaf Education		1			2
Interpretation				1	4
Linguistics	3	3	2	1	4
Clinical Psychology	4	4	7	5	3
DOCTORATES TOTAL	18	24	23	17	25
TOTAL DEGREES AWARDED	148	171	194	171	177
HEADCOUNT	146	164	189	166	176

## Graduate Degrees Awarded by Program Trend (continued)

Note: Includes programs awarding dual degrees to single graduates. Cut-off dates for each year are as follows: 2011-12 (9/11/12), 2012-13 (9/10/13), 2013-14 (9/9/14), 2014-15 (10/28/15), and 2015-16 (9/13/16).

Alabama	94	Nebraska	99
Alaska	17	Nevada	24
Arizona	168	New Hampshire	51
Arkansas	84	New Jersey	410
California	1,051	New Mexico	88
Colorado	139	New York	1,036
Connecticut	252	North Carolina	283
Delaware	46	North Dakota	60
District of Columbia	261	Ohio	413
Florida	449	Oklahoma	56
Georgia	201	Oregon	109
Guam	4	Pennsylvania	647
Hawaii	54	Puerto Rico	24
Idaho	49	Rhode Island	55
Illinois	566	South Carolina	86
Indiana	267	South Dakota	69
lowa	141	Tennessee	104
Kansas	156	Texas	496
Kentucky	132	Utah	57
Louisiana	142	Vermont	31
Maine	62	Virginia	569
Maryland	999	Virgin Islands	5
Massachusetts	318	Washington	214
Michigan	269	West Virginia	79
Minnesota	334	Wisconsin	269
Mississippi	34	Wyoming	12
Missouri	210	TOTAL	11,893
Montana	48		

# Cumulative Listing of U.S. Alumni by State/Territory since 1864<sup>1</sup>

<sup>1</sup>Includes all those that graduated through summer 2016.

# Cumulative Listing of International Alumni by Country since 1864<sup>1</sup>

Argentina	4
Australia	10
Austria	2
Bahamas	2
Bangladesh	1
Barbados	1
Belgium	7
Benin	1
Botswana	3
Brazil	7
Bulgaria	1
Burkina Faso	1
Cameroon	3
Canada	496
Chile	3
China	56
Colombia	2
Costa Rica	3
Cyprus	1
Czech Republic	1
Denmark	1
El Salvador	2
Ethiopia	4
Fiji	1
Finland	3
France	5
Gabon	2
Germany	6
Ghana	14
Greece	4
Guatemala	3

Guyana	1
Haiti	1
Honduras	1
Hong Kong	2
Hungary	1
Iceland	2
India	41
Indonesia	3
Iran	3
Ireland	6
Israel	11
Italy	2
Jamaica	5
Japan	28
Jordan	4
Kenya	8
Korea, Republic of	15
Kuwait	1
Lebanon	2
Liberia	1
Malaysia	16
Mali	1
Mexico	7
Mongolia	1
Nepal	1
Netherlands	11
New Zealand	3
Nigeria	57
Norway	7
Pakistan	3
Paraguay	1

Peru	3
Philippines	16
Poland	1
Portugal	1
Russian Federation	2
Rwanda	1
Saudi Arabia	8
Sierra Leone	2
Singapore	19
Slovakia	1
Slovenia	1
South Africa	17
Spain	8
Sri Lanka	6
Sweden	20
Switzerland	3
Taiwan, Republic of China	11
Tanzania	1
Thailand	5
Trinidad and Tobago	2
Turkey	1
Uganda	3
United Arab Emirates	3
United Kingdom	11
Uzbekistan	1
Venezuela	2
Vietnam	2
Zambia	1
TOTAL	1,048
COUNTRIES	90

<sup>1</sup>Includes all those that graduated through summer 2016.

# II. Support Programs and Strategies

To support students' persistence to graduation and to prepare them for careers or graduate education, the University promotes and encourages student learning and development in all its activities. Gallaudet's Student Affairs and Academic Support division and the Office for Diversity and Equity of Students provides an array of programs that contribute to outside-the-classroom learning that enhances the academic curriculum, supports at-risk students, facilitates leadership development, and ensures an inclusive and supportive social environment. A positive and inspiring campus climate encourages students' engagement in learning and connection to the University community and the deaf community, an important contributor to student persistence. The following section provides brief descriptions of the significant impact that these programs have on persistence and graduation rates.

## **Academic Advising**

Academic/Career Advisors work with students in collaboration with academic departments and student support offices to enhance student academic performance for retention purposes. The office provides academic and career advising primarily for students who have not decided on their major. Advisors meet numerous times per semester with students as a group in their First Year Seminar classes to cover relevant academic and career topics. Students also meet individually with their academic/career advisor to review their four year plans and course registration "shopping cart" to ensure that they have selected appropriate courses for enrollment. Other services include, but not limited to, assistance with course registration, individual and group advising, career advising and guidance in selecting an academic major and/or minor throughout their years at Gallaudet. In addition, advisors monitor Starfish, an early warning and student tracking system, for any red flags; when students are red-flagged in the system, they are contacted by their advisor to discuss concerns raised by their faculty and if necessary develop an intervention plan to ensure academic success. Academic Advisors periodically meet with students who have declared their major for any questions they may have related to academic issues.

Academic Advising highlights for the year include:

• During the fall 2015 semester, a total number of 140 students participated in the Pre-Registration Assessment focusing on Shopping Cart which resulted with 89 percent achieving a score of three or higher for the preparedness portion on the Pre-Registration Rubric. This is 19 percent higher than the target of 70 percent. During the spring semester of academic year 2015-2016, a total number of 18 students participated in the Pre-Registration Assessment, which resulted with 83 percent achieving a score of three or higher for the preparedness portion on the Pre-Registration Rubric. This is 13 percent higher than the target of 70 percent.

- During the fall 2015 semester, a total number of 140 students participated in the Pre-Registration Assessment focusing on My Planner which resulted with 67 percent achieving a score of three or higher for the preparedness portion the Pre-Registration Rubric. This is three percent short of the target of 70 percent. During the spring semester of academic year 2015-2016, a total number of 18 students participated in the Pre-Registration Assessment which resulted with 50 percent achieving a score of three or higher for the preparedness portion on the Pre-Registration Rubric. This is 20 percent short of meeting the target of 70 percent.
- During the fall 2015 semester, a total of 90 students participated in the Degree Audit Report Quiz Assessment with 90 students achieving 70 percent or higher. The target was met and surpassed with 100 percent of these students achieving 70 percent or higher. During the spring semester of academic year 2015-2016, a total of 94 students participated in the Degree Audit Report Quiz Assessment with 91 students achieving 70 percent or higher. The target was met and surpassed with 97 percent or higher. The target was met and surpassed with 97 percent of these students achieving 70 percent or higher.
- Student satisfaction with academic advising services continues to be steady, with 94 percent (fall 2015) and 98 percent (spring 2016) reporting satisfaction.
- In spring 2016, Academic Advising had a graduate intern from the Department of Counseling to work with students who were on academic warning or academic probation to provide them with additional support.
- In the fall semester, Starfish Appointments showed that the Academic Advising unit had 2,104 appointments which totaled 60,315 minutes. In the spring semester, there were 2,040 appointments which totaled 58,800 minutes. During the summer months, there were 83 appointments, which totaled 2,665 minutes, not includ-

ing emails and videophone calls between advisors and the more than 350 new students regarding course registrations.

• The director and three academic advisors attended and brought back valuable information from the "Capitol-zing on Student Success through Academic Advising" NACA-DA Region 2 Conference in Hyattsville, Md.

## **Athletics and Intramural Programs**

Athletics Programs provide opportunities for student-athletes of good character and academic standing to compete in organized intercollegiate athletics while pursuing a baccalaureate degree. Students participating in intercollegiate athletics are taught the importance of an academics-first philosophy. Each student-athlete develops as a total person, is encouraged to be involved in other areas of student life, and is given tools that will aid the student-athletes after graduation.

Intramural Programs provide students who are not on an intercollegiate team with an opportunity to participate in sports activities that provide the benefits of team membership and foster connections to the Gallaudet community.

Athletics and Intramural Programs highlights for the year include:

- Eighty-eight student-athletes made the Dean's List during the 2015-16 academic year.
- Fifty-three student-athletes earned a spot on the 2015-16 North Eastern Athletic Conference (NEAC) Scholar-Athlete list for having a grade point average of 3.4 or better; 30 were repeat honorees and five earned Scholar-Athlete honors all four years they were a student-athlete. Two student-athletes made the Eastern Collegiate Football Conference (ECFC) All-Academic Team.
- Two student-athletes were named College Sports Information Directors of America (CoSIDA) Academic All-America honorees for men's basketball; Trey Gordon and Todd Bonheyo. Gordon became the third Bison to earn two CoSIDA Academic All-America honors in his career. Fourth straight year Gallaudet has earned multiple CoSIDA Academic All-America honors.

For a second consecutive year, the Gallaudet Athletics Social Media platforms (Facebook, Instagram, Twitter) remained ranked No. 1 in NCAA Division III by D3SocialMedia.com for the entire 2015-16 school year. The Bison hold the highest Social Media Index rating, are tops in Instagram, and fourth in Facebook overall.

- Forty confirmed student-athletes, coaches and managers, that were on an active roster during the 2015-16 school year, graduated and met their degree requirements; 22 graduated with honors (summa cum laude, magna cum laude, cum laude); two student-athletes received University Honors, and one former student-athletes was the graduate student speaker.
- The women's volleyball team won a sixth straight NEAC championship and went to the NCAA tournament for the 11th time in program history and earned the AVCA Team Academic Award for a 10th straight year.
- Freshman Otto Kingstedt re-wrote the Gallaudet men's cross country record book as he posted four Top 10 8K times, including the fourth fastest in school history 26 minutes, two seconds. He won the 2015 NEAC Men's Cross Country championship and was named 2015 NEAC Men's Runner and Rookie of the Year, earned NCAA Division III All-Region honors, and earned U.S. Track & Field and Cross Country Coaches' Association All-Academic honors.
- Twenty-six student-athletes earned all-conference honors for their respective sport.
- Two GU student-athletes, BJ Flores and Darriyan Thomas, were named 2016 Arthur Ashe Jr. Sports Scholars as announced by *Diverse: Issues In Higher Education*.
- Assistant Athletic Director for Communications Sam Atkinson was elected to the NCAA Division III Men's Basketball Committee and will serve a four-year term. He also earned the 2015 U.S. Track & Field and Cross Country Coaches Association Excellence in Communications Award for Division III.
- Baseball coach Curtis Pride was appointed Major League Baseball's Ambassador for Inclusion. He is helping to assist MLB's efforts to ensure an inclusive environment.
- Gallaudet athletics was ranked in the Learfield Sports Directors' Cup standings for a record sixth year in a row.
- Coach Stephanie Stevens was named to the inaugural Women's Basketball Coaches Association (WBCA) Thirty Under 30 honorees, created to honor 30 up-and-coming women's basketball coaches age 30 and under at all levels

of the game. Stevens also completed the 2016 Marine Corps Coaches Workshop, a four-day leadership boot camp in Quantico, Va.

- Gallaudet Student-Athlete Advisory Committee (SAAC) President Dakota Kalis was named a 2015-16 NEAC SAAC honorable mention honoree. Under Kalis' leadership SAAC initiated and updated its constitution and bylaws, held its first 5K fun run/walk event, and Bison athletic games saw a greater student engagement and excitement due to an energized SAAC leadership group.
- Thirteen Gallaudet student-athletes were inducted into the Chi Alpha Sigma National College Athlete Honor Society for demonstrating excellence in athletics and academics.
- Men's basketball senior Trey Gordon became the 23rd player in school history to record 1,000 career points. He finished his career ranked No. 15 with 1,211 career points.
- Men's basketball tied a program record with 18 wins, 14 conference wins and posted a 10-1 record in the Field House during the 2015-16 season.
- Women's volleyball coach Lynn Ray Boren, Gallaudet former and current student-athletes lead Team USA to gold at the 2016 World Deaf and PanAm Volleyball Championships hosted by Gallaudet University.
- Women's soccer coach Liza Offreda and student-assistant Meghan Maiwald helped Team USA win the 2016 Deaf World Cup in Italy.
- Men's basketball coach Kevin Kovacs along with other alumni and current student-athletes help Team USA win gold in the Pan American Basketball Tournament.

#### **Career Center**

The Career Center prepares students for life after Gallaudet through a variety of services and learning opportunities including: internship and job fairs, job-search workshops, resume reviews, mock interviews, and career consultation. The Career Center's goals are to educate and empower students to learn lifelong career development skills, to make effective career decisions, and to achieve professional success. Career Center Highlights for the year include:

- Eighty-six percent of 2016 grads reported that they had participated in internships prior to graduation, as reported in the 2016 Gradfest survey.
- 165 student internships were coordinated by the Career Center in 2015-2016.
- Twenty internship site visits were conducted by Career Consultants to monitor student internships.
- Fall Internship and Job Fair: 45 employers and 199 students in attendance.
- Spring Internship and Job Fair: 54 employers and 400 students in attendance.
- 397 students received direct career consulting.
- 2,240 student visits to the Career Library.
- 212 students were enrolled in the GSR 110 Career Development Course.
- 278 students attended employer information sessions and/ or mock interviews.
- Eleven deaf awareness training workshops were presented to off-campus employers.
- 121 career presentations/consultations were conducted in partnership with faculty and/or in their classrooms.
- Seventy-one students interviewed through Workforce Recruitment Program (WRP).
- Two Career Center Staff members attended the National Association of Colleges and Employers (NACE) conference in Chicago, Ill.

## **Counseling and Psychological Services**

Counseling and Psychological Services (CAPS) supports the academic and social-emotional development of Gallaudet students by providing psychological assessments, counseling, crisis intervention, and psychiatric services. CAPS also provides several prevention programs to address unique developmental needs of the university population. CAPS also consults with faculty and staff regarding students' needs, contributes to the student paraprofessional training programs, and offers training

for mental health graduate students from the departments of psychology, social work, and counseling.

CAPS highlights for the year include:

- 304 students were served.
  - o 288 received ongoing individual counseling, 77 of those also received psychiatric services, 39 also received assessment services, and seven received assessment services only
  - o Clinical psychology trainees assessed 16 community clients.
- Sixty-four percent of students receiving services identified themselves as deaf, twenty-two percent as hard of hearing, two percent as deaf-blind, and 14 percent as hearing.
- Fifty-two percent of students received services because of problems in school, and of those students, 79 percent reported that CAPS services helped them stay in school and 67 percent reported that services helped them do better in class.
- Ninety-three percent rated CAPS services as above average to outstanding.
- More than 200 students, staff, and faculty participated in the second Out of the Darkness Campus Walk, a collaborated effort coordinated by CAPS and American Foundation for Suicide Prevention (AFSP) to raise funds for, and awareness of, suicide prevention.
- Collaborated with AFSP and NBC4 to develop a public service announcement for the 10th Annual D.C. Community Walk, in which Gallaudet was represented by a student.
- Developed ASL versions of the informed consent and CAPS services brochure.
- Ninety-seven Howard University medical students received training on best practices in serving deaf and hard of hearing patients.
- Collaborated with the LGBTQA Resource Center to provide support group for transgendered students.
- Spearheaded the establishment of a Men Can Stop Rape group.

- Updated CAPS' video recording system to better train mental health graduate students.
- Implemented an interactive screening program to encourage students to get mental health care and reduce the stigma.
- Screened 40 students at National Depression Screening Day and 25 students at National Alcohol and Other Drugs Screening Day.

# Office for Students with Disabilities

The Office for Students with Disabilities (OSWD) empowers students with disabilities to succeed in higher education and encourages and provides experiences and opportunities to build confidence beyond the classroom. OSWD provides individually tailored, comprehensive, support services and programs for students with disabilities.

OSWD highlights for the year include:

- 255 students with disabilities used OSWD services—54 graduate and 201 undergraduate students.
- Eighteen percent of the student population was served by OSWD—12 percent of the graduate population and 21 percent of the undergraduate population.
- Fifty-four OSWD students received student advocacy training designed to enhance their understanding of advocacy strategies, including introduction to advocacy training, roles and responsibilities, confidentiality, and the grievance process.
- Thirty students with disabilities received new student orientation tailored to OSWD students.
- Produced 247,325 pages of large print/scanned pages, 240 Braille pages, and 150 eBooks for 18 students with low vision.
- Seventy-five students in 204 classes received support from 96 student paraprofessional note takers who received the note takers training and orientation workshop for OSWD note takers.
- Reinstituted OSWD's Faculty Support Program to strengthen collaboration with faculty who are key stakeholders in the disability support service process by provid-

ing opportunities for information sharing, discussion, and professional development.

- Enhanced OSWD's student testing services to assure academic integrity and equal access.
- Presented "Assuring Accommodations for Students with Multiple Disabilities" at the 2015 National Conference of the Association of Higher Education and Disability (AHEAD).

## Office of Residence Life and Housing

The Office of Residence Life and Housing provides a safe and welcoming environment for students in the pursuit of academic excellence. Realizing the transition to college living can be challenging, the office offers dormitory programs that foster skills that contribute to living successfully in a pluralistic world and cultivate character, civility, and connections to community.

The Office of Residence Life and Housing highlights for the year include:

- Co-sponsored and co-chaired the revived 2nd Paraprofessional Conference for paraprofessionals from Residence Life, Campus Activities, Commuter Programs, and Student Success.
- Co-sponsored the Berry Blossom Festival for the third consecutive year with the Office of the President and Campus Activities.
- Increase of residents on campus from fall 2015 to fall 2016 by 9.9 percent.
- Residence Life team along with the Counseling and Psychological Services coordinated the "Out of the Darkness" Campus Walk to raise awareness of suicide prevention on campus.
- A coordinator of residence education attended the twoday Suicide Support Group Facilitator Training in Philadelphia, Pa., and plans to implement the support group on campus for students, faculty, and staff.
- In an effort to keep up with the daily upgrades in technology, new televisions and technology were installed and implemented on the terrace of LLRH6.

Keeping in mind the importance of maintaining a welcoming and friendly environment within our dormitories, Ballard West, Benson Hall, and Clerc Hall were painted and new furniture was purchased for Clerc Hall.

## **Student Center Programs and Services**

#### **Alcohol and Other Drugs Services**

Alcohol and Other Drug Services provides education and support for students dealing with alcohol and/or other drug related infractions. In addition, ADS also coordinates the required online AlcoholEdu and Haven course for new/transfer students.

Alcohol and Drug Services highlights for the year include:

- Forty-six students participated in mandatory alcohol and/ or other drug classes during the 2015-16 academic year.
- Ninety-three percent of students were assigned a C or above on the post-class test and 61 percent got a B or above.
- Approximately 365 new, transfer, and special students participated in AlcoholEdu and Haven, the online course promoting healthy behaviors related to alcohol use and relationships, in August 2015 and January 2016.

#### **Campus Activities**

Campus Activities is a one-stop information center responsible for student organizations. It manages the planning and execution of student organization events, coordinates numerous events in collaboration with academic and non-academic departments, provides leadership training and mentoring for students, and manages reservations for rooms in the Jordan Student Academic Center (JSAC). Campus Activities also handle room reservations for space in JSAC, Ely Center, and the Foster Auditorium. Services such as poster approvals, printing banners, and making copies are provided for the community.

Campus Activities highlights for the year include:

- Campus Activities has 928 Facebook likes and 258 Instagram followers.
- Campus Activities handled over 500 requests to use space in the JSAC, totaling over 4,000 hours of space usage.

- Campus Activities programs were well attended:
  - o More than 350 people attended the Berry Blossom Festival (collaborated with the President's Office and Residence Life)
  - o Fifty-two vendors participated at the wellattended Holiday Market
  - More than 350 students participated in the traditional Halloween event, the Thanksgiving trip, and the de-stress event.
- Thirty-one student organizations and clubs were registered.

#### **Commuter Programs**

Commuter Programs provides a place for commuter students to stay between classes and offers a number of amenities such as a place to rest, watch TV, and study; there is a small kitchenette, computer lab, lockers, and a playroom for kids to play in while their parents do their school work. Commuter Programs also serves as a resource for commuter students by offering programs such as landlord/tenant rights and how to be a good neighbor.

Commuter Programs highlights for the year include:

- 3,088 students and 55 children utilized the lounge in fall 2015 and 2,000 students and 25 children utilized the lounge in the spring of 2016.
- 359 individuals are members of the Commuter Programs' Facebook.
- 561 students are on the newsletter distribution list.

### **New Student Orientation**

New Student Orientation (NSO) assists new and transfer students with transition to Gallaudet University. Students learn about the mission of Gallaudet, examine their individual identity, develop an appreciation for diversity, and explore the D.C. community through a series of programs. Students also learn about the various services available that they can utilize throughout their personal and academic journey. New Student Orientation highlights for the year include:

- 357 new undergraduate and transfer students were welcomed this summer.
- A separate orientation for transfer students was implemented this year, with 68 students participating.
- Fifty parents participated in Family Orientation.
- Sixty-five faculty assisted on arrival day.
- Fourteen academic departments participated in the Academic Expo during NSO.
- NSO had 1,180 Facebook likes and 225 Instagram followers.

#### **Health and Wellness Programs**

Health and Wellness Programs provides for the enhanced well-being of students by empowering them to make informed health and lifestyle choices. Examples of activities include the following.

Health and Wellness Programs highlights for the year include:

- Ninety-two programs were offered by the Health and Wellness Programs on physical, social, emotional, and sexual health to 2,367 participants. Programming included workshops, booths, and events, including Haze, Condom Fashion Show, and Get Moving Gallaudet). This demonstrates an 11 percent increase in the programming offered and a 26 percent increase in the students who participated.
- Provided six peer health advocates (PHAs) and one intern the opportunity to develop professional skills, learn about different aspects of health, and organize information to present to the Gallaudet community through "bathroom tips," bulletin boards, booths, workshops, and other events.
  - A hundred percent of PHAs reported learning new health-related knowledge and beneficial ways they disseminated information to the community. In the exit interview/questionnaire, all of the PHAs "agreed or strongly agreed" that this experience "helped me to develop skills I can use."

- One student wrote, "The yearlong experience being a PHA was one that truly made me grow. Being able to have complete communication access with absolutely everyone was beyond amazing. Gaining knowledge on a range of health topics and gaining wonderful friendships, being a PHA made me realize how blessed I really was."
- Facilitated four Green Dot bystander intervention trainings to 64 participants, along with other programs on sexual assault, domestic/dating violence, and stalking.
  - A hundred percent of students reported that as a result of the training they were positively certain or fairly certain that we can actually, measurably reduce the number of people who experience power-based personal violence.
  - hundred percent of students reported that they would definitely do or say something if they saw something that concerned them or get someone else to if they couldn't.

#### Office of Campus Ministries

Realizing that spiritual development is an important part of students' engagement for many students in the campus community and a contributor to overall student development, Gallaudet supports a group of volunteer religious workers who are appointed by their jurisdictional supervisors to serve and minister on campus.

The Office of Campus Ministries highlights for the year include:

- Regular religious services.
- Counseling on religious matters.
- Interfaith activities that foster social justice and diversity awareness.
- Student service projects in the community.
- Helping to foster the moral and spiritual development of members of the community.

#### Office of Student Conduct

The Office of Student Conduct (OSC) used discussion, counseling, mediation, and other procedures to handle conduct problems and to maximize the educational experience of students involved. OSC serves as a campus-wide resource, providing consultation on issues related to student conduct, classroom disruptions, and Title IX. OSC provides training for new and current students, students enrolled in the English Language Institute (ELI), paraprofessional student workers, and student organization officers.

The Office of Student Conduct highlights for the year include:

- Enhanced prevention and education efforts by collaborating with academic departments and other Student Affairs units.
- Provided preventative and risk education and training, including but not limited to development and dissemination of educational print material, videos, workshops, training seminars, and academic course offerings.
- Handled a total of 98 cases for both general student code of conduct infractions and sexual misconduct during the 2015-16 academic year.

## **Student Success**

Student Success' three programs—JumpStart: American Sign Language (ASL), JumpStart: Bachelor of Interpretation (BAI), and Peer Mentorship—give targeted groups of students specialized support to facilitate their adjustment to Gallaudet and help them succeed.

#### JumpStart: ASL

JumpStart: ASL is a four-week summer program for first-year students, including transfer students, who are new or emerging users of American Sign Language. Student arrive the summer before the fall semester and receive intensive sign language training and instruction in deaf awareness, deaf culture, and Gallaudet history and traditions.

#### JumpStart: BAI

JumpStart: BAI is a four-week summer program for first year students, including transfer students, who are enrolled in the Bachelor of Interpretation program. Students arrive the summer before the fall semester, and receive help in polishing their sign language skills and instruction in deaf awareness, deaf culture, and Gallaudet history and traditions.

#### **Peer Mentorship Program**

The Peer Mentorship Program assists students in their social, personal, and academic acclimation to Gallaudet University. Each incoming student who is taking the First Year Seminar is paired with an outstanding sophomore, junior, senior student who act as a mentor throughout the academic year.

Student Success highlights for the year include:

- Fifty students participated in the JumpStart: ASL program.
- Fifteen students participated in the JumpStart: BAI program.
- Nineteen peer mentors were recruited.
- 285 first-year students were assigned a peer mentor.
- Peer mentors served as teacher assistants in GSR 101 courses.
- Seventy-six percent of mentees reported that visits with their peer mentors helped them adjust to Gallaudet
- Sixty-one percent of mentees reported that mentors helped them keep up with their studies, based AY 2014-2015.

## **Tutorial & Instructional Programs**

In the Tutorial & Instructional Programs (TIP) students find Tutorial & Instructional Programs (TIP) provides a supportive learning environment for students needing academic assistance. The department provides a variety of academic support services offered by qualified tutors, supplemental instruction interns, who provide academic support for historically difficult courses, and academic coaches. Students learn diverse skills and strategies necessary for academic success. TIP, in collaboration with academic departments, provides learning assistance programs and a consolidated academic support center with emphasis on American Sign Language, English, and mathematics. Tutorial & Instructional Programs highlights for the year include:

- Students received TIP services in various programs; 1,879 tutoring sessions that totaled 35,880 minutes (598 hours) in the fall and 1,624 tutoring sessions that totaled 45,958 minutes (766 hours) in the spring.
- Provided English and math walk-in services for summer courses which resulted in 82 tutoring sessions that totaled 2,963 minutes (49 hours).
- An English coach intern, in collaboration with English Department, developed a citation guide for English coaches to use during coaching sessions.
- The Math Center was renovated, which includes new tables, computers, and a television.
- Developmental math courses received "in class tutoring" support.
- Block tutoring for specific courses for which finding tutoring support was challenging.

# Supporting a Multicultural Campus Environment

The Office of Diversity and Equity for Students (ODES) houses Keeping the Promise, the Lesbian, Gay, Bisexual, Transgender, Questioning, and Allies (LGBTQA) Resource Center, and Multicultural Programs and provides support to intergroup dialogue activities and events. ODES initiatives all support: Strategic Plan Goal B (which guides the University to increase Gallaudet's six-year undergraduate rate to 50%); Objective 1 (which guides the university to create an environment and support system to encourage retention and successful completion); and Strategy 1.3 which specifies that the university should develop programs to promote acceptance and respect for students, faculty, and staff along all facets of diversity including nationality, race, gender, gender identity and expression, sexual orientation, language, etc.

# Keeping the Promise: Equitable Outcomes for Students

Keeping the Promise: Equitable Outcomes for Students (KTP) is a key initiative in support of the university's goal of closing the gap in retention and graduation for deaf students who are underrepresented in terms of degree conferment. Participa-

tion in the KTP program is voluntary, and consequent reports concerning retention and persistence to graduation are limited to actual KTP participants. Of the KTP students from 2014-2015, 82 percent were retained for 2015-2016. In addition, 20 undergraduate and eight graduate KTP students graduated in 2016. Thus, KTP continues to fulfill its charge of supporting retention and graduation via promoting the intellectual advancement of these students by demonstrating and reinforcing the essential values of scholarship and perseverance through intentionally-designed activities that foster motivation, empowerment, academic excellence, understanding of historical and cultural heritage, and model citizenship.

#### Academic Skills-Building Workshops

In these weekly events, campus experts shared strategies for succeeding in college. Topics discussed ranged from general strategies for success to applied and personal stories, which are designed to raise awareness of identity and the appreciation of different cultures. In AY 2015-2016, 35 academic skills building and cultural education workshops were offered with a total of 150 attending, including:

- Cultural trip: El Museo del Barrio and Hispanic Society of America
- DAWN Domestic Violence: People Of Color
- Rap discussion: Academic support system
- Midterm and final exam study tables
- Deaf Native Americans: Organizations, culture, and experience
- KTP leadership retreat
- Asian brown bag gathering series
- History of the Trail of Tears
- Social justice: Intersectionality and community accountability
- Survival study skills and exam taking tips
- Academic success strategies: How to survive your finals
- Road to freedom: History of the Underground Railroad
- National Great Blacks in Wax Museum and Reginald F. Lewis Museum
- Rap discussion: Black Lives Matter

- Martin Luther King Memorial and Frederick Douglass
  National Historic Site
- Feminist herstory
- Believe in Yourself
- Asian: Who are We?
- Anchoring black and Latino deaf students in academic success
- Amele Habtemichael and Christoper Mbochwa internship experience
- Celebration of Cesar Chavez Day and the United Farm Workers Association
- How to be technology savvy
- Rap discussion with Dr. Pamela Lightsey

#### **Cultural Education Workshops and Events**

These workshops and events addressed the learning about personal heritage, culture, and communication. Topics and activities included visits to Latino/Hispanic and African-American museums, History of the Day of the Dead (dia de Muertos) by the Latino Student Union, Indian Removal Act and The Trail of Tears, community accountability, physical and sexual assaults, and an Asian panel. Three cultural education trips were offered. Approximately 150 students attended these cultural education workshops.

#### **Focus Groups**

Focus groups provide opportunities for KTP members to discuss issues affecting them as black, Latino, and Asian students on campus and to exchange ideas and suggestions for navigating a predominantly white university. Four group discussions were held during the course of the academic year.

#### **KTP Program Expansion**

The Asian and Pacific Islander Community Forum was established to discuss their experiences being AAPI students at Gallaudet. Based on the survey and community forum, ODES identified an important need, namely a mentoring program. ODES began to build the foundations of such a program through the brown bag lunch gatherings where the students were afforded opportunities to develop support systems with faculty and staff of similar backgrounds to themselves.

#### Leadership Training Retreat

A two-day leadership and team-building retreat is offered every fall to enable students to learn leadership skills, develop the peer bonds and support systems that are critical to persistence, and develop an understanding of the characteristics and traits of effective leaders. Twenty-eight students participated in this activity this year.

#### **Individualized Support**

This year, 759 walk-in students were served with a variety of issues ranging from class-oriented questions to personal matters.

#### Lesbian, Gay, Bisexual, Transgender, Queer/ Questioning, and Asexual/Ally (LGBTQA) Resource Center

The LGBTQA Resource Center is the central hub for LGBTQA-related programs, services, training, activities, and groups on campus. The LGBTQA Resource Center cultivates community-building, disseminates resources, promotes equity and access, and facilitates education, training, and awareness for individuals of all sexual orientations and gender identities/expressions. The LGBTQA Resource Center promotes an LGBTQA presence year-round, overseeing programming during Pride Month, National Coming Out Day, Transgender Awareness Week, the Lavender Graduation held during spring commencement, and other culturally significant dates. In addition to maintaining a comprehensive resource library for the LGBTQA community on campus, the LGBTQA Resource Center offers ally-development training and awarenessbuilding workshops that address heterosexism, homophobia, transphobia, and other oppressions and injustices impacting LGBTQA individuals with a wide range of intersectional social identities.

Grounded in social justice principles, and using a community empowerment framework, the LGBTQA Resource Center works collaboratively with other campus entities and student groups to enfranchise and empower students of intersecting identities, supporting student development, well-being, and academic success. As a member of the Consortium of Higher Education LGBT Resource Professionals, the LGBTQA Resource Center also leads, collaborates with, and supports staff, faculty, and members of the administration in infusing knowledge of diversity in sexual orientation and gender identity/ expression through all facets of student support, curriculum planning, programming, and operations. The programs and services of the LGBTQA Resource Center address the following strategies outlined in University Goal B: increase Gallaudet's six-year undergraduate graduation rate to 50 percent.

- Strategy 2.3 Strengthen culturally appropriate mentoring and support programs for all TUGS (formerly part of B.2.5).
- Strategy 4.3 Establish targets for retention and graduation of TUGs university-wide, and in targeted majors (formerly part of B.2.5).
- Strategy 4.4 Improve the quality of interactions between students and faculty and student support services (revision of B.1.2).
- Strategy 4.5 Improve acceptance and respect in all programs for students, faculty, and staff along all facets of diversity (formerly B.1.3).

The following section describes the services that were offered during AY 2015-2016.

#### Advocacy Leadership and Support

The LGBTQA Resource Center leads and supports advocacy efforts to promote LGBTQA-inclusive policies and practices on campus through activism and education tailored to campus units and departments. Such services include assisting faculty development and contributing to curriculum transformation efforts to infuse information on diversity of gender and sexuality into academic offerings. The LGBTQA Resource Center leads and facilitates the work of the University Transgender Task Force, which is responsible for campus advocacy efforts promoting transgender-inclusive policies and practices on campus, in compliance with D.C., and federal law and with the goal of improving the campus climate for individuals of all gender identities and expressions. During AY 2015-2016, an estimated 363 hours were focused on contact and correspondence supporting advocacy efforts.

#### Collaboration/Consultation

During AY 2015-2016, 416 contact hours with students, staff, faculty members, and administrators were spent providing individual and group consultation. This included advising campus offices and departments on policy development, benchmarking services and programs, and consulting on curriculum transformation in keeping with best practices for LGBTQA inclusion in higher education.

Examples of collaborative projects include:

- Working with Counseling and Psychological Services (CAPS) to develop and implement a Transgender Student Support Group in the spring 2016 semester;
- Establishing the Transgender Task Force with the collaborative assistance of Dr. Martha Sheridan (Department of Social Work) and students enrolled in SWK 752, "Practice with Deaf and Hard of Hearing Populations: Macro Interventions;"
- Advising the Model Secondary School for the Deaf (MSSD) on the first annual MSSD LGBT Awareness Week in fall 2015;
- Consulting to the Office of the Ombuds on best practices for inclusion of transgender, non-binary, and gender nonconforming students in the classroom;
- Consulting to the Theatre Arts Department on themes of sex and gender in the spring 2016 production of "Cloud Nine;"
- Providing staff advising to Rainbow Society, the LGBTQA student organization, through consultation on structural reorganization, bylaws, membership fees, and other facets of operations and programming;
- Serving on the university-wide Sexual Assault Resource Team (SART) to contribute perspectives on the impact of sexual violence and intimate partner violence on LG-BTQA students in higher education;
- Consulting to University Communications on LGBTQAinclusive language and design in marketing materials;
- Consulting to the Title IX Office with a resulting joint email to all Gallaudet faculty and staff and MSSD teachers that highlighted the May 2016 U.S. Department of Education/Department of Justice "Dear Colleague Letter on Transgender Students" guidelines.

Units receiving consultation, advising, or training in AY 2015-2016 include: Admissions Office; Department of History, Philosophy, Religion, and Sociology; Department of Science, Technology, and Mathematics; Department of Physical Education and Recreation; Gallaudet Technology Services; Honors Program; Financial Aid Office; Office of National Outreach; Office of the Ombuds; Office of the Registrar; Student Affairs and Academic Support; and Title IX Office.

#### **Education/Training**

The LGBTQA Resource Center presents informational LGBTQA-related trainings which are developed and offered upon request and tailored to targeted audiences, which include students, staff, and faculty. During trainings, participants are familiarized with LGBTQA-related terms and introduced to concepts of importance such as coming out, gender identity development, sexual orientation, impacts of bullying and harassment, legal and civil rights, and other important topics. Time is devoted to answering questions by the audience, with the objective of debunking myths and misconceptions, reducing stigma, and helping audiences achieve a broader and deeper understanding of LGBTQA identities. Training audiences in AY 2015-2016 included academic departments, campus offices, and student organizations.

During AY 2015-2016, the LGBTQA Resource Center revised its assessment plan and Student Learning Objectives (SLOs). More than twenty-seven trainings and workshops were offered to an estimated 178 individuals. Assessment feedback continues to be positive, with an average of 85 to 100 percent of student participants rating their satisfaction as "satisfied" or "very satisfied" with workshop content. For example, a 2016 presentation to COM430 students received the following feedback: 100 percent of the respondents agreed they were more knowledgeable about LGBTQA-related terms, and were more likely to take action to address bias against LGBTQA individuals. Admissions staff who completed training offered the following feedback: 100 percent were "more likely to take action to address bias" against LGBTQA people. Participants especially liked when personal stories were shared by accompanying presenters, including LGBTQA students and staff.

Training, educational outreach, and/or informational in-services on best practices in serving LGBTQA students in higher education were provided to some of the following units/ departments/groups: Admissions; Financial Aid; Gallaudet University Library; Gallaudet Interpreting Services; JumpStart 2016; Office of Residence Life and Housing, coordinators of residence education, graduate assistants, resident assistants, and peer advisors; Student Body Government executive board; and classes in the departments of Communication, Physical Education and Recreation, and Theatre Arts.

Additionally, LGBTQA outreach efforts were expanded to include audiences beyond the walls of Gallaudet. Awarenessraising efforts included co-presenting at the 2016 Creating Change Conference, the annual conference of the National LGBTQ Task Force, and co-presenting to students at Georgetown University.

#### **Incident Reporting**

The LGBTQA Resource Center offers a supportive space in which LGBTQA students, staff, and faculty members may process and determine responses to experiences with LGBTQA-related bias, discrimination, or exclusion. In AY 2015-2016, the LGBTQA Resource Center received fourteen informal individual incident reports from students; four from faculty members, and five from staff members. Responses are determined by those making reports, with consultation by the LGBTQA Resource Center coordinator. In AY 2015-2016, responses included referrals to the Office of the Ombuds, with follow-up assistance during mediation and resolution; provision of department in-services; and individual consultation and support, including appropriate referrals.

#### Information Dissemination

The LGBTQA Resource Center creates and disseminates a campus-wide monthly electronic newsletter, "LGBTQA Resource Center E-News," with information related to oncampus and local LGBTQA programming and events, including announcements about upcoming initiatives, volunteer, scholarship, and internship opportunities, or other LGBTQArelated information. Additionally, the Center's social media presence, which includes accounts on Facebook and Twitter, offers information about LGBTQA-related events, resources, and news on campus and around the greater D.C., metropolitan area and nation. The LGBTQA Resource Center's official page on the Gallaudet University website includes information on programs and services as well as archival information on the Center's history, growth, and past events and programs.

In AY 2015-2016, the monthly "LGBTQA Resource Center E-News" experienced a 150 percent readership increase from AY 2013-2014. The LGBTQA Resource Center's Facebook page heightens visibility and features posts, stories, links, and pictures related to LGBTQA events on-campus, locally, and around the country and the world. During AY 2015-2016, the LGBTQA Resource Center Facebook page saw an increase in individual "LIKES" (n=786), up 60 percent from AY 2014-2015. The LGBTQA Resource Center assists students, staff, and faculty members with research and referrals to relevant and notable peer-reviewed, state-of-the-art resources on sexual orientation and gender identity/expression.

#### LGBTQA Resource Library

The LGBTQA Resource Center maintains and continues to grow its lending library of LGBTQA-related books, reference materials, magazines, pamphlets. In AY 2015-2016, new acquisitions were donated by individual members of the Gallaudet LGBTQA community, along with Health and Wellness Programs, which generously donated 13 textbooks and/or first-source books on LGBTQA identities, relationships, and/ or communities.

#### Student Lounge

The LGBTQA Resource Center shares responsibility for the Office of Diversity and Equity for Students Hangout Lounge, a safer space for educational programming, social events, speakers, group meetings, workshops, and presentations on relevant topics. During AY 2015-2016, the Hangout Lounge was utilized to promote student interaction and resource gathering during programs such as the Fall Welcome/Ice Cream Social and Coming Out Day.

#### **Student Groups**

A highlight of AY 2015-2016 included the development and implementation of the spring 2016 Transgender Student Support Group, offered in collaboration with licensed mental health staff from Counseling and Psychological Services (CAPS) and support from staff in University Communications, to facilitate the provision of personal, social, and academic support by and for transgender, non-binary, and gender non-conforming students. Participating students reported benefiting from acquiring relevant knowledge and resources, gaining support, and networking with other students. Student participants who completed the post-group assessment instrument reported they felt their identities were "acknowledged and respected" (100 percent), support group facilitators were skilled (100 percent), they would participate again if given the chance (100 percent), and they would encourage other transgender students to participate as well (100 percent).

#### **Transgender Resources**

The LGBTQA Resource Center is committed to growing the University as a welcoming and inclusive space for individuals of all gender identities and expressions. The LGBTQA Resource Center maintains a resource referral list for transgender students, staff, faculty, administration, and alumni, including information on campus and locally-based medical and mental health resources and campus policies and procedures related to name and gender marker changes on University records. Additional services include consultation to prospective and current students and their families as well as staff, faculty, alumni, administrators, and the community on equity and inclusion for transgender, non-binary, and gender non-conforming members of the Gallaudet University community. During AY 2015-2016, the "Trans@Gallaudet" section of the LGBTQA Resource Center was also updated with this information, and additional website content was added to communicate Transgender Task Force-related updates and relevant policy changes to the campus community.

#### Research

The LGBTQA Resource Center assists students, staff, and faculty with research project development and appropriate source referrals on data and literature pertaining to sexual orientation and gender identity/expression. For example, requests received in AY 2015-2016 included student, staff, and faculty inquiries about demographic statistics on Deaf LGBTQA individuals, information on infusing gender-inclusive language into academic writing, and research on identity formation in LGBT deaf individuals. In addition to highlighting and publicizing LGBTQA-related work by students, the LGBTQA Resource Center responds to requests for information and referrals by outside entities and individuals seeking information on deaf LGBTQA populations. Those served include the Deaf Health Communication and Quality of Life Center; Hearing, Speech & Deaf Center of Washington (HSDC); Trans Life Line, University of California Los Angeles; University of Wisconsin Oshkosh; and Vera Institute of Justice: Center on Victimization and Safety.

In addition to the above services, the LGBTQA Resource Center coordinates, develops, and implements programming events for the campus community throughout the year. The following section describes the programming events that were offered during AY 2015-2016.

#### Open House/Ice Cream Social 2015 and 2016

Approximately 70 students, staff, faculty, and administrators gathered in the ODES suite to meet members of the LG-BTQA campus community, learn about available resources, and obtain information about LGBTQA programming and plans for AY 2015-2016. Program highlights included an appearance and presentation by Sheila Alexander-Reid, director of LGBTQ Affairs in the Washington, D.C., Mayor's Office.

#### Monthly Brown Bag Lunches

During AY 2015-2016, approximately 90 students, staff, faculty, administrators, and alumni gathered monthly to meet and talk with other LGBTQA community members and discuss issues impacting the campus, the nation, and the world with respect to social and economic equity for LGBTQA individuals and communities.

#### Law Enforcement and LGBTQA Community Gathering

In the fall of 2015, nearly 30 students, staff, and faculty participated in a meet and greet reception with officers from the Gallaudet Department of Public Safety and the Washington, D.C., Metropolitan Police Department to learn more about the services provided by the Gay and Lesbian Liaison Unit and the Deaf and Hard of Hearing Unit.

#### Spirit Day in Support of LGBTQ Youth

The LGBTQA Resource Center collaborated with LGBTQA students to plan and execute campus campaign aligned with national Spirit Day campaign on October 15, 2015, encouraging members of the Gallaudet community to take action against bullying and in support of LGBTQA youth. The campaign included wearing purple in visible show of support, participating in social media discussions, and visiting the Spirit Day table in JSAC to have photographs taken with hand-drawn signs of support and encouragement. An estimated 70 students, staff, and faculty members were reached through the Spirit Day table.

#### Gallaudet Coming Out Day 2015

Approximately 40 students, staff, and faculty members gathered in the ODES suite to share coming out stories, give and receive support, and co-watch the live broadcast of the announcement of Gallaudet's first female, openly LGBTQA university president.

#### 2015 Intricate Identities DC LGBTQ Student Conference

Nearly eighteen Gallaudet students presented and/or participated in the daylong annual DC LGBTQA Student Conference, held in November 2015, for interactive education, group, and personal reflection as well as research exchange on leadership, activism, and issues of student interest related to topics of sexual orientation and gender identity/expression as well as diversity, inclusion, and liberation.

#### **Transgender Awareness Week 2015**

Transgender Awareness Week 2015 was observed with a brown bag lunch dedicated to discussion of gender identity and expression, and the experiences of transgender, non-binary, and gender non-conforming people on campus; two widelyattended campus-wide presentations on transgender identity, cisgender privilege, and ally development; and a social media campaign featuring the voices and experiences of transgender people. It also marked the first meeting of the Universitywide Transgender Task Force. An estimated 450 students, staff, faculty, alumni, and community partners were reached through the brown bag lunch, presentations, and social media campaign.

#### 2015 Transgender Student Panel

The LGBTQA Resource Center collaborated with Rainbow Society and the Office of Residence Life and housing peer advisors to identify participants, develop questions, and perform outreach to the campus for the "Stigmatized: Transgender Student Panel," which featured transgender, non-binary, and gender non-conforming students discussing their intersectional identities and experiences both on campus as well as off. Approximately 80 students, staff, and faculty members attended.

# 2016 LGBTQA/Rainbow Society Open House/Valentine's Celebration

With support from ODES, the LGBTQA Resource Center co-sponsored a Valentine's Day Celebration paired with an open house for the Rainbow Society, the LGBTQA student organization. Nearly 60 student, staff, and faculty participants shared coming out stories, love stories, poems, and songs; participated in cookie-decorating; shared stories for a related BisonTV segment; and gathered information on the LGBTQA Resource Center and Rainbow Society.

#### Transgender Day of Visibility 2016

The 2016 Transgender Day of Visibility included a powerful presentation on gender identity/expression; a student dinner with activist/educator/artist Ignacio Rivera; a student vlog, social media, and chalking campaign about the ally project and pledge program "I'll Go With You;" and a student-generated art project in JSAC featuring photos and profiles of transgender students and staff members. Nearly 250 students, staff, and/or faculty members participated.

#### Pride Month 2016

Collaborating with ODES, Rainbow Society, and other campus offices and departments, the LGBTQA Resource Center's 2016 Pride Month initiative included financial and in-kind support of relevant events such as a lecture and dinner discussion on race, religion, and LGBTQA identity; LGBTQA Students of Color panel; Rainbow Society trip to ColorFEST 2016; performance of the gender-exploring theater production "Cloud Nine;" and student Pride Month Extravaganza featuring music and live performance. Approximately 200 individuals were reached.

#### 2015-2016 Pride Presenters Series

The LGBTQA Resource Center's Pride Presenters Series introduced the campus to the ideas, art, work, and achievements of renowned and expert LGBTQA scholars, activists, educators, performers, and storytellers. The following individuals presented at Gallaudet during AY 2015-2016.

#### "Beyond Bisexuality 101" by Robyn Ochs

Questions covered in this interactive program included, what does it mean to identify as bisexual, pansexual, or fluid? What are the challenges in recognizing and understanding the middle sexualities, an often overlooked segment of the LGBTQ community? The program also provided the 30 attendees with the tools for challenging ignorance, bi-phobia, and bisexual erasure.

#### "Making History: An Afternoon with Congressman Mark Takano"

The lecture by Rep. Mark Takano, the first openly gay person of color elected to the United States Congress, was co-sponsored with ODES KTP. Approximately 70 people attended this lecture.

#### "Working My Way Out" by S. Bear Bergman

This informational and autobiographical lecture was about gender identity and expression, transitioning, social construct of gender, young adulthood, religion, family, and social justice, and was co-sponsored with Deaf-REACH. Approximately 25 people attended this lecture.

#### "Queer and Transgender-Positive Sex Education" by S. Bear Bergman

This presentation, followed by a question and answer session, focused on language, behavior, and the needs of LGBTQA individuals with regard to education on sexuality and sexual behavior. It was co-sponsored with Deaf-REACH, Health and Wellness Programs, and ODES. Approximately 25 people attended this presentation.

#### "Asexual Love: How the Ace Community Fights Stigma by Radically Redefining Intimacy" by David Jay

This lecture, by the founder of Asexuality.org, focused on identity and intimacy in the asexual community, with an emphasis on asexual identity, relationship development, and community building. Approximately 25 people attended this lecture.

#### "Intersex Human Rights and International Developments" by Michela Balocchi

This lecture, followed by a question and answer session, provided an overview of and supporting research about intersex issues as human rights concerns. Approximately 20 people attended this lecture.

#### "The T in LGBT: A Deaf Man's Journey from Female to Male" by Drago Renteria and Jennifer Mantle

This was a widely acclaimed, thought-provoking, and informative presentation about a deaf Chicano transman's personal journey through physical and cultural transition, his partner's perspective, experiences of transphobia, and important information on allyship. Approximately 200 people attended this presentation.

#### "Cisgender Privilege and Trans Allyship" by Drago Renteria and Jennifer Mantle

This lecture focused on the difference between sex and gender, intricacies of gender identity and expression, cisgender privilege, and ally identity development and practice. Approximately 200 people attended this presentation.

#### "TRANS VISIONING: Oppression, Connectivity and Resilience" by Ignacio Rivera

This interactive presentation, co-sponsored with ODES in observation of Transgender Day of Visibility, highlighted the importance of transgender leadership, connections between societal injustices and gender-based oppression, and the vision of a future where transgender people can live openly and authentically. Approximately 100 people attended this presentation.

#### Lavender Graduation 2016

This end-of-the-year ceremony acknowledges the unique challenges of being an LGBTQA student at Gallaudet University, celebrating students' achievements through gifting of purple stoles, tassels, and Lavender Diplomas. Following presentations by student and staff/faculty/administration speakers, including the University President, the annual LGBTQA Resource Center Awards were given in recognition of advocates and special supporters. AY 2015-2016 Lavender Graduation saw a record high of 57 registrants and 46 participating LGBTQA students graduating in the Lavender Graduation class of 2016. Approximately 250 individuals attended the ceremony and/or reception following the ceremony.

#### Multicultural Student Programs

Multicultural Student Programs (MSP) seeks to create an environment at Gallaudet University that embraces individual difference, sustains inclusion, provides support and advocacy, and cultivates a campus atmosphere that is free from bias. MSP will achieve its mission by offering the community a variety of multicultural programs and experiences, which foster an inclusive, bias-free campus climate. MSP provides and supports the strategic goal B.1.3.

#### Turn-A-Page-Together (TAPT)

This program was provided during the fall and spring semesters for 10 weeks in the fall semester and 10 weeks in the spring semester. TAPT is one of the cornerstone programs of MSP and is very successful. Among faculty, staff, and students, about 36 participants in fall semester and 43 participants in spring semester joined the book club. Participants enjoyed reading books about different cultures and had the opportunity to share their diverse views and perspectives through discussions.

#### Hispanic Heritage Month

#### Presentation: "Education of a Hispanic/Latino Deaf Professional" by Mark Apodaca

In this presentation, Mark Apodaca, chair of the New Mexico Commission on the Deaf and Hard of Hearing, discussed his education and journey towards his successful career as a Hispanic/Latino deaf professional.

#### Workshop: "Immigration is Beautiful: Butterfly"

This workshop included a brief history of immigration issues in American and a hands-on activity making wearable butterfly wings, a symbol for migrant rights. Twenty-eight participants attended this workshop.

## "Piñata" Workshop

This presentation included the history of the piñata, and a hands-on activity making colorful piñatas, which was a symbol of Latino culture. Thirty-two participants attended this workshop.

#### Students of Color Leadership Institute

The Student of Color Leadership Institute is for members and leaders of student organizations. The goal of the institute is to train student leaders in the skills and tools they need to lead their organizations effectively and to enhance the cohesiveness of student organizations on campus. Topics included understanding oneself, cultural competence, managing different perspectives, and developing a strategic plan for an organization. A total of 22 participants attended the full day training.

Guest speakers at the institute included Norma Moran ("Identity: Who am I?"), Niesha Shepard and Ikumi Kawamata ("Self-Advocacy"), SooHyun Tak ("Allyship") Andrea Sonnier ("Social Justice"), Dr. Kojo Amissah ("Leadership and Teamwork"), and Nathalie Franck ("Navigating through Gallaudet University as a Student Leader of Color").

#### Native American Heritage Month

# Presentation "DNA and the Re-Articulation of Native American Race"

Dr. Kim TallBear compared symbolic blood, as it has been used in 20th and 21st century U.S. tribal enrollment, with the more recent advent of DNA testing for enrollment. She briefly examined both "Indian blood" and "tribe-specific blood" and compared these concepts with that of the "DNA profile" or DNA parentage test that is increasingly used in tribal enrollment. She also examined genetic ancestry testing in which individuals search for ancestral lineages traceable to different continents and areas of the world. While tribes do not use continental ancestry tests, such commercially available DNA testing is shifting the way the public views Native American racial identity to the detriment of Native American tribes. She argued that genetic practices are more likely to racialize Native American identity than are current blood rules alone, and this may be harmful to tribal sovereignty. Seventy-eight participants attended this presentation.

#### **Black History Month**

#### Presentation: "The Impact of the Self-Fulfilling Prophecy"

Dr. Kojo Amissah shared findings from his qualitative descriptive study exploring the perceptions of a purposive sample of 20 black deaf male students and alumni in postsecondary in Washington, D.C., to determine if the self-fulfilling prophecy theory contributed to their pedagogy. Twenty-eight people attended Dr. Amissah's two-hour presentation.

#### Women History Month

#### Presentation: "The Power in You, Yes Woman Can!"

Jade Bryan, the founder of DeafVision Filmworks, Inc., and Jade Films and Entertainment, LLC, gave a presentation about her career experiences as a deaf woman writer, producer, and director. Jade has years of experience in show business, producing films, talent management, event coordinating, fundraising, and marketing research, as well as teaching, writing, theater directing, and business administration. Under the auspices of her production company, Jade Films and Entertainment, she has plans to form an agency exclusively focused on producing fashion shows, music videos, feature films, commercials; coordinating model recruitment; managing talent; and special project developments. Fifty-seven people attended this presentation.

#### The Shattered Mind Film Showing

The Shattered Mind film depicts the captivating story of a proud black deaf that has never been told before in the main-

stream film industry. It explores a black deaf family's journey while their daughter, Zhane Rain, struggles to overcome adversity, a traumatic childhood past, and hearing loss. The first showing was attended by 42 participants and the second showing was attended by 32 participants.

#### Panel: "Honoring Deaf Women and Their Involvement in Public Service and Government"

The four deaf women—Cecilia Madan, April Jackson-Woodard, Rita Torres, and Michelle Sherbondy—on the panel shared their experiences in breaking the glass ceiling in their careers and communities. They also shared tips for female students to succeed in their careers. There were 43 participants at this panel.

#### **Deaf History Month**

#### Workshop: "Deafhood"

In his presentation, Marvin Miller explained the Deafhood journey, engaged in a daily internal and external dialogue on what it means to be a healthy deaf person today. With this understanding, the speaker asked that participants answer the question, "How can members of Gallaudet University community be part of this healing process?"

#### Erase the Hate

#### Presentation: "Our Country of Laws: Using the Legal System to Fight Bias and Discrimination"

The Erase the Hate campaign is an effort to fight hate and seek justice for vulnerable members of the campus community and society. The speaker was Deborah L. Johnson, Esq., director of diversity and outreach, at Roger Williams University School of Law. She explained the history, laws, and policies related to hate crimes, zero-tolerance, and discrimination. There were 92 participants at this presentation.

#### UnityFest

The 2016 iteration of UnityFest was the tenth successive annual festival, a full day of celebration of the rich cultural heritage of the Gallaudet community. The day's events provided students, faculty, staff, and friends an opportunity to explore and experience the wide variety of cultures that make up the campus community. There were 380 participants at this event.

#### Individual Support and Consulting

MSP provides one-on-one support and consultation to students, staff, and faculty during meetings in person related to MSP resources, interviews for different projects, and collaboration with different units for various issues related to multiculturalism. During the academic year 2015-2016, 468 students, staff, and faculty were supported or provided with consultation.

#### Outreach

#### Presentation: "Images of Race, Ethnicity and Gender: Examining the Impact of Mass and Social Media"

This workshop, presented on July 7, 2016 by Elvia Guillermo, program coordinator, at the 53rd Biennial National Association of the Deaf Conference, examined mass and social media to understand the impact of racial, ethnic, and gender stereotypes on cross-cultural relations. Different video clips were reviewed along with activities to illustrate how racial, ethnic, and gender differences influence and affect public policy decisions and how various physical characteristics and cultural practices disadvantage people of color, non-privileged heritages, and women. This session ultimately aimed to increase awareness and provide tools to recognize, engage, and improve racial, ethnic, and gender relations, as well as incubate ideas for efforts to work together in achieving more positive public policy results and change the system.

Support Unit	Number of Contact Hours
Dean's Office	2,496
Academic Advising and Tutorial and Instructional Programs	15,592
Student Success	19,038
Career Center	8,512
Counseling and Psychological Services	9,825
Office for Students with Disabilities	26,853
Residence Life-Housing	69,114
Student Centered Programs and Services	2,000
Alcohol and Other Drugs Program	668
Campus Activities	7,475
Commuter Programs	3,549
Health and Wellness Programs	4,002
Office of Student Conduct	4,380
New Student Orientation	930
Athletics and Intramurals	51,188
Office of Campus Ministries	640
Office of Diversity and Equity for Students	
Keeping the Promise	1, 148
Multicultural Student Programs	385
LGBTQA Resource Center	1,108
TOTAL	228,903

### Student Affairs and Academic Support: Student Contact Hours for AY 2014-15



On June 14, 2016, Counseling and Psychological Services (CAPS) and the Office of Diversity and Equity for Sudents (ODES) co-hosted a community vigil, providing an opportunity for discussion on the Orlando, Florida tragedy that occurred on June 12. Representing the LGBTQA community, Alex Lefferes, web content developer/editor for University Communications, led the candlelight vigil around campus. Participants walked while maintainting the ASL sign for candlelight.

Photo by: Zhee Chatmon

# **Strategic Plan Goal C: Resource Efficiency**

A goal of the university is to secure a sustainable resource base through expanded and diversified funding partnerships and increased efficiency of operations. This chapter enumerates a series of steps taken to ensure that Gallaudet University has control of various financial resources to complete its mission, included are steps to control spending as well as to increase revenue. Included are steps taken during the current year and those taken during previous years. Also included are demographics—gender, deaf/hearing status, and race/ethnicity status—for employees by category of employment, including administrators, faculty, Clerc Center teachers, professional staff/student support, professional staff administrators/instructional support, secretarial/clerical, technical, service, and maintenance. The contents of this chapter reflect the major accomplishments performed during FY 2016 in support of Goal C of the Gallaudet Strategic Plan.

# I. Recent Resource Efficiency Steps

Gallaudet University continued to pursue revenue growth opportunities and carefully manage its resources in FY 2016. This section provides a brief summary of the actions completed and initiated since FY 2010.

## Fiscal Year 2016

- Gallaudet University welcomed a new president, Roberta "Bobbi" Cordano, on January 1, 2016. To give her time to develop a new strategic plan, Gallaudet University extended the Gallaudet Strategic Plan 2010-2015 one additional year, to December 31, 2016. Ms. Cordano shared her initial "Guiding Vision for Organizational Priorities" with the Board of Trustees in the May 2016 meeting. It is expected that the new strategic plan under her leadership will leverage the University's assets and expertise to maximize its potential and adapt to the changing trends facing higher education.
- 2. The Board of Trustees approved a budget totaling \$176.7 million for FY 2017, which is \$3.7 million higher than the FY 2016 budget of \$173.0 million. The budget contains a conservative assumption of an increase in the federal appropriation for Gallaudet's operations of \$1 million.
- 3. The largest increase in the revenue budget is expected to be from auxiliary enterprises, made possible by developing Gallaudet's 6th Street property and converting the third floor of the Kellogg Conference Hotel for use by hotel guests. Previously the floor housed university department offices.
- 4. On the expense side, the FY 2017 budget is based on the assumptions of flat headcount, a reduction of the planned operating surplus by \$500,000 to \$2.1 million, and a reduction in the divisions' non-payroll budgets by \$1 million. However, further revenue increases and cost decreases are still needed. In order to give Ms. Cordano the flexibility in managing the operations of Gallaudet University during FY 2017, the budget lists additional options to choose from:
  - Increasing the enrollment by 25 U.S. full time residential students

- Reducing the salary treatment of \$2 million to \$1 million, delaying its effective date, or even not to implement this recommendation
- Increasing the contributions by 10 percent
- Requesting a one-time additional payout from the endowment to support priorities
- 5. Acting on recommendations in the FY 2017 budget, the Board of Trustees approved a tuition increase of 3 percent and a variable room rate increase of approximately 2 percent, depending on the dormitory, to take effect in fall 2017.
- 6. The National Science Foundation (NSF)/Gallaudet Center on Visual Language and Visual Learning (VL2), the Technology Access Program, and the Petitto Brain and Language Laboratory (BL2) continued to be active in deaf related fields of research. For instance, under the guidance of Dr. Laura-Ann Petitto, scientific director of the Brain and Language Laboratory, Adam Stone (lead author) and Geo Kartheiser, both third-year Ph.D. in Educational Neuroscience (PEN) students, published "Fingerspelling as a Novel Gateway into Reading Fluency in Deaf Bilinguals" in October 2015 in PLOS One, an open-access multidisciplinary research journal. More information about the accomplishments of these programs can be seen at vl2.gallaudet.edu/news/headlines.
- 7. Gallaudet won a competition to perform as the lead institution for a \$950,000 Rehabilitation Engineering Research Center (RERC) Information and Technology Access grant for the next three years. This keeps Gallaudet in the forefront of communication accessibility research in collaboration with the University of Wisconsin serving as a sub awardee on this grant.
- 8. To support Gallaudet's long-term recruitment and retention efforts, the university completed the construction of a \$17 million new Science, Technology & Math lab in the Hall Memorial Building. A legacy of President T. Alan Hurwitz who retired on December 31, 2015, the laboratory celebrated a grand opening in late 2015. With input from students, the state-of-the-art laboratory was designed according to DeafSpace design principles, demonstrating how architecture can be enhanced through a greater

## **Goal C: Resource Efficiency**

awareness of the unique ways deaf people learn in their spaces.

- 9. The university continued the work of major upgrades to the Human Capital Management and Financial Aid modules of the PeopleSoft information management system. Several key software packages were installed and are being rolled out to the departments at the time of this writing. The project is expected to be completed in the third quarter of 2016.
- 10. Gallaudet completed the first year of a \$3 million, threeyear project to upgrade its network and phone systems and equipment.
- 11. Preparations continued for a long-term ground lease of Gallaudet's 6th Street property with the JBG Company. The design teams participated in the final phase of the competition in August and the finalist will be selected in November. JBG, Gallaudet's selected developer for the project, testified before the D.C. Zoning Commission in June to seek approval for the project. Approval is expected in the fall or winter which will allow the project to move forward.
- 12. Gallaudet reworked its recruitment processes, marketing materials and admissions staff during FY 2016 to bring those areas in line with the recommendations from consultant Ruffalo Noel Levitz. An increasing number of the financial aid packages offered to students are developed in accordance with the guidelines provided from the firm. In fall 2016, enrollment by headcount increased to 1,774 students, up from 1,670 students in fall 2015. The freshman and sophomore classes are 20% and 22% larger than those of the previous year, respectively. Gallaudet will continue to invest time and effort in improving its processes to retain these students throughout their college years.
- 13. The Facilities Department completed a major project to upgrade the chiller plant that provides cooling to most campus buildings. This investment in new equipment and controls is expected to reduce annual campus electricity use by approximately 5 percent.
- During FY 2016 Gallaudet raised \$3.28 million, bringing the 2010-2016 fundraising total to \$31.9 million. The alumni engagement rate during FY 2016 was 72.8 percent, which includes alumni giving, as well as involvement and service to the university.

## Fiscal Year 2015

- 1. Preparations were underway for the launch of an international design competition for Gallaudet University's 6th Street property development project. Shortly after the end of FY 2015, the university selected four finalists to compete in the second stage of the competition with assistance from The JBG Group. The two-stage design competition is intended to create a new campus gateway and redefine the university's urban edge as a vibrant, mixed-use, creative and cultural district, generating long-term revenue for Gallaudet under a long-term lease to begin in a few years.
- 2. Gallaudet continued working with consultant Noel Levitz on maximizing enrollment and net tuition revenue through the strategic use of scholarships. Despite a decline in enrollment by headcount from 1,753 students in fall 2013 to 1,691 in fall 2014, Gallaudet essentially managed to meet the net tuition revenue budget goal of \$17.5 million with actual net tuition revenue of \$17.4 million at the end of FY 2015 (unaudited). The decision to increase tuition by 4% for FY 2015 helped to offset an increase in scholarships awarded.
- 3. An analysis of fall 2015 enrollment numbers shows that although the total enrollment number is slightly lower, the yield rate actually increased and Gallaudet exceeded the budgeted goals for enrollment. A lot of progress has been made to address the recommendations from Noel-Levitz, but there is still more work to be done. The primary goal for fall 2016 is to increase the number of incoming freshmen, as well as continue the university's progress toward improving yield and retention rates.
- 4. During FY 2015 Gallaudet raised \$7.9 million, bringing the 2010-2015 fundraising total to \$28.6 million. The alumni engagement rate during FY 2015 was 34 percent, which includes alumni giving, as well as involvement and service to the university.
- 5. Gallaudet hired a new executive director for development, further strengthening the university's focus on fundraising.
- 6. The university is now an approved nonprofit as part of the Combined Federal Campaign, which is a workplace giving program for federal civilian, postal and military personnel.
- The Abraham Lincoln Legacy Society and its website are currently being reinvigorated to attract more bequests for Gallaudet, which are expected to be a pathway for more and larger endowment gifts.
- 8. Gallaudet completed the conversion of the third floor of the conference center to hotel use for additional hotel room revenue. Previously the floor housed mostly Gallaudet administrative offices.
- 9. The Board of Trustees approved a budget totaling \$173 million for FY 2016, which is slightly higher than the FY 2015 budget of \$172.6 million. The planned operating surplus is set at \$2.6 million, \$300,000 more than in FY 2015. The budget contains an assumption of a flat federal appropriation from the FY 2015 level.
- 10. The budget calls for a reduction in headcount from 930 to 910 during FY 2016 and \$2 million to be set aside for a general pay increase to be awarded to eligible faculty and staff at the discretion of the president. Under the budget, the pay increase is contingent upon receiving a federal appropriation in FY 2016 equal to the FY 2015 federal appropriation.
- 11. The Trustees further approved an increase of 3% to student tuition to take effect in fall 2016.
- 12. The FY 2016 budget also includes a recommendation for a review of programs and services to determine their true costs, to identify which programs are viable and in demand, and to reassess non-academic administrative programs to maximize efficiencies.
- 13. The University continued several other initiatives such as the establishment of an online infrastructure to facilitate the creation of online course offerings.
- 14. Gallaudet also continued pursuing new funding for research for the Technology Access Program as well as the award of a highly competitive grant from the National Science Foundation's Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE) grant to VL2.
- 15. The Board also approved a new risk management and insurance program in the Department of Business to be offered as both a major and a minor. This program evolved with the support of an outside donor from the insurance industry and has already led to two internships this past summer, one leading to a job offer, and more than 20

students participating in the program. This program holds great promise for successful career outcomes for Gallaudet's students in this industry.

- 16. To support Gallaudet's long-term recruitment and retention efforts, the university expended \$10.3 million during FY 2015 on the construction of a \$17 million new Science, Technology & Math lab in Hall Memorial Building. This project is expected to be completed in 2016.
- 17. To bring more robust information technology support for Gallaudet's financial management processes, the university is carrying out major upgrades to the Human Capital Management and Financial Aid modules of the People-Soft information management system. These upgrades are expected to add numerous enhancements and will bring the software to current status. The project is expected to be completed in the third quarter of 2016.
- 18. A three year project to upgrade and build out a Tier 2 data center with redundancies to continue operations, in case of a power outage, was completed. A secondary data center, which did not meet minimum standards, on campus was decommissioned in preparation for a true disaster recovery posture utilizing the cloud. This allowed us to consolidate services for greater efficiency, and the capital investments including, but not limited to replacing the UPS, HVAC system, air suppression system, and generator(s). These improvements have resulted in a safer, greener, and redundant data center.

## Fiscal Year 2014

- Standard & Poor's affirmed Gallaudet's credit rating of A+, in part based on the university's financial performance during the sequestration in the FY 2013 federal government appropriations; Moody's affirmed the rating of A2.
- 2. After considering four responses to the Request for Proposals, the Gallaudet University Foundation received approval from the Board of Trustees to enter into exclusive negotiations with The JBG Companies for a development agreement for the university's properties adjacent to the campus on 6th Street. The Foundation recommended The JBG Companies based on its experience in the District, as well as the incorporation of DeafSpace design elements into its proposal. The development, to occur in phases over the next 10 years, is expected to create opportunities for Gallaudet students, staff, and faculty in terms of employment, internships, training, and collaborations.

- 3. We recently worked toward earning a five-year \$4.75 million grant from the US Department of Education for the University's Technology Access Program. The program conducts research related to communication technologies and services, with the goal of producing knowledge useful to industry, government, and deaf and hard of hearing consumers. The goal for the grant is to provide the tools, methods, and knowledge that will bridge the gaps between the capabilities of modern technologies and the ability of consumers to take full advantage of them.
- 4. Gallaudet and outside contractors completed Operation Green Light, a campus-wide energy conservation project that started in FY 2013. Most of the work involved coupling low-power, instant start ballasts with occupancy sensors for the optimal balance between energy savings and the DeafSpace design guidelines, as well as exterior lighting replacements. This work is expected to simplify long term maintenance and replacement requirements.
- 5. With approval from the Board of Trustees, the annual payout on 67 underwater endowment accounts was suspended for one more year. This continued an action taken by the Board in FY 2012 to suspend the annual payout for individual endowment funds with a market value that was less than the historical principal value.
- 6. To reduce employee benefit costs, the maximum limit for the annual leave carryover hours was reduced to 240 during FY 2014.
- We carried out the Voluntary Retirement Incentive Program (VRIP), reducing regular status employee headcount by 66.
- 8. A recent analysis done by an independent consultant of Gallaudet's staff employees' salaries showed that they continued to be competitive in the marketplace, and the staff employees' salaries continued to be appropriately distributed.
- 9. Despite restoration of the sequestration cut in the federal government appropriation support to Gallaudet, operating divisions did not receive the \$1.25 million permanent budget reductions that were carried out at the division level in the preceding year. The FY 2015 budget does not provide for an automatic restoration of the reductions because of the continued uncertainties over another potential sequestration.

- Gallaudet continued working with consultant Noel Levitz on maximizing enrollment and net tuition revenue through the strategic use of scholarships. Net tuition revenue increased from \$16.7 million in FY 2013 to \$17.6 million (unaudited) in FY 2014.
- 11. A new vice president of development and alumni relations was hired, bringing 15 years of experience in higher-education development that includes recognitions for notable accomplishments.
- 12. To support Gallaudet's long term recruitment and retention efforts, we continued to design and plan a \$16 million new science, technology, and math lab in Hall Memorial Building to be completed in 2016.
- 13. The Board of Trustees approved the FY 2015 operating budget of \$172.6 million with a goal of achieving an operating surplus of \$2.3 million. The budget also includes an assumption of \$2 million for salary increases to be awarded at the president's discretion.
- 14. The Board of Trustees approved the suspension of an automatic nine percent annual increase in the student housing rates, effective FY 2016 and FY 2017. Gallaudet administrators will recommend the rate of increase for room and board costs as part of the annual budget process. This is intended to support efforts to fill Gallaudet's residence halls.
- 15. As part of the FY 2015 budget development process, the Board of Trustees approved the goal of a regular status employee headcount of 930, the same as FY 2014.
- 16. The Board approved a four percent increase in tuition, effective FY 2015.
- 17. The trustees approved a reallocation of \$4 million from the President's Endowment Fund toward enrollment stabilization and research innovation initiatives. Distributions are expected to total approximately \$100,000 per year for each initiative.
- 18. Planning is underway for a "campus gateway" at the 6th Street and Florida Avenue corner with the potential for supporting auxiliary revenue.
- 19. The renovation of the first and second floors of the conference center, to accommodate larger scale conferences and events, has been completed. We are also designing and developing guest rooms on the third floor of the conference center for additional hotel room revenue.

20. We authorized the creation of a director of business development position to generate additional revenue by soliciting outside groups to use university facilities. Search is currently underway.

## Fiscal Year 2013

- 1. Division administrators identified permanent budget reductions of \$1.25M, and an additional estimated \$2.343 million of savings for the year were identified through this process; all reductions and savings were chosen to have the least educational impact on strategic plan implementation.
- 2. The Board of Trustees provided the administration with the authority to implement personnel actions as needed in the face of unknowns for FY 2014, resulting in the announcement of an FY 2014 Voluntary Retirement Incentive Program which currently has employees considering their participation options.
- 3. A change in the Staff Layoff policy reduced the layoff payout for regular status staff employees.
- 4. The program to reduce the amount of annual leave employees can carry over from year to year was accelerated, and no employees can carry over more than 240 hours of annual leave.
- 5. An agreement was made with the U.S. Department of Education to increase the percentage of hearing undergraduate students (HUGs) from 5% to 8%, with the increase occurring by one percentage point per year over a three-year period beginning in FY 2013. Additionally, for our on-line courses, the Department agreed to the elimination of the 5% HUGs cap for a period of five years to allow those programs to grow and to enable the university to develop a stronger framework for supporting on-line activity. Both of these actions will allow enrollment to grow, resulting in an increase in revenue.
- 6. Tuition and fees were raised by 8% at the start of FY 2013 and will be raised by the same amount at the start of FY 2014.
- 7. Room rates were increased by 9% at the start of FY 2013 and will be raised the same amount at the beginning of FY 2014. A policy was adopted requiring freshmen and sophomore students to live on campus beginning in the fall of calendar year 2014.

- 8. Neither salary increases nor one-time payments were provided to employees in FY 2013.
- 9. Selected capital improvement projects were deferred, resulting in decreased depreciation expenses.
- Our FY 2013 budget called for the elimination of 26 positions; that reduction was achieved at the end of FY 2013. For FY 2014 we intend to further reduce the number of employees by 34.
- 11. Operation Green Light, part of the campus-wide energy conservation project, involving engineering teams from the Facilities Department and outside contractors, is retrofitting lighting in classrooms, offices, and conference rooms with energy efficient solutions in a project scheduled for completion in FY 2014. In addition, the installation teams are updating and replacing exterior lighting throughout the campus.
- 12. The manner in which capital improvement projects are initiated, approved, and followed has been revised with the establishment of a University-wide committee working on principles that: consider all facilities as controlled by the university, not by budget units; recommend controls, budgeting, and space allocations to the President for final decisions; uses the Gallaudet Strategic Plan as the basis for project approvals; makes recommendations in a transparent process; manages facilities to optimize utilization; and works at a high standard of performance. For the first time, a three-year capital budget expenditure plan has been prepared creating a better picture of capital expenditures and allowing for better planning for all projects.
- 13. Hiring of student employees has been centralized in the Career Center, resulting in common, transparent student hiring practices.
- 14. The Office of Communications and Public Relations is now available to meet requests free of charge for creative media services for marketing-related materials, reducing the need to hire these services from outside vendors; that office is also available to negotiate printing discounts from vendors.

## Fiscal Year 2012

1. As mentioned in previous years below, Johnson Controls International (JCI) is implementing an Energy Saving

Program that retrofits existing buildings by improving electrical, plumbing, and mechanical systems to reduce Gallaudet's energy usage significantly. This work includes: solar system drawings and design are now complete, and equipment order review, scheduling, and construction permits are in progress; electric and water sub-meter programming is now complete; exterior and interior lighting mock-ups are now complete, with final reviews for campus-wide installs in progress; boiler replacements are progressing well; a community energy kiosk "Green Scene Kiosk" planning is underway for the Jordan Student activity Center; and a campus-wide underground piping infrastructure system review is in progress.

- 2. A new program review process has been established to evaluate the viability of new academic programs proposed by faculty. This process will work to ensure that newly proposed programs are established to generate more enrollment while also ensuring that we do not bring on new programs that will take resources from strategic initiatives. This process involves our administration much earlier in the process than has been the case in the past.
- 3. Academic Affairs in currently in the ending stages of an extensive restructuring activity that has involved the development of a list of guiding principles for the process, the collection of information from departments and units affected by the restructuring, recommended restructuring, the identification of areas needing further attention, and the suggestion of the steps necessary to carry out the implementation. In addition, a listing of specific programs with recommendations about their assigned location within the Academic Affairs was created. Once fully implemented there should be efficiencies obtained from this restructuring.
- 4. The University Planning and Budget Committee (UPBC) has been established to supersede the previously functioning University Budget Committee (UBC). With new members and a new charge to actively consider planning, this group is now working to ensure resources are aligned or re-aligned to support strategic planning efforts.
- 5. The Living and Learning Residence Hall 6 is complete, students are living in the building, the geothermal field is at work, and documents will be submitted to the United States Green Building Council to finalize the building's anticipated LEED Silver sustainability rating.
- 6. The Residence Hall Interiors Project which renovated the public spaces in all five dorms has been completed.

- An outside consultant is at work with our financial aid and admissions offices to create the most effective strategies for the allocation of financial aid.
- Our FY 2013 budget calls for the elimination of 26 positions and the reduction of \$1.25M of expenditures. These goals are constantly be reviewed in terms of the revenue anticipated for this fiscal year.
- 9. We have raised tuition by 8% for the fall 2013 and room rates continued their rise, increasing by 9% for fall 2013.
- 10. Neither salary increases nor one-time payments were provided to employees for FY 2012.
- 11. A uniform External Relations policy has been created and adopted regarding a variety of actions which have previously been left to individual units to determine on their own. This single policy now regulates Governmental Relations, Media and Public Relations, International Relations, Donor and Alumni Relations, Obtaining Sponsorship of On-campus Activities, Sponsorship of External Activities, and Product and Vendor Endorsements. An individual or an office has been made responsible for each area which will result in efficiencies from the coordination of activities such as requesting financial support from outside organizations.
- 12. Extensive work was completed with regard to the usage and adoption of the new University logo; these established policies regarding the use of the logo, and the prohibitions on developing new single unit logos will result in efficiencies as units have begun to use templates available University-wide instead of needing to hire outside designers to create material from scratch.
- 13. A new banners policy has been adopted which specifies the size and source of banners acceptable for using on light posts, buildings, and so on. This should result in efficiencies as templates are used and as controls are placed on the replacement of banners.
- 14. An extensive web policy has been developed and is under review. Once modified as needed, and then adopted we should see efficiencies as individual units who would previously have established non-standard web pages now follow pre-established templates with the resultant efficiencies attendant to that common usage.

## **Fiscal Year 2011**

- 1. We approved contracting with an outside audit and consulting firm to conduct our internal auditing function, effectively replacing what had been an internal audit resource. This has significantly increased the audit capability available to the University. At this point a risk assessment was conducted, an internal audit plan was approved by the Board of Trustees, our Internal Audit Charter was updated to be in compliance with the Institute of Internal Audit Standards, three reports were issued, fieldwork was completed for several more audits, and planning and fieldwork commenced for additional audits.
- 2. As mentioned below for Fiscal Year 2010, a Benefits Task Force was at work. Their assignment has been completed and the Board of Trustees in May, 2011, approved benefits changes including: reducing the maximum amount of annual leave carry over from 480 hours to 240 hours by 2016; having employees share the cost of the University's dental plan, basic life insurance plan, and long-term disability insurance plan, effective January 1, 2012, with the shared costs at 50% of the premiums; and eliminating the University 403(b) tax deferred retirement plan in 2012 while providing for employees in this plan with the opportunity to either roll the funds to the Thrift Savings Plan (TSP) or an IRA account. All other University benefits were unchanged.
- 3. As mentioned below for Fiscal Year 2010, the Program Prioritization Task Force made recommendations including the elimination of programs and the realignment, reorganization, or integration of programs. In February, 2011, the Board of Trustees approved all recommendations made by this Task Force.
- 4. Although we reported for Fiscal Year 2010 below that no salary increases would be provided to employees in Fiscal Year 2011, we note that the Board subsequently approved a one-time 2%-of-salary payment to employees in that year.
- 5. In May 2011 Gallaudet University entered the capital markets with its first-ever tax-exempt bond issue. The Series 2011 revenue bonds issue raised \$40 million to fund the new Living and Learning Residence Hall next to Peet Hall that is now under construction, as well as an ambitious cost-savings energy initiative and other important capital improvement projects for the campus. The trustees passed a resolution at the May 12 business

meeting authorizing final approval of the transaction for these 30-year, fixed-rate bonds. The University received favorable credit ratings of A+ from Standard & Poor's and A2 from Moody's.

- 6. The Board of Trustees approved the opening of an interest bearing account to ensure we are receiving the maximum daily interest on deposited funds.
- 7. We have tightened controls over "frequent travelers" who drive at least 12 or more trips for Gallaudet on an annual basis. This will enable us to comply with insurer mandates as well as meet other standards.
- 8. The role of the University Budget Committee expanded to include planning and assessment.
- 9. We are beginning to examine the use of student financial aid to ensure that it is being allocated in the most effective manner.
- 10. We have begun to open the process used for the selection of University capital projects and will now include the Cabinet and University Council in discussions of proposed improvements, each providing advice to the President where final decisions will be made.
- 11. We are actively underway on the generation of a master plan for the University for the 10 years from 2012 to 2022; once adopted by the Board of Trustees, this will serve to ensure that project approval is conducted within a framework that has been approved for the future of the University.

## Fiscal Year 2010

1. Most significantly we laid off 39 individuals from across the University. We had learned that we completed the previous year in balance, but with an extremely small surplus of less than one-third of one percent of our total budget. We learned that our Federal allocation—the primary source of our funds—would be the same this year as it was last year. We learned from President Obama during his State of the Union address that he will seek to freeze discretionary Federal spending, a category including Gallaudet University, for the next three years. Finally, we learned from a U.S. Department of Education official that we should not anticipate Federal funding increases in coming years. We took this step to maintain the fiscal health of the University.

- 2. At the same time we froze 40 open positions, with hiring for critical positions requiring Presidential approval.
- 3. We have implemented strict controls on the number of employees, with Presidential approval required for the opening of a new position. In recent years we have made significant reductions in the number of employees; from fiscal year 2007 when we had a headcount of 1,050 employees to fiscal year 2010 when we had reduced head-count to 909, a reduction of 141 headcount or a reduction of 13 percent.
- No salary increases were provided to employees in FY 2010.
- No salary increases will be provided to employees in FY 2011.
- We asked individuals to reduce voluntarily from 12-month appointments to 10- or 11-month appointments.
- 7. A task force, the Program Prioritization Task Force (PPTF) was initiated to review all academic programs. This significant University-wide effort produced a report which is now under review that recommended: the retention and enhancement of 19 programs; the monitoring and addressing of identified issues for 29 programs; the realignment, reorganizing, or integration of 12 programs; the closing in their current form and replacement of 2 programs; and finally the elimination of 20 programs. The next chapter of this report on Academic Programs contains additional information on this action.
- 8. Intended as a companion process to that of the Gallaudet University Academic Program Prioritization Task Force (PPTF), the Administrative Programs and Services Review Committee (APSRC), was established to review all University non-academic programs and to recommend how to reallocate administrative resources in a manner that best addresses Gallaudet University's strategic priorities. Their report was recently submitted and will soon be under University-wide review before any of its recommendations are adopted.
- 9. A Benefits Task Force was established because the University, along with so many other employers, has faced continued escalation in the employer portion of benefits in recent years, resulting in the need for a thorough, thoughtful, and considered review of the benefits the University provides. With this in mind, this task force was

charged with comparing Gallaudet's benefits with local and national universities, with reviewing best practices and trends, and with proposing cost-cutting options to cover an anticipated deficit in the benefits budget. At this point, no decisions have been made and the University will be collecting community feedback before final recommendations are produced by the task force.

- 10. A new University Budget Director position was created and filled. Among other responsibilities, this individual directs the development of the University's annual budget request to the Department of Education and Congress, provides budget material for government agencies, directs long-range planning strategies for future budget development activities, works collaboratively with the Finance Office to ensure stringent fiscal controls are in place, and leads the important University Budget Committee.
- 11. A major utility efficiency study was completed and the Board of Trustees has approved the investment now of significant resources that will significantly reduce utility expenditures via a high-payoff in future years.
- 12. Individuals were encouraged to use their annual leave thereby reducing the amount of 'banked' annual leave they accumulate and the cost to the University to set aside funds to cover potential future payouts for banked leave. We asked the community to reduce leave carry-over by taking as much leave this year as possible. This was a successful campaign that saved significant funds this year.
- 13. A new telecommunications device policy was implemented.
- 14. A bulk-purchase plan was implemented for the purchase of computer equipment.
- 15. Controls were placed on international travel, and the President must now approve all such travel.
- 16. The Board of Trustees approved increases in room fees to help fund the building of a new student housing facility which is expected to open in the fall of 2012.
- 17. The Board of Trustees approved a 7 percent increase in tuition fees. While the University has achieved several significant cost-saving measures recently, they are offset by several factors, including a federal appropriation that has remained flat over the past two years, with projections indicating that it will remain the same in the current fiscal year as well.

- 18. A new Vice President of Development and Alumni Relations was hired and changes implemented to increase fundraising. We are meeting with foundations and corporations and others regarding future funding; thus we are significantly expanding our development fundraising efforts.
- A number of individuals worked aggressively and successfully to take steps that resulted in the renewal of our VL2 grant. Complete information on research grants in contained in the chapter on Research and Outreach.



Pigmental Studios held its ribbon-cutting ceremony at Gallaudet's Appleby Building on September 23, 2016. From left: Dean of College of Arts and Sciences Genie Gertz; President Roberta Cordano; Open Hands Initiative Founder Jay Snyder; Pigmental CEO Marina Martins; Daughter of Producer Steve Rifkind, Isabella Rifkind; Director of OCTFME Angie Gates; Director of Real Estate and Economic Development at Gallaudet University Samuel Swiller; and Deputy Mayor of Planning and Economic Development Brian Kenner.

Photo by: Zhee Chatmon

# **II. Employee Demographics**

The first five tables of this section provide the number of employees by various categories, with the first table providing a total of all employees, and then four tables each with a different category of employee. Additional tables provide historical summaries of employees by category.

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	TOTAL Each Category
Administrators	49	74	64	59	92	31	123
Faculty	68	106	88	86	124	50	174
Clerc Center Teachers	20	34	47	7	42	12	54
Professional Staff Academic/ Student Support	60	109	117	52	107	62	169
Professional Staff Administrators/ Institutional Support	58	126	83	101	119	65	184
Secretary/Clerical	3	25	3	25	5	23	28
Technical	31	32	47	16	33	30	63
Service	76	37	33	80	36	77	113
Maintenance	15	18	4	29	1	32	33
TOTAL	380	561	486	455	559	382	941

					_	
Total All	Types	Employ	yees as	of	October 1,	2016

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG1	TOTAL Each Category
Administrators	47	70	62	55	87	30	117
Faculty	68	106	88	86	124	50	174
Clerc Center Teachers	18	34	45	7	41	11	52
Professional Staff Academic/ Student Support	58	101	110	49	101	58	159
Professional Staff Administrators/ Institutional Support	55	114	78	91	109	60	169
Secretary/Clerical	2	20	3	19	4	18	22
Technical	30	28	43	15	29	29	58
Service	73	33	26	80	32	74	106
Maintenance	15	18	4	29	1	32	33
TOTAL	366	524	459	431	528	362	890

### **Regular Status Employees as of October 1, 2016**

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

#### Extended Temporary Employees as of October 1, 2016

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG1	TOTAL Each Category
Administrators							
Faculty							
Clerc Center Teachers	2		2		1	1	2
Professional Staff Academic/ Student Support	1			1	1		1
Professional Staff Administrators/ Institutional Support	1	4	3	2	3	2	5
Secretary/Clerical							
Technical		1	1		1		1
Service							
Maintenance							
TOTAL	4	5	6	3	6	3	9

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG1	TOTAL Each Category
Administrators	1			1	1		1
Faculty							
Clerc Center Teachers							
Professional Staff Academic/ Student Support		2		2	2		2
Professional Staff Administrators/ Institutional Support	2	4	2	4	4	2	6
Secretary/Clerical							
Technical		1	1		1		1
Service							
Maintenance							
TOTAL	3	7	3	7	8	2	10

### Grant Funded Employees as of October 1, 2016

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	Total Each Category
Administrators	1	4	2	3	4	1	5
Faculty							
Clerc Center Teachers							
Professional Staff Academic/ Student Support	1	6	7		3	4	7
Professional Staff Administrators/ Institutional Support		4		4	3	1	4
Secretary/Clerical	1	5		6	1	5	6
Technical	1	2	2	1	2	1	3
Service	3	4	7		4	3	7
Maintenance							
TOTAL	7	25	18	14	17	15	32

## Auxiliary Funded Employees as of October 1, 2016

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

## Deaf and Hard of Hearing Individuals in the Workforce in Percents

Fiscal Year	Administrators %	Faculty %	Teachers %	Professional Staff %	Support Staff %	All %
1996	30	35	43	41	24	33
1997	35	35	47	44	25	35
1998	37	36	46	41	25	35
1999	40	38	53	44	25	37
2000	40	37	53	49	25	38
2001	37	39	54	46	32	40
2002	38	39	54	46	32	40
2003	36	38	56	48	33	40
2004	34	40	59	51	31	41
2005	40	41	60	50	32	42
2006	41	40	56	50	32	42
2007	37	42	64	52	34	43
2008	36	46	66	55	34	45
2009	38	45	68	53	35	45
2010	41	48	76	56	34	47
2011	45	48	72	58	35	48
2012	47	49	79	60	36	50
2013	49	49	80	59	37	51
2014	50	52	86	60	37	52
2015	48	53	88	59	37	52
2016	52	51	87	57	37	52

Note: All sources of funding, regular status and extended temporary status. As of the end of the fiscal year.

Fiscal Year	Administrators %	Faculty %	Teachers %	Professional Staff %	Support Staff %	All %
1996	9	9	22	26	61	34
1997	14	10	23	27	60	34
1998	15	10	23	27	61	34
1999	16	11	19	26	61	33
2000	17	11	24	27	62	34
2001	21	14	15	30	62	37
2002	26	14	22	28	61	36
2003	26	14	27	28	61	37
2004	29	16	23	28	63	37
2005	23	17	17	29	67	38
2006	24	18	18	29	67	38
2007	31	18	23	27	67	39
2008	22	19	21	32	67	40
2009	25	20	23	33	67	40
2010	21	21	30	35	67	40
2011	24	22	28	35	67	40
2012	24	22	25	36	65	40
2013	26	24	27	36	68	41
2014	24	24	26	37	67	40
2015	25	27	24	36	65	40
2016	25	29	22	36	68	41

## Members of Traditionally Underrepresented Groups in the Workforce in Percents

Note: All sources of funding, regular status and extended temporary status. As of the end of the fiscal year.

Grade and N Positic	umber of		A	pplicants			Hired						
			Rac	e	Hearing	g Status	Rad	e	Se	ex	Hearing	Status	
Grade	#	#	White/ Unknown	TUG <sup>1</sup>	Hearing	Deaf/ Hard of Hearing	White/ Unknown	TUG <sup>1</sup>	Male	Female	Hearing	Deaf/ Hard of Hearing	
Union	3	66	20	46	56	10		3	3	0	2	1	
1-2 <sup>2</sup>	4	36	18	18	19	17	1	3	2	2	3	1	
3	4	70	23	47	37	33	1	3		4	2	2	
4	8	48	14	34	33	15	2	6	5	3	6	2	
5	15	202	117	85	66	136	8	7	2	13	5	10	
6	5	123	66	57	53	70	2	3	2	3	3	2	
7	10	102	67	35	27	75	7	3	6	4	4	6	
8	17	201	118	83	15	86	8	9	5	12	12	5	
9	10	86	59	27	48	38	6	4	3	7	5	5	
10	4	14	6	8	3	11	2	2	2	2	2	2	
11 - 14 <sup>2</sup>	7	55	27	28	20	35	3	4	2	5	3	4	
SUBTOTAL	87	1,003	535	468	377	526	40	47	32	55	47	40	
Open positions	21	Final data	are not avail	able becau	se these po	ositions wer	e opened or	on hold at t	he end of th	ne year.			
Canceled positions	15	Hiring dat	Hiring data are not available as these positions were cancelled during the year.										
Temporary positions													
TOTAL POSITIONS	129												

## FY 2016 Staff Hire Demographics by Grade for Regular Status Employees

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

<sup>2</sup>Data combined for grades because of small numbers of positions.

## **III. Development and Alumni Relations**

The mission of Development and Alumni Relations is to engage alumni, families and friends, foundations, and corporate partners in the life of the university. Staff work to ensure an active and committed alumni community and to encourage financial investment in Gallaudet programs and scholarships from all constituents. During FY 2016, fundraising provided \$3.28 million in new gifts and pledges for a three-year annual average for FY 2014-2016 of \$5.05 million.

The charts below provide a five-segment analysis of major constituencies giving to Gallaudet. It is presented in three-year averages to level the variances resulting from bequests.



In FY 2015, the university renamed the Alumni Participation Rate to Alumni Engagement Rate, which measures involvement with university activities, giving, and volunteer service. In its second year, data collection has improved as well as alumni activity. Below is a bar graph comparison for FY 2015 and FY 2016.



## Major Gifts to the University by Individuals in FY 2016-\$10,000 or more

Dr. Michael S. and Mrs. Virginia L. Adler Mr. Paul and Dr. Mary Jan Bancroft Ms. Alexis Cole Mr. Jameson and Mrs. Meredith Crane Dr. Samuel K. Weisman and Dr. Nancy J. Crown Mr. Richard and Mrs. Diana England Mrs. Lois H. England Ms. Joni L. Henderson Mrs. Betty M. Lawson Mr. James J. and Mrs. Frances M. Maguire Mr. James J. and Mrs. Lisa Maguire

## Major Gifts to the University by Corporations, Foundations, Organizations in FY 2016— \$10,000 or more

Bou Family Foundation, Inc.
The Hilda E. Bretzlaff Foundation
The Morris and Gwendolyn Cafritz Foundation
Consumer Technology Association Foundation
The Arthur Vining Davis Foundation
Gallaudet University Alumni Association (GUAA)
High Road to Hope, Inc.
International Alumnae of Delta Epsilon Sorority (IADES)
Kantor Foundation, Inc.
The Maguire Foundation The Jamie & Lisa Maguire Family Foundation Burger King McLamore Foundation The Charlotte W. Newcombe Foundation Purple Communications, Inc. Raytheon Company Schwab Charitable Fund Side by Side Foundation Custody Sorenson Communications, Inc. Hattie M. Strong Foundation Frank B. Sullivan Memorial Foundation The Theodore R. & Vivian M. Johnson Scholarship Foundation Anonymous (3)

### Major Bequests to the University in FY 2016—\$10,000 or more

Estate of Dr. Barbara A. Brauer Estate of Mr. Sheldon T. Crittenden Estate of Miriam P. Leslie Estate of Ms. Clara F. Mertens Estate of Ms. Ruth U. Paul Estate of Raquel Roin Estate of Marguerite Smyth Estate of Ms. Angela Solicalcio Estate of Dr. Allen E. Sussman

# Members of the Abraham Lincoln Heritage Society in FY 2016 (joined by making a Planned Gift)

Dr. Ronald E. and Mrs. Melvia M. Nomeland Mr. David R. Reekers and Mrs. Shanna G. Winesburg-Reekers Mrs. Eleanor P. Scouten\*\* Mr. David S. and Mrs. Kim Tossman Ms. Marcia A. Zisman

\*\*= donor deceased during 2015

# Members of the Abraham Lincoln Legacy Society in FY16 (joined by setting up an Endowed Fund)

Mr. Edward H. Bosso Mr. Ruben and Mrs. Barbara Cortina Mr. Richard and Mrs. Diana England Dr. Dennis B. Galvan Mr. John Perez and Mrs. Ann N. Lowry-Perez Dr. Deborah M. McCaw Mr. Kenneth C. Mikos Mr. Nicolas J. and Dr. Caroline M.K. Pezzarossi Mr. Sean Sweeney Anonymous (1)

Gallaudet University used the inauguration of President Roberta Cordano as an opportunity to increase its reach for receiving gifts from friends, alumni, and organizations. Many gifts arrived to honor the new president and to support her installation.

The Gallaudet Technology Services (GTS) team showed their festive spirit on August 19, 2016, during a carnival they hosted at the Merrill Learning Center. Along with the chance to get acquainted with GTS staff and have photos taken for web profiles, the campus community enjoyed fellowship, food and games, and a chance to win prizes.

Photo by: Zhee Chatmon



## IV. The Gallaudet University 2022 Campus Plan

The Gallaudet University 2022 Campus Plan is a ten-year campus development plan required by the District of Columbia Zoning Commission. The Campus Plan provides guidance for the development of capital projects to support the mission and goals of the Gallaudet Strategic Plan 2010-2015 (GSP) while ensuring the best use of the university's physical assets and fiscal resources.

The Campus Plan sets a bold vision for the campus that builds upon the goals of the 2002-2012 Facilities Master Plan and responds to changes in higher education, the university's strategic goals, and the surrounding community. Given the dynamic nature of academia in the 21st century and the university's physical surroundings, the Campus Plan is intended as an aspirational guide and a vision for future development. It is also intended to serve as a foundation for the university's capital budget planning process.

Led by a steering committee consisting of representatives from a cross-section of Gallaudet students, faculty and staff, the Campus Plan is the culmination of input from the campus community and beyond. Over 18 months, students, faculty, and staff participated in a series of campus workshops focusing on the facility needs related to academics and research, sustainability and accessibility, campus life, and DeafSpace design concepts. The Urban Land Institute led a week-long workshop to assist Gallaudet planning staff in developing strategies for building stronger physical and programmatic connections with the surrounding community. Broadly stated, these workshops yielded a commitment to the following planning principles:

- Accommodate enrollment growth and support Gallaudet Strategic Plan goals.
- Increase and enhance on-campus housing.
- Revitalize the heart of the campus and increase density.
- Integrate physical accessibility and sustainability.
- Build new connections with the local community.

The Campus Plan will accommodate a range of enrollment growth over the next ten years, from a conservative 1.0 percent annual growth rate that is in-line with projected national trends to a more aggressive 3.0 percent that represents an aspirational goal consistent with the GSP. The recommendations in this Campus Plan are based on a maximum projected enrollment of 2,327 for the combined enrollment at the university and the Clerc Center.

The Campus Plan lays out an ambitious series of projects that aim to transform the current campus and includes several major new building projects. A state-of-the-art Learning Commons located on the current Edward Miner Gallaudet Memorial Building site will replace the Merrill Learning Center. A new mixed-use housing development along 6th Street will open the campus to the city via a new pedestrian entrance at the corner of Florida Avenue and 6th Street while acting as a catalyst for new development in the 6th Street/Capital City Market Area. A newly renovated Hall Memorial Building will become the new student center at the heart of the campus and a new academic building will create a premiere facility for student learning and research. In addition, the Model Secondary School for the Deaf at the Clerc Center will be transformed with a new residence housing and an academic complex.

This new construction will enhance the Gallaudet experience with state-of-the art buildings and grounds in which to teach, learn, study, live, and socialize. The Campus Plan will realize stronger connections within the campus and with the neighborhood and city beyond with new buildings and campus spaces designed in accordance with DeafSpace principles and to preserve and enhance the architectural and landscape legacy. By fostering new physical and programmatic connections and supporting creative new avenues in deaf education and research the 2022 Campus will lead Gallaudet into a new era "from isolation to innovation."

See the next page for a map of the 2022 Campus Plan.



- 101 Chapel Hall
- 102 College Hall 103 Dawes House
- 104 Kendall Hall
- 105 Fowler Hall
- 106 Gate House
- 107 EMG Residence
- 108 Ballard House
- 109 Fay House
- 110 Denison House
- 115 Peikoff Alumni House
- 214 Kellogg Conference Center
- 219 Hall Memorial Building
- 223 Elstad Auditorium
- 229 Washburn Fine Arts Building

- 231 Student Union Building
- 232 Student Academic Center243 Central Utilities Building
- 248 Field House
- 265 Sorenson Language &
- Communication Ctr.
- 290 Penn Street
- 317 Peet Hall
- 318 Living Learning Residence Hall
- 327 Ballard Hall West
- 328 Ballard Hall North
- 335 Clerc Hall
- 336 Benson Hall
- 345 Carlin Hall
- 537 Health Center

- 538 University Dining Hall
- 569 Central Receiving 581 MSSD House 100/200
- 582 MSSD House 300/400
- 589 MSSD Gym. & Pool
- Building 641 Kendall Demonstration
- Elementary School 771 Security Kiosk
- 772 Grandstand
- 791 Field House Parking Garage
- 792 Hanson Plaza Parking Garage
- 793 KDES Parking Garage
- 794 MSSD Parking Garage

- 795 Sixth Street Parking Garage
- A New Student Learning Commons
- B New Academic Building
- C New 6th Street Mixed-Use Apartments
- D New Innovation Lab/Business Incubator
- E New Visitors Center
- F New Recreational Gym
- G New MSSD Residence Hall
- H New MSSD School

## V. Communication Access—Gallaudet Interpreting Service

Gallaudet Interpreting Service (GIS) is a campus resource offering:

- Communication access services to students, faculty and staff for the purpose of excellence in education including:
  - o Interpreting services used by students, faculty, staff and visitors for academic and employment related activities at Gallaudet, the Clerc Center, and the Consortium of Universities
  - o Captioning services for the campus community.
- Comprehensive after-hours emergency response program for on-campus emergencies
- Emerging signers, classroom support services for deaf, hard of hearing and deaf-blind undergraduate students who are new to learning American Sign Language
- Captioning services program, which focuses on increasing quality and options of captioning services available to students while also reducing expenses to the university for such services
- Deaf-Blind Paraprofessionals Program, which increases inclusion of both deaf-blind students and students seeking to explore working with deaf-blind persons
- *Results! Mentoring Program*, which provides mentoring, training, consultation and supervision to practicum and intern interpreting students and freelance interpreters
- External revenue streams
- Workshops on a variety of topics

GIS employs approximately 30 staff interpreters and 75 additional part-time, contract interpreters. GIS interpreters are nationally certified and bring at least five years of professional interpreting experience. While the majority of GIS services are American Sign Language (ASL)-English and deaf-blind interpreting services for academic endeavors, all of the following services can be requested through GIS:

- ASL-to-English and English-to-ASL interpreting
- Deaf-blind interpreting

- Captioning, on-site and remote Communication Access Realtime Translation (CART) and TypeWell
- Transcription services, i.e., an ASL video translated to written English
- Legal and law enforcement interpreting
- Medical/mental health interpreting
- Consultation/workshops
- Video Remote Interpreting
- International interpreting

While GIS is a service unit that supports communication needs in educational, employment, and administrative functions, GIS also collaborates with the Office of Student Success to provide sufficient communication access for undergraduate students who are learning American Sign Language (ASL), as well as cultural inclusion for these students while they are also given resources and tools to become independent users of ASL and members of the deaf community. GIS modified how interpreting services are provided and offered additional services, to encourage students to learn through immersion when possible, without compromising access to classroom communication. This program includes a high level of interaction with students regarding their communication needs.

GIS also has an integral role as a collaborating department to the Department of Interpretation. The shared goals of these two departments include career preparedness for many Gallaudet students and advancement in the field of signed language interpreting. Currently, these interpreting academic and service departments are collaborating on the Deaf-Blind Paraprofessionals Program, which is increasing services available to deafblind students in non-academic campus life activities, while providing greater career exploration opportunities for Gallaudet undergraduate and graduate students who serve as paraprofessionals. Student employees in this program are required to take a special topics course in working with deaf-blind persons, as well as participating in additional training, supervision, and mentoring sessions.

GIS administers the *Results! Mentoring Program*, which provides structured support to students with emerging interpreting skills, and to professional working interpreters who desire skills refinement or skills specialization. All staff interpreters have received training in mentoring. As a result they better meet collaborative needs of the University by providing continued professional development and internship supervision opportunities for students from the Department of Interpretation and professional interpreters from the greater community.

GIS provides emergency communication support to faculty, staff, and students both at Gallaudet University and at the Clerc Center (Model Secondary School for the Deaf and Kendall Demonstration Elementary School campuses). GIS works closely with the Department of Public Safety (DPS), Residential Life staff, and external emergency support personnel in assessing, determining, and providing communication support. This model program is staffed with interpreters who are nationally certified; many hold additional specialty certifications for interpreting in legal situations. Additionally, interpreters have specialized training in interpreting for law enforcement, medical, and other emergency situations.

The following graphs and tables provide the number of hours of direct student services, including interpreting for all direct services, such as classroom, internships, externships, student teaching, and consortium courses, as well as for other services provided for students. For the Clerc Center, this includes the Parent-Infant Program and Emerging Signers Program.

	Academic Year 2012-13			Academic Year 2013-14			Academic Year 2014-15			Academic Year 2015-16		
	Fall 2012	Spring 2013	Total	Fall 2013	Spring 2014	Total	Fall 2014	Spring 2015	Total	Fall 2015	Spring 2016	Total
Captioning	47	39	86	52	46	98	34	43	77	51	48	99
ASL-English	78	88	166	89	73	162	102	86	188	100	90	190
Deaf-Blind	85	91	176	83	75	158	75	93	168	68	76	144
TOTAL	210	218	428	224	194	418	211	222	433	219	214	433

#### **Courses Supported by Semester by Service**



On Thursday, February 19, 2016, there was an art exhibition reception: "Visual Music from My Soundless Mind", hosted by Dr. Paul Johnston, art professor. The 64 new abstract paintings on display at this exhibit symbolized Dr. Johnston's visual interpretation of the power of music. The exhibit was open through Friday, April 8, in the Linda K. Jordan Gallery. Amy Stevens, art professor and coordinator of GSR 240, is pictured with Dr. Johnston. They both can be thanked for the incredible collaboration done on this exhibit.

Photo by: Zhee Chatmon

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
President	13	39	28	7	
Administration and Finance	134	32	274		
Academic Affairs	38,522	52,951	50,496	54,536	53,101
Clerc Center	6,059	8,160	9,096	7,425	5,909
TOTAL	44,728	61,182	59,894	61,968	59,010

## Direct Student Services Hours Provided by by Area



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Student	44,728	61,182	59,894	61,968	59,009
Student Related	5,141	2,845	7,962	7,417	4,769
Other	18,680	13,885	15,373	16,169	21,649
TOTAL	68,549	77,912	83,229	85,554	85,427

### Hours of Direct Total Services Provided University-wide by Type



#### Percent of Student Services (Direct and Related) Provided University-wide

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Percent of student services	73%	82%	82%	81%	75%



On May 5, 2016, Capstone students had a poster session to showcase their work. Shuxu Tian, pictured, presented "Sign and Share: Full-Stack Sign Language Video Story Sharing, Application." Inspired by VL2 bilingual story apps, this project provides a new application for sharing multi-lingual signed and written language stories to a worldwide audience. The technical structure of this full-stack app includes a social media platform or iOS mobile app for the user, a server connecting the user with the database collection of stories, and the database. Her director was Dr. Qi Wang, Department of Business; her second reader was Dr. Tsuihsia (Irene) Tseng, Information Technology Program, Department of Science, Technology, and Mathematics.

Photo by: Zhee Chatmon

# **Strategic Plan Goal D: Academic Programs**

The university continues to work to refine a core set of undergraduate and graduate programs that are aligned with the institutional mission and vision, leverage Gallaudet's many strengths, and best position students for career success. This chapter includes data on academic programs at the university level, with separate data contained in the Clerc Center chapter for their students. Included are a summary of the academic programs; an assortment of the institutional student learning outcomes; a summary of the center of bilingual teaching and learning; enrollment trend data for graduate students by degree program and discipline; enrollment trend data for undergraduate students by majors and minors; enrollment trend data for hearing students by majors and minors; and the results of a recent survey of alumni which includes employment data by occupational group for those surveyed. The contents of this chapter reflect the major accomplishments performed during FY 2016 in support of Goal D of the Gallaudet Strategic Plan.

## I. Academic Programs

During FY 2016, the Division of Academic Affairs implemented several new initiatives.

- On March 24, 2016, President Cordano and Steven Florio, president of the National Association of State Agencies of the Deaf and Hard of Hearing (NASADHH), signed a memorandum of understanding between Gallaudet and NASADHH to promote shared interests and to facilitate cooperation between the two organizations in the areas of internship, employment, and professional development opportunities. The memorandum of understanding was developed by the Department of Government and Public Affairs and NASADHH. Under this agreement, NASADHH and its agency members will provide internship and employment opportunities to Gallaudet students, and the Department of Government and Public Affairs, as well as the Burstein Center on Excellence, Leadership and Innovation (BCELI), will provide training to NASADHH members.
- The Department of Counseling successfully achieved full re-accreditation from the Council for Accreditation of Counseling and Related Educational Programs (CACREP) of its three programs: Clinical Mental Health Counseling; School Counseling (on-campus format); and School Counseling (summer hybrid format) through March 31, 2024. In addition, the department received the second year of funding in a five-year award from the U.S. Department of Education for its personnel preparation grant "Long-Term Training of Mental Health Counselors Working with Learning and Language Challenged Deaf Rehabilitation Clients." The grant, totaling \$750,000 over the five-year funding period, was awarded to Dr. Kendra Smith and Dr. Mary Hufnell. The goals of the project are:
  - Increase the provision of culturally and linguistically appropriate mental health services to support optimal vocational functioning among persons who are deaf, deafblind, and hard of hearing by training counselors who can match the unique needs of this population;

- 2.) Increase the provision of appropriate mental health services to language and learning challenged deaf persons by training mental health counselors within the rehabilitation system who can communicate flexibly with and engage the unique neuropsychological strengths of clients in this population; and
- 3.) Increase the number of mental health counseling scholars who through specifically identified and tailored fieldwork experiences have already upon graduation learned to work effectively with the targeted language and learning challenge population in providing such services as psychological rehabilitation, consumer empowerment, and independence counseling.
- The Business Department's new academic program in Risk Management and Insurance (RMI) is now accepting majors into the program and thanks to a generous donation by the Maguire Foundation is offering \$5,000 scholarships to as many as five promising juniors for up to two years. The program has also established a Gamma Iota Sigma (GIS) chapter at Gallaudet University. GIS is the International Risk Management, Insurance and Actuarial Science collegiate fraternity and its purpose is to promote, encourage, and sustain student interest in insurance, risk management, and actuarial science as professions; to encourage high moral and scholastic attainments of its members; and to facilitate interaction of educational institutions and industry through networking and by fostering research activities, scholarship, and improved public relations.
- In May 2016, the proposed undergraduate program in Public Health received approval from the New Program Review (NPR) committee to move to the next stage of review. The curriculum proposal for the new major and minor was submitted to the Council on Undergraduate Curriculum (CUE) on September 13, 2016. If CUE approves the curriculum this fall and receives the support of the Faculty Senate, the curriculum will be presented for approval to the Board of Trustees in February and, if approved, it will be launched in the fall of 2017.

## **Goal D: Academic Programs**

- For the second time, a student in the interdisciplinary Educational Neuroscience Ph.D. program (PEN) under the supervision of Dr. Laura-Ann Petitto has won the prestigious NIH F31 Fellowship, the Predoctoral Individual National Research Service Award. Mr. Adam Stone, a fourth-year doctoral student, has received NIH funding to support his research on Neural Systems for Infant Sensitivity to Phonological Rhythmic-Temporal Patterning. The purpose of the F31 Fellowship is to provide predoctoral students with supervised research training in specified health and health-related areas leading to the research degree (e.g., Ph.D.). This year's award is in the amount of \$43,576.
- The Department of Interpretation finalized articulation agreements with Ohlone College (Fremont, Calif.) and John A. Logan College (Carterville, Ill.). This brings to five the number of articulation agreements between Gallaudet University and selected community colleges across the country designed to create pathways for students in the community colleges to transfer to the B.A. in Interpretation program at Gallaudet University. The first articulation agreement, between Gallaudet University and Central Piedmont Community College, was signed on December 5, 2014. The department continues to actively explore and develop additional partnership opportunities.

#### Faculty

The university began the 2016-2017 academic year with 181 full-time, regular faculty members. Five faculty members retired in 2015-16 and eight new full-time, regular faculty members joined the following departments:

- Art, Communication, and Theater
- Interpretation and Translation
- Ph.D. in Educational Neuroscience Program
- Psychology
- Science, Technology, and Mathematics

Eight faculty fellows are gaining administrative and leadership experience in the following units: Undergraduate Admissions and Outreach, Gallaudet Technology Services, the Provost's Office, the Center for Deaf Documentary Studies, and the Center for Bilingual Teaching and Learning. These tenured faculty members are from the following academic departments:

- Art, Communication and Theater
- English
- Business
- History, Philosophy, Religion, and Sociology
- Linguistics
- Psychology

Multicultural Haliday Calebration Tam-4pm Friday, December 11 JSAC MPR Internet Internet Foot

The Office of Diversity and Equity for Students (ODES) hosted the Multicultural Holiday Celebration on December 11, 2015 at the JSAC Multi-Purpose Room, allowing attendees a chance to learn more and value the cultural diversity of Gallaudet University, and to enjoy good food, music, and wonderful fellowship. ODES staff members preparing the celebration include (Front) Vanessa Slade, ODES executive secretary; Jeremy Smith; (Back, from left) Dr. Judith Mounty, ODES Research Scientist II; Delia Lozano-Martinez, program coordinator, Keeping the Promise: Equitable Outcomes for Students; Andrew Biskupiak, Natalee "Nayo" Franck, Ikumi Kawamata, Syed Ahmed, and Kala Granger.

Photo by: Zhee Chatmon

## II. Institutional Student Learning Outcomes

The General Studies Program of General Studies Requirements (GSR) courses was established in 2007 as a response to calls for reform of the general education curricular design at Gallaudet. The mission statement of the GSR curriculum states that the program is designed to "provide a rigorous academic program that prepares students for successful learning in a complex world where traditional academic disciplines are interrelating, merging, and overlapping." The program provides students with a high-quality sequence of coursework intended to prepare them for their chosen majors, for life-long learning, and for challenging careers. The General Studies program begins with Freshman Foundations (GSR 100-level courses), continues with Integrated Courses (interdisciplinary GSR 200-level courses), and concludes with a Capstone Course (GSR 300).

Gallaudet has five Student Learning Outcomes (SLOs) that were established for all undergraduate students and that represent the knowledge, skills, and attitudes that students should acquire to successfully complete the requirements of the General Studies program, the undergraduate majors, and the baccalaureate degree. The five SLOs are:

- Language and Communication
- Identity and Culture
- Critical Thinking
- Knowledge and Inquiry
- Ethics and Social Responsibility

Gallaudet and the General Studies program have adopted the value rubrics developed by the American Association of Colleges and Universities (AACU) for assessment of the five SLOs in the GSR courses.

The Language and Communication SLO for American Sign Language and written English is assessed in the entire range of GSR courses. The other four SLOs are assessed in the GSR 200 and GSR 300 level courses.

Data on literacy measures was collected for the first time in academic year 2008-2009 in all GSR courses at the freshman and sophomore level. During academic year 2009-2010, baseline data was used to establish proficiency target scores in each of the five categories used to determine literacy in ASL and in written English. Similar work was done in 2009-2010 and 2010-2011 to establish proficiency target scores for the categories for the rubrics used to assess the four other SLOs.

Based on this work, the following values have been assigned for the six rubrics used for assessment of the five SLOs in GSR courses as presented in the following tables and graphs:

#### Score and Value

Score	Value
1	Developing student (lowest level)
2	Progressing student
3	Benchmark – target score
4	Exceptional student (highest level)

### Language and Communication

 The Language and Communication SLO states, "Students will use American Sign Language (ASL) and written English to communicate with diverse audiences, for a variety of purposes, and in a variety of settings."

#### Assessment of this SLO

Gallaudet has adapted the AACU Oral Presentation rubric as the ASL Public Presentation rubric to assess ASL in presentations. The AACU Written Communication Value Rubric is used for assessment of written English.

#### Assessment of ASL

#### GSR 100 AY 2016 ASL Public Presentation Data

At the 100-course level, the plurality or majority of students received the benchmark score of 3 or better for the all five skill areas: organization, language, delivery, supporting materials, and central message. There were also some students with scores of 1 (developing and progressing) for all the categories assessed, "language" and "delivery" being the categories with the most scores of 1. The skill categories of "language" and "delivery" also showed the lowest overall means, indicating areas that require implementation of pedagogical strategies to help students improve in these skill areas in future GSR 100 courses.

## **Goal D: Academic Programs**

	Organization	Language	Delivery	Supporting Materials	Central Message
1's	3%	7%	8%	5%	4%
2's	24%	36%	36%	37%	27%
3's	55%	37%	34%	38%	46%
4's	18%	20%	23%	20%	24%
N	394	394	394	394	394
Mean	2.84	2.67	2.69	2.70	2.87

### GSR 100 AY 2016 ASL Public Presentation Data

#### GSR 200 AY 2016 ASL Public Presentation Data

At the 200-course level, in comparison with the 100 data, there is a noticeable shift to scores of 3 and 4 (benchmark and exceptional) for all skill areas and a decrease in the number of students scored at 1 and 2. Student skill performance is consistent across all five skill areas with 70 percent to 78 percent of the students scoring at 3 and 4 compared to a range of 57 percent to 73 percent for the same scores at the 100-course level. Mean scores are consistently higher for the 200-course level compared with the 100-course level across all five skill areas, but a range of 21 percent to 30 percent of students fail to achieve the benchmark score of 3 for the five categories.

#### GSR 200 AY 2016 ASL Public Presentation Data

	Organization	Language	Delivery	Supporting Materials	Central Message
1's	2%	2%	6%	2%	2%
2's	20%	20%	24%	25%	19%
3's	58%	52%	50%	50%	58%
4's	20%	25%	20%	24%	20%
N	127	127	127	127	127
Mean	2.98	3.00	2.83	2.95	2.97

#### GSR 300 AY 2016 ASL Public Presentation Data

At the 300-course level, in comparison with the data for 100 and 200, the majority of the students are scored at 4 (exceptional) for all skill areas. For three skill areas ("organization," "language," and "delivery") there were no scores of 1, and for "central message," only 1 percent of students got a score of 1. Student skill performance appears to be consistent across all five skill areas with 93 percent to 96 percent of the students scoring at 3 and 4. Mean student scores consistently exceed the benchmark score of 3 for all skill areas and were at least 0.50 points greater than the mean student scores at the 200-course level.

## **Goal D: Academic Programs**

	Organization	Language	Delivery	Supporting Materials	Central Message
1's	0%	0%	0%	3%	1%
2's	5%	7%	7%	4%	4%
3's	27%	28%	32%	28%	17%
4's	68%	65%	61%	65%	77%
N	75	75	75	75	75
Mean	3.63	3.59	3.55	3.56	3.71

### GSR 300 AY 2016 ASL Public Presentation Data

The next graph compares the average ASL public presentation scores for students at the three course levels of the General Studies program and indicates steadily increasing skill improvement as students progress from the Freshman Foundation courses (100 level) to the Capstone Course (300 level). While students in the GSR 200 courses show slight improvement compared with the GSR 100 courses, they do not consistently achieve the benchmark score of 3. On the other hand, the students in the GSR 300 courses perform better and exceed the benchmark target by at least 0.55 points.



#### **Assessment of Written English**

#### GSR 100 AY 2016 Written Communication Data

At the 100-course level, the plurality of students received the benchmark score of 3 for all categories ("context and purpose for writing," "content development," "genre and disciplinary conventions," "sources and evidence," and "control of syntax and mechanics"). Student scores of 1 and 2 ranged from 35 percent to 46 percent in 100 level courses, and scores of 3 and 4 ranged from 53 percent to 65 percent for these same students. Student skill performance appears to be consistent across all five skill areas with 73 percent to 81 percent of the students scoring at 2 and 3. There were also at least 7 percent of the students with scores of 1 for all categories assessed. The skill categories of "control of syntax and mechanics" showed the lowest overall mean of 2.53, the second lowest overall mean of 2.63 was "sources and evidence," followed by "content development" and "genre and disciplinary conventions" means of 2.64. The four lowest mean scores are areas that require implementation of pedagogical strategies to help students improve these skills in future GSR 100 courses.

	Context and Purpose for Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics
1's	7%	10%	10%	11%	9%
2's	28%	33%	31%	31%	37%
3's	50%	42%	45%	42%	44%
4's	15%	16%	15%	16%	9%
N	399	399	399	399	399
Mean	2.72	2.64	2.64	2.63	2.53

## GSR 100 AY 2016 Written Communication Data

#### GSR 200 AY 2016 Written Communication Data

At the 200-course level, in comparison with the 100-course level data, the number of students with scores of 1 decreased with less than 10 percent of the students scoring 1's. There is also a 12 percent to 18 percent increase in the number of students scoring at 4 for all five categories. There is a noticeable spread of scores of 2, 3, and 4 for all skill areas with a plurality of 3's for all five categories. Compared with students at the 100 level, students at the 200-level show more 3s and 4s than 1s and 2s. Specifically, scores of 1 and 2 at the 100 level were in the range of 35 percent to 46 percent in the five skill categories; scores of 1-2 at the 200 level were in the range of 25 percent to 31 percent. Student skill performance at the 200 level appears to be consistent across all five skill areas with 69 to 75 percent of the students scoring at 3 and 4. Mean scores are consistently higher for the 200 course-level compared with the 100-course level across all five skill areas but in 4 out of 5 categories, the scores do not achieve the benchmark mean score of 3.

	Context and Purpose for Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics
1's	3%	5%	5%	3%	9%
2's	22%	25%	25%	25%	22%
3's	42%	43%	42%	40%	44%
4's	33%	28%	28%	31%	25%
N	122	122	122	122	122
Mean	3.04	2.93	2.93	2.99	2.84

## GSR 200 AY 2016 Written Communication Data

## **Goal D: Academic Programs**

#### GSR 300 2016 Written Communication Data

At the 300-course level, in comparison with the data for 100 and 200, there is a noticeable shift to scores of 3 and 4 for all skill areas. There were few 1's scored for all five categories of skills assessed, specifically 3 percent to 4 percent of the students scored 1's. In each of the five skill categories assessed,

4 was the most common single score. Student skill performance appears to be consistent for three skill areas. Scores of 1 and 2 combined were in the 7 percent to 12 percent range, and scores of 3 and 4 combined were in the 88 percent to 93 percent range. Mean scores are consistently higher for the 300-course level compared with the 200-course level across all five skill areas and exceed the benchmark score of 3.

	Context and Purpose for Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics
1's	4%	3%	3%	3%	3%
2's	3%	7%	5%	9%	8%
3's	44%	39%	35%	39%	32%
4's	49%	52%	57%	49%	57%
N	75	75	75	75	75
Mean	3.39	3.40	3.47	3.35	3.44

## GSR 300 AY 2016 Written Communication Data

The next graph compares the average written communication scores for students at the three course levels of the General Studies program and indicates steadily increasing skill improvement as students progress from the Freshman Foundation courses (100 level) to the Capstone Course (300 level). Many of the GSR 200 students do not meet the target score of 3 but still demonstrate improvement in written English compared with the GSR 100 students. The GSR 300 scores demonstrate continued improvement in all five skill areas and exceed the target score of 3.



## **Critical Thinking**

 The Critical Thinking SLO states that "Students will summarize, synthesize, and critically analyze ideas from multiple sources in order to draw well-supported conclusions and solve problems."

This SLO has been assessed for GSR 100-level courses using the AACU Critical Thinking Value Rubric.

#### GSR 100 AY 2016 Critical Thinking Data

While there were few students—three percent to five percent—scoring 1 for this SLO, the majority of the student scores clustered around 2 and 3 for a range of 77 percent to 82 percent for all five skill areas. For all five of the skill areas ("explanation of issues," "evidence," "influence of context and assumptions," "student's position," and "conclusions and related outcomes"), a plurality scored 3. None of the means met the benchmark target and the "influence of context and assumptions" category had the lowest mean (2.63) of all categories. Because this SLO is not assessed again in GSR 200 or 300 level classes, conclusions about meeting the benchmark on this outcome can be better achieved by assessing students later, perhaps in their majors or in a senior level assessment. This SLO requires continued analysis, assessment, and strengthening through pedagogy to improve student skills over time.

	Explanation of Issues	Evidence	Influence of Context and Assumptions	Student's Position	Conclusions and Related Outcomes
1's	5%	5%	5%	3%	4%
2's	29%	30%	33%	30%	32%
3's	53%	51%	50%	47%	49%
4's	12%	14%	11%	20%	14%
Ν	173	174	174	174	174
Mean	2.66	2.69	2.63	2.78	2.69

#### GSR 100 AY 2016 Critical Thinking Data

For the following three SLOs, the data for the various GSR 200-level courses (sophomore level) indicate that the mean scores for the various skill areas demonstrate a range of values—2.49 to 3.10—and tend to cluster around the target score of 3 for "ethical reasoning," and cluster lower for "intercultural knowledge and competence" and "knowledge and inquiry."

## Identity and Culture

 The Identity and Culture SLO states, "Students will understand themselves, complex social identities, including deaf identities, and the interrelations within and among diverse cultures and groups."

This SLO has been assessed for GSR 200-level courses using the AACU Intercultural Knowledge and Competence Value Rubric.

#### GSR 200 AY 2015 Intercultural Knowledge/Competence Data

A plurality or a majority of the 200-course level students show scores of 3 for all six skill areas. For two skill areas ("cultural self-awareness" and "knowledge of cultural worldview frameworks), 31 percent of the students have scores of 2, indicating areas that need to be addressed in future GSR 200 courses. There are also several categories with a large number of students scoring 1's ("empathy," 18 percent; "verbal and nonverbal communication," 20 percent; "curiosity," 15 percent; and "openness," 18 percent). For all six skill categories, the range of students scoring 1 and 2 was 31 percent to 42 percent, and the range of students scoring 3 and 4 was 58 percent to 69 percent. Across the six skill areas, the means ranged from 2.49 to2.73. No skill areas exceeded the benchmark target of 3 overall.

## **Goal D: Academic Programs**

	Knowledge: Cultural Self-Awareness	Knowledge: Knowledge of Cultural Worldview Frameworks	Skills: Empathy	Skills: Verbal and Nonverbal Communication	Attitudes: Curiosity	Attitudes: Openness
1's	7%	9%	18%	20%	15%	18%
2's	31%	31%	18%	22%	16%	13%
3's	49%	47%	51%	47%	51%	56%
4's	13%	13%	13%	11%	18%	13%
Ν	55	55	55	55	55	55
Mean	2.67	2.64	2.58	2.49	2.73	2.64

### GSR 200 AY 2016 Intercultural Knowledge/Competence Data

## **Knowledge and Inquiry**

4. The Knowledge and Inquiry SLO states that "Students will apply knowledge, modes of inquiry, and technological competence from a variety of disciplines in order to understand human experience and the natural world."

This SLO has been assessed for GSR 200-level courses using the AACU Inquiry and Analysis Value Rubric.

#### GSR 200 AY Knowledge and Inquiry Data

Mean scores are slightly yet consistently below 3 with "topic selection" nearing the benchmark. However, a plurality of the students consistently scored 3 across all skill areas. Scores of 1 and 2 were in the 27 percent to 40 percent range, and scores of 3 and 4 were in the 60 percent to 73 percent range. Of note in this data set are the four categories in which the percentage of students scoring 2 is higher than the percentage scoring 4. This helps to account for the missed mean benchmarks in the categories of "existing knowledge, research, and/or views," "design process," "conclusions," and "limitations and implications."

	Topic Selection	Existing Knowledge, Research, and/or Views	Design Process	Analysis	Conclusions	Limitations and Implications
1's	9%	9%	0%	4%	4%	4%
2's	18%	27%	32%	29%	29%	36%
3's	42%	42%	61%	38%	42%	49%
4's	31%	22%	8%	29%	24%	11%
N	45	45	38	45	45	45
Mean	2.96	2.78	2.76	2.91	2.87	2.67

#### GSR 200 AY 2016 Knowledge and Inquiry Data

## **Ethics and Social Responsibility**

5. The Ethics and Social Responsibility SLO states that "Students will make reasoned ethical judgments, showing awareness of multiple value systems, and taking responsibility for the consequences of their actions. They will apply these judgments, using collaboration and leadership skills, to promote social justice in their local, national, and global communities."

This SLO has been assessed for GSR 200-level courses using the AACU Ethical Reasoning Value Rubric.

#### GSR AY 2016 Ethical Reasoning Data

This 200-course level SLO has the plurality of students scoring 4 in each category. In this way, "ethical reasoning" is different from the other SLOs assessed at the 200 level. In two out of five categories, the mean benchmark of 3 was achieved ("understanding different ethical perspectives/concepts" and "ethical issue recognition"). Two other categories, "ethical self-awareness" and "evaluation of different ethical perspectives/concepts," were 0.03 and 0.08 short from the mean benchmark, respectively. Student scores of 1 and 2 were in the 30 percent to 41 percent range, and student scores of 3 and 4 were in the 58 percent to 68 percent range.

	Ethical Self-Awareness	Understanding Different Ethical Perspectives and Concepts	Ethical Issue Recognition	Application of Ethical Perspectives and Concepts	Evaluation of Different Ethical Perspectives and Concepts
1's	8%	9%	8%	9%	9%
2's	26%	23%	22%	32%	29%
3's	27%	26%	22%	23%	23%
4's	39%	42%	48%	35%	39%
N	77	77	77	77	77
Mean	2.97	3.00	3.10	2.84	2.92

#### GSR 200 AY 2016 Ethical Reasoning Data

The General Studies Program has evolved over the last nine years to include scaffolded learning opportunities that support and provide assessment mechanisms for each of the SLOs. Curriculum mapping and routine assessment of student skills, as used in authentic academic tasks, has been the cornerstone of program improvement. It is critical to keep in mind that these scores are from university faculty and instructors in real classes with actual student work. Thus, they reflect student competencies in the context of the academic environment where students work and perform daily. The two Language and Communication assessments: ASL and English offer the most information as the skills are continuously taught, reinforced, and supported, and opportunities for mastery on the indicators are possible because all General Studies courses include learning opportunities and assessment of ASL and written English outcomes. However, many of the outcomes are assessed once in the program, and so progress or growth on these skills is currently not measured as students matriculate either through the program or into major programs of study. Institutional assessment on all outcomes in major programs, using the AAC&U Value Rubrics would be a step toward understanding student progress on all outcomes during their academic careers.
### III. Bilingual Teaching and Learning

Since 1864, Gallaudet University has always offered a unique, bilingual learning environment. In 2007, the Board of Trustees adopted a new mission statement, which commits the university to become more intentional about leveraging the advantages of bilingual education for deaf and hard of hearing students. In the transformation from "default bilingualism" to a model of "intentional and inclusive bilingualism," the university has undertaken a number of steps to implement the mission, including defining student learning outcomes, developing curricula and assessments, offering professional development opportunities, creating learning materials, supporting research projects, and hosting a series of lectures, workshops, and campus-wide dialogues.

In order to support faculty in aligning teaching and learning activities with the bilingual mission, the provost established the Center of Bilingual Teaching and Learning (CBTL) in August 2014. This center brought together work previously coordinated by the Office of Bilingual Teaching and Learning (OBTL) and the Gallaudet Scholarship on Teaching and Learning Initiative (GSTLI) into one place unifying resources and research about bilingual teaching and learning. The primary responsibility of CBTL has been to support faculty in developing capacity to engage in best practices in bilingual teaching and learning.

The Center of Bilingual Teaching and Learning has supported the following initiatives and projects in support of the bilingual mission over the past year:

#### Video Production

The CBTL filming studio is available to faculty and staff who need support in the creation of bilingual materials for the classroom, communications for the campus community, and other forms of language/film support. The greatest percentage of CBTL's time was in this area during FY 2016. A total of 193 videos were made, with a combined total of more than 7,600 views.

#### **Bilingual Consultation**

Bilingual consultation and support provides pedagogical support, design suggestions, ASL coaching, English coaching, filming support for ASL products, and suggestions for the incorporation of products into online media and websites. Below is an overview of several projects in which CBTL was involved in over the past year, organized by department served:

#### Department of Communication/History

CBTL collaborated with a professor who teaches a cross listed course, "COM/HIS 495: Introduction to Documentary Filmmaking," to make the course more accessible for students by incorporating videos, which provided the course description and course goals in ASL.

#### **Department of Education**

Worked to create a more bilingual website with the inclusion of ASL videos of the department's mission statement, resources, research by department faculty as well as a glimpse of a graduate classroom.

#### **Department of Interpretation**

In spring 2015, the Department of Interpretation began a new initiative to disseminate student research at the doctoral level. CBTL worked with department chairs to develop a program titled "Research Chats," short five-minute videos in which students summarized their work in ASL. CBTL completed a second video this past year and a third is in the final stages of editing.

#### Department of Public Safety and Gallaudet Interpreting Services

Department of Public Safety (DPS) and Gallaudet Interpreting Services (GIS) requested CBTL's assistance in producing a video that explains to students their rights for communication and access to interpreters if they are ever in an emergency situation or need to interact with police for any reason.

#### Department of STM: Biology

Dr. Cara Gormally requested assistance in the production of a video explaining her research interests and recruiting students to become an intern on her research team.

#### **Emerging Signers Program/Jumpstart**

CBTL collaborated with Gallaudet Interpreting Services and the Emerging Signers Program, to provide advice on improving the collection of information from students who are emerging signers about what their experience with language development is like at Gallaudet. Three focus groups were conducted during spring 2016 to collect this information. CBTL also provided feedback on aspects of the emerging signer pilot

program, which were incorporated into the Jumpstart program in the summer of 2016.

#### **Faculty Development Office**

The faculty development fellow contacted CBTL to help in the production of a video explaining the results of the Higher Education Data Sharing Consortium (HEDS) Teaching Quality Survey that students completed during fall 2015.

#### **First Folio Project**

Worked to create a more bilingual website with the inclusion of ASL videos about the First Folio Project and events during October 2016 when Gallaudet hosted the First Folio. In an effort to link the events of First Folio at Gallaudet to the classroom, three videos summarizing Shakespeare plays were produced. CBTL coordinated the production of summaries for Macbeth, The Tempest, and Othello.

#### **Gallaudet Technology Services**

CBTL worked with GTS to create informational videos explaining, in ASL, about the new two-step verification process that would be required of all students to access their Google email and the process for registering. These videos were added to GTS' Cybersecurity webpage as a permanent resource for students. CBTL also participated in the GTS Technology Fair during faculty development week in August 2016 with an information table regarding CBTL services and a presentation on CBTL and faculty collaborations to create bilingual resources.

#### **Graduate Student Orientation**

Created a video from the assistant graduate dean to be included in her feedback survey about the new graduate student orientation program in August 2016.

#### **General Studies Program**

The director of the General Studies Program requested assistance in making a bilingual resource for a worksheet that assists instructors in designing an inclusive syllabus.

#### Library

The staff of the library requested assistance in the development of a series of videos explaining different aspects of using the library. The first video, Secrets of Reading Citations, explains how to read and interpret a book or article citation in order to locate the book or article in the library.

#### Office of Academic Quality

The Office of Academic Quality (OAQ) collaborated with CBTL on several projects this past year. One was to create ASL videos of the survey instructions for both the Student Satisfaction Inventory and the Employee Satisfaction Survey to accompany the surveys when distributed. Connected to both of these surveys, the development of video ads were created and published in the Daily Digest informing the community of these surveys. A second project was to produce three informational videos about the Starfish Student Success tool. One video, Understanding Starfish Interventions, was completed, and the two others are still in development.

#### Office of the Ombuds

The Ombuds worked with CBTL to enhance the Ombuds webpage by creating and providing an ASL video explaining her services.

#### Office of Research Support and International Affairs

CBTL worked with RSIA on two projects this past year. The first was the development of a bimodal online survey that was used to collect feedback on RSIA's new proposed research priorities. This first of a kind survey allowed all the information to be conveyed in both written English and ASL. Responses to the survey could be provided in either ASL or written English as well. The survey was disseminated at the end of November 2015. Feedback from this survey is being used to revise the research priorities.

The second collaboration with RSIA was in the promotion of the RSIA Research Expo that was held March 24, 2016. Videos explaining the different parts of the Research Expo were created and added to the RSIA website. Daily Digest video ads were also created to promote the event. On the day of the RSIA Research Expo, CBTL evaluated all the poster presentations and provided an assessment about how well the researcher visually conveyed their research. The results of this pilot evaluation of posters are being used to develop more rigorous guidelines for the 2017 Research Expo.

#### Office of Sponsored Programs

Worked to create a more bilingual website with the inclusion of a video of the director of Office of Sponsored Programs (OSP) explaining the OSP mission. CBTL also worked with OSP to develop a bilingual survey to collect feedback on their services.

### Language Development Program

CBTL has been involved in developing and implementing the Language Development Program (LDP) since fall 2015. During FY 2016, the program included four components—ASL Gatherings, Individual Language Support, Language Development Resources, and ASL Immersion Day. In aligning with CBTL's primary responsibility in supporting faculty with best practices in bilingual teaching and learning, the LDP strives to provide various resources and opportunities for language development, which is essential for the classroom and beyond.

#### ASL Gatherings

ASL Gatherings began in the fall of 2013 and is a casual, seminar-like environment where faculty come together to discuss ASL as a language, techniques for improving their usage of ASL, and techniques/technology to incorporate ASL into the classroom.

During AY 2015-2016, 72 ASL Gatherings sessions, with 36 hours of direct contact per semester, were held. In fall 2015, there were 43 participants with an average of 7 participants each session. In spring 2016, there were 27 participants with an average of 8 participants each session. All of the participants received certificates of attendance which documented the number of times they attended each semester.

#### Individual Language Development Support

CBTL assumed coordination of the Faculty ASL Tutoring Program in January 2016. The name of this program was changed to Individual Language Development Support to more accurately reflect the type of program it is, which are one-on-one sessions between a language specialist and faculty who desire to improve ASL skills necessary in academic settings. During the spring of 2016, there were 12 faculty members who received this service. Three language specialists were hired to work with them and CBTL's language development coordinator provided group tutoring to six faculty. Three faculty received individualized language support during summer 2016.

Pre-assessment videos were used to identify areas that needed for improvement and would be targeted during the meeting sessions. Post-assessment videos were produced at the end of the semester to measure progress with developing the targeted ASL skills.

#### Language Development Resources

Those involved with language development support benefit from the availability of language development resources that can be accessed outside of the meetings sessions. These resources allow faculty to practice both receptive and expressive ASL skills. The creation of such resources was begun during spring 2016. A glossary of technology terms was created with 70 terms.

#### **ASL Immersion Day**

On May 10, 2016, CBTL hosted an ASL Immersion Day for faculty and staff who had participated in CBTL language development programs during the spring of 2016. The goal of the day was to give participants an opportunity to interact all day using ASL. There were 11 faculty members, six staff members, and one staff/adjunct faculty member who participated. The morning consisted of workshops—The Use of Facial Expressions in ASL, Function of Space in ASL, Depicting Verbs, and Types of ASL Sentences. In the afternoon, a presentation on deaf culture was provided and group activities were held to practice what was learned in the morning workshops. Feedback on this program was overwhelmingly positive, and the participants appreciated an opportunity to practice with others on what they had been studying over the course of the semester.

#### **Bilingual Approaches Seminars**

Since its inception in 2010, the Bilingual Approaches Seminars (BAS) has offered learning opportunities for faculty and staff in bilingual theory and pedagogical practices. After completing an intensive two-week summer workshop led by a CBTL faculty fellow, faculty and teaching staff then intentionally apply specific bilingual methodologies in the following fall classes. Over the past several years, 85 members of faculty and professional staff have participated in the Bilingual Approaches Seminars.

CBTL supported five faculty in their application of a bilingual teaching strategy to their courses during fall 2015 or spring 2016. CBTL worked with the faculty to create videos which summarized their projects. To date, two participants—Dr. Larry Pick, Department of Psychology, and Johnston Grindstaff, Department of Art, Communication and Theater—completed their e-showcase research summaries and they are available on the CBTL website.

#### **Faculty Development Support**

CBTL continues to collaborate frequently with the Faculty Development Office (FDO). CBTL taught a five-week online course, Bilingual Teaching Strategies, for adjunct faculty during spring 2016. Nineteen adjunct faculty enrolled in the course and fourteen completed the course. CBTL also provided support to the FDO with various faculty development week activities. CBTL helped write the script for the play "It's All Related," which was performed on the Teaching and Learning Development Day, and co-presented on the Institutional Assessment Day about assessing ASL products.

#### Gallaudet Scholarship of Teaching and Learning

CBTL and the Office of the Associate Provost for Research received a two-year \$200,000 grant from the Booth Ferris Foundation to support the Gallaudet Scholarship of Teaching and Learning Initiative (GSTLI). This project was designed to create a learning community of teacher-scholars, over a period of two years per cohort, to investigate, reflect upon, document, and enhance teaching practices designed to meet the needs of visually oriented and linguistically diverse learners in Gallaudet classrooms. The initial cohort of five participants conducted their research projects and disseminated their work into a volume published by Gallaudet University Press in 2014, Teaching and Learning in Bilingual Classrooms: New Scholarship. With the support of designers and programmers, this group of researchers developed the framework for a showcase website. The second GSTLI cohort began their two-year participation in January 2015. During AY 2015-2016, participants collected data and analyzed their data, and, in fall 2016, the group will disseminate their results.

#### **Grant Support**

CBTL is constantly exploring options for grants to fund and expand services in meeting the clearly growing need of an increasingly bilingual and multilingual community. In conjunction with the Department of Art, Communications and Theater, CBTL is currently working on submitting a grant to the Andrew J. Mellon Foundation to support CBTL's work in creating bilingual educational materials.

#### Website Development and Outreach

The CBTL team continues to improve upon the center's bilingual website. The goal was twofold—first, to create a purpose driven website with specific, clear functions to support faculty and staff, and secondly, to create a model bilingual website to guide and jump-start the creation of more bilingual online materials. Over the past year, more language development resources were added to the website.



Howie Seago, current William H. and Ruth Crane Schaefer Distinguished Faculty who is teaching in the theater program during the 2016 fall semester, is working with students to translate William Shakespeare's Titus Andronicus into ASL. Their works were showcased on Saturday, October 15, from 7 to 8:30 p.m., at JSAC 1011 as part of the First Folio! Month activities. From left: Zoe Allardice, Billy Millios, Caldonia Dolly Wilding, Tyresha Collins, and Seago.

Photo by: Zhee Chatmon

## **IV. Academic Enrollment Trends**

Note that in addition to the data in this chapter, the Highlights chapter and the Goal A: Enrollment chapter contain considerable additional information regarding enrollment at the university. The Clerc Center chapter contains enrollment data for Model Secondary School for the Deaf and the Kendall Demonstration Elementary School.

	2011	2012	2013	2014	2015		2011	2012	2013	2014	2015
Accounting	19	22	14	16	23	Graphic Design	13	8	6	1	
American Sign Language	19	13	9	5	12	History	18	20	17	15	13
Art						Information Technology	13	16	14	17	18
Art and Media Design			12	23	17	International Studies	13	20	19	26	22
Art History	2	2				Interpretation	46	45	47	39	36
Biology, B.A.	7	4	10	11	6	Liberal Studies	2	2			
Biology, B.S.	10	16	22	16	9	Mathematics, B.A.	4	5	6	7	8
Business Administration	29	33	39	40	33	Mathematics, B.S.	9	2	4	1	5
Chemistry, B.A.	3	1	2	1	2	Philosophy		1	3	4	3
Chemistry, B.S.	5	3	1	1	3	Photography	7	7	5	1	
Communication Studies	35	30	24	36	55	Physical Education	35	30	16	6	2
Computer Information Systems	1					Physical Education & Rec- reation		7	26	44	46
Computer Science B.A.	1	1				Psychology	50	51	46	35	42
Computer Science, B.S.	3	1				Recreation & Leisure Stud-	2	1			
Deaf Studies	27	40	32	27	27	les Becreation and Sports					
Digital Media	9	4	1			Program	22	19	12	3	
Economics						Self-directed Major	1	1	3	3	
Education	17	15	13	23	26	Social Work	42	37	42	44	36
English	13	19	14	14	13	Sociology	16	12	6	11	7
Family & Child Studies	15	12	4	1		Spanish	2	2	4	4	6
Finance						Studio Art	5	5	3		
French						Theatre Arts	21	16	11	7	5
Government	7	14	18	18	25		543	537	505	500	500

#### Fall Undergraduate Degree-seeking Enrollment Trend by Declared Major

<sup>1</sup>This is not a headcount; dual degree enrollments are included, but students who have not yet declared a major are not. Declared majors are as of census date.

	2011	2012	2013	2014	2015
Accounting			1	1	
American Sign Language			1	2	1
Art	10	6	7	5	3
Athletic Coaching		5	24	26	20
Biology	2	3	3	3	4
Business Administration	2	5	1	1	7
Chemistry	4	3	6	4	2
Communication Studies	3	8	6	6	4
Computer Information Systems					
Dance			3	4	5
Deaf Studies	2	2	1	2	6
Economics & Finance	1	1	2	1	
English	3	2	5	10	8
Family & Child Studies	8	6	5		9
French	4	2	1	1	
German		1			
Government	4	3	3	3	2
History	1	1	2	1	
Information Technology	3	4	5	8	6
Linguistics	16	7	2	8	11
Mathematics	2	2	2	3	3
Philosophy	7	3	4	2	1
Physical Education	3	4			
Psychology	15	13	5	9	7
Recreation and Sports Program	10	13	5	4	3
Religion		2			
Sociology	9	9	9	10	8
Spanish	1	4	6	5	5
Theatre Arts	4	3	3	2	5
Women's Studies	2				
TOTAL PLAN ENROLLMENT	116	112	112	121	120

### Fall Undergraduate Degree-seeking Enrollment Trend by Declared Minor

<sup>1</sup>This is not a headcount; dual degree enrollments are included. Declared minors are as of census date.

	2011	2012	2013	2014	2015
American Sign Language	3	1			
Biology, B.S.	1	1	1	1	
Chemistry, B.A.			1		
Communication Studies	2	1		1	1
Deaf Studies	4	7	3	3	6
Education	3	2	2	1	2
English	1	1	1	1	
Family & Child Studies					
Government				1	1
History	1				
International Studies		1	1	2	4
Interpretation	8	5	3	3	7
Mathematics					1
Philosophy			1	1	
Psychology	1	1	2		3
Recreation & Sports Program	1	1			
Self-directed major			1		
Social Work		1	1	3	
Sociology	1	1		2	
Spanish		2	2		
Theatre Arts	2				
Undeclared	19	22	26	30	41
TOTAL MAJORS DECLARED <sup>1</sup>	47	47	19	49	66
TOTAL HEADCOUNT <sup>2</sup>	43	47	43	49	66

### Fall Hearing Undergraduate (HUG) Enrollment Trend by Declared Majors

<sup>1</sup>Dual program enrollments are included. Declared majors and minors as of census. Total Majors Declared could exceed Headcount because some students have dual majors.

<sup>2</sup>Headcount includes students who haven't yet declared a major.

	2011	2012	2013	2014	2015
CERTIFICATES					
ASL/Deaf Studies			2	2	2
ASL/English Bilingual Early Childhood Education			2	2	0
Cultural Diversity and Human Services					
Deaf and Hard of Hearing Infants, Toddlers, and Families	8	11	11	19	13
Deaf History	4	1			
Deaf Students with Disabilities	1	1	1	4	0
Deaf Studies		1			
International Development					
Leadership					
Management	4				
CERTIFICATES TOTAL	17	14	16	29	15
MASTERS					
Administration	5	2			
Audiology	1				
Counseling: Mental Health	20	15	12	12	9
Counseling: School	22	19	18	14	12
Deaf Education: Advanced Studies	2	1	2	3	6
Deaf Education: Special Programs	2	1	3	3	4
Deaf Studies	26	24	26	13	15
Developmental Psychology <sup>1</sup>			1		2
Education	34	34	25	21	22
Hearing, Speech, and Language: Non-clinical					
International Development	17	15	15	10	13
Interpretation	27	34	29	20	22
Interpreting Research			2	1	4

#### Fall Graduate Degree-seeking Enrollment Trend by Degree Program and Discipline

<sup>1</sup>The M.A. in Developmental Psychology is in the School Psychology, Psy.S. program. Students receive M.A. degrees upon completion of comprehensive examinations.

	2011	2012	2013	2014	2015
Leisure Studies	4				
Linguistics	18	19	20	19	13
Psychology	5				
Public Administration		14	36	40	44
Sign Language Education				35	35
Sign Language Teaching	29	32	35	1	1
Social Work	35	45	48	42	42
Speech-Language Pathology	26	28	30	33	32
MASTERS TOTAL	273	283	302	267	276
SPECIALISTS					
Administration and Supervision					
Change Leadership in Education	1				
Deaf Education		1		3	2
School Psychology	11	14	13	17	16
SPECIALISTS TOTAL	12	15	13	20	18
DOCTORATES					
Administration: Special Education	10	7			
Audiology, Au.D.	40	40	44	45	44
Audiology, Ph.D.	9	8	6	2	1
Clinical Psychology	39	40	43	42	40
Critical Studies in the Education of Deaf Learners		13	18	12	14
Deaf Education	11	5	3	3	3
Educational Neuroscience			2	4	5
Hearing, Speech, and Language Sciences		5	7	8	7
Interpretation	14	24	26	33	35
Linguistics	14	13	10	8	9
DOCTORATES TOTAL	137	155	159	157	158
TOTAL PROGRAM ENROLLMENT <sup>2</sup>	439	467	490	473	467
TOTAL HEADCOUNT	410	446	469	443	444

### Fall Graduate Degree-seeking Enrollment Trend by Degree Program and Discipline (continued)

<sup>2</sup>Dual program enrollments are included. Enroute enrollment counted while student is pursuing another program.

## V. Alumni Survey Information

This section contains excerpts of data available from respondents to our Annual Survey of Recent Graduates (December 2013 - August 2014 graduates). Data below includes employment experience, employment fields, internship participation, and satisfaction with their preparation. Finally a full table of employment by occupational category and by whether the employment involves service to deaf or hard of hearing individuals is included.

The survey is sent to recent undergraduate and graduate alumni approximately one year after graduation. The survey is administered in the fall to those who graduated December through August of the preceding year. The Office of Institutional Research produces the Gallaudet University Annual Survey of Recent Graduates.

### **Post-graduation Employment Experience**

During the year since graduation,

- Sixty-seven percent (67 percent) of bachelor's degree alumni who responded to the survey stated that they worked either full-time or part-time.
- Eighty-two percent (82 percent) of graduate degree alumni worked either full-time or part-time.
- Twenty-seven percent (27 percent) of bachelor's degree alumni were pursuing additional education.
- Eighteen percent (18 percent) of graduate degree alumni were pursuing additional education.

### **Employment Fields**

The most common fields for employment for all recent Gallaudet alumni are:

- 32 percent are in education, training, and library occupations;
- 18 percent are in community and social services occupations; and
- 15 percent are in business and financial operations occupations.

Sixty-five percent (65 percent) of alumni are working in the three fields listed above.

### **Internship Participation**

• Ninety percent (90 percent) of all responding alumni participated in an internship while at Gallaudet—ninety-three percent (93 percent) of bachelor's level alumni and eighty-eight (88 percent) of graduate degree alumni.

### **Hearing Undergraduate Outcomes**

- Ninety-five percent (95 percent) of the hearing undergraduates who responded to the survey stated that they were employed.
- Five percent (5 percent) of the hearing undergraduates who responded to the survey stated they were pursuing additional education.

Gallaudet's Ashley Bergeron, Kiel Callahan, Ana Salazar, and Christopher Mbochwa, along with Trevor Klemp and Charles Hem from the Rochester Institute of Technology, presented their posters showing research in genetics, bioinformatics, ecology and nanotechnology at the Hall Memorial Building third floor atrium on July 29, 2016. This culminated Gallaudet's seventh year of hosting a STEM summer internship program. From left: Bergeron, Klemp, Callahan, Salazar, Hem, and Mbouchwa.

Photo by: Zhee Chatmon



				Percent of to service to de	who provide earing people	
Major standard occupational group	Under- graduate (N 49)	Graduate (N=63)	TOTAL (N=112)	Under- graduate	Graduate	TOTAL
Arts, Design, Entertainment, Sports, and Media	0%	3%	2%	N/A	0%	0%
Business and Financial	8%	1%	4%	50%	0%	40%
Community and Social Services	14%	21%	18%	71%	85%	80%
Computer and Mathematical	4%	2%	3%	0%	0%	0%
Education, Training, and Library	27%	37%	32%	77%	57%	64%
Food preparation and serving related	4%	0%	2%	100%	N/A	100%
Healthcare Practitioners and Technical	4%	24%	15%	50%	27%	29%
Legal	6%	0%	3%	0%	N/A	0%
Life, Physical, and Social Science	4%	0%	2%	50%	N/A	50%
Management	4%	5%	4%	100%	67%	80%
Office and administrative support	10%	6%	8%	80%	25%	56%
Personal Care and Service	4%	0%	2%	50%	N/A	50%
Production	2%	0%	1%	100%	N/A	100%
Sales and related	8%	2%	4%	50%	100%	60%
TOTAL RESPONDENTS				63%	51%	56%

### Current Employment by Standard Occupational Group and by Service to Deaf and Hard of Hearing Individuals

Note: Percentages may not sum to 100 percent due to rounding.



On May 9, VL2 hosted a Knowledge Festival, showcasing the wide array of research, products, and achievements of the National Science Foundation (NSF) and Gallaudet University's Science of Learning Center, Visual Language and Visual Learning, VL2.

Photo by: Zhee Chatmon

# **Strategic Plan Goal E: Research and Outreach**

The university continues to make great strides in reaffirming its goal to be the epicenter of research, development, and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all humanity. In FY 2016, faculty, often alongside students, vigorously pursued a wide range of research interests related to their academic disciplines. In this process, they demonstrated their commitment to sharing the broad base of knowledge that has built Gallaudet's international reputation as a center of academics and research by sharing this knowledge to enlighten and empower others. Examples follow in the FY 2016 Overview section that demonstrate Gallaudet's international outreach and its investments to prepare tomorrow's deaf leaders. These combinations of enhancing the research expertise of Gallaudet's progress on Goal E of the Gallaudet Strategic Plan.

## I. Introduction

The University reinforced its ongoing commitment in FY 2016 to be the epicenter of research, development, and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all humanity. Faculty and a growing number of students -- often in collaboration -- vigorously pursued a wide range of research interests related to their academic disciplines. In this process, they demonstrated their commitment to sharing the broad base of knowledge that has built Gallaudet's international reputation as a center of academics and research by sharing this knowledge to enlighten and empower others.

The Office of the Provost includes several units that support the research mission of the University. These units include the Center for Bilingual Teaching and Learning (CBTL) (See Strategic Plan Goal D: Academic Programs), and the Office of Sponsored Programs, Office of Research Support and International Affairs (RSIA), and the following research centers: the National Science Foundation/Gallaudet Science of Learning Center on Visual Language and Visual Learning (VL2), the Rehabilitation Engineering Research Center on Improving the Accessibility, Usability, and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC), the Technology Access Program (TAP), and the Center for Deaf Documentary Studies (CDDS). (Details on these units can be found later in this chapter.)

Gallaudet celebrated its emphasis on research as a pillar of the University's mission by holding its first Research Expo in March. The Expo is a three-year initiative by the Provost and the University's Academic Affairs division to recognize efforts and accomplishments in research by undergraduate and graduate students, and faculty and staff members, and to promote dialogue about and recognition of the indispensable role that research plays in the University and the deaf community. The theme for 2016 was "Reshaping Our Vision." Future themes are collaborative research between faculty and students, and the value of multidisciplinary research.

Also in FY 2016, the office of Research Support and International Affairs (RSIA) revived a University newsletter, Research at Gallaudet, which has been dormant for many years. Considering the many exciting developments in research that have taken place at Gallaudet in recent years, RSIA felt this was an opportune time to restart the publication.

The following FY 2016 Overview section provides examples that demonstrate Gallaudet's international outreach and its

investments to prepare tomorrow's deaf leaders. These combinations of enhancing the research expertise of Gallaudet's academic community, and sharing this knowledge with scholars overseas who are eager to benefit from it, continue to reinforce Gallaudet's progress on Goal E.

### FY 2016 Overview

FY 2016 was an exceptionally eventful year for Gallaudet's research and academic achievements.

Through collaboration and grant writing, research accelerated in academic departments as well as in Gallaudet's dedicated research centers. A strong emphasis continues to be placed on how research findings can be applied to instruction and other issues of importance to the advancement of deaf and hard of hearing people. Gallaudet reinforced its commitment to global education and outreach as well by cultivating and strengthening international partnerships that benefit Gallaudet students and the worldwide deaf community, and encourage personal and academic growth for faculty and students alike through international and intercultural education opportunities.

Gallaudet's Office of Sponsored Programs (OSP) reported that 19 federal grants totaling \$2,403,779 were awarded in FY 2016. OSP provides services and support to Gallaudet faculty and staff seeking external funding for research and training projects of benefit to the Gallaudet community and the world. OSP provided three examples of grants that illustrate Gallaudet's commitment to research that benefit the deaf and hard of hearing communities, as well as society: 1) The University received a U.S. Department of Health and Human Services' Administration for Community Living grant award for Technology Access Program Director Christian Vogler's project, "Rehabilitation Engineering Research Center (RERC) on Improving the Accessibility, Usability and Performance of Technology for Individuals who are Deaf or Hard of Hearing." (Award #90RE5020-02-00, \$950,000 federal funds for the period of September 30, 2015 through September 29, 2016.) 2) Gallaudet received grant award funding from Howard University through the National Science Foundation for associate professor of chemistry Paul Sabila's project, "Center for Integrated Quantum Materials." (Subagreement #0008241-100049333/49334, \$65,257 federal funds for the period of October 1, 2015 through September 30, 2016.) As a result of Dr. Sabila's efforts, Gallaudet students and faculty have the opportunity to access state-of-the-art instrumenta-

tion at Howard University, Harvard University, and the Massachusetts Institute of Technology. 3) A grant award for a project that will contribute to monitoring the influence of the pre- and post-construction of green and gray infrastructure on local phytoplankton and fish populations and the resulting impacts on local residents who fish in the Anacostia River was also reported by OSP. The grant award is from the D.C. Water Resources Research Institute at the University of the District of Columbia, with funding from the U.S. Geological Survey, for biology professor Caroline Solomon's project, "Influence of consistently high levels of ammonium on food web dynamics in the Anacostia River." (Award #2016DC176B, \$30,100 total federal funds, \$10,000 for the period of March 1, 2016 through February 28, 2017.)

The Science of Learning Center at Gallaudet University on Visual Language and Visual Learning (VL2), an initiative of the National Science Foundation, made great inroads in FY 2016 on its overarching goal to improve the education and lives of all visual learners. Led by Dr. Laura-Ann Petitto, science director of VL2, the center and its four hubs reported 46 new or ongoing projects in five Strategic Focus Areas (SFAs) that meet multiple University research priorities. The SFAs are: Visual and cognitive plasticity, language development and bilingualism, reading and literacy in visual learning, translation of research to educational practice, and integration of research and education.

In FY 2016, VL2 hosted its first annual Knowledge Festival to share with the public its scientific and translational advancements and the successes of Gallaudet's Ph.D. in Educational Neuroscience (PEN) program.

Petitto's Brain and Language Laboratory for Neuroimaging (BL2) at Gallaudet continues to make advances in research addressing the early learning needs of vast numbers of children - particularly those who are deaf -- throughout the nation who are impacted by the devastating consequences of minimal or delayed language exposure. This work is supported by threeyear grants from the W.M. Keck Foundation and National Science Foundation (INSPIRE, Petitto, PI). Notably, in FY 2016, Petitto authored a peer-reviewed, milestone paper that describes a theory of visual phonology and the insights it provides into how the human brain builds a universal level of language organization from both signed and spoken languages. She also recruited two new faculty members in the PEN program who are establishing their own laboratories at the University to further research using the most advanced brain imaging technology. PEN students continue to shine, with prestigious pre-doctoral grants from the National Institutes of

Health, a peer-reviewed publication, and summer rotations at other universities. BL2 continues to provide students at Gallaudet and from other universities training and certification in functional Near-Infrared Spectroscopy (fNIRS), enhancing relationships with universities in Washington, D.C., across the nation, and globally.

Examples of Gallaudet's international outreach in 2016 included contributions from Petitto, PEN assistant professor Clifton Langdon, and students in the PEN program. In Hong Kong, Dr. Petitto brought to fruition her work to help the University of Hong Kong (HKU) establish its Science of Learning-Educational Neuroscience program, modeled after Gallaudet's own. She advised HKU faculty, helped them acquire a functional Near-Infrared Spectroscopy (fNIRS) system, and established a memorandum of understanding between Gallaudet and HKU that provides Gallaudet students opportunities to complete practicums there. International work included travel to Italy, Australia, and Switzerland. Petitto conducted research at Universita d'Annunzio-Chieti; Dr. Langdon and fourth-year PEN students Adam Stone and Geo Kartheiser presented research at a conference in Melbourne; and Melissa Malzkuhn, creative director of the Motion Light Lab, a VL2 resource hub, presented in Bern about the advances she and Petitto are making in avatar technology, and its translational impacts for society.

Stone further exemplified Gallaudet's student success in the research field in FY 2016 by winning the National Institute of Health's prestigious National Research Service Award graduate pre-doctoral fellowship for his proposal, "Neural Systems for Infant Sensitivity to Phonological Rhythmic-Temporal Patterning." (Award #1F31HD087085-01A1, \$43,576 federal funds for the period of July 30, 2016 through July 29, 2017.) The goal of his research is to understand how all infants discover the finite set of language units in their native language from the infinite combinations of sensory stimuli around them.

Gallaudet's Technology Access Program (TAP), led by Dr. Christian Vogler, has been instrumental in the Federal Communications Commission's (FCC) rulemaking process on the transition from TTYs to next-generation real-time text. The rules under consideration by the FCC aim to make real-time text ubiquitous on phones, thereby vastly expanding the potential for people who are deaf or hard of hearing to call hearing people directly. The process started with a pivotal visit at AT&T Labs in 2013, where TAP successfully convinced the company to champion this technology, and culminated in visits by FCC Commissioners Jessica Rosenworcel and Ajit Pai to TAP's labs in late 2015 and early 2016, and ended with a hands-on demonstration of the technology by TAP to FCC Chairman Tom Wheeler in April 2016. During the adoption of the rulemaking, the FCC explicitly acknowledged TAP's work multiple times. The FCC is expected to make a decision on real-time text in late 2016, with a proposed effective date of late 2017. Additionally, TAP received a one-year award from the Consumer Technology Association to develop proof-of-concept next-generation home alerting systems, with a particular emphasis on off-the-shelf components and interoperability with other technologies. TAP has also successfully completed work on audio quality on phones funded by AT&T, and a series of instructional videos on the correct use of telecommunications equipment, funded by the Consumer Technology Association.

The Center for Deaf Documentary Studies (CDDS), directed by Dr. Brian Greenwald, has been engaged in several major research projects and formed many partnerships on and off campus. Three major ongoing research projects are: "How High the Moon: Deaf People and Space Exploration," Deaf NYC: Signs of Change," and "Sorting the Defectives: Exclusion of Deaf People from State Sterilization Laws." CDDS also completed its website this year. In collaboration with several academic departments, CDDS is working on introducing a minor in Documentary Studies. Off campus collaborations included hosting a John F. Kennedy Center for the Performing Arts forum to explore ways to engage deaf audiences, a meeting with exhibition colleagues from Rochester Institute of Technology, and ongoing conversations with a national network of Universities working to build a searchable web portal on disability history. The Gallaudet University Museum, an integral part of CDDS, is beginning the American Alliance of Museums accreditation process. The museum has been busy in FY 2016 collaborating on Shakespeare in the American Deaf Community in connection with the First Folio project, an incentive of the Folger Shakespeare Library for a traveling exhibit of the 1623 First Folio, the first collected edition of William Shakespeare's plays. The University will house a copy of the Folio in October. For 2015, the Museum hosted over 8,000 visitors.

In 2016, the Department of Interpretation and Translation continued its commitment to infusing research into each of its programs. At the B.A. level, seniors conducted small-scale research projects, which culminated in a public poster session about their findings. Graduate students showcased their research endeavors in the Annual Masters of Interpretation Research Forum in which each student gave a summary of their year-long research project. Doctoral students are presenting their research both nationally and internationally as well as publishing numerous articles and chapters. The Department also saw its fifth graduate from its doctoral program in Interpretation, the only degree program of its kind in the world.

The Center for the Advancement of Interpreting and Translation Research (CAITR), let by Dr. Brenda Nicodemus, kept up an active conversation about the latest research in Interpretation and Translation Studies. At the B.A. level, seniors conducted small-scale research projects, which culminated in a public poster session about their findings. Graduate students showcased their research endeavors in the Annual Masters of Interpretation Research Forum, in which each student gave a summary of their year-long research project. Doctoral students presented their research both nationally and internationally, and published numerous articles and book chapters. The department also saw the fifth graduate from its doctoral program in interpretation, the only degree program of its kind in the world. CAITR hosted four lectures by deaf and hearing research scholars, which were streamed across the globe to thousands of viewers. CAITR also created "Research Chats" - short videos that showcase student and faculty research questions. In the works is a reprisal of the highly successful Symposium on Signed Language Interpretation and Translation Research, which will take place in early 2017. Additionally, notable growth in research activity can seen in various other academic departments, including Linguistics, Psychology, and Hearing, Speech, and Language Science, to name a few.

Recognizing that a high level of research activity is essential to the mission of Gallaudet University and the well-being of its constituents, the Office of Research Support and International Affairs (RSIA) awards Priority Research Funds (PRFs) each year to assist faculty and staff with expenses associated with getting their studies underway, with the understanding that they will obtain external funding to expand and sustain work in their chosen area when the start-up funding expires. In FY 2016, PRFs were awarded to Dr. Chizuko Tamaki, Associate Professor, Program Director - Audiology, and Dr. Kristen Maul, assistant professor, Department of Hearing, Speech, and Language Sciences, for Spatial Navigation Abilities in Deaf Older Adults: With and Without Vestibular Impairment. PRFs for ongoing studies were awarded to Dr. Cara Gormally, an assistant professor in the Department of Science, Mathematics, and Technology, for Developing Positive Attitudes toward Science in University Lab; Drs. Deborah Chen Pichler and Mary Thumann, professor and associate professor, respectively, in the Department of Linguistics, for L2 Acquisition of ASL in M1 and M2 Contexts; and Dr. Terra Edwards, an assistant profes-

#### sor in the Department of Linguistics, for *The Grammatical Incorporation of Pointing in Pro-Tactile American Sign Language at Gallaudet.*

Gallaudet's faculty sustains a broad range of research activity within their disciplines, and makes conscious efforts to involve students in their research studies. A prime example is Poorna Kushalnagar, a Gallaudet alumna who is an associate professor in the Department of Psychology and director of the University's Deaf Health Communication and Quality of Life Research Center. Dr. Kushalnagar is also a board member of Discovering Deaf Worlds, an international advocacy organization dedicated to creating a world that recognizes the abilities of deaf and hard of hearing people in developing countries, helping them acquire an education, maintain a job, raise families, and live autonomously.

Kushalnagar is the principal investigator of grants funded by the National Institute of Health (NIH) that total over \$2,000,000. "Deaf Sign Language Users' Experiences in Seeking Health Information" (Award #7R15DC01481602, \$438,104 total federal funds, \$267,503 for the period of August 1, 2016 through July 31, 2018) emphasizes the inclusion of undergraduate students in research from such varying disciplines as software engineering, graphics arts, psychology, and deaf studies. Through this grant, she guided students in taking active roles in such important endeavors as translating the National Cancer Institute's Health Information National Trends Survey into ASL, developing a computer-based survey app, and conducting a human-computer interaction evaluation of this app. One student who participated in this project was accepted to a Ph.D. program in school psychology, and another student is applying for graduate studies in data science. A second grant, "PROMIS-Deaf Profile: Inclusion of Deaf Patients in Disability and Outcomes Research" (Award #7R01DC01446302, \$1,630,431 total federal funds, \$371,840 for the period of September 1, 2016 through August 31, 2017), allowed Kushalnagar and her team of student researchers to include subcontractors from Northwestern University and the University of Arkansas at Little Rock, and faculty collaborators at Gallaudet and Rochester Institute of Technology in conducting cultural and linguistic validity studies of global, social, mental, and physical health issues drawn from the widely used Patient Reported Outcomes Measure Information System. They also developed a new category -communication health -- that is specific to people's experiences related to being deaf or hard of hearing. All of these findings

were translated into ASL and tested for comprehension prior to administering the survey to deaf people across the U.S. This project included a diversity supplement to train a postbachelor of arts deaf fellow who was subsequently accepted to a Ph.D. program in clinical psychology.

The contents of the ensuing chapter reflect some of the major accomplishments performed during FY 2016 in support of Goal E of the Gallaudet Strategic Plan.

#### **Chapter Content**

The research section of the chapter contains both profiles on active research projects as well as individual faculty and staff members' scholarly achievements, such as publications and presentations, both research-based and otherwise.

The section begins with a table showing the projects conducted by faculty, staff, students and collaborators on each of the university's research priority areas. Next is an overview of student engagement in research, highlighting the most notable of their achievements—doctoral dissertations. Finally, is shown a profile of each research and demonstration project, and a citation for each reported scholarly product, arranged under the banner of the hosting research center and academic unit.

The reader can conveniently search through all of this information using the online database called "Research and Scholarly Achievement at Gallaudet University" at http://research. gallaudet.edu/ara/. The database can be searched by department, individual, research priority, and other criteria in order to easily locate both prior and current projects and scholarly products. The reader who desires more in-depth information may contact the scholar directly.

The chapter also provides the Office of Sponsored Programs' reports on submitted research proposals and received awards from external sponsors.

Finally, this chapter reports on a comprehensive array of outreach programs and services to Gallaudet's many constituencies, both nationally and internationally.

Information about the research activity of the Laurent Clerc National Deaf Education Center can be found in a later chapter.

## **II. Gallaudet Research Priorities**

The priorities of the University reflect its unique responsibility and commitment to encourage research that aims to benefit the diversity of the deaf and hard of hearing population on campus, across the United States, and around the world. These priorities are a framework for the research efforts of the University and the Clerc Center.

The Education of the Deaf Act (EDA) and Goal E of the Gallaudet Strategic Plan require the University to establish its research priorities through input from constituent groups, consumers, and heads of federal agencies. Gallaudet faculty, staff, and students are offered the opportunity to provide their input by working together to identify areas that they feel are most essential to the University's mission to educate and empower deaf and hard of hearing people.

Strategy E.1.1 of Gallaudet University's preceding five-year Strategic Plan called for no more than five integrated research priorities, formulated by assessing compelling needs as well as current and potential strengths in fields such as visual language and learning, linguistic and communication access, genetics, and ASL/English bilingualism. In keeping with this directive, an ongoing process to establish these new priorities began in fall 2014 with three campus-wide discussions where various University constituents shared their opinions on what Gallaudet's priorities should be. This was followed by a priority setting task force composed of 33 faculty members and five staff representing 10 academic departments, three research centers, and the Clerc Center. Last fall, a draft of the priorities was presented to the campus for feedback using a bilingual survey. The results of this survey has been analyzed and the results were used to revise the five draft priorities. External feedback from key constituencies and federal agencies is being gathered during the current academic year, and a final presentation will be made to the Board of Trustees.

#### 1. Development of Signed Language Fluenc

Research aimed at understanding the sensory, cognitive, affective, linguistic, pedagogical, and socio-cultural processes by which individuals acquire American Sign Language or other signed languages. This priority applies both to individuals acquiring signed language in childhood and to those who acquire or learn signed languages later in life.

[27 projects]

#### 2. Development of English Literacy

Research aimed at increasing understanding of the sensory, cognitive, linguistic, and socio-cultural processes by which Deaf and hard of hearing individuals learn to read and write, plus the relationship between literacy learning and the signed, printed, and spoken languages used in the individual's home, school, community, and cultural environments. [20 projects]

- **3. Psycho-Social Development and Mental Health Needs** Research focusing on biological, neurological, psychological, and sociological aspects of Deaf and hard of hearing people's psychosocial development and mental health throughout their life spans. [25 projects]
- Teaching, Learning, and the Communication Environment Research on how pedagogical practices and accessibility of information affect learning for Deaf and hard of hearing students.

[49 projects]

 School, Home, and Community Relationships Research aimed at understanding home, school, and community relationships, school readiness, family and community involvement, and dynamics in homes and schools with Deaf or hard of hearing members.
[20 projects]

#### 6. Transition Through School and into Postsecondary Education and Work Research aimed at understanding and identifying the

transition processes of Deaf and hard of hearing students through school and beyond into post-secondary education, work, and independent living. [13 projects]

#### 7. History and Culture of Deaf People

Studies of Deaf peoples' history, cultures, creative productions, and signed languages, including research into and preservation of the contributions of visual and tactile ways of knowing and experiencing the world. This priority highlights studies of the origins and development of literature, the visual arts, and other creative, political, and social contributions of Deaf people around the world. [22 projects]

#### 8. Linguistics of Signed Languages

Linguistic studies of signed languages, including phonological, morphological, and syntactic phenomena as

well as meaning construction, discourse, and variation. This priority supports cross-linguistic comparison among signed languages as well as research on language contact and historical change. [20 projects]

#### 9. Interpretation and Translation

Research examining processes, practices, and pedagogy involved in interpreting for hearing, hard of hearing, Deaf, and Deaf-Blind individuals in a broad range of settings. This priority relates to situations involving Deaf and hearing interpreters working with signed and spoken languages or other visual or tactile communication systems. In addition, this priority concerns literary and other translations involving signed languages. [26 projects]

#### 10. Studies that Inform Public Policies and Programs

Research essential for the development, administration, and evaluation of public policies and programs affecting education, mental health, communication access, medicine, employment, and other services used by Deaf and hard of hearing people throughout their lives. [30 projects]

# 11. Technologies that Affect Deaf and Hard of Hearing People

Studies of technology's impact on the lives of Deaf and hard of hearing people, including research on and development of technologies and media aimed at enhancing communication.

[35 projects]

#### 12. Assessment

Research related to the development, translation, validation, and practical application of appropriate tools, techniques, and models for assessing a wide range of characteristics, skills and abilities of Deaf and hard of hearing people. [33 projects]

#### 13. Diverse Deaf and Hard of Hearing Populations Research that examines multicultural awareness, knowledge, and/or skills as well as methods of social advocacy related to diverse Deaf and hard of hearing children, youth, adults, their families and their communities. Diversity includes, but is not limited to differences of race, ethnicity, gender, age, creed, disability, socioeconomic status, sexual orientation, school experience, linguistic background, and immigration experience.

[32 projects]

The following table lists all FY 2016 research and demonstration projects with cross-references to these research priorities. The projects are done by Gallaudet faculty, staff and students, as well as collaborators on Gallaudet's externally funded research grants.

220 1507	JECT PRIORITIES (Numbers correspond to priorities earlier in this section												
PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13
'American Annals of the Deaf': Reference issue				•						•			
'Deaf Studies Digital Journal'							•				•		•
Acceptance of disability, coping strategies, and perception of social support among veterans with acquired physical disability			•							•			
Accessible communication for everyone (video relay services software)										•	•		
Acquiring an effective training method for at-home use for the made for mobile phone otoscope				•	•								
Advancing students' science literacy				•									
Alternative approaches: Exploring yoga as a treatment for PTSD			•										
ASL assessment toolkit	•			•				•				•	
Assessing audiologists' exposure to, knowledge of, and attitudes when working with culturally Deaf individuals										•			
Assessing the assessment: Reliability and fairness in the Teacher Work Sample				•								•	
Assessing the Risk of Cochlear Damage in Irish Step Dancers										•			
Attention and retention of educators of the Deaf										•			
Auditory self-monitoring											•		
The biological basis of language and reading in monolingual and bilingual children and adults (discoveries of the reading brain, the bilingual brain, and the bilingual reading brain)		•											

### **Research Projects Organized by Research Priorities**

PROJECT PRIORITIES (Numbers correspond to priorities earlier in this section								ı					
PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13
Body image, cultural, and media			•		•		•						
Cancer genetic education for the Deaf community				•									•
Capstone Honors			•		•		•	•		•	•		•
Classroom discourse observation	•											•	
Cochlear implants and the brain: The biological basis for language and cognition in infants, children, and adults with cochlear implants		•								•	•		•
Comparative analysis of the signed output of a Deaf Interpreter working from English text and from an ASL interpretation									•				
Comparing Monolinguals with Sequential Late Bilingual Listeners: A Spoken-Language Processing Study													
Comparing objective and subjective outcomes of two frequency-lowering algorithms											•		
Continuing medical education modules	•	•	•		•					•			
Coping Mechanisms for Mental Health Interpreters			•						•				
Creation of a DNA repository to identify deafness genes							•						•
Deaf NYC				•	•		•						
Deaf Signers' Experience with Seeking Health Informa- tion											•		
Deaf Weight Wise 2.0			•				•						•

	PRIORITIES (Numbers correspond to priorities earlier in this section												
PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13
Developing an Understanding of Quality Communication in Families with Hearing Caregivers and a Deaf Child, percieved by the Child													•
The development of perceptual span in beginning and developing deaf readers		•										•	
The diagnosis of Attention Deficit Hyperactivity Disorder in college-aged Deaf individuals: Exploring the accuracy of the Barkley Adult ADHD rating scale-IV and the Attention Deficit Scales for Adults, Sign Language Version			•										•
Do ASL/English Interpreters Demonstrate a Greater Command of English Synonyms than Monolingual Speakers of English?									•				
Educational Interpreters and Deaf Students from Non-English Speaking									•				
Educational Interpreters Incorporating Visual Phonics into Their ASL Interpretations: Perspectives and Practical Application		•							•	•			
Educational interpreting: working with Deaf children who have autism spectrum disorders/ additional special needs									•				
The effect of caffeine withdrawal on VNG oculomotor assessment												•	
The effect of elaboration: non elaboration of sign list recall tasks on rate of learning in Deaf individuals													
Effect of eye gaze on amplitude of the ocular vestibular evoke myogenic potential (oVEMP)												•	
Effect of Talker Gender and Speech Stimuli Type on Speech Perception												•	
Effectiveness of mentoring in science research				•			•					•	
The Effects of Background Noise on Preferred Listening Levels and Loudness Perception of Music										•			
The effects of early visual language exposure on deaf children's linguistic and non-linguistic visual processing: An Eye-Tracking and fNIRS brain imaging investigation of emergent readers	•	•									•		•

	PRIORITIES (Numbers correspond to priorities earlier in this section													
PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13	
Emotion regulation and effortful control in deaf children as a function of parenting behavior and communication quality	•		•											
Emotional Display Rules of the Deaf Culture: An Evaluation of Emotional Expression			•									•		
Ethical practices website													•	
Evolutionary and functional analysis of dubious open reading frames suggest a functional role in yeast genomes														
Examining the correlations between social network ties and linguistic production								•						
Examining the effects of visual language experience on visual attention in young Deaf emergent readers with eye-tracking: A pilot study for innovation in e-literacy and signing creatures avatar design	•	•									•			
Examining the use of depiction across American Sign Language Proficiency Interview assessment levels	•													
Experiences of LGBTQIA-Identified Faculty in Biology Classrooms				•										
Exploring the feasibility of utilizing PCIT in families of hearing parents and a deaf child with a weak shared communication			•											
Exploring the foundations of iconicity in language: Evidence from an fNIRS brain imaging study on the neural basis of ASL classifiers								•		•				
Exploring the hegemonic whiteness in sign language interpreter education. Program curricula: A discussion with students, faculty and administrators	•								•					
Feasibility study on the use of head mounted displays in parent child interaction therapy														
Fingerspelling development that is independent of English	•	•						•						
Forward to professorship: "Pay it forward"					•									

	PRIORITIES (Numbers correspond to priorities earlier in this section												
PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13
Gallaudet Scholarship of Teaching and Learning — Cohort 2	•	•						•					
Genetic deafness in alumni of Gallaudet University							•						
The Grammatical Incorporation of Pointing in Pro-Tactile American Sign Language at Gallaudet							•		•	•	•		
Hearing Aid Validation in Deaf University Students Using Self-Assessment Measures													
HINTS-ASL: Deaf Signers' Experience with Seeking Health Information													
Home alerting devices for people who are deaf or hard of hearing													
Image processing for NASA applications						•							
Influence of consistently high levels of ammonium on food web dynamics in the Anacostia River					•	•							
Instructional videos on telecommunications access											•		
Interactive interpreting: teaching and learning strategies 2									•				
Interactive learning environment for optimizing technol- ogy use											•		
Interpreting decisions and power: Interpreters working in legal settings					•		•	•	•				
Interpreting for Deaf academics: Perceptions of credibility by non-signers													
Investigating the microbial abundance and biodiversity of the Anacostia River						•							
Investigating the water quality of two freshwater ecosystems: The Anacostia River (DC) and the Brainerd Area Lakes (MN)													

BPO JECT	PRIORITIES (Numbers correspond to priorities earlier in this section												
PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13
An Investigation of Virtual Environment Stability													
Investigations of the effect of catalyst loading on cross- metathesis reaction											•		
Language acquisition and literate thinking in young d/Deaf children with Deaf caregivers	•												
Learning to read with visual languages: Investigation of the impact of native language ASL visual sign phonology training on emergent and developing literacy in English (new language)		•											
Learning to teach science as inquiry													
Literacy skills in deaf readers		•									•		•
Literal interpretation stratagies of English-ASL interpreters									•				
Male Privilege in the Field of ASL/English Interpreting									•				
Media Objectification and Implicit Gender Bias						•							
Media objectification in the context of online news: Effects on implicit gender bias						•							
Metalinguistic References in Interpreting: Deaf-Hearing Relay Interpreting Teams								•	•				•
Motion capture & nursery rhymes	•										•		
Motivation to learn and apply new knowledge and skills from training to the workplace													
Nanowire array production and characterization						•							

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
National Space Grant College Fellowship						•								
NextGen Genome Solver														
NIH Research Supplements to Promote Diversity in Health-Related Research														
Nitrogen and Phosphorus Excretion by Native Freshwater Mussels and Invasive Chinese Mystery Snails in Nova Scotia						•								
Obesity: Understanding Disparities Among Deaf and Hard of Hearing Adults														
Ongoing analysis and follow-up study of the Early Education Longitudinal Study Participants	•	•												
Overcoming barriers to STEM success for deaf undergraduates														
Parents information package	•	•												
Partnership in reduced dimensional materials (PRDM): Preparation of molybdenum disulfide nanomaterials														
Partnerships for material research (PREM)							•							
Peace Corps Stories							•						•	
Perceptual narrowing in sign exposed and non¬sign exposed infants	•									•				
Philadelphia signs							•		•					
Population genetics of connexin 26 deafness														
Potential societal impact of advances in genetic deafness							•							

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Prevalence of dizziness and balance problems in deaf adults														
Priority Research Fund										•				
Project D1: Development of a model for a consumer-centric, technology-focused train-the-trainer program										•	•			
Project D2: Context-sensitive assessment of real-world listening situations via integrated smartphones and hearing aids														
Project D3: Interactive learning environment for optimizing technology use											•			
Project R1: Enhanced aural rehabilitation for cochlear implant users via telerehab technology											•			
Project R2: User-driven customization of cochlear implant programming											•			
Project R3: Validation of hearing aid fitting for infants and toddlers											•			
PROMIS-ASL: Inclusion of Deaf Adults in Patient-Reported Outcomes Research			•											
Psychological stress in sign language interpreters									•					
A qualitative perspective on deaf women's experiences of sexual assault disclosure			•											
A quantifiable posturography screening measure using the Wii Fit Plus											•			
The RAVE Revolution for Children with Minimal Language Experience During Sensitive Periods of Brain and Language Development	•		9								•			
Receptive listening — narrowband vs. wideband with network impairments for the iPhone														

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Reggio Emilia Approach in Deaf Education				•	•									
Research methods in psycholinguistic investigations of signed language processing								•						
Resilience in Deaf Children With Additional Disabilities: The Role of the Parent-Child Relationship in Social Skills			•										•	
REU AMI Site											•			
Seeing the Temporal Beats of Human Language	•	•		•	•			•		•	•		•	
SFA1: Visual and cognitive plasticity	•			•										
SFA2: Language development and bilingualism	•	•		•										
SFA3: Reading and literacy in visual learning		•		•										
SFA4: Translation of research to educational practice				•					•					
SFA5: Integration of research and education				•							•			
Shakespeare in American Deaf History							•							
Shared book reading using ASL and English for young signing deaf and hard of hearing children	•	•												
Sign Language Annotation, Archiving and Sharing (SLAASh)					•		•	•						
Signed language interpreter responses to interpreters in the media														

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Signing with an accent: ASL L2 phonology and Chinese signers								•					•
Signs of aggression: Translating the peer conflict scales into American Sign Language			•						•		•	•	
Site-directed mutagenesis of RasGRP2										•			
Small Research Grants										•			•
Speed of visual sign language processing and visual sign phonological awareness processing in young Deaf typically and atypically-developing bilingual-bimodal readers		•										•	•
Standards work and technical assistance										•			
A study of excellent teaching at Gallaudet University				•									
Synthesis of bismuth telluride nanomaterials				•		•							•
Targeting America's Defectives: the Exclusion of Deaf People from State Sterilization Programs							•						
Tasks of a Trilingual Interpreter									•				
The temporal and spatial dynamics of visual language perception and its relation to visual sign phonology: Eye-tracking in infants and children in a perceptual discrimination experiment of signs versus gestures	•							•				•	
Transitioning from high school to college: Student I perceptions of preparation				•		•				•			
Undergraduate and graduate level interpreter education: Pedagogical considerations									•				
Unpacking Stakeholder Perspectives on Interpreter's Presence on Social Media									•				

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Unpacking Sterilization Laws: The Deaf					•		•							
US Navy/NASA Experiments on Deaf Men:					•		•							
Various Earphone Models for iPhones: Do They Make a Difference When Used With a Hearing App?														
VL2 national research volunteer program	•	•	•	•	•	•	•		•		•	•	•	
VL2 shared data resource	•	•	•	•	•	•	•		•					
Voice quality under adverse network conditions											•			
Why are you here?: Certified Deaf Interpreters' psychological well-being and coping mechanisms			•						•					
WPPSI-IV & WISC-V special population study: Deaf and hard of hearing children			•											
Totals: 150 projects reported	27	20	25	49	20	13	22	20	26	30	35	33	32	

### III. Students Actively Engaged in Research

Gallaudet has made a tradition of emphasizing to students the importance of being actively engaged in their majors through research. The University feels strongly that being involved in one or more research studies is the best way for students to express their ideas, putting their new-found knowledge to practical use. Furthermore, research gives students the unparalleled opportunity to apply theories from their classes in a way that makes connections to real-life situations. This critical approach to thinking leads to a deeper insight into their chosen field—and solidifies their foundation for a promising career in knowledge-based fields.

Of the 150 research projects reported herein, 120 graduate and undergraduate students were involved in 82 projects. In FY 2016, there were 23 small research grants awarded to students conducting their own research or who are working under faculty members.

From serving as assistants for faculty investigators to carrying out their own studies, students are major contributors to the vitality of campus research scholarship. Across the University, there is a growing number of student researchers working on their own studies or assisting other researchers, from the physical sciences to social sciences to deafness-related disciplines. Student research assistants play vital roles in collecting responses from diverse participants, analyzing raw data, and presenting findings.

Many academic programs have classes that require research projects as a final project, or as the focus of the entire course. This is indicated in the large amount of research coming from students in the Department of Interpretation's master's and Ph.D. programs, the Department of Education's Ph.D. program, the Department of Science, Technology, and Mathematics, and many others.

The University encourages student involvement in research activities through graduate assistantships, hiring under external grants, and direct funding of student research. In addition, research internships are being made available to students through various departments. Recently, there has also been a growth in Gallaudet's research labs, which continually expand their opportunities to include students.

Research by students benefits the institution as well. Gaining the insights of younger deaf and hard of hearing people is essential to many topics that support Gallaudet's mission. Young minds frequently approach long-standing problems in new ways and lend fresh perspectives that may otherwise be overlooked.

The pinnacle of student contribution to knowledge is the doctoral dissertation. In FY 2016, 13 students completed their doctoral study (shown below).

DiMarco, J. M. (2016). *Exploring maternal representations and parental experiential avoidance in hearing mothers of children who are Deaf or hard of hearing* (Doctoral Dissertation). Gallaudet University.

Goodman, Evan (2015). *Gender effects in cognition and Deaf signers: New considerations for an old question* (Doctoral dissertation). Gallaudet University, Washington DC.

Healy, Christina (2015). *Construing affective events in American Sign Language* (Doctoral dissertation). Gallaudet University, Washington DC.

Maddux, L. (2016). Source attribution instructional methods in ASL-English interpreter education (Doctoral dissertation). Gallaudet University.

Morris, C. (2016). *Examining the association between social network ties and linguistic production* (Doctoral Dissertation). Gallaudet University.

Nelson, T. (2016). *Preparation by American Sign Language-English methods, effectiveness, and perception.* (Doctoral dissertation). Gallaudet University, Washington, DC.

Palmer, J. (2015) *Bimodal bilingual word order development* (Doctoral Dissertation). Gallaudet University.

Reynolds, W. (2016). *Early bimodal bilingual development of ASL narrative referent cohesion in a heritage language framework* (Doctoral Dissertation). Gallaudet University.

Romero, E. M. G. (2016). *Deaf university's knowledge of Miranda warnings*. (Doctoral Dissertation). Gallaudet University.

Schatz, S. (2016). A coordinator of instructional support chronicles change in the Common Core State Standards Era: An autoethnographic study (Doctoral Dissertation). Gallaudet University

Shahan, C. (2015). *An elementary Deaf teacher's interactions with Deaf girls and Deaf boys* (Doctoral dissertation). Gallaudet University.

Alley, E. (2016) *Professional autonomy in Video Relay Service interpreting: Perceptions of American Sign Language-English interpreters* (Doctoral Dissertation). Gallaudet University

Letteri, A. (2016). *Emotion regulation and effortful control in Deaf children as a function of parenting behavior and communication quality* (Doctoral Dissertation). Gallaudet University.

The University is proud of these students' accomplishments and is confident in their leadership abilities.

Keith Doane, '14, a graduate administrative assistant for the Innovation and Entrepreneurship Program and MPA graduate student, emceed the Business Pitch Competition, held June 10, 2016, at Peikoff Alumni House.

Photo by: Zhee Chatmon



### IV. Research and Scholarly Activities by Research Center

The research and scholarly activity sections lists the FY 2016 research projects and achievements by the dedicated research centers, including the Rehabilitation Engineering Research Center on Improving the Accessibility, Usability, and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC); Technology Access Program (TAP); National Science Foundation/Gallaudet Science of Learning Center (SLC) on Visual Language and Visual Learning (VL2) and its four hubs, including the Brain and Language Laboratory for Neuroimaging (BL2); and the Center for Deaf Documentary Studies (CDDS). (The work done in department laboratories is shown later under the part "Research and Scholarly Activities by Academic Units".)

When a project has two principal investigators from different units, a cross-reference note guides the reader to the placement of the full project profile. For each research project, the following fields are shown: the project's title, status and timing, abstract, investigator(s) and their affiliation, funding sources, and products derived from that project.

At the end of each unit's part there is a list of citations of scholarly and creative products that are not associated with a research project. The increased number of scholarly achievements by the faculty and staff is a sign of Gallaudet's intellectual vitality.

# Center for Deaf Documentary Studies (CDDS)

The Center for Deaf Documentary Studies (CDDS) educates students in the documentary arts and explores the lives of deaf people through research, documentation and dissemination.

Through the process of discovery and documentation, the center focuses on significant historical issues and endangered cultural knowledge specific to deaf peoples. Using film, photography, and narrative writing, the center disseminates stories of the deaf experience. Programs and products advance discourse on deaf lives, promoting a new level of awareness. The center also serves as a humanities-based resource for information on culturally and technically accessible documentary presentation.

CDDS adds to the public's knowledge of the humanities in four focused areas:1) Discovery — conducts research on deafspecific topics through a variety of methods; 2) Documentation — engages in creation of film, photographs, and narrative writing; 3) Dissemination — organizes and hosts film screenings, lectures, and discussions in public and classroom settings, develops exhibitions, publishes articles, and produces multimedia website presentations and online bilingual (American Sign Language) publications; and 4) Education — trains students in the documentary process, including concept development and technical skills in film, photo, or text formats.

Gallaudet University's Center for Deaf Documentary Studies seeks to enhance humanities scholarship through newly revealed perspectives on the meaning of deaf life, and by contrast, what it means to be hearing. Harnessing dispersed expertise the center takes an ambitious approach to building partnerships and offering courses, workshops, summer institutes, lectures, online and print publications, documentary films, exhibitions and web-based media that brings deaf history and contemporary life to the University and the public. A diverse team collaborates to discover, document, educate, and disseminate humanities content. Through fieldwork, the center identifies significant historical issues and endangered cultural knowledge.

#### **Principal Investigator**

 Greenwald, Brian H. • Director, CDDS, and Professor of History

#### Other Investigator

Bergey, Jean • Associate Director, CDDS

#### **Research Projects**

#### **Deaf NYC**

Status: Ongoing Start date: October 2015 End Date: December 2019

A critical mass of Deaf people in urban settings forms a unique cultural linguistic environment. For example, hundreds of Deaf people, mostly Jewish and Italian first-generation Americans, lived within a one-mile radius of the Gravesend section of Brooklyn, New York, in the 1950s, 60s and 70s. A designated bus to transport children to the nearest school for deaf students in Manhattan served the community. Deaf people lived in in concentrated areas that were affordable, close to jobs, and offered an interwoven community. Very little

documentation has been conducted on urban deaf life, with minimal "oral history" interviews on the mid-20th century city experience. Over eighty people have been identified as potential interviewees and the Center has formed a team of advisors to guide research. Comparison and contrast with hearing communities is part of this humanities research that examines the way groups wrestle with linguistic, educational and employment challenges.

#### Principal investigators

- **Bergey, Jean** Center for Deaf Documentary Studies Staff
- Greenwald, Brian H. History, Philosophy, Religion, and Sociology

#### Additional investigators

- Kopp, Margaret (Student) English
- Weiner, Stephen Communication Studies
- Weinstock, Janet (Consultant) Center for Deaf Documentary Studies (CDDS)

#### **Funding sources**

Center for Deaf Documentary Studies

#### **Peace Corps Stories**

Status: Ongoing Start date: March 2012 End Date: December 2017

The CDDS is working with 47 deaf Returned Peace Corps Volunteers to edit stories of service.

#### Principal investigators

- Greenwald, Brian H. History, Philosophy, Religion, and Sociology
- Bergey, Jean Center for Deaf Documentary Studies (CDDS)

#### US Navy/NASA Experiments on Deaf Men:

Status: Ongoing Start date: October 2015 End Date: December 2017 In the early 1960s, a joint research project hosted by the United States Navy and the National Aeronautics and Space Administration (NASA) sought deaf men from Gallaudet College (now University) to participate in experiments on balance, motion sickness, and weightlessness. Eleven deaf men, aged 25 to 48, most of whom became deaf from meningitis, participated in the research which began before the NASA 1961 manned suborbital flights of Project Mercury and continued until 1969. Of the eleven Deaf men labeled "Labyrinthine Defective," six are involved with this project. The Center has collected over 130 images showing the experiments and will conduct oral interviews and digitize footage. An exhibition, including life size cutouts of the men in body casts preparing for centrifuge spins and free-falling in aircraft is being developed.

#### Principal investigators

- **Bergey, Jean** Center for Deaf Documentary Studies (CDDS)
- Greenwald, Brian H. History, Philosophy, Religion, and Sociology

#### Additional investigators

- Kopp, Margaret (Student) English
- Myers, David (Consultant)
- Peterson, Don (Consultant)

#### **Funding sources**

Center for Deaf Documentary Studies

### Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

The Rehabilitation Engineering Research Center on Improving the Accessibility, Usability, and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC) is funded by the National Institute on Disability, Independent Living, and Rehabilitation Research, under the Administration for Community Living at the US Department of Health and Human Services. The mission of the DHH-RERC is to provide consumers who are deaf or hard of hearing, as well as their families and clinicians, with the knowledge and tools necessary to:

 take control of their communication and hearing technologies, adapt those technologies to their needs in realworld environments, and achieve greater autonomy in their technology use

 derive full benefit of the shift from special purpose devices to increasingly powerful and interconnected consumer electronics.

Consumers who are deaf or hard of hearing, if given appropriate ways to control the technologies that they use, will be in the best position to meet their needs and make technology work for them. Instead of having to rely on clinical practitioners, hearing health providers, and other types of service providers, who all are one step removed from the firsthand experiences consumers need to be in charge of their communication needs. The technologies that are needed for this kind of paradigm shift have begun to emerge in recent years, and as a result people and devices have become increasingly interconnected. With respect to hearing loss, many rehabilitation and training activities that formerly could take place only face-to-face — such as in a clinical setting, or at dedicated events in buildings - can now potentially be done using consumer devices, online, and at every individual's own pace. Parallel to this development, the advent of interconnected mobile and wearable devices, which are more powerful than the desktop computers of yesterday, is leading to a convergence of hearing devices and consumer electronics that are becoming increasingly integrated. Apps are already on the market to control hearing aid settings from a mobile device, and there are countless opportunities for closer integration between apps and hearing devices. The DHH-RERC supports this paradigm shift through research, development, and knowledge of translation activities.

#### **Principal Investigators**

- Vogler, Christian Art, Communication and Theatre -Technology Access Program (TAP)
- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)

#### Other investigators

- Bernstein, Claire Hearing, Speech and Language Sciences
- Parmanto, Bambang University of Pittsburgh
- Kwon, Bomjun Hearing, Speech and Language Sciences
- Firszt, Jill Washington University in St. Louis

- Holden, Laura Washington University in St. Louis
- Yoshinaga-Itano, Christine University of Colorado-Boulder
- Gilley, Phillip University of Colorado-Boulder
- Hamlin, Lise Hearing Loss Association of America
- Devlin, Lisa Hearing Loss Association of America
- **Compton-Conley, Cynthia** Hearing Loss Association of America
- Shaewitz, Dahlia American Institutes for Research
- Overton, Cynthia American Institutes for Research
- Josias, Liza American Institutes for Research
- Wu, Yu-Hsiang University of Iowa
- Chipara, Octav University of Iowa
- **Barac-Cikoja, Dragana** Hearing, Speech and Language Sciences
- Brewer, Diane Consultant
- Cole, Kevin Consultant
- Julstrom, Stephen Consultant
- Park, Jae-Heung Consultant
- Kovacs, Lisa Consultant

#### **Research Projects**

#### Project D1: Development of a model for a consumer-centric, technology-focused train-the-trainer program

Status: Ongoing Start date: October 2014 End Date: September 2019

Unfortunately, research has shown that deaf and hard of hearing consumers have trouble using their own hearing devices properly. Consumers may not even be aware of technologies included in hearing devices or their purpose. When technology problems arise, consumers may not know how to engage with technology providers or industry manufacturers to try to solve their problem. They may also be unaware of their rights to communication access or when and how to inform policy
makers if engaging with industry is not successful in solving a problem. Training is the key to addressing these issues in order to provide consumers who are hard of hearing or deaf themselves or are parents of hard of hearing or deaf children with the knowledge and skills to achieve the level of empowerment and control necessary to take full advantage of the hearing devices and other assistive and emerging technologies they might want or need to use. The RERC is developing a consumerbased technology-focused train-the-trainer (TTT) program, in collaboration with the Hearing Loss Association of America (HLAA), and Hands & Voices (HV) - a parent driven, nonprofit organization dedicated to providing unbiased support to families with children who are deaf or hard of hearing. This TTT model emphasizes an active role for consumers who are hard of hearing or deaf and parents of children with hearing loss, one in which they share in the process of addressing their hearing health care needs, particularly related to assistive and emerging communications technologies.

#### **Principal investigators**

- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)
- Shaewitz, Dahlia American Institutes of Research

#### Additional investigators

- **Compton-Conley, Cynthia** Hearing Loss Association of America
- Devlin, Lisa Hearing Loss Association of America
- Hamlin, Lise Hearing Loss Association of America
- Josias, Liza American Institutes for Research
- Julstrom, Stephen (Consultant)
- Kovacs, Lisa (Consultant)
- **Overton, Cynthia** American Institutes for Research

### **Funding sources**

 U.S. Dept. of Education-National Institute on Disability & Rehabilitation Research (NIDRR)-Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA)-UW-Madison subgrant

#### Products

Hamlin, L. (2016). N-CHATT wants you! *Hearing Loss Maga*zine, 37(3), 19.

# Project D2: Context-sensitive assessment of real-world listening situations via integrated smartphones and hearing aids

Status: Ongoing Start date: October 2014 End Date: September 2019

In order to improve hearing aid outcomes, it is critical to understand listeners' perceptions with hearing aids in the real world so that problems/factors with them can be identified. To achieve this goal, field assessment tools are required that collect (1) perception data, (2) listening context information, which includes characteristics of listening activities, situations, and environments, and (3) hearing aid configuration. To overcome the many disadvantages of retrospective self-report assessments, a computer-based Ecological Momentary Assessment (EMA) system was developed. This system immediately and repeatedly records listeners' perceptions and listening context information in natural environments using mobile phones. AudioACE will be developed for this project, which builds on the previous system, and adds capabilities to respond to changes in listening context and intelligently records information that is relevant to the specific context; for example, silence and noisy conversational environments demand different types of data and responses. AudioACE will integrate hearing aids and mobile phones to capture hearing aid configurations for each listening context. Additionally, AudioACE will incorporate intelligent sampling techniques that trigger the delivery of momentary assessments based on the properties of the listening context (e.g., signal-to-noise ratio level). We will compare the sensitivity and efficiency of AudioACE and the previous system as part of a field study that evaluates the outcomes of directional microphone hearing aids.

#### Principal investigators

- Wu, Yu-Hsiang Speech Pathology & Audiology University of Iowa
- Chipara, Octav University of Iowa

#### Additional investigators

 Kozma-Spytek, Linda • Art, Communication and Theatre - Technology Access Program (TAP)

# **Funding sources**

 U.S. Dept. of Education-National Institute on Disability & Rehabilitation Research (NIDRR)-Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA)-UW-Madison subgrant

#### Products

Hasan, S. S., Brummet, R., Chipara, O., Wu, Y. H., & Yang, T. (2015). In-situ measurement and prediction of hearing aid outcomes using mobile phones. *ICHI*, 525-534, Dallas, TX:IEEE.

Wu, Y. H., Stangl, E., Zhang, X., & Bentler, R. A. (2015). Construct validity of the ecological momentary assessment in audiology research. *Journal of the American Academy, 26*, 872-884.

# Project D3: Interactive learning environment for optimizing technology use

Status: Ongoing Start date: October 2014 End Date: September 2019

For a person with hearing loss, technological developments continue to expand the sensory management options available through hearing devices. The diversity and sophistication of these new hearing enhancement options brings about an ever-increasing need for guidance and support in becoming a knowledgeable and effective user of a hearing device. There is also a growing realization that more realistic conditions during training may lead to greater transfer of acquired skills. Similarly, the importance of realistic expectations in setting aural rehabilitation goals both on the part of the hearing device user and the clinician/audiologist is universally acknowledged. To develop such expectations and ensure that the aural rehabilitation goals are challenging yet attainable for the user, an individualized and interactive process is needed. It is likely to include not only measurements of the person's hearing loss, but also a more efficient (sensitive and specific) assessment of his/her listening, comprehension, and communication abilities as well as aural rehabilitation goals and expectations. The goal of this project is to develop a prototype training/counseling program to simulate in some relevant ways, a variety of reallife listening situations so that a person can experience both the benefits and limitations of their new hearing device, and develop more realistic auditory rehabilitation goals and expectations. To accomplish this, the training program will utilize an interactive learning environment based on self-directed

exploration of the relationship between (i) acoustic factors that affect hearing/sound processing, and (ii) technological solutions and communication strategies that are aimed at improving sound detection, speech comprehension, and the overall listening experience. The proposed training program is aimed at providing an alternative to the prevailing intensive learning paradigm and is believed to address several of its shortcomings. Realistic simulations of real-life listening situations will allow direct, structured experience that neither auditory training nor informational counseling provide.

#### Principal investigators

- Barac-Cikoja, Dragana Hearing, Speech, and Language Sciences
- Kozma-Spytek, Linda Art, Communication and Theatre - *Technology Access Program (TAP)*

#### Additional investigators

Cole, Kevin • NOVA Web Development

# Project R1: Enhanced aural rehabilitation for cochlear implant users via telerehab technology

Status: Ongoing Start date: October 2014 End Date: September 2019

The project aims to improve performance of cochlear implant users with enhanced aural rehabilitation (AR) strategies via telehealth technology, maximizing both access to auditory information and functional outcomes for individuals with hearing loss. Using a randomized controlled trial of AR via telerehab we will be able to demonstrate greater performance and usability of technology, and at the same time yield significantly greater accessibility to this effective intervention. Although there is great potential in AR services for CI users, there are both financial and non-financial barriers to AR service delivery. In surveys of U.S. adults, 21% reported nonfinancial barriers including accessibility (mobility, distance, and transportation problems), accommodation (too busy with work or caring for family), and availability. Those from rural areas report limited qualified providers, financial constraints, and reduced transportation access. As the population ages, which comprises a sizable portion of adults receiving CIs, mobility issues contribute a noteworthy barrier to AR access. Telehealth technologies are commonly regarded as promising options to improve access to health services. The previous RERC on hearing enhancement developed a state-of-the art

rehabilitation program conducted in clinical settings. Adapting this successful rehabilitation protocol for telerehab has the potential of greatly extending access to much needed rehabilitative services. It also lets consumers take advantage of the increasingly interconnected world in which they live.

# **Principal investigators**

• Bernstein, Claire • Hearing, Speech, and Language Sciences

#### Additional investigators

- Brewer, Diane Speech and Hearing Sciences George Washington University
- Parmanto, Bambang University of Pittsburgh

# Project R2: User-driven customization of cochlear implant programming

Status: Ongoing Start date: October 2014 End Date: September 2019

Essential to the outcomes with a cochlear implant (CI) is the manner in which the external portion of the device, the speech processor, is programmed. Research has shown that each CI user requires an individualized set of programming parameters to achieve optimal performance; no one set of parameters has been found optimal for all CI users. Programming the speech processor is typically done heuristically in clinics following a procedure recommended by the manufacturer. Given the complexity of the programming space and limited guidance on effective programming protocols, clinicians tend to rely on "default" programming parameters recommended by the manufacturers. These default parameters may be used without exploration of other options, eliminating individualized optimization to achieve maximum performance. Exacerbating this trend are factors such as limited manpower and clinic resources as well as low reimbursement for audiology services. Individual customization of programming parameters is not being accomplished. This project aims to develop a consumer-driven, userinterface system assisting the programming process. The most notable feature of the proposed system is that it will allow CI users to control the programming of the device themselves and enable them to personally explore a wider range of programming parameters. Consequently, individual customization can be achieved to maximize performance at the individual level with less time from the audiologists. This also opens the door

for user-driven customization of other types of hearing devices in the future, thereby giving consumers with hearing loss greater control over their use of technology.

#### Principal investigators

- Kwon, Bomjun Hearing, Speech, and Language Sciences
- Holden, Laura Washington University in St. Louis

#### Additional investigators

Park, Jae-Heung

# Project R3: Validation of hearing aid fitting for infants and toddlers

Status: Ongoing Start date: October 2015 End Date: September 2019

Universal newborn hearing screenings have resulted in earlier access to auditory information through hearing device fittings and intervention services for children with hearing loss. Despite such significant gains, these children continue to exhibit delayed spoken language compared to their hearing peers. Research with hearing infants has demonstrated that early exposure to speech is critical to spoken language development. Infants with hearing loss are likely to experience spoken language delays in the first year of life if hearing aids do not provide full access to spoken language. In this project, we aim to develop a set of tools that will help clinicians improve the assessment and intervention of hearing aid fitting in infants and toddlers. To achieve this aim, we are studying the relationship between physiological and behavioral measures of speech sound discrimination. Physiological measures provide objective information about how the brain is responding to different sounds. We record the brain activity of infants under 3 months old in an EEG, while they listen to speech sounds. An automated procedure detects and classifies the infants' speech discrimination responses from the EEG. Behavioral measures are then applied for the same speech sounds after the infants are older than 6 months. A procedure called visual reinforcement infant speech discrimination (VRISD) allows us to test whether a toddler will respond to a change in speech sounds. The combination of EEG and VRISD responses will allow us to develop a set of testing protocols that clinicians can use to cross-validate the hearing aid fitting.

## Principal investigators

- Yoshinaga-Itano, Christine University of Colorado-Boulder
- Gilley, Phillip University of Colorado-Boulder

# Additional investigators

• Kozma-Spytek, Linda • Art, Communication and Theatre - *Technology Access Program (TAP)* 

# **Funding sources**

 National Institute on Disability, Independent Living, and Rehabilitation Research

#### Products

Durkee, L., Fredrickson, T., Uhler K., Gilley, P.M., & Yoshinaga-Itano, C. (2016). *Sound discrimination in infants.* Presented at Early Hearing Detection & Intervention Annual Meeting. San Diego, CA.

Gilley, P. (2016). *AORtools – Analysis of auditory oddball responses in ERP/EEG experiments.* Retrieved from: https://www. mathworks.com/matlabcentral/fileexchange/56138-aortools

Gilley, P.M. (2016). *Neurophysiological and behavioral assessment of speech perception in infant and children.* Presented at Center for Innovation and Creativity annual CINC Tea Series. Denver, CO.

Medwetsky, L. & Yoshinaga-Itano, C. (2016). *Theoretical* model for speech contrast perception and its application to assessment and habilitation. Presented at The American Academy of Audiology, Phoenix, AZ.

Uhler, K., Gilley, P., Watson, K., & Yoshinaga-Itano, C. (2016). *Automated detection of auditory discrimination responses in the EEG of infants during sleep staging*. Presented at Association for Research in Otolaryngology Annual Midwinter Meeting, San Diego, CA.

Yoshinaga-itano, C. (2016). *Early detection (newborn hearing screening) on early intervention impact on language development.* Presented at US-Russia Peer-to-Peer Program, St. Petersburg, Russia. Yoshinaga-Itano, C. (2016). *The communication is the key.* Presentation given in Santiago, Chile.

Yoshinaga-Itano, C., Park, A., & Nunez, L. (2016). *Evolution of a revolution: Universal newborn hearing screening*. Presented at National Academies of Practice, Baltimore, MD.

Yoshinaga-Itano, C. (2016). *Speech takes a piggyback on sign language*. Presented at Universidad Salamanca, X International Workshop on Advances in Audiology, Salamanca, Spain.

# Standards work and technical assistance

Status: Ongoing Start date: October 2016 End Date: September 2019

Standards work and technical assistance from the RERC is being provided to stakeholders (e.g., consumers, industry, standards bodies) across a range of issues that include, but are not limited to: (1) Compatibility and Connectivity between hearing devices and other technologies: ANSI ASC C63 on Electromagnetic Compatibility S8 WG19 - compatibility between wireless communication devices and hearing aids, standards activity within the International Telecommunications Union and the Bluetooth Special Interest Groups on hearing device connectivity, and the Wireless HAC Refresh. (2) Policy and Regulatory Intersection between emerging mainstream wearable technologies that can provide hearing assistance and more traditional hearing assistive technology and devices: Consumer Technology Association activities on personal sound amplification products. (3) Technology Design Considerations for use in cases specific to consumers who are hard of hearing or deaf: Results from the RERC's focus groups in Project D1 will inform this issue by helping to develop a better understanding of the user experience from the perspective of hard of hearing and deaf consumers, and then helping to effectively communicate that to industry for use in products beginning at the design and development phase. (4) Other technical standards activity, including real-time text policy and standardization: ATIS IMSESINet real-time text standardization, FCC rulemaking on real-time text.

# Principal investigators

- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)
- Vogler, Christian Technology Access Program (TAP) -Technology Access Program (TAP)

# **Funding sources**

• National Institute on Disability, Independent Living, and Rehabilitation Research

# Products

Kozma-Spytek, L. (2016, September 23). *Voice telecommunications access survey results*. Retrieved from http://www. deafhhtech.org/rerc/2016/08/22/voice-telecommunicationsaccess-survey/.

Vogler, C. (2015, October 9). *It is our technology: How deaf and hard of hearing communities can take control.* Presented at 6th Annual Coalition for Global Hearing Health, Washington, DC.

Vogler, C. (2016, June). *Technology for visual and auditory access: Trends and the future*. Presented at Family Centered Early Intervention Conference, Bad Ischl, Austria.

Vogler, C. (2016, September 23). *A flowchart: Navigating the labyrinth of the FCC's IP captioning rules.* Retrieved from http://www.deafhhtech.org/rerc/2016/06/29/a-flowchart-navigating-the-labyrinth-of-the-fccs-ip-captioning-rules/

Vogler, C., & Hellström, G. (2016). Comments on the RUE Specification and FNPRM. Retrieved from https://www.fcc. gov/ecfs/filing/10915911425811

Vogler, C., Vanderheiden, G., & Hellström, G. (2016). Comments on the Real-time text NPRM. Retrieved from https:// www.fcc.gov/ecfs/filing/1071281180135

Vogler, C., Vanderheiden, G., & Hellström, G. (2016). Reply to comments on the Real-time text NPRM. Retrieved from https://www.fcc.gov/ecfs/filing/10726150982469

# Technology Access Program (TAP)

The Technology Access Program (TAP) is a research unit within the Department of Art, Communication and Theatre. TAP's primary mission is to advance accessibility and usability of communication technology for people with all types of disabilities. The current program is designed both to lay the foundation for access in next generation technologies and to create the bridge technologies needed to allow users to migrate to new technologies without losing access to emergency services or the ability to communicate with colleagues and family who are still on older telecommunications networks. TAP currently maintains the Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA). The research and development program of this RERC-TA covers four areas:

- 1. To ensure that people with disabilities have effective communication for an emergency (and every day) when using new and emerging telecommunication technologies.
- 2. To ensure interoperable real-time text for people who depend on text for communication (Deaf, hard of hearing, physical disability, and speech disability).
- 3. To ensure the availability of accessible telecollaboration solutions for employment and participation, and
- To increase the impact of research through better guidelines, standards, tools, sample codes, and other resources that enable more companies to implement accessibility in their telecommunication technologies.

In addition, TAP currently conducts research into online sign language technologies, funded by the National Science Foundation, and research into closed captions online, funded by TAP's operational budget.

#### Principal investigator

• Vogler, Christian • Art, Communication and Theatre -Technology Access Program (TAP)

#### Additional investigators

- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)
- Tucker, Paula Art, Communication and Theatre -Technology Access Program (TAP)
- Williams, Norman Art, Communication and Theatre -Technology Access Program (TAP)

## **Funding sources**

 U.S. Dept. of Education — National Institute on Disability & Rehabilitation Research (NIDRR) (Subcontract from Trace Center, University of Wisconsin, Madison) Grant Number: H133E090001

# **Research Projects**

# Accessible communication for everyone (video relay services software)

Status: Completed Start date: May 2015 End Date: July 2016

This project consists of developing a new breed of video relay services (VRS) software to address persistent interoperability problems, as well as the closed nature of the VRS ecosystem. This software was originally suggested by the Gallaudet University Technology Access Program, and adopted by the FCC in a 2013 order, and funded in 2015. This software will be open-source and serve as a baseline for enforcing interoperability among VRS videophones and software. It also is expected to jump-start independent research and development. The targeted systems are Windows, Mac, iOS, and Android.

### Principal investigators

 Vogler, Christian • Technology Access Program (TAP) -Technology Access Program (TAP)

#### Additional investigators

 Tucker, Paula • Art, Communication and Theatre -Technology Access Program (TAP)

# Home alerting devices for people who are deaf or hard of hearing

Status: Completed Start date: February 2016 End Date: December 2016

People with hearing loss currently do not have any satisfactory options for receiving audio alerts in their home in visual or tactile form, including phone calls, ringing doorbells, appliances, and fire alarms. This puts them at a significant disadvantage compared to their hearing peers, and also poses safety hazards. We propose developing a prototype next-generation housewide visual and vibration alerting system that leverages the increasing interconnectedness of consumer devices and appliances via the Internet of Things. For maximum sustainability, the system will feature off-the-shelf components, open APIs and extensive documentation, and be designed for easy extension by third parties.

#### Principal investigators

- Williams, Norman Technology Access Program (TAP) -Technology Access Program (TAP)
- Vogler, Christian Technology Access Program (TAP) -Technology Access Program (TAP)

#### Instructional videos on telecommunications access

Status: Completed Start date: November 2014 End Date: September 2016

A series of accessible instructional videos are being developed that provide in-depth information that consumers with hearing loss need in order to learn about the effective use of their hearing devices with telecommunications technologies. Each video will be informal, brief and cover a specific topic of concern frequently expressed by consumers. The information and instruction will provide general principles that can be applied across a single product category regardless of manufacturer. Each video production has undergone quality assurance measures and will be disseminated to the public via the Internet.

#### Principal investigators

- Kozma-Spytek, Linda Art, Communication and Theatre Technology Access Program (TAP)
- Vogler, Christian Technology Access Program (TAP) -Technology Access Program (TAP)

#### Additional investigators

- Garvert, Mary (Student) Hearing, Speech, and Language Sciences
- Julstrom, Stephen (Consultant)

# Receptive listening — narrowband vs. wideband with network impairments for the iPhone

Start date: October 2014 End Date: October 2015

In collaboration with AT&T, this research project addresses the needs and issues of hard of hearing people with regard to accessible telecommunications. This project involves direct performance measures and subjective ratings of audio signal characteristics to gather information about technical requirements that hard of hearing individuals have for effective speech understanding in newer telecommunication environments. Specific goals include examining the impact of audio signal alteration due to coding techniques and network impairments.

# Principal investigators

- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)
- Vogler, Christian Technology Access Program (TAP) -Technology Access Program (TAP)

#### Additional investigators

- Tucker, Paula Art, Communication and Theatre Technology Access Program (TAP)
- Williams, Norman Art, Communication and Theatre -Technology Access Program (TAP)

# Standards work and technical assistance

See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

## Voice quality under adverse network conditions

Status: Completed Start date: February 2015 End Date: January 2016

With the transition from the PSTN to IP-based and wireless networks, voice communications now increasingly rely on speech coding techniques and transport mechanisms that differ significantly from the legacy Public Switched Telephone Network (PSTN). A variety of degradations to the audio signal can result from coding techniques (e.g., lossy compression) and transport mechanisms (e.g., packet loss) used in such telecommunications networks. Likewise, potential audio enhancements (e.g., wideband audio) may become more widely available. Both signal degradations and signal enhancements generally only lead to changes in perceptual quality for normal hearing listeners, while the impact on people with hearing loss may be much more critical to communication. In past work, we found that wideband coding strategies that still use compression techniques, but include almost double the frequency bandwidth as the legacy network, can significantly improve speech quality and understanding and in turn reduce expenditures of mental effort for individuals with hearing loss who have access to the extended frequency region. Additionally, consumers in a telecommunications access survey by TAP currently expressed sound quality as one of the two greatest to satisfactory telephone communication. This project examines the impact of the following independent variables to gain a better understanding of the factors in play. 1) network impairments and 2) environmental noise for 3) codecs of varying audio bandwidth but similar data rates.

## **Principal investigators**

• Vogler, Christian • Technology Access Program (TAP) -Technology Access Program (TAP)

#### Additional investigators

- Garrison, Laurie AT&T
- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)
- Williams, Norman Technology Access Program (TAP) -Technology Access Program (TAP)

# Science of Learning Center on Visual Language & Visual Learning (VL2)

Hosted by Gallaudet University, the Science of Learning Center (SLC) on Visual Language and Visual Learning (VL2) is one of six SLCs funded by the National Science Foundation (NSF). These Science of Learning Centers were established by NSF to support interdisciplinary and cross-disciplinary research that presents new lines of thinking and inquiry into the science of learning.

A driving question in contemporary neuroscience is how the human brain and human learning are impacted by different sensory experience in early life. Much scientific focus has examined the role of sound and auditory processes in building abstract linguistic, cognitive, and social representations, leaving one of our species' most critical senses, vision, underspecified regarding its contribution to human learning. Within VL2, we focus on how early experience with a visual language changes the brain's visual attention and higher cognitive systems, language learning in monolingual and bilingual contexts, and reading and literacy-indeed changes that are distinct and separable from sensory differences (Deaf or hearing). How vision impacts learning in these domains constitutes a vital "missing piece" of knowledge in the promotion of productive, successful lives for all humans. A strong revolution in purpose derives from the strength and depth of the involvement of and collaboration with Deaf individuals in this research endeav-

or—individuals who rely significantly on vision, acquire naturally visual signed languages, and learn how to read and write fluently without prior mastery of the spoken form of written languages. The formal properties of visual languages, the enabling learning contexts, and the multiple pathways used to derive meaning from the printed word are leading to a better understanding of how visual language and visual learning are essential for enhancing educational, social, and vocational outcomes for all humans, Deaf and hearing individuals alike, consequently transforming the science of learning. Moreover, the identification of specific processing advantages in the young "visual learner" have already provided a significant conceptual challenge to prevailing societal views by offering an alternative to prior "deficit models." They further provide new approaches to helping all young learners capitalize on visual processes.

While all the work of VL2 is collaborative and interdisciplinary, the activities of the Center are focused around five Strategic Focus Areas (SFAs):

- SFA1: Visual and cognitive plasticity
- SFA2: Language development and bilingualism
- SFA3: Reading and literacy in visual learning
- SFA4: Translation of research to educational practice
- SFA5: Integration of research and education

Descriptions of each SFA are given below along with the list of current projects and the 2012 achievements produced by its affiliated researchers (both from prior and current projects). Then there is a description of each current project followed by a list of other scholarly achievements of VL2

# **Principal investigators**

- Allen, Thomas Gallaudet University
- Petitto, Laura Ann Gallaudet University
- Corina, David University of California, Davis
- Emmorey, Karen San Diego State University
- Hauser, Peter National Technical Institute for the Deaf (NTID) • Rochester Institute of Technology (RIT)
- Morford, Jill University of New Mexico
- Singleton, Jenny Georgia Institute of Technology

# **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

# **Research Projects**

### ASL assessment toolkit

Status: Ongoing Start date: October 2011

Since its inception, VL2 has had an ongoing effort to develop and validate measures of ASL skill, especially those that are suitable for tracking and monitoring the development of ASL skill among young children. The researchers at VL2 have also been working to adapt and modify a broad array of neurocognitive measures with ASL translations and methods suitable for both children and adults. Ultimately, the goal is to build a "one-stop shop" ASL assessment portal that will provide access to the tools themselves and an online means for test administration.

#### Principal investigators

• Allen, Thomas • Education

# Additional investigators

- Baker, Sharon University of Tulsa
- Clark, Diane Lamar University
- Fernandez, Ralph Science of Learning Center on Visual Language & Visual Learning (VL2)
- McQuarrie, Lynn University of Alberta
- Paludneviciene, Raylene Psychology
- Rodriguez, Yessica (Student) Science of Learning Center on Visual Language & Visual Learning (VL2)
- Simms, Laurene E. Education

#### **Funding sources**

• National Science Foundation (NSF)

#### Continuing medical education modules

# Status: Ongoing Start date: October 2012

Parents of babies newly diagnosed as being deaf are faced with many critical and immediate challenges. They rely, as "first responders," on professionals in the medical profession: pediatricians, otolaryngologists, audiologists, etc. It is clear that decisions that parents make very early in a child's life can have a profound impact on the trajectory of the child's later success in society. It is therefore urgently important that members of the medical profession who will communicate with these parents understand deaf individuals as visual beings, and are aware of the communication and language options that are open to the child. As well, they need to know the underlying neurological and cognitive underpinnings of development for children who are deaf. VL2 is developing continuing education modules designed for this group of medical professionals to better prepare them to communicate important and relevant information to patients, clients, and their caregivers.

### Principal investigators

• Singleton, Jenny • Georgia Institute of Technology

# Additional investigators

• Allen, Thomas • Education

# **Funding sources**

• National Science Foundation (NSF)

# The development of perceptual span in beginning and developing deaf readers

Status: Completed Start date: September 2013 End Date: October 2015

There is an intricate relationship between reading skill and American Sign Language skill. The earlier a deaf child has been exposed to sign language, and the more skilled he/she is with sign language, the better his/her chances are of becoming a skilled reader. Research using tasks tapping low-level visual attention processing suggests that deaf individuals have enhanced peripheral attention relative to hearing individuals. This enhanced visual attention distribution is believed to explain the wider perceptual span seen during silent reading in adult skilled deaf readers. Deaf readers' age of ASL acquisition was also highly related with reading level. In light of the research with deaf adults and older deaf children linking lowlevel visual attention adaptations, reading skill, perceptual span size, reading skill, and ASL proficiency, the project expand the investigation to examine the relationships among these variables in severely to profoundly deaf children. Participants were ASL users ages 7-9 years and 13-15 years. They were be compared to age-matched hearing readers. Eyetracking data was collected using Eyelink 2K during a reading task. The main measure was the number of words read per minute to determine the size of the perceptual span. Other factors analyzed included ASL proficiency, age, reading level, and hearing status (hearing vs. deaf).

# **Principal investigators**

• Rayner, Keith • University of California, San Diego

#### Additional investigators

- Allen, Thomas Education
- Bélanger, Natalie University of California, San Diego
- Morford, Jill University of New Mexico

# **Funding sources**

• National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

## Ethical practices website

Status: Ongoing Start date: September 2008

Through the VL2 Center, deaf and hearing scientists from many research institutions are engaged in collaborative studies investigating questions about how the brain adapts to different sensory experiences and early exposure to a visual language. Many of the research projects funded by the VL2 Center involve research participants who are deaf and who use American Sign Language. With the Center's collective experience we offer a set of guidelines for responsible and ethical conduct for researchers whose projects involve individuals who are deaf. VL2 is currently designing a website on which these principles will be presented, discussed, and sample ASL informed consent videos will be available for download and use by researchers in the future.

# **Principal investigators**

- Singleton, Jenny Georgia Institute of Technology
- Herzig, Melissa Science of Learning Center on Visual Language & Visual Learning (VL2)

# Additional investigators

Allen, Thomas • Education

## **Funding sources**

National Science Foundation (NSF)

# Learning to read with visual languages: Investigation of the impact of native language ASL visual sign phonology training on emergent and developing literacy in English (new language)

Status: Completed Start date: September 2013 End Date: December 2015

This project involves conducting a multi-site, school-based training study designed to examine the effects of intensive small group visual sign phonological awareness training both on ASL language and on English literacy outcomes over time (children grades K-4, approximately ages 5-9 years). It examines the individual characteristics and contextual conditions that impact reading and signed language vocabulary growth in K-4 students, with the goal of identifying powerful predictors of reading success in young visual learners. In turn, the visual sign phonology training will lay bare, and provide evaluation of, the components of training necessary to improve English reading and literacy trajectories in young deaf children. It further addresses the need for more longitudinal training studies that will advance our knowledge of optimal learning strategies to support all young deaf children in reading success, inclusive of deaf children with and without cochlear implants.

#### Principal investigators

- McQuarrie, Lynn University of Alberta
- Enns, Charlotte University of Manitoba

### Additional investigators

• Allen, Thomas • Education

#### **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

#### Motion capture & nursery rhymes

Status: Ongoing Start date: May 2014

The working project is to investigate the motion capture technology and develop a working "proof of concept" ASL nursery rhyme produced in mocap. It will also strengthen collaborative work between Gallaudet University's Visual Language and Visual Learning's Motion Light Lab and Mocaplab, a leading motion capture Motion capture technology that allows flexibility in developing stimuli for research projects looking to identify the rhythmic temporal patterns in young infants when they are engaged and learning. We are interested in finding the code and further understanding the structure in ASL rhymes and improving our storytelling patterns for young children.

#### Principal investigators

• Malzkuhn, Melissa • Science of Learning Center on Visual Language & Visual Learning (VL2)

#### Additional investigators

Bahan, Benjamin • ASL and Deaf Studies

#### Funding sources

• National Science Foundation (NSF)

# Ongoing analysis and follow-up study of the Early Education Longitudinal Study Participants

Status: Ongoing Start date: July 2016

The VL2 Early Education Longitudinal Study (EELS), conducted between the years 2010 and 2012 yielded a database rich in information about the early literacy development of deaf pre-school aged children as they entered school. To date, the EELS database has been utilized to study the important relationship between early sign skills and later skills in emergent literacy. Going forward, we intend to continue our analysis of the rich EELS dataset. We also intend to conduct a follow-up study of EELS participants. It is now almost four years since the most recent data collection. The EELS participants are currently between the ages of 10 and 13. They are at an age

where we can study their reading and math skills. Importantly, given that we already have collected a tremendous amount of data on these same participants, we will be able to answer very critical questions the early antecedents of achievement in the later elementary school years.

# **Principal investigators**

- Allen, Thomas Science of Learning Center on Visual Language & Visual Learning (VL2)
- Eyer, Sherry Psychology
- Morere, Donna Psychology

# Additional investigators

- Fedlan, Denise (Student) Psychology
- Rodriguez, Yessica (Student) Psychology

# **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

# Parents information package

# Status: Ongoing

The parent information package, "Growing Together," is a collection of appealing and accessible resources for hearing parents of deaf children. It is intended to share the science of learning or research-based information related to ASL/English bilingualism. The primary audience this product is intended for is hearing parents of deaf or hard of hearing children. Other groups may use this package to share with their customers, clients, or stakeholders, such as educators, practitioners, and medical professionals. The next step is to study the usability (and accessibility) of this package. Focus groups will be set up and input solicited about the package, as well as demographic information from people who are getting those packages, and surveying them about the content of the package. The first focus is on usability characteristics; the next focus of the study will be on the efficacy of this package.

# **Principal investigators**

- Malzkuhn, Melissa Science of Learning Center on Visual Language & Visual Learning (VL2)
- Herzig, Melissa Science of Learning Center on Visual Language & Visual Learning (VL2)

#### **Funding sources**

- National Science Foundation (NSF)
- National Science Foundation (NSF) Directorate for Social, Behavioral & Economic Sciences (SBE)

**Seeing the Temporal Beats of Human Language** See in Brain and Language Laboratory (BL2)

### SFA1: Visual and cognitive plasticity

## Status: Ongoing

This research intends to determine the effects of variation in sensory and linguistic experience on the development of visual and higher cognitive systems. Using multiple methods and grains of analyses, spanning VL2's psychophysical and neurophysiological studies, VL2 researchers have made significant contributions to Theme 1, regarding our understanding of the impact that early visual sensory and visual language experiences can have on neural systems and higher cognitive processes following differences in early sensory experience. In years 8-9, and beyond, we use our foundational findings as a springboard to ask next-step questions, which is how do such visual affordances impact higher cognitive processes underlying healthy language processing and reading-indeed, higher cognitive processes that are central to achieving lifelong academic and societal success. SFA1 studies 1-3 share a scientific goal of studying visual perception of language input, including the visual cues that make possible the young infant's capacity to differentiate visual language from gesture (where both reside in the same modality), and the behavioral and/or neural processes underlying ASL vocabulary, fingerspelling, orthographic decoding, and reading. All three studies in SFA1 are united by their advancement of the Center's scientific themes.

#### Principal investigators

- Corina, David University of California, Davis
- Petitto, Laura-Ann Psychology

#### Additional investigators

- Belanger, Natalie University of California, San Diego
- Bosworth, Rain University of California, San Diego
- **Hwang, So-One** University of California, San Diego Student
- Jasinska, Kaja Haskins Laboratories Yale University

- Kartheiser, Geo (Student) Brain and Language Laboratory (BL2)
- Langdon, Clifton
- Malzkuhn, Melissa Science of Learning Center on Visual Language & Visual Learning (VL2)
- Morford, Jill University of New Mexico
- Rayner, Keith University of California, San Diego
- Stone, Adam Educational Neuroscience-PEN

### SFA2: Language development and bilingualism

#### Status: Ongoing

The goal of this research is to understand the principles and organization of linguistic competencies developed through the visual modality. Researchers in the language development and bilingualism strategic focus area at VL2 have discovered new support for the important role that timing, plays in early language acquisition (as in the Critical/Sensitive Period Hypothesis), especially early bilingual language acquisition. Some of the earliest studies completed in the Center investigated whether signs are activated during print word recognition in "print bilinguals." These studies of deaf adults involved the remarkable case of a new kind of bilingual, print bilinguals, whereupon deaf individuals had their first language exposure to ASL and gained access to their other language (English) through the printed word. This foundational work led to the surprising implication that visual sign phonology may not only play a role in sign language processing but also in recognition of English print when reading words. However, the role of visual sign phonology in young deaf children remains open as we do not yet know whether activation of sign parameters during reading emerges only after reading proficiency is achieved, or whether sign phonology is instrumental in the development of reading skills. This will be the focus of SFA 2 in Years 8-9, with these questions being specifically studied.

#### Principal investigators

• Wilkinson, Erin • University of Manitoba

# Additional investigators

- Allen, Thomas Education
- Emmorey, Karen San Diego State University

- Hauser, Peter National Technical Institute for the Deaf
  Rochester Institute of Technology
- Morford, Jill University of New Mexico
- Piñar, Pilar World Languages and Cultures
- Quinto-Pozos, David Linguistics University of Texas, Austin

## **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

## SFA3: Reading and literacy in visual learning

# Status: Ongoing

The purpose of this project is to determine the contribution of variation in sensory and linguistic experience on the development and mastery of reading and literacy. From our brain and behavioral studies of reading and literacy in visual learners comes a new understanding of how experiential change can impact the brain's structures and related functions underlying children's reading and literacy success. Reading is a complex, multifaceted process and Center studies address reading from multiple levels. SFA 3 studies have a strong focus on the relative weight of these multiple factors including the signphonological, morphological, syntactic, semantic, and higher cognitive developmental factors that contribute to successful reading, as well as children's comprehension of reading. Moreover, SFA 1 and 2 focused on experimental studies in the lab and here in SFA 3 we focus on experimental studies in the classroom. Prior research in studies of how children learn to read have focused greatly on auditory sources of information, such as sound-based phonological awareness in the young reader, and less on understanding the role of visual input. VL2 studies have revealed that spoken language phonological processing skills do not account for much of the variance in reading achievement in deaf students. Instead the quality of first-language knowledge plays a more important role in predicting reading outcomes. However, exactly what aspects of the language are most important in predicting later reading remain undiscovered. In Years 8-9, this will be addressed in our SFA 3's studies.

#### Principal investigators

• McQuarrie, Lynn • University of Alberta

#### Additional investigators

- Allen, Thomas Education
- Enns, Charlotte University of Manitoba
- Goodman, Evan (Student) Psychology
- Letteri, Amy (Student) Psychology
- Morere, Donna Psychology
- Rodriguez, Yessica (Student) Science of Learning Center on Visual Language & Visual Learning (VL2)
- Tay, Phoebe (Student) Linguistics
- Traxler, Matthew University of California, Davis

# **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

#### SFA4: Translation of research to educational practice

# Status: Ongoing

SFA 4's translation in education (e.g., building visual phonological skills as a gateway to reading), translational products (e.g., development of bilingual reading apps), and vast methods of knowledge dissemination (e.g., multimedia dissemination of the Parent Information Package) unite synergistically discoveries about (i) the impact of early visual language experience on young visual learners' enhanced joint visual attention and eye gaze, which, in turn, can facilitate the acquisition of vocabulary, language, and literacy, (ii) the vital role of early language exposure, especially early bilingual language exposure, on children's development of enhanced linguistic and cognitive skills relative to monolingual peers, and (iii) the core role of "visual phonology" in successful early reading in the young deaf visual learner.

VL2 brings together individuals from diverse backgrounds, joined in their mutual commitment (a) to enhance our understanding of visual learning in developing children, (b) to understand the human visual learning capabilities over the life span (both in brain and in behavior), (c) to ground educational change for all students in the highly principled translation of research that employs both behavioral as well as a multitude of modern methodologies (including functional brain imaging), and (d) to advance a common set of scientific tools/resources, interventions, training strategies, and research practices that can be made available to a broad set of stakeholders that includes scientists, educators, policy makers, students at all educational levels, and society at large.

#### Principal investigators

 Herzig, Melissa • Science of Learning Center on Visual Language & Visual Learning (VL2)

## Additional investigators

- Allen, Thomas Education
- Malzkuhn, Melissa Science of Learning Center on Visual Language & Visual Learning (VL2)
- Wilkins, Erica (Student) Science of Learning Center on Visual Language & Visual Learning (VL2)

#### **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

# SFA5: Integration of research and education

# Status: Ongoing

In terms of VL2's future sustainability with intent to expand our programs of research, we have established as an integral goal: to train a new generation of scientists, skilled in interdisciplinary methods for advancing the Science of Learning of Visual Language and Visual Learning leading to a sustainable community of scholars, both Deaf and hearing, pursuing transformative research contributing to the science of learning. The highlight of FY2013 was the development and launch of the new interdisciplinary Ph.D program in Educational Neuroscience which provides core training in cognitive neuroscience with an overarching emphasis on the application of scientific discoveries to the improvement of education. The program offers advanced coursework in cognitive neuroscience, neuroimaging techniques, neuroethics, and statistics. VL2 trains scientists at the undergraduate, graduate, and post-doctoral levels. VL2 has created a Science Mentorship Program to address the crucial issue of the retention of young students in science, including by linking undergraduates to young faculty. VL2 has established an effective student network of both Deaf and hearing students at all levels attending universities throughout our network. These students are pursuing advanced degrees in a variety of disciplines ranging from neuroscience to educational administration. We develop

training opportunities, extensive inter-lab student internships and rich opportunities for research, leadership, and conference participation.

# **Principal investigators**

- Allen, Thomas Education
- Hauser, Peter National Technical Institute for the Deaf
  Rochester Institute of Technology

#### **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

# Speed of visual sign language processing and visual sign phonological awareness processing in young Deaf typically and atypically-developing bilingual-bimodal readers

Status: Completed Start date: September 2013 End Date: October 2015

The present study investigates whether rate of sign language processing influences the comprehension abilities of typically and atypically developing Deaf children. Numerous studies have documented evidence that rate of processing is a primary factor in developmental language disorders of hearing children who acquire spoken language. No study has investigated rate of processing in deaf children who are suspected of having a signed language disorder. If signed and spoken languages are processed similarly by atypical learners, deaf children's comprehension is predicted to be affected by rapid rates of presentation. However, studies of signed language have suggested that there are some differences between signed and some spoken languages with respect to the rate at which units of meaning are produced in the two modalities. Alternatively, the slower articulation of signs might support comprehension for atypical learners at fast rates of signing. ASL and English language/ reading abilities will be investigated in 10-20 atypically developing deaf children ages 8-16 and 30 typically developing deaf children controls ages 5-16 (matched for age and reading/ language age). Language processing measures will be used to determine general ASL language abilities, including measures of ASL visual sign phonological abilities. To investigate rate as a factor, short sentences and single words in ASL and English will be presented at normal and fast speeds (English print is shown using running text via captions). Comprehension of short sentences and identification of single words will be assessed.

#### Principal investigators

 Quinto-Pozos, David • Linguistics • University of Texas, Austin

#### Additional investigators

Allen, Thomas • Education

#### **Funding sources**

 National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

#### VL2 national research volunteer program

### Status: Ongoing

One of the difficult challenges faced by researchers working with culturally Deaf participants is the recruitment of these participants. To help facilitate this, VL2 is designing a webbased volunteer program whereby Deaf adults can volunteer over the web to become participants in research projects, and parents of deaf children can volunteer on behalf of their children to become research participants. The VL2 Research Volunteer Program includes a brief online background questionnaire to help researchers to define and select subgroups of a broader d/Deaf population with specific characteristics for inclusion in proposed studies. Address information submitted to the database may also be used to disseminate valuable information about VL2 research and upcoming events of interest to a broad national constituency of deaf individuals and their families.

#### Principal investigators

Allen, Thomas • Education

#### Additional investigators

- Fernandez, Ralph Science of Learning Center on Visual Language & Visual Learning (VL2)
- Letteri, Amy (Student) Psychology

#### **Funding sources**

National Science Foundation (NSF)

# VL2 shared data resource

#### Status: Ongoing

NSF requires that data collected with NSF funding be made available for data sharing for the benefit of future researchers. VL2 is developing an online resource for VL2 data that has been collected throughout its history. In this resource, data sets developed with Center funding will be described, their codebooks published, and strategies for access to Center data will be presented. This resource will help ensure ongoing statistical analysis and publication from archived data covering the range of research topics undertaken by the Center.

#### Principal investigators

• Allen, Thomas • Education

#### Additional investigators

- Fernandez, Ralph Science of Learning Center on Visual Language & Visual Learning (VL2)
- Letteri, Amy (Student) Psychology

#### **Funding sources**

• National Science Foundation (NSF)

# **Scholarly and Creative Activity**

Allen, T. E. & Morere, D. A. (2016). *Early Access to Language and the Young Deaf Child's Acquisition of Reading*. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.

Allen, T., Morere, D., Clark, M. D., & Murphy, L. (2015). *The VL2 Early Education Longitudinal Study: Rationale, methods and participant characteristics.* Retrieved from http://vl2.gallaudet.edu/files/2914/1045/8608/EELS\_Methods\_Paper.pdf

Allen, T.E. (2016). *EL2 Presentation.* Presented at the VL2 Knowledge Festival, Gallaudet University, Washington, DC.

Allen, T.E. (2016). *The Early Education and Literacy Lab: Individual dfferences studies and tool development.* Gallaudet University's Presidential Inauguration. Washington, DC.

Andrews, J., Byrne, A. & Clark, M. D. (2015). Deaf scholars on reading: A historical review of 40 years of dissertation research (1973-2013): Implications for research and practice. *American Annals of the Deaf, 159*(5), 393-418. Andriola, D., & White, B.E. (2016, May). *Early language acquisition*. Presentation conducted from Maryland School for the Deaf - Family Support and Research Center, Columbia, MD.

Anible, B., & Morford, J.P. (2016). Look both ways before crossing the street: Perspectives on the intersection of bimodality and bilingualism. *Bilingualism: Language and Cognition*, *19*(2), 243-245. doi:10.1017/S1366728915000358.

Anible, B., Twitchell, P., Waters, G.S., Dussias, P.E., Piñar, P. & Morford, J.P. (2015). Sensitivity to verb bias in ASL-English bilinguals. *Journal of Deaf Studies and Deaf Education*, 20(3), 215-228, doi:10.1093/deafed/env007.

Brooks, R., Singleton, J.L., & Meltzoff, A. (May, 2016). *Gaze following and gaze checking: Early advances in social cognition for deaf sign-exposed infants.* Paper presented at the International Congress of Infant Studies. New Orleans, LA.

Clark, D.M., Hauser, P.C., Miller, P., Kargin, T., Rathmann, C., Guldenoglu, B., Kubus, O., & Israel, E. (2016). The importance of early sign language acquisition for Deaf readers. *Reading and Writing Quarterly, 32*, 127-151. doi: 10.1080/10573569.2013.878123

Cochran, C. (2016). *Are we oriented to orientation: Evidence from Articulatory Compensation.* Poster presented at TISLR12, Melbourne, Australia.

Cochran, C. (2016). *Toward a surface area hypothesis.* Poster presented at TISLR12, Melbourne, Australia.

Contreras, J. & Hauser, P.C. (2016, March). *Reading English and watching sign language provides a bilingual advantage.* Presented at RIT Graduate Research & Creativity Symposium, Rochester, New York.

Contreras, J., Haug, T., Kurz, K., & Hauser, P. C. (2016, April). *Sign language researchers: Moving into the future*. Presented at New England Sign Language Festival, Boston, Massachusetts.

Contreras, J., Kimbley, S., & Hauser, P. C. (2016, April) Presented at the NTID Student Research Fair, Rochester, New York.

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Dye, M.W.G., Seymour, J.L., and Hauser, P.C. (2016). Response bias reveals enhanced attention to inferior visual field in signers of American Sign Language. *Experimental Brain Research, 234*(4), 1067-1076.

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Haug, T., Kurz, K., Hauser, P.C. & Contreras, J. (2016, January). *Sign language researchers: Who we are and what we want.* Presented at Theoretical Issues in Sign Language Research (TISLR), Melbourne, Australia.

Hauser, P. C. & Contreras, J. (2015, October). *Impact of language experience on executive function: English & American Sign Language.* Presented at Undergraduate Research and Visitation Day (URVD), Rochester, New York.

Hauser, P. C. & Contreras, J. (2016, June). *Effect of early sign language experience on executive function development*. Presented at Assessment of Multimodal Multilingual Outcomes in Deaf and Hard-of Hearing Children, Stockholm, Sweden.

Hauser, P. C. & Hoffmeister, R. (2015, September). *Key methodological issues in sign language test development.* Keynote presentation at the Sign Language Assessment Workshop, HfH Institute for Special Education, Zurich, Switzerland.

Hauser, P. C. (2016, February). *Cognitive sequelae of atypical sign language development*. Presented at Annual meeting of the American Association for the Advancement of Science, Washington, DC.

Hauser, P. C., & Contreras, J. (2015, September). *Sentence Reproduction Tests in Signed Languages*. Conference on Sign Language Assessment, HfH Institute for Special Education, Zurich, Switzerland.

Hauser, P. C., Paludnevicience, R., Ridall, W., Kurz, K., Emmorey, K., & Contrereas, J. (2016). American Sign Language Comprehension Test. *Journal of Deaf Studies and Deaf Education.* doi:10.1093/deafed/env051 Hauser, P. C., Quinto-Pozos, D., & Singleton, J. L. (2015). Studying sign language disorders: Considering Neuropsychological Data. In E. Orfanidou, B. Woll, & G. Morgan (Eds.), *Research methods in Sign Language Studies: A Practical Guide*. (pp. 336-351). Hoboken, NJ: Wiley-Blackwell.

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Herzig, M. & Malzkuhn, M. (2016, January) All Children Can Read: The Neuroscience of Language Learning and Reading & The Research-based Resources. Presented at the Sorenson Communications Conference, Salt Lake City, UT.

Herzig, M. (2015, October). ASL & English Lesson from VL2 Storybook App: The Little Airplane That Could. Presented at the Literacy Camp, Deaf Community Service, San Diego, CA.

Herzig, M. (2016) Early Intervention: Brain Development and Early Visual Language & Research to Resources. Presented at the Michigan Early Hearing Detection Intervention Statewide Conference, East Lansing MI.

Herzig, M. (2016, August) *The Brain Science of Language Learning and Reading: Applying the Findings to Practice.* Presented at the Low Incidence Conference, State College, PA.

Herzig, M. (2016, January) *What Do We Know About Language Learning and Reading & How Can We Support Our Students?* Presented at the Iowa School for the Deaf, Council Bluffs, IA.

Herzig, M. (2016, June) *Family's Role in ASL Acquistiion*. Presented at the American Society for Deaf Children-ASL Learning Opportunities, Columbia, MD.

Herzig, M. P (2016, August 2016). *SignWise for Kids*. Retrieved from http://www.signwise4kids.com/

Herzig, M., & Abrams, S. (2015, November). *Opening A Treasure Chest—Together!* Presented at the Arizona Association of the Deaf 2015 Biennial Conference, Phoenix, AZ.

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Kubicek, E., White, B. E., & Williams, J. (2015, December). Speech, language, & hearing sciences. Presented at the National Science Foundation and Gallaudet University's Science of Learning Center on Visual Language and Visual Learning (VL2) Student Retreat, Washington, DC.

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Malzkuhn, M. (2016). The Role of the NAD during the American Eugenics Movement. *NADmag.* 28-33.

Malzkuhn, M. (2016, April). *Sign Language in the Digital Frontier: Revolutions in Learning*. Presented at the Tribeca Interactive, New York, NY.

Malzkuhn, M. (2016, February). *21st Century Learning Tools: Research to Innovation*. Presented at the NSF Conference, Alexandria, VA.

Malzkuhn, M. (2016, July). *Resilience through Innovation: The Convergence of Sign Language and Technology*. Presented at the 3rd International Congress on Deaf Education, Bern, Switzerland.

Malzkuhn, M. (2016, March). Virtual Rights and Avatars Panel, Congressional Caucus on Entertainment. Presented at the DC Independent Film Festival, Washington, DC.

Martinez, D. (2016, November). *Individual Differences in Signed Word Learning Among Hearing Adults*. Presented Psychonomic Society's 57th Annual Meeting, Boston, MA.

Martinez, D. & Pittman, N.(April, 2016). *Individual Differences in Signed Word Learning*, 11th Annual Meeting of the Georgia Psychological Society, Atlanta, GA.

McQuarrie, L (2016). Sign of the Times: Higher Purpose Inspires Harder Work Ethic for Students Turned Entrepreneurs. *Science Contours Magazine*.

McQuarrie, L, & Enns, C. (2016, April). *Innovative technologies: Creating breakthrough dual language word learning games through co-design with Deaf children.* Poster presented at the 32nd Annual Pacific Rim International Conference on Disability and Diversity, Honolulu, Hawaii.

McQuarrie, L, & Enns, C. (2016, February). *Research to practice: Investigating the effects of a signed language phonological awareness intervention on language and literacy outcomes in bilingual deaf children.* Paper presented at the 42nd Annual Conference of the Association of College Educators - Deaf and Hard of Hearing (ACE-D/HH), New York, NY.

McQuarrie, L, & Enns, C. (2016, June). *Innovative technologies: Creating dual language word learning games through co-design with Deaf children.* Poster presented at the 2016 International Education Conference, Venice, Italy.

McQuarrie, L. & Enns, C. (2016, June). Signed language phonological awareness: Building deaf children's vocabulary in signed and written language. Presented at the 18th International Conference on Education of the Deaf and Hearing Impaired (ICEDHI), Paris, France. McQuarrie, L., & Enns, C. (2016, June). *Cultivated transfer: Examining the effects of explicit signed language phonological awareness training on young bimodal bilingual deaf children's vocabulary learning in signed and spoken languages.* Poster presented at the 2016 NHS and AHS Hearing Across the Lifespan (HeAL) Conferences. Cernobbio, Lake Como, Italy.

McQuarrie, L., Enns, C. & Purvis, C. (2016, July). "Cultivating" transfer in dual language learning: Exploring the effectiveness of signed language phonological awareness training on deaf children's sign and print vocabulary learning. Presented at the 28th Australian and New Zealand Conference for Educators of the Deaf & the 12th Asia Pacific Congress on Deafness. Christchurch, New Zealand.

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Quinto-Pozos, D. (2016, January). *Rates of visual processing and (a)typical acquisition*. Paper presentation at Theoretical Issues in Sign Language Research (TISLR), Melbourne, Australia.

Quinto-Pozos, D., & Adam, R. (2015). Sign languages in contact. In A.C. Schembri & C. Lucas (Eds.), *Sociolinguistics and Deaf Communities*. (pp. 29-60). Cambridge: Cambridge University Press.

Rodriguez, Y. & Allen, T. E. (2016, April). *Exploring Hispanic Parents' Beliefs and Attitudes about Deaf Education*. Presented

at the Annual Meeting of the American Educational Research Association, Washington, DC.

Singleton, J. L. (February, 2016). *Rethinking Child Language Disorders: Insights from Sign Language Research*. Presented at the annual meeting of the American Association for the Advancement of Science, Washington DC.

Singleton, J. L., Brooks, R., & Meltzoff, A. (June, 2016). *Gaze following and gaze alternating behavior in 8-20 month old Deaf and hearing infants.* Presented at the Multimodal Multilingual Outcomes in Deaf and Hard of Hearing Children. Stockholm, Sweden.

Stone, A., Bosworth, R., & Petitto, L. A. (2016, January). Perceptual sensitivity to sonority in visual language: Native signers & naïve infants. Presented at the 12th Theoretical Issues in Sign Language Research (TISLR), Melbourne, Australia.

Twitchell, P., Morford, J. P. & Hauser, P. C. (2015). Effects of SES on literacy development in deaf signing bilinguals. *American Annals of the Deaf, 159*(5), 433–446.

# Brain and Language Laboratory (BL2)

The state-of-the-art Brain and Language Neuroimaging Laboratory (BL2), led by Dr. Laura-Ann Petitto (Scientific Director, Founder), is a member of the NSF Science of Learning Center at Gallaudet University, Visual Language and Visual Learning, VL2. The team studies language and bilingualism, reading and literacy, including the important role of Visual Sign Phonology in successful reading in young Deaf children. They are further committed to powerful innovative translation and to providing meaningful knowledge to society, spanning parents, teachers, and educational policymakers. The team seeks to uncover the biological foundations and environmental influences underlying linguistic, reading and cognitive processing in monolingual and bilingual infants, children, and adults. A wide range of methods (behavioral, neuroimaging, genetic), languages (signed, spoken) and populations (infants, children, and adults, both monolingual and bilingual, Deaf and hearing, and cochlear implant users) are used to understand the fascinating processes by which infants discover the basic building blocks of their language as well as the most optimal conditions of learning language, reading, and literacy. Another important goal of BL2 is to provide state-of-the-art training to Gallaudet students in the world's most advanced neuroimaging. We are especially proud to be the neuroimaging training home for Gallaudet's pioneering new PhD in Educational Neuroscience

program. BL2 features one of the world's most advanced brain imaging systems, called functional Near Infrared Spectroscopy (fNIRS), as well as an Infant Habituation Lab, Video-Recording and Editing studios, Video-Conferencing facilities, Cognitive Neurogenetic analysis studio, Experimental and Observation Chambers, state-of-the-art Tobii Eye-Tracking studio, Library, and more.

# **Research Projects**

The biological basis of language and reading in monolingual and bilingual children and adults (discoveries of the reading brain, the bilingual brain, and the bilingual reading brain)

# Status: Ongoing Start date: January 2011

The purpose of this study is to discover the neural participation and neural organization of bilinguals and what impact the age of first bilingual exposure has on the bilingual's capacity to process and read in two languages. We will examine how bilingual children learn to read in two languages. The way in which the child's first language impacts on reading development in the second language is of great theoretical importance to educators and for understanding language processing in general. (1) Bilingual babies have a greater and longer sensitivity to language distinctions that make up the world's languages, and showed unique patterns of brain activation for language; (2) Both bilingual children and adults showed greater extent and variability in neural recruitment of classic language brain areas during language processing relative to their monolingual peers; (3) Bilinguals seemed to have greater coordination between their two hemispheres as compared with monolinguals; (4)An age-related shift in the recruitment of brain areas has been observed supporting reading among monolingual and bilingual children; (5) Bilingual advantage in phonological awareness has been observed at the earliest stages of reading compared to monolingual children. Specific parts of language knowledge, and their contribution to reading mastery, are indeed altered as a result of bilingual language experience.

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#### **Funding sources**

• National Institutes of Health (NIH)

# Cochlear implants and the brain: The biological basis for language and cognition in infants, children, and adults with cochlear implants

Status: Ongoing Start date: September 2012

Controversy abounds regarding differences in acquisition of spoken language in deaf individuals with cochlear implants (CIs). There are claims that early exposure to a signed language causes deviance to auditory language tissue development, and that young children with CIs shouldn't receive early exposure to a signed language because tissue devoted to auditory processes will be "taken over" by signed language processing. We ask whether early exposure to a signed language impacts negatively, and/or causes neural deviance or abnormality, to classic left-hemisphere spoken language tissue development in deaf individuals who had early cochlear implantation, including left Inferior Frontal Gyrus and Superior Temporal Gyrus in deaf individuals with a CI. We used fNIRS brain imaging technology to study healthy deaf individuals with CIs, with and without early exposure to a visual signed language. Early exposed deaf CI individuals showed normal activation in classic left-hemisphere language areas. Late exposed deaf CI individuals showed greater activation in the right-hemisphere. This

supports the hypothesis that early signed language exposure facilitates normal language processing and doesn't cause neural deviance or abnormality to left-hemisphere language tissue. Strong evidence of neural plasticity wasn't at work—auditory processes weren't "taken over" by signed language processing in early-sign exposed individuals with CIs.

# **Principal investigators**

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# **Funding sources**

- National Institutes of Health (NIH)
- National Science Foundation (NSF)

# The effects of early visual language exposure on deaf children's linguistic and non-linguistic visual processing: An Eye-Tracking and fNIRS brain imaging investigation of emergent readers

Status: Ongoing Start date: January 2013

Virtually nothing is known about how young deaf children learn to read using contemporary learning tools. How do they use, examine, and process complex visual information on a moving screen? Our present studies are the first of their kind to explore these questions. We examine whether differences in early visual language experience (AoE) impact visual attention and allocation in young deaf and hearing emergent readers. AoE affords enhanced gaze-shifting and attention in the young deaf visual learner, which impacts book sharing and literacy behaviors and yields linguistic, reading, and cognitive benefits. Also, little is known about how early visual language experience impacts how young deaf children learn to read in a bilingual context, where both languages are presented visually, but one is signed (ASL) and the other written (English).

We examine whether differences in AoE impact visual attention and allocation in the young emergent reader. If early visual language is a significant factor in task performance in early sign-exposed children, it may suggest that select visual properties enhance word recognition in ways that facilitate their acquisition of reading. Also, it will provide insights about the age deaf children are best exposed to sign languages to promote bilingual mastery of reading. Results from the study have begun to provide research-based insights into all young children's visual attention to linguistic and non-linguistic information.

#### Principal investigators

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# **Funding sources**

- Gallaudet funding
- W.M. Keck Foundation

# Examining the effects of visual language experience on visual attention in young Deaf emergent readers with eye-tracking: A pilot study for innovation in e-literacy and signing creatures avatar design

Status: Ongoing Start date: January 2013

How do young children learn to read when using contemporary learning tools such as reading apps? Virtually nothing is known about this, even though such learning tools are ubiquitous. Do young Deaf readers use, visually examine, and process complex visual information on a moving screen—especially involving early reading apps designed for them? Present studies in this research are the first of their kind to address these questions. This project examines whether differences in early-life visual language experience impact visual attention and allocation in young Deaf and hearing emergent readers. Early visual language experience affords enhanced visual gaze shifting and visual attention in the young Deaf visual learner, which subsequently impacts book sharing and literacy behaviors in toddlers, and yields linguistic, reading, and cognitive benefits. Little is known about how early visual language experience impacts the way young Deaf children learn to read in a bilingual learning context, where both languages are presented visually but one is signed (American Sign Language) and the other is written (English). Whether differences in early visual language experience and age impact visual attention and allocation exist is examined. If early visual language is a significant factor in task performance, it may suggest that select visual properties at the heart of visual sign phonology selectively enhances sight word recognition in ways that positively impacts those children's acquisition of English reading. Results from the present study will provide research-based insights into all young children's visual attention to linguistic and non-linguistic visual information in dynamic moving scenes.

#### **Principal investigators**

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# **Funding sources**

• National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

# Exploring the foundations of iconicity in language: Evidence from an fNIRS brain imaging study on the neural basis of ASL classifiers

Status: Ongoing Start date: January 2011

Current approaches to classifier constructions have been characterized either as utilizing a linguistic system that can exploit iconicity or an exhaustively morphemic approach. To gain novel insight into the underlying basis of this American Sign Language system, fNIRS brain imaging methodology is utilized as a tool to adjudicate between the hypotheses that classifier constructions engage additional neural systems (H1) or that they are only processed by the same neural systems as other verbs that carry grammatical inflection (H2). If H1 is supported, it would suggest that sign languages are able to exploit iconic bases in a similar manner as spoken languages do with ideophones. If H2 is supported, it would suggest that the exhaustively morphemic approach is more felicitous than linguistic analyses that propose classifier constructions can be decomposed into gestural and linguistic components.

#### Principal investigators

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## **Funding sources**

- National Institutes of Health (NIH)
- National Science Foundation (NSF)

# The RAVE Revolution for Children with Minimal Language Experience During Sensitive Periods of Brain and Language Development

Status: Ongoing Start date: October 2015

Year 2 of this 3-Year grant (January 15, 2016-January 14, 2017): Monthly meetings (combined Keck and NSF-IN-SPIRE) as well as SLACK web based team daily communications were maintained throughout the year, and included in-person, on site at Gallaudet, all-hands- on-deck team meetings. This Keck research project provided many Gallaudet an undergraduate and graduate students with training opportunities that will significantly impact their future career opportunities, catapult their ability to enter STEM disciplines, and become leaders in them. Infant recruitment was conducted. The complex neuroscience design of the fNIRS brain imaging experiment was completed, pilot data collected, experimental modifications implemented, and experimentation begun. Petitto's linguistic-structural analyses guided the team's Keck-purchased Motion Capture. Experimental analyses (deaf, hearing) have already begun. Our discoveries about babies' preferences for specific rhythmic temporal frequencies in language (over others) have, in turn, guided the design and creation of our learning tool (e.g., with more fluid movements in avatar sign productions). We have identified indices of when infants are in a peaked emotional and higher cognitive attentive state, (i.e., "ready to learn") before they are able to produce language and tell us so (ages 6-12 months). This revolutionizes our capacity to provide targeted early intervention.

#### Principal investigators

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### **Funding sources**

- Gallaudet funding
- National Science Foundation (NSF)
- National Science Foundation (NSF) INSPIRE (Integrated NSF Support Promoting Interdisciplinary Research and Education)

# Seeing the Temporal Beats of Human Language

Status: Ongoing Start date: January 2015 End Date: September 2018

Year 1 of this 3-Year grant (October 1, 2015 to Sept 30, 2016). This NSF INSPIRE research project provided many Gallaudet undergraduate and graduate students with training opportunities that will significantly impact their future career opportunities, catapult their ability to enter STEM disciplines, and become leaders in them. Gallaudet IRB applications were submitted. Design and planning for Experiments 1-4 were completed. Based on Petitto's analyses of sign-phonetic and sign-syllabic structure (especially as salient in infant-directed sign and nursery rhymes), design of the Motion Capture stimuli for all Experiments was completed (Malzkuhn, Lamberton). Intensive technology integration efforts were begun: the thermal IR imaging team (Merla, Italy) and the Petitto Gallaudet team (fNIRS brain imaging and eye-tracking; Gallaudet team: PEN assistant professor Clifton Langdon; Post-Doc/ thermal IR imaging expert Barbara Manini; PEN graduate students Adam Stone and Geo Kartheiser/Petitto Advisors; undergraduate, and graduate students; RAs). The team completed the first-time integration of BL2's 3 technologies: Thermal IR Imaging, fNIRS brain imaging, and Tobii Eyetracking systems.

Experiment 4 (infant gaze following) was fully completed; data analyses are underway and manuscript preparation has begun. Together, the integrated system will render the first artificialhuman infant learning tool that can engage in contingent, socially interactive conversations.

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- Malzkuhn, Melissa Science of Learning Center on Visual Language & Visual Learning (VL2)
- Manini, Barbara (Consultant) Brain and Language Laboratory (BL2)

- Padilla, Cryss (Student) Brain and Language Laboratory (BL2)
- Quickel, Brittany (Student) Brain and Language Laboratory (BL2)
- **Rebecca, Stevener (Student)** Brain and Language Laboratory (BL2)
- Scassellati, Brian Computer Science, Cognitive Science, and Mechanical Engineering NSF Expedition on Socially Assistive Robotics • Yale University
- Shandler, Gavriella (Student) Brain and Language Laboratory (BL2)
- Shapiro, Ari USC Institute for Creative Technologies, Playa Vista, CA
- Stone, Adam (Student) Education
- **Traum, David** USC Institute for Creative Technologies, Playa Vista, CA
- Tsui, Katherine Social Robotics Lab Yale University
- Wang, Yiqiao Science of Learning Center on Visual Language & Visual Learning (VL2)

#### **Funding sources**

Gallaudet funding

The temporal and spatial dynamics of visual language perception and its relation to visual sign phonology: Eye-tracking in infants and children in a perceptual discrimination experiment of signs versus gestures

Status: Completed Start date: September 2013 End Date: October 2015

This study investigates selective visual perception and attention for linguistic and nonlinguistic stimuli in younger and older infants, to investigate the basis by which infants differentiate what is language and what is not. This is important for discerning the levels of language organization, and their relative contributions to the language acquisition process, which are key for learning language including the universal level of language organization, "phonology," as well as grammatical patterns important for latter successful language and reading acquisition. A central hypothesis to be tested is whether infants possess a developmental sensitivity to the patterns of visual sign phonology that make possible their ability to differentiate between "what's in my language?" and "what is not in my language (gesture)?"

# **Principal investigators**

- Bosworth, Rain University of California, San Diego
- Langdon, Clifton Educational Neuroscience-PEN

#### Additional investigators

- Corina, David University of California, Davis
- Hwang, So-One (Student)• University of California, San Diego
- Petitto, Laura-Ann Psychology

#### **Funding sources**

National Science Foundation (NSF)

# **Scholarly and Creative Activity**

Jasinska, K. K., Petitto, L. A. (2016). Age of bilingual exposure changes the contribution of phonological and semantic knowledge to successful reading development. *Child Development.* Retrieved from http://dx.doi.org/10.1016/j.dcn.2013.06.005

Kovelman, I., Salah-Ud-Din, M., Berens, M., Petitto, L. A. (2015). "One glove does not fit all" in bilingual reading acquisition: Using the age of first bilingual language exposure to understand optimal contexts for reading success. *Cogent Education.* 2(1). Retrieved from http://dx.doi.org/10.1080/23 31186X.2015.1006504

Petitto, L. A. & Merla, A. (2016, January 14). *Thermal infrared imaging and fNIRS integration*. Presented at the Winter Institute Workshop, University of Hong Kong, Hong Kong.

Petitto, L. A. (2015, November 21). *The impact of multiple language learning on children's brain development*. Presented at The World Bank, Washington, DC.

Petitto, L. A. (2016, February 8). Universals of learning and the brain as revealed through the eyes: How we learn?. Presented at the NSF Evaluation iSLC, National Science Foundation. Arlington, Virginia.

Petitto, L. A. (2016, February 9). VL2, the science of learning and 21st century directions: Can we get there?. Presented at the

NSF Evaluation iSLC. National Science Foundation. Arlington, Virginia.

Petitto, L. A. (2016, January 12). *Children's discovery of bilingualism and the bilingual brain*. Presented at the ISF Bilingual Academy, Hong Kong, Hong Kong.

Petitto, L. A. (2016, January 15). *Revolutionary science, robots, avatars, and changing the nature of learning for meaningful translation to society.* Presented at the University of Hong Kong, Hong Kong.

Petitto, L. A. (2016, January 21). Grand challenge: Learning & assessment in the digital citizenship in the 21st century. Presented at the University of Hong Kong, Hong Kong.

Petitto, L. A. (2016, July 20). *Impact, innovation and integrity.* Panel discussion at the Science of Learning Center. University of Hong Kong, Hong Kong.

Petitto, L. A. (2016, July 20). What are these sister disciplines, and why do they matter to schools and families?. Presented at the SummerFest, Science of Learning and Educational Neuroscience. University of Hong Kong, Hong Kong.

Petitto, L. A. (2016, March 16). Universals of early language, reading and the brain as revealed through the eyes. Presented at the Neuroscience American Association for the Advancement of Science (AAAS), Washington, DC.

Petitto, L. A. (2016, May 9). Presented at the Visual Language & Visual Learning 1st Annual Knowledge Festival, Gallaudet University, Washington, DC.

Petitto, L. A. (2016, September 9). Universals of literacy & the brain as revealed through the eyes. Presented at the USAID International Literacy Day Forum, Washington, DC.

Petitto, L. A., (2016, September 28). "New scientific understandings and directions from the National Science Foundation and Gallaudet University Science of Learning Center for Visual Language and Visual Learning, VL2." Presented at the Gallaudet University Presidential Inauguration, Washington, DC.

Petitto, L. A., Langdon, C., Cochran, C., Andriola, D. Stone, A., Kartheiser, G. (2016). Visual sign phonology: Insights into human reading from a natural soundless phonology. *WIREs Cognitive Science*. Retrieved from doi:10.1002/wcs.1404

Petitto, L. A., Stone, A., Andriola, D., & Langdon, C. (2015, October 18-20). *Age of sign- speech bilingual language exposure* 

and syntactic processing in deaf individuals with cochlear implants using functional near infrared spectroscopy. Poster session presented at the Society for Neuroscience, Chicago, IL.

Stone, A, Bosworth, R., Petitto, L. A. (2016, January). *Perceptual sensitivity to sonority in visual language: Native signers & naïve infants.* Presented at the 12th Theoretical Issues in Sign Language Research (TISLR), Melbourne, Australia.

Stone, A., Kartheiser, G., Hauser, P. C., Petitto, L. A., & Allen, T. E., (2015). *Fingerspelling as a gateway into reading fluency in deaf bilinguals*. Retrieved from http://dx.doi.org/10.1371/ journal.pone.0139610

STM Open House, held April 23, 2016, was a big success, with students touring various VL2 facilities.

Photo by: Zhee Chatmon



# V. Research and Scholarly Activities by Academic Unit

The research and scholarly activities section reports the FY 2016 research projects and achievements of individuals within Gallaudet's academic units including departmental research laboratories. The list of academic units is organized alphabetically. For research-related work by units such as the Center for Bilingual Teaching and Learning and the the Office of Research Support and International Affairs, see Office of the Provost.

When a project has two principal investigators from different units, a cross-reference note guides the reader to the placement of the full project profile. For each research project, the following fields are shown: the project's title, status and timing, abstract, investigator(s) and their affiliation, funding sources, and products derived from that project. At the end of each unit's part there is also a list of citations of scholarly and creative products that are not associated with a research project.

# Art, Communication and Theatre

This body of work is reflective of the mission of the Department of Art, Communication and Theatre. The Department strives to provide a quality, bilingual, interdisciplinary, liberal arts focus in its teaching, service, and research.

# **Research Projects**

**Instructional videos on telecommunications access** See in Technology Access Program (TAP)

# Interactive learning environment for optimizing technology use

See in Hearing, Speech, and Language Sciences

# **Project D1: Development of a model for a consumer-centric, technology-focused train-the-trainer program** See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

### Project D3: Interactive learning environment for optimizing technology use

See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

# Receptive listening — narrowband vs. wideband with network impairments for the iPhone

See in Technology Access Program (TAP)

# Standards work and technical assistance

See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

# **ASL and Deaf Studies**

ASL and Deaf Studies faculty engage graduate and undergraduate students in interdisciplinary research projects dedicated to producing new knowledge about Deaf communities and their signed languages. Central areas of inquiry include sensory orientation, DeafSpace, bioethics, identity formation, human rights, language teaching, transnationalism, and the contributions of Deaf individuals to human diversity.

## **Research Projects**

## 'Deaf Studies Digital Journal'

Status: Ongoing Start date: September 2008 End Date: January 2025

The Deaf Studies Digital Journal (dsdj.gallaudet.edu) is the world's first peer-reviewed academic and creative arts journal dedicated to the creative and scholarly output of individuals within the signing communities. The journal features academic articles in International Sign Language, ASL, English, commentaries, visual arts, signed literature, and historic, archival texts.

#### **Principal investigators**

• Boudreault, Patrick • ASL and Deaf Studies

#### **Funding sources**

- Sorenson Legacy Foundation
- Office of the Provost

#### Products

ASL and Deaf Studies Department (2014). *Deaf Studies Digital Journal*, Vol. 4. Retrieved from http://dsdj.gallaudet.edu

# Cancer genetic education for the Deaf community

**Status:** Completed **Start date:** August 2011 **End Date:** July 2016

Although much effort has been made to educate consumers about cancer genetics information, Deaf individuals whose linguistic preference is American Sign Language (ASL) are at a disadvantage in learning this information because it is predominantly available in spoken or print English. Deaf individuals are at risk for cancer genetics-related health disparities and have poorer outcomes compared to hearing individuals, even though the expected prevalence of cancer, including cancer conditions with a strong genetic component, does not differ between Deaf and hearing populations. For this project, an evidence-based English language National Cancer Institutefunded cancer genetics educational intervention shown to improve knowledge outcomes in English-language populations will be culturally and linguistically tailored for use in a population whose language preference is ASL. The education intervention will present information in a bilingual format (ASL videos with English captioning or text: ASL+English) and will be evaluated using a randomized, controlled experiment with 100 Deaf individuals whose linguistic preference is ASL to (a) compare the effect of a bilingual (ASL+English) education intervention on comprehension and attitudes toward genetics services, compared to a monolingual format (English text only); and (b) identify subgroups who may particularly benefit from receiving cancer genetic information in a bilingual format.

## Principal investigators

- Boudreault, Patrick ASL and Deaf Studies
- Palmer, Christina Germaine University of California, Los Angeles

## **Funding sources**

• National Institutes of Health (NIH)

# **Deaf Signers' Experience with Seeking Health Information** See in Psychology

# **Scholarly and Creative Activity**

Bahan, B & Ryan, R (2016, March). *Wolf is Here.* Once Upon a Sign Video Production, DawnSignPress, San Diego, CA.

Bahan, B (2015, October). *The Wolf who cried Sheep.* Performed at the 2015/2016 Poetry/Storytelling Calendar Talent, Sorenson Communications, Inc., NY, NY. Bahan, B. (2015, September). *Deaf Gain: what can healthcare and society at large gain from the deaf community?* Presented at the Medicine X Conference, Stanford University, Palo Alto, CA.

Bahan, B. (2016, April). *The whole picture: Why academic ASL exposure matters to sign language interpreters*. Presented at the Street Leverage conference, Fremont, CA.

Boudreault, P. & Palmer, C. G. (2015) Bilingual Cancer Information: Access is the first line of defense. Odyssey Magazine, "The Influence, Impact, and Opportunuty of Technology" 2015 issue, pp. 64- 66.

Boudreault, P. & Palmer, C.G., (2015). *A guide to learn about cancer in family: Deaf genetics projects.* [Booklet]. Washington, DC: Gallaudet University and University of California Los Angeles.

Boudreault, P. (2016). *Deaf Interpreter*. In Deaf Studies Encyclopedia. (Vol.#2, pp. 511-515). Los Angeles, CA, Sage Publications.

Boudreault, P., Palmer, C. G. & Pumphrey, K., (2015). ASL Cancer Genetics. Retrieved from www.aslcancergenetics.org

Boudreault, P., Zimmer, K. & Enns, C.J. (2015). *Creating videos to assess children's signed language narrative skills.* Proceedings from 22nd International Congress on the Education of the Deaf. Athens, Greece.

Gertz, G. & Boudreault, P. (2016). Deaf Studies Encyclopedia, Editors. Los Angeles, CA. Sage Publications.

Kianmahd, J., Boudreault, P. & Palmer, C.G. (2016). *Connexin 26 and Connexin 30*. In Deaf Studies Encyclopedia. (Vol.#2, pp. 432-435). Los Angeles, CA. Sage Publications.

Andrews, J. F., Leigh, I. W. & Harris, R. L. (2016). *Deaf culture: Exploring deaf communities in the United States*. Plural Publishing, San Diego, CA.

Davis, J., Harris, R. & Williams, F. (2016). Data collection. In R. Harris & F. Williams (Eds.), Research and Evaluation in Education and Psychology, ASL Version (14:24 m.). ASLChoice, Austin, TX.

Harris, R. & Williams, F. (2016). Research and evaluation in education and psychology - ASL version. ASLChoice, Austin, Texas.

Harris, R. (2015, October 6). *American Sign Language Teaching: Career Prospects in 2025*. Presented at Texas School for the Deaf, Austin, Texas.

Harris, R. (2016, April 16). *Assessing ASL Skills: PRVAB-izing Your Assessment Tools.* Presented at the Blue Grass ASL Teachers Association, University of Louisville, Louisville, KY.

Harris, R. (2016, April 21). *ASL in academic settings: Language features.* Presented at the RIT ASL and Deaf Studies Community Center, Rochester Institute of Technology, Rochester, NY.

Harris, R. (2016, April 22). *Assessing ASL Skills: PRVAB-izing Your Assessment Tools.* Presented at the ASL and Interpreting Education, Rochester Institute of Technology, Rochester, NY.

Harris, R.L., Leigh, I.W., & Wilkins, E. (2016). Companion Website to "Deaf Culture: Exploring Communities in the United States". Retrieved from http://www.pluralpublishing. com/publication/dc

Marchut, A., Williams, F. & Harris, R. (2016). Qualitative research. In R. Harris & F. Williams (Eds.), Research and Evaluation in Education and Psychology, ASL Version (39:30 m.). ASLChoice, Austin, TX.

Wilkins, E., Wiliams, F. & Harris, R. (2016). Causal comparative and correlational approaches. In R. Harris & F. Williams (Eds.), Research and Evaluation in Education and Psychology, ASL Version (14:09 m.). ASLChoice, Austin, TX.

Williams, F. A. & Harris, R. L. (2016). Evaluation. In R. Harris & F. Williams (Eds.), Research and Evaluation in Education and Psychology, ASL Version (15:05 m.). ASLChoice, Austin, TX.

Wolsey, J.A., & Pudans-Smith, K. (2016). Language Production and Perception. What every parent of a deaf child should know about sign language. Retrieved from http://speech-languagepathology-audiology.advanceweb.com/Editorial/Content/ PrintFriendly.aspx?CC=290387

# ASL Diagnostic and Evaluation Services

ASL Diagnostic and Evaluation Services (ASL-DES) provides training, consultation and comprehensive measures of American Sign Language (ASL) proficiency and communicative competence. The data and information generated by ASL Diagnostic and Evaluation Services benefits not only individual language learning, but is also essential to Gallaudet University and to institutions and governing bodies nationwide. Information pertaining to ASL proficiency is provided to ensure individuals have requisite language skills for (but not limited to):

- Admission into academic programs
- Core curriculum, practicum, internship, and graduation
- Professional opportunities and advancements

#### **Research Projects**

# Classroom discourse observation

Status: Completed Start date: September 2010 End Date: September 2016

In 2008, the Gallaudet University Faculty Senate passed a measure requiring the development of multiple measures to evaluate faculty proficiency in American Sign Language (ASL). One key aspect is the evaluation of language and discourse within the classroom. After an ad-hoc committee developed the classroom discourse checklist, the Office of Bilingual Teaching and Learning and ASL-Diagnostic and Evaluation Services (DES) conducted a pilot study to determine appropriate procedures, protocols, and measures involved in classroom discourse observations (CDOs). A final report was submitted to the Faculty Welfare Committee in May 2011. The ASL-DES unit continues to conduct CDOs, and has created a resource guide online for CDOs that can be found on the ASL-DES website.

#### Principal investigators

- Roult, Loretta ASL Diagnostic and Evaluation Services
- Arellano, Leticia ASL Diagnostic and Evaluation Services
- Gordon, Jean M. ASL Diagnostic and Evaluation
  Services

# Center for Bilingual Teaching and Learning

The mission of the Center for Bilingual Teaching and Learning (CBTL) is to promote and support the ongoing development and enhancement of ASL-English bilingual teaching and learning at Gallaudet University. The CBTL team collaborates with faculty, professional staff, and departments to create an adaptable and innovative ASL-English bilingual and multicul-

tural learning environment in which outstanding bilingual, multicultural teaching is recognized and rewarded.

CTBL also coordinates activities in support of the University's bilingual mission. Activities are intended to promote evidencebased innovation and effectiveness in bilingual teaching and learning; foster cross-disciplinary collaboration; and facilitate the sharing of resources, skills, and knowledge across programs. Key areas of focus are:

- 1. Implementation, support, and assessment of University Language and Communication Student Learning Outcomes.
- 2. Development of ASL materials and bilingual resources.
- 3. Faculty and staff professional development.
- 4. Linguistic and Communication Competence for Faculty and Staff.
- 5. Institutional climate.
- 6. Research on teaching and learning.

# **Research Projects**

# Gallaudet Scholarship of Teaching and Learning — Cohort 2

Status: Completed Start date: January 2015 End Date: January 2016

This project was designed to create a learning community of teachers-scholars who, over a period of two years per cohort, investigate, reflect upon, document, and enhance teaching practices in Gallaudet classrooms to meet the needs of visually oriented and linguistically diverse learners. Each faculty member focuses on a research topic: Multicultural Competence in a Deaf Environment - Barbara Gerner de Garcia; An Assessment of Different Approaches in Teaching Mathematics to Deaf Students, with Special Reference to Educational Technology - Susanna Henderson; Benefit of Video Lectures - Raylene Paludneviciene; Analysis of Quantitative Reasoning Skills and Representations in Senior Writing Assignments – Leslie Rach; and Language Dynamics and the Impact on a Student's Critical Thinking Skills – Laurene Simms.

### Principal investigators

Mulrooney, Kristin • Linguistics

#### Additional investigators

- Gerner de García, Barbara Education
- Henderson, Susanna Science, Technology, and Mathematics
- Palmer, Jeffrey L. (Student) Linguistics
- Paludneviciene, Raylene Psychology
- Rach, Leslie General Studies Program
- Simms, Laurene E. Education

# Counseling

The Counseling department is devoted to getting students to interact with their education in a very hands-on way. We encourage our students to apply their education to research and to use the results to become better in their field. Research in our department is a channel for students to experiment with theories and build critical thinking skills.

## **Scholarly and Creative Activity**

Lytle, L.R. & Oliva, G. (2016). *Raising the Whole Child: Addressing SocialEmotional Development in Deaf Children.* (Science of Learning Center on Visual Language and Visual Learning Research Brief #11). Retrieved from http://vl2.gallaudet. edu/research/research-briefs/english/research-brief-11-raisingwhole-child/

# Education

The Department of Education engages in research and innovation in teaching and learning contexts with an eye to the kind of intellectual, linguistic, and social development that is optimal and which is congruent with the strengths inherent in Deaf and hard of hearing learners as human beings and who are by nature visually-inclined.

#### **Research Projects**

# ASL assessment toolkit

See in Science of Learning Center on Visual Language & Visual Learning (VL2)

# Assessing the assessment: Reliability and fairness in the Teacher Work Sample

Status: Ongoing Start date: August 2016 End Date: August 2018

This study will present the results of a reliability and fairness evaluation of the Teacher Work Sample (TWS), a performance assessment for preservice teachers, used at one university. The TWS is a high-stakes assessment, and as such, issues of fairness and reliability are critical, particularly when trying to promote increased diversity in the teacher workforce. Dimensions of ethnicity, gender, and hearing status are reviewed as part of this study.

#### Principal investigators

• Yuknis, Christina • Education

# Attention and retention of educators of the Deaf

Status: Completed Start date: January 2014 End Date: September 2016

The purpose of this study is to examine the reasons why graduates teaching in the field of Deaf education move to general education or choose to leave the field of education to pursue other career options. The researchers hope to gather information about the needs of teachers of the Deaf that will promote and encourage retention in the field. Data will be collected from surveys sent to alumni who graduated from the Department of Education's Teacher Preparation Program at Gallaudet University from 2003 to the present.

#### Principal investigators

Appanah, Thangi • Education

# The effect of elaboration: non elaboration of sign list recall tasks on rate of learning in Deaf individuals

**Status:** Completed **End Date:** September 2016

Best practices in deaf education have promoted the use of visual information during instruction based on the notion that deaf individuals are "visual learners". These assumptions are based on "Sensory Compensation" hypothesis and Dual Coding Theory (DCT). While the bulk of the research supports visual approach to instruction, the question of "how much does it benefit learning?" still remains. Research has yet to demonstrate what gains in learning are made as a result of association of visual imagery to the common language of instruction in the deaf classroom, that being American Sign Language (ASL). DCT and the neurological basis for ASL being similar to that of spoken language suggests that the addition of visual imagery should improve recall but research has only looked at benefit to English recall. The purpose of this study is to determine if Deaf individuals benefit from associating visual imagery with ASL signs by administering the Signed Verbal Learning Test (SVLT) with and without associated pictures.

#### Principal investigators

 Whitaker, Robert • Laurent Clerc National Deaf Education Center

#### Funding sources

Gallaudet Small Research Grant

# **Effectiveness of mentoring in science research** *See in Science, Technology, and Mathematics*

# Language acquisition and literate thinking in young d/Deaf children with Deaf caregivers

Status: Completed Start date: January 2014 End Date: December 2015

There is a need to continue to investigate language acquisition, emergent literacy, and discourse patterns in young deaf children to gain insights in promising practices for mediating their linguistic and literacy development. Deaf caregivers typically use their knowledge and experience as deaf individuals to interact with their deaf children in the visual mode. Many of the studies with deaf families have been useful in gaining insights into early interactions with deaf infants and young children in the homes and early childhood programs. This study focuses on Deaf families and their interactions on facilitating language acquisition and literate thinking in young Deaf children, framed through Deaf Cultural lenses, exploring how the children converse with their caregivers in natural environments with a natural, visual language. In light of the growing research into the importance of the early years, the outcomes of the study call into question ramifications for d/Deaf children in general, through the lenses of critical pedagogy, toward eradicating language and literacy deprivation for all d/Deaf children.

#### Principal investigators

- Hile, Amy E. Education
- Bailes, Cynthia Education
- Mitchiner, Julie Education

#### Additional investigators

- Keith, Cara (Student) Education
- Santini, Joseph (Student) Education

#### **Reggio Emilia Approach in Deaf Education**

Status: Ongoing Start date: December 2015 End Date: July 2017

The purpose of this research study is to investigate the use of the Reggio Emilia approach in two early childhood education programs that serve young deaf and hard of hearing children in the U.S. The Reggio Emilia approach originated in Italy and has inspired many early childhood programs around the world to infuse unique child-centered, collaborative teaching and learning environments. This study will explore why and how two schools in the U.S. incorporate the Reggio Emilia approach in their teaching and learning with deaf and hard of hearing children through classroom observations and interviews. The study will potentially lead to a larger study to identify promising practices in early childhood education for young deaf children.

#### Principal investigators

- Mitchiner, Julie Education
- Batamula, Christi Education

# **Funding sources**

Gallaudet Small Research Grant

#### SFA5: Integration of research and education

See in Science of Learning Center on Visual Language & Visual Learning (VL2)

# Shared book reading using ASL and English for young signing deaf and hard of hearing children

Status: Completed Start date: September 2014 End Date: October 2015 Using a quasi-experimental design, this study aims to investigate bilingual language growth in both English literacy and American Sign Language (ASL) in deaf and hard of hearing children using an ASL/English shared book reading approach. Two schools for deaf children with comparable students will function as the experimental (treatment) (n = 15) and control group (n = 15). A set of standardized and non-standardized measures of ASL and early literacy including motivation will be used to document growth over a 10-week intervention. The study will investigate the effects of a systematized shared reading program for young children who are deaf or hard of hearing and attend residential schools for the deaf. The program will use DVD and literacy materials developed at Lamar University based on reading research from the University of Illinois that use whole stories as a basis for early literacy instruction.

## **Principal investigators**

• Clark, Diane • Education

#### Additional investigators

- Andrews, Jean Lamar University
- Baker, Sharon University of Tulsa
- Musyoka, Millicent Lamar University

# Transitioning from high school to college: Student perceptions of preparation

Status: Ongoing Start date: August 2015 End Date: August 2017

There is a disconnect between the number of students who enter college and the number who graduate. Research demonstrates that a high percentage of deaf students enter postsecondary education; however few persist to graduation. The question we are left with is how to identify the barriers preventing deaf students from graduating at the same rate as their hearing counterparts. The study will interview first-year deaf college students in order to understand their perspectives regarding their transition to college. Moreover, the study will examine how they describe preparedness and resolve perceived challenges.

#### Principal investigators

- Yuknis, Christina Education
- **Tibbitt, Julie** (Student) Education

• Zimmerman, Heather (Student) • Education

# VL2 national research volunteer program

See in Science of Learning Center on Visual Language & Visual Learning (VL2)

#### VL2 shared data resource

See in Science of Learning Center on Visual Language & Visual Learning (VL2)

# **Scholarly and Creative Activity**

Appanah, T. (2015, October). *Developing Family Collaboration in Pre-Service Teadhers*. Presented at the Multicultural Advanced Institute Mini Conference, Gallaudet University, Washington Dc.

Batamula, C., Graham, P., Scarboro-Hensley, J. (2016, March). *100 Languages of All Children: Empowering Deaf and Hard of Hearing Children to Express Themselves.* Presented at the Early Hearing Detection and Intervention Conference. San Diego, CA.

Batamula, C., Mitchiner, J., Kite, B.J., Keith, C. (2016,March). *Family Language Policy & Planning: How to develop a visible language plan for your family?* Presented at the Early Hearing Detection and Intervention Conference. San Diego, CA.

Cooper, A. C. (2016, April). *Intersections: Social justice and culturally relevant leadership in the Deaf community.* Presented at the American Educational Research Association. Washington, DC.

Cooper, A. C. (2016, February) *I don't mean to be a dick but: Categorization, paralipsis and getting away with sexual objectification in the classroom.* Presented at the 23rd annual meeting of the Lavender Languages and Linguistics Conference. Washington, DC.

Cooper, A.C. (2015, December). Signed language sovereignties in Vietnam: Deaf community responses to ASL-based tourism. In It's a small world: Inquiries into international Deaf spaces. In Michele Friedner and Annelies Kusters. (Eds.) Washington, DC: Gallaudet University Press.

Cooper, A.C. and Nguyễn Trần Thủy Tiên (2015, Fall). Signed language community-researcher collaboration in Việt Nam: Challenging language ideologies, creating Social Change. *Journal of Linguistic Anthropology*, 25(2): 105-128.

Cooper, A.C., Harrelson, E.M., Hochgesang, J., Lee. J., & Rashid K.K. (2016, May). *Establishing boundaries: Claims to* 

*authority and knowledge.* Presented at the Washington Association of Professional Anthropologists, Washington, D.C.

Harrelson, E.M., Cooper, A.C., dela Torre, T.C., Domingo, R., Palfreyman, N. & Th⊠y Tiên, N.T. (2016, February). *Asia, Southeast, Deaf Community.* In. G. Gertz & P. Boudreault (Eds.), SAGE Deaf Studies Encyclopedia. In Sage Publications, Inc.

Garate, M. (July 2016). *Bilingual education for Deaf children: What does it really mean?* Keynote address at the National Deaf Education Conference. Phoenix, AZ.

Garate, M. (June 2016). *Purposeful language allocation in an ASL/English bilingual classroom.* Presented at the Pre-Conference Workshop Convention of American Instructors of the Deaf (CAID). Louisville, KY.

Garate, M. (October 2015) *Desenvolvimento bilíngue para crianças Surdas" [Bilingual Development for Deaf Children].* Presented at the XIV International Congress and XX National Seminar of INES, Rio de Janeiro, Brazil.

Gárate, M. & Lenihan, S. (2016). *Collaboration for communication, language and cognitive development*. In Sass-Lehrer, M. (Ed). Early Intervention for Deaf and Hard of Hearing Infants, Toddlers and their Families: Interdisciplinary Perspectives. (pp.233-273). New York, NY: Oxford Press.

Gerner de Garcia, B. A. & Karnopp, L.B. (2016). *Change* and promise: Bilingual deaf education and Deaf culture in Latin America. Washington, DC: Gallaudet Press.

Gerner de Garcia, B.A (2016). Psycholinguistics: Multilingualism. In G. Gertz & P. Bouldreaut (Eds). *The Deaf studies encyclopedia*. Thousand Oaks, CA: Sage.

Gerner de Garcia, B.A. & Karnopp. L. B. (2016). Deaf history: South America. In G. Gertz & P. Bouldreaut (Eds). *The Deaf studies encyclopedia*. Thousand Oaks, CA: Sage.

Karnopp. L. B. & Gerner de Garcia, B.A. (2016). Deaf community: South America In G. Gertz & P. Bouldreaut (Eds). *The Deaf studies encyclopedia*. Thousand Oaks, CA: Sage.

Arnett, S., Fitzpatrick, M. & Neild, R. (2016). Foundations of Special Education: Understanding Students with Exceptionalities. Dubuque, IA: Kendall Hunt.

Neild, N. (2016, August 5). *Autism strategies for parents*. Presented at the Deaf Autism America. Connecticut, Hartford.

Neild, N. (Summer, 2016). *Deaf Students with Disabilities.* Presented at Lamar University, Beaumont, TX.

Neild, R. (Summer, 2016). *Introduction to Deaf Education*. Presented at George Washington University, Washington, DC.

Bernstein, E. R. & Yuknis, C. (2015, November). *Gaps in Support for Students with Disabilities-Reconceptualizing Approaches to Disabilities Through Culturally Relevant Pedagogy*. Presented at the ASHE Annual Conference, Denver, CO.

Everette, M., Yuknis, C., Ferrell, L., & Krakower, B. (2016, August 17). *Promises and pitfalls: Collaborative MakerSpace Grants.* ASCD Inservice. Retrieved from: http://inservice.ascd. org/promises-and-pitfalls-collaborative-makerspace-grants/

Yuknis, C. & Burns, H. (2016, April). *Adventures in maker-space*. Presented at the ASCD Annual Conference, Atlanta, GA.

Yuknis, C. (2016, April). *Using Twitter to informally assess graduate students in education policy.* Presented at the American Education Research Association Annual Conference, Washington, DC.

Yuknis, C. (2016, June). *Making in the classroom.* Presented at the Convention of American Instructors of the Deaf Conference, Louisville, KY.

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Yuknis. C. (2016). Deaf education journals. In G. Gertz & P. Boudreault (Eds.). The Deaf Studies Encyclopedia. Thousand Oaks, CA: SAGE.

Yuknis. C. (2016). The education of the deaf act. In G. Gertz & P. Boudreault (Eds.). The Deaf Studies Encyclopedia. Thousand Oaks, CA: SAGE.

# English

The English department provides a high quality academic environment that involves students in critical thinking, discussing and writing about literature and writing.

# **Research Projects**

## Shakespeare in American Deaf History

**Status:** Completed **Start date:** May 2016 **End Date:** September 2016

This research project will investigate what roles Shakespeare played in education and theater prior to the 1960s. I will locate and investigate the archives of organizations such as the Pas-a-Pas Club in Chicago, the Philadelphia Theatre Guild of the Deaf, St. Ann's Church for the Deaf in New York City, the New York Hebrew Association of the Deaf, and others. I will also consult the holdings of mid-Atlantic area schools for the Deaf and Deaf clubs established in the nineteenth century. My research will contribute to two projects – a museum exhibit on Shakespeare in American Deaf History that will be installed at Gallaudet in October 2016 and a general audience book on Shakespeare in ASL, tentatively entitled "The Speaking Eye." One chapter of this book will cover the history of Shakespeare in the American Deaf community.

#### Principal investigators

• Bradbury, Jill • English

## Scholarly and Creative Activity

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Taavila-Borsheim, P. (2016, Spring). Sanding the Hull. *Duende.* Retrieved from http://www.duendeliterary.org/pia-taavilaborsheim .

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Kennedy, R. (2016, Feb. 13). *Sweet momentum at Undone Chocolate.* Jewish Daily Forward. Retrieved from http://forward.com/food/333409/sweet-momentum-at-undone-chocolate/

Pajka, S. (2016, June 11). *Multiple identities in visual-verbal narratives with deaf characters*. Presented at the 43rd Annual Children's Literature Association (ChLA) Conference. The Ohio State University, Columbus, OH.

Pajka, S. (2016, March 4). *Marking Fred Gwynne's Unmarked Grave with Flowers*. Cemetery Travel: Adventures in Graveyards Around the World. Retrieved from https://cemeterytravel.com/2016/03/04/marking-fred-gwynnes-unmarkedgrave-with-flowers/

# **Gallaudet University Press**

Gallaudet University Press is a vital, self-supporting member of the Gallaudet educational and scholarly community. The mission of the Press is to disseminate knowledge about Deaf and hard of hearing people, their languages, their communities, their history, and their education through print and electronic media.

#### **Research Projects**

## 'American Annals of the Deaf': Reference issue

Status: Ongoing Start date: January 1990

For more than 20 years, the Office of Research Support and International Affairs compiled information for the "Schools and Programs for the Deaf in the United States" and "Schools and Programs for the Deaf in Canada" listings in the Reference issue of the *American Annals of the Deaf*. In 2012, Gallaudet University Press took over that responsibility. The 2014 Reference issue includes 872 schools and programs in the United States and 22 in Canada. The listings have been used for a variety of purposes by educators and researchers, but they serve chiefly as a directory of programs and schools and the services they provide to Deaf children and youth in support of their education.

#### Principal investigators

Mullervy, Deirdre • Gallaudet University Press

# **Government and Public Affairs**

The Government and Public Affairs program emphasizes the links between research, learning, and activism. Much of the research effort by both faculty and students focuses on issues such as international and domestic human rights and influencing political processes, often integrating the areas of law, politics, and organizational behavior.

## **Research Projects**

## Fingerspelling development that is independent of English

Status: Completed Start date: October 2011 End Date: September 2016

Fingerspelling is often lauded as the link between American Sign Language (ASL) and written English. Studies have shown that children begin to produce fingerspelling in ASL before they are facile with English orthography. Children also incorporate fingerspelling naturally as part of the ASL acquisition process. Fingerspelling in natural ASL discourse is often shaped by the phonological processes to help make it flow with ASL. In the Kuntze longitudinal study (5-year), an explosion in the use of fingerspelling is observed during the Kindergarten class even though the students have not been formally introduced to reading. The investigation focuses on what the development is like. The hypothesis for this study is that the process may parallel in some interesting ways the "invented spelling" observed in children's writing. For example, a child might "invent" by filling in what they think a fingerspelled word they have been exposed to consists of.

#### Principal investigators

• Kuntze, Marlon • Government and Public Affairs

#### Additional investigators

• Kim, Kelly • Boston University

# Motivation to learn and apply new knowledge and skills from training to the workplace

Status: Completed Start date: October 2014 End Date: August 2016

The proposed inquiry focuses on how faculty transfer what they are motivated to learn in their educational training back to their workplace. Knowledge, skills, and abilities learned from educational training and applied in the workplace have become a concern for any organization including Universities, due to the lack of evaluation instruments to examine the transfer of learning motivation. Universities invest considerable money and employee time in professional development with the intention of gaining intellectual capabilities, and effective work performance. The study examined how faculty transfer what motivates them to learn in training how the newly learned content is applied to their work, and how relationships in motivation and work environment apply learning transfer in the workplace. The study will analyze the state of learning transfer research for motivation and work environment that may require clarification or further research study. The outcomes of the study may provide strategies that can be used to design and evaluate transfer of learning and motivation to improve performance in the workplace.

#### Principal investigators

Myers, Mark • Government and Public Affairs

# Hearing, Speech, and Language Sciences

The department conducts extensive research on communication access technology and rehabilitation for Deaf and hard of hearing people through its Rehabilitation Engineering Research Center on Hearing Enhancement. Faculty, staff, and students conduct research on hearing, speech, spoken and visual language, and balance assessment and intervention across the human lifespan.

## **Research Projects**

# Acquiring an effective training method for at-home use for the made for mobile phone otoscope

Status: Completed Start date: April 2015 End Date: May 2016

The aim of this study is to evaluate the effectiveness of training materials on producing accurate and efficient otoscopic images and their applicability for at-home care. The current study will use two groups of novice users/non-professionals; for example, parents. Group A (n=15) will receive the written instruction manual along with visual instructions from me, a third year audiology graduate student. Group B (n=15) will receive both the written instruction manual and CellScope's training video addressing the proper use of this device. Group C (n=5) will consist of audiology doctoral students who serve as the control group and will receive the written instruction manual only to ensure that a useable image is able to be generated by semi-professionals. All groups will use the Oto by CellScope to capture images of a number of ears. Group effectiveness will be measured by anecdotal depiction of ease of manipulation of the device, the number of tries, and the length of time required to take an accurate picture of the tympanic membrane. Accuracy of the picture will be determined by following a certain criteria determined at a later time. A pre- and post-survey will be administered assessing the subject's comfort level, the ease of use, the potential for future use, attitudes, and the opinion of the instructional materials. Group comparisons will be made to determine the effectiveness of the training materials, as well as assessing the functional use of the Oto for novice users.

#### Principal investigators

- Tamaki, Chizuko Hearing, Speech, and Language Sciences
- **Pomycala, Rachel** (Student) Hearing, Speech, and Language Sciences
Roush, Kristin • University of Virginia

# Additional investigators

 Meehan, Rachel (Student) • Hearing, Speech, and Language Sciences

# Assessing audiologists' exposure to, knowledge of, and attitudes when working with culturally Deaf individuals

Status: Completed Start date: September 2013 End Date: April 2016

Historically, the Deaf community and audiologists have had differing views on hearing loss intervention. Studies have discussed the need to "narrow the gap" between audiologists and the Deaf community. A thorough literature search revealed no recent research investigating this gap and audiologists' exposure, attitudes, or knowledge working with this population. Though no current research was found on audiologists' cultural competency with this population, research has been done in other health care fields. Studies have investigated Deaf cultural competency of physicians and medical students and found that physicians and medical students who had no training in working with the Deaf community had less knowledge of working with it than those who did. Individuals in the Deaf community may go to an audiologist for several reasons. It is important that the audiologist be able to work with these individuals in a culturally sensitive manner. Thus, the purpose of this study was to investigate the exposure, knowledge, and attitudes when working with Deaf individuals.

#### Principal investigators

 Medwetsky, Larry • Hearing, Speech, and Language Sciences

#### Additional investigators

- Boudreault, Patrick ASL and Deaf Studies
- Easterling, Beth History, Philosophy, Religion, and Sociology
- Matesi, Chelsea (Student) Hearing, Speech, and Language Sciences

# Assessing the Risk of Cochlear Damage in Irish Step Dancers

Status: Ongoing Start date: June 2016 End Date: April 2017

This project is designed to assess the risk of cochlear damage in those who have been exposed to Irish music and dance for a long period of time by comparing distortion product otoacoustic emission input-output function of a group of Irish Step Dancers to an equivalent group of those who have not been exposed to loud levels of sound. Noise exposure can cause many health complications. Irish Step Dancers are not only exposed to loud music levels, but they are also exposed to loud noise levels that are caused by dancing with fiberglass shoes. Irish step dancing studios have hard wooden floors that are designed to increase the intensity level of each dance step. This is done so the dancers can hear themselves and each other over the music so they can stay on beat. Oftentimes there is a difficult balance of maintaining the noise levels of the shoes and the noise levels of the music; the noise from the dancing causes the dancers to not hear the music, so the music level is increased. In turn, the music becomes louder and the dancers then have to dance with more intent, causing the noise levels from the dancing to increase. Noise induced hearing loss can occur when an individual is exposed to 85 decibels (dB) on a regular basis, or if the noise level exceeds 120 dB in one instance.

#### Principal investigators

• Fauble, Brittany (Student) • Hearing, Speech, and Language Sciences

#### Additional investigators

• **Bakke, Matthew** • Hearing, Speech, and Language Sciences

# Auditory self-monitoring

Status: Completed Start date: October 2003 End Date: October 2016

A novel approach to investigating self-hearing has been developed. It is based on traditional psychophysical techniques, and focuses on the individual's sensitivity to variations in different acoustic properties of his/her speech feedback (e.g., timing, intensity). To date, tests of feedback delay detection and relative loudness of the self-generated speech have been fully automated and applied to investigate the effect of differ-

ent listening conditions on self-hearing by individuals with different hearing abilities. In addition, a new line of research has been developed that focuses on the acoustic characteristics of the speech signal recorded both in the person's ear canal and at different points on his/her head, for live versus recorded speech, in either an open or occluded ear. It is expected that the outcomes of this research program will include both increased understanding of the role that speech feedback plays in speech production, and the guidelines for the design of hearing assistive technology that can better serve self-hearing needs of hard of hearing individuals.

#### Principal investigators

• **Barac-Cikoja, Dragana** • Hearing, Speech, and Language Sciences

#### **Funding sources**

 U.S. Dept. of Education-National Institute on Disability & Rehabilitation Research (NIDRR)

# Comparing Monolinguals with Sequential Late Bilingual Listeners: A Spoken-Language Processing Study

Status: Ongoing Start date: October 2015 End Date: April 2017

Central auditory processing tests are usually administered in English. Despite self-ratings of an overall equal proficiency in English between sequential late bilinguals and monolinguals, tests performed in difficult listening conditions, such as those involving background noise or competing stimuli, have shown that sequential late bilinguals perform more poorly than monolinguals for whom norms have been derived. This study will assess whether sequential late bilinguals perform more poorly than monolinguals on various auditory processing tasks that require higher-order spoken language processing.

### Principal investigators

- **Park, Ellen** (Student) Hearing, Speech, and Language Sciences
- Garrido-Nag, Karen Hearing, Speech, and Language
  Sciences

### Additional investigators

• Medwetsky, Larry • Hearing, Speech, and Language Sciences

# Comparing objective and subjective outcomes of two frequency-lowering algorithms

Status: Completed Start date: December 2015 End Date: May 2016

This research project compares two different frequency-lowering algorithms that are used by two major hearing aid manufacturers. Frequency-lowering algorithms are typically used for individuals who have a significant high frequency hearing loss and normal or only a mild hearing loss in the low frequencies. The purpose of frequency-lowering technology is to move high frequency speech sounds, which would often be inaudible to the hearing aid user, to a lower, more audible frequency bandwidth. By applying these algorithms, individuals are able to better understand speech and gain greater benefit from their hearing aids. Each hearing aid manufacturer uses a unique algorithm to accomplish optimal speech audibility. There is little research comparing the effectiveness of each of these different algorithms. This research attempts to fill that void. By comparing two major frequency-lowering algorithms, we will be able to determine the effectiveness of each algorithm and whether or not there is a significant difference between them. Audiologists should have a better understanding of how well these algorithms work in order to prescribe hearing aids that will provide the most benefit to their patients.

#### **Principal investigators**

 Rose, Bethany (Student) • Hearing, Speech, and Language Sciences

#### **Funding sources**

Gallaudet Small Research Grant

# The effect of caffeine withdrawal on VNG oculomotor assessment

Status: Completed Start date: October 2014 End Date: December 2015

Many audiologists recommend that patients abstain from caffeine before vestibular testing. The necessity of this requirement, however, has not been substantiated in the literature. Abrupt caffeine abstention is known to cause caffeine withdrawal symptoms, which can include drowsiness, fatigue, and inattention. These particular symptoms are also known to negatively affect oculomotor performance. This study investigated the impact of caffeine withdrawal symptoms on Videonystagmography (VNG) oculomotor assessment. Fifteen caffeine users who consumed, on average, between 200 and 900 mg of caffeine daily were recruited. Participants were subject to the oculomotor portion of the VNG test battery, in addition to spontaneous nystagmus measures, with caffeine in their systems and again after abrupt abstention. Participants also completed a caffeine withdrawal symptom assessment at the end of testing. The results showed 86% of participants reporting drowsiness/fatigue and 80% reporting decreased alertness/concentration. Paired sample t-tests revealed statistically significant differences in caffeinated versus abstention performance for 40 deg/sec OKN velocity for clockwise and counterclockwise stimuli (p = .009, p = .013) and for gain for clockwise stimuli (p = .041). No other parameters measured revealed significant differences in performance. Results from this study reveal that regular caffeine users who abruptly abstain from caffeine for vestibular testing may exhibit poorer oculomotor responses as opposed to their performance with caffeine in their system. Caffeine consumption does not appear to negatively impact oculomotor test performance; however, caffeine abstention does appear to cause negative withdrawal symptoms for many patients. These findings provide evidence that supports reconsideration of caffeine abstention requirements prior to vestibular assessment.

## **Principal investigators**

- **Graham, Krystyna** (Student) Hearing, Speech, and Language Sciences
- Tamaki, Chizuko Hearing, Speech, and Language Sciences

#### Additional investigators

• Smith, Sean (Student) • Hearing, Speech, and Language Sciences

# Effect of eye gaze on amplitude of the ocular vestibular evoke myogenic potential (oVEMP)

Status: Completed Start date: September 2014 End Date: October 2015

The purpose of this study is to evaluate which eye-gaze direction will produce the greatest amplitude when recording the response of the ocular vestibular evoked myogenic potential (oVEMP). Six muscles aid the movements of the eye. Vertical eye movements (up and down) use four of the six muscles: superior rectus, inferior oblique (up), and superior oblique and inferior rectus (down). The oVEMP is derived solely from contractions of the inferior oblique. Previously studied eye gaze positions (i.e. upward maximal gaze and upward gaze of 30-35 degree) have been used in recording the oVEMP response. These upward eye gazes contract the inferior oblique muscle while eliciting the use of the superior rectus to accomplish the upward direction of gaze. This study will solely elicit the contraction of the inferior oblique muscle, and will compare two eye-gaze positions: side and upward left (side gaze left) and side and upward right (side gaze right) with the previously studied upward eye-gaze (up gaze) direction. The oVEMP will be measured using each of the eye gaze directions and comparisons between previously used up gaze, and this study's side gaze will be analyzed. Measuring only the contraction of the inferior oblique may reveal a more sensitive response that can be obtained for the oVEMP.

#### Principal investigators

• Espinosa, Ashley (Student) • Hearing, Speech, and Language Sciences

# Effect of Talker Gender and Speech Stimuli Type on Speech Perception

Status: Completed Start date: September 2013 End Date: July 2016

Multiple factors affect the audibility of speech sounds for individuals with hearing loss. One relates to the spectral differences between male and female talkers, such as those that entail alveolar (s, sh) sound. Previous research has demonstrated significant gender/age-related differences in the production of these speech sounds per the frequency of their peak energy. For example, one study shows that female adult speakers produce the 's' sound at significantly higher frequencies than their male adult counterparts (Mean = 4.3 KHz). The importance of these spectral differences has been explored in a number of studies examining speech perception in individuals with hearing loss. Results have shown that individuals with (simulated) hearing loss perform significantly poorer when presented with female adult/children speech samples -- especially as it pertains to perceiving high frequency speech consonants. This study examines differences in the perception of speech as produced by male/female talkers, by administering commonly used clinical procedures that vary by speech stimuli type.

# Principal investigators

- Fishman, Gabrielle (Student) Hearing, Speech, and Language Sciences
- Medwetsky, Larry Hearing, Speech, and Language Sciences

#### Additional investigators

• Kwon, Bomjun • Hearing, Speech, and Language Sciences

### The Effects of Background Noise on Preferred Listening Levels and Loudness Perception of Music

Status: Completed Start date: September 2015 End Date: April 2016

Currently, there is a lack of research focusing on the effect of background noise on loudness perception of music and the possible relationship between increased PLLs in noise. The current study seeks to define changes in loudness perception of music in quiet settings versus noisy settings and to relate loudness perception in quiet versus noise to selected PLL in quiet versus noise. The research will provide more insight in regards to necessary protection from background noise while listening to music and education regarding the possible risks. Questions: What is the relationship between adult PLLs for music and SNR as the intensity of noise increases? What is the effect of noise on the loudness perception of music in adults? Methods: The study will include 20 normal hearing participants who will rate the loudness of music in a quiet setting, as well as for 3 different levels and types of noise. The participants will also set PLL in a quiet setting, as well as for the 3 different levels and types of noise. Analysis: Repeated Measures Analysis of Variance will be used to determine the effects of level and type of background noise on loudness ratings and PLL.

#### Principal investigators

• Gilbert, Leslie (Student) • Hearing, Speech, and Language Sciences

#### Funding sources

Gallaudet Small Research Grant

# Hearing Aid Validation in Deaf University Students Using Self-Assessment Measures

Status: Completed Start date: January 2016 End Date: December 2016

Hearing aid validation is an important part of assessing hearing aid outcomes and efficacy. While objective measures such an improvement in speech perception scores can be part of validation, self-assessment measures are also an important component. As such, there are a variety of questionnaires available for this purpose. However, most current inventories were developed for the general adult population with postlingual hearing loss and would be inappropriate to apply the normative data of those inventories to deaf and hard of hearing adults who use American Sign Language as their primary mode of communication. Current self-assessment questionnaires contain questions that are not always applicable to this population. The goal of this study is to highlight and identify questions in the self-assessment questionnaires that are applicable for this population through surveying deaf and hard of hearing university students and audiologists accustomed to working with deaf and hard of hearing individuals who use American Sign Language. The following self-assessment questionnaires will be used: Abbreviated Profile of Hearing Aid Benefit, Satisfaction with Amplification in Daily Life, International Outcome Inventory - Hearing Aid, Hearing Aid Users Questionnaire, Profile of Aided Loudness, and Device Oriented Subjective Outcome Scale.

### Principal investigators

• Feltner, Cassandra Beth (Student) • Hearing, Speech, and Language Sciences

#### **Funding sources**

Gallaudet Small Research Grant

# Interactive learning environment for optimizing technology use

Status: Ongoing Start date: October 2014 End Date: September 2019

Current clinical and home training programs for auditory rehabilitation use an *intensive* learning paradigm, a supervised training regime focusing on the use of important acoustic and contextual cues. This contrasts with principles of *implicit* learning that model perceptual learning in real-life, natural circumstances, and emphasize spontaneous exploration of the environment. The goal of this project is to develop a prototype training/counseling program to simulate different real-life listening conditions so that a person can experience both the benefits and limitations of their hearing devices, and develop realistic auditory rehabilitation goals and expectations. To accomplish this, the training program utilizes an individualized and interactive learning environment, consisting of soundscapes that represent a variety of listening situations with varying degrees of difficulty, and which change in response to user input. The program is based on self-directed exploration of the relationship between (i) acoustic factors that affect

hearing/sound processing, and (ii) *technological solutions* and *communication strategies* that are aimed at improving sound detection, speech comprehension and the overall listening experience. Simulations of real-life listening conditions allow a self-structured direct experience that neither traditional auditory training nor informational counseling provide.

### Principal investigators

- Barac-Cikoja, Dragana Hearing, Speech, and Language
  Sciences
- Kozma-Spytek, Linda Art, Communication and Theatre - Technology Access Program (TAP)

### **Funding sources**

 National Institute on Disability, Independent Living, and Rehabilitation Research

#### An Investigation of Virtual Environment Stability

Status: Completed Start date: April 2016 End Date: September 2016

Virtual reality technology has great potential for vestibular testing and research, and the Oculus Rift DK2 (OR) head mounted device is a promising system for those applications. Despite numerous advantages over other virtual reality systems, results obtained with the OR should be treated with caution until the system itself is validated. This study will validate the OR by showing that it will not impact subject performance in a simple sensory-integration test. That test, the mCTSIB, will assess subjects' ability to combine vestibular, visual, and proprioceptive information by measuring postural sway. If the OR is not a valid system for testing and research, it will produce inaccurate vision. This will cause subjects to sway more when compared to the same test taken without virtual reality. Subjects will be asked to fill out a questionnaire for their hearing, balance, vision, and medical history. Next, they will perform the mCTSIB with no special conditions. Finally, they will perform the mCTSIB while viewing a virtual scene. Confirming that the OR does not cause a decrease in subject performance greatly impacts future research, because results of future research obtained with the device will have been proven reliable.

## Principal investigators

• Smith, Sean (Student) • Hearing, Speech, and Language Sciences

#### **Funding sources**

Gallaudet Small Research Grant

#### Prevalence of dizziness and balance problems in deaf adults

Status: Completed Start date: August 2015 End Date: August 2016

The current project aims to document the prevalence of dizziness and balance problems in adulthood, and to some extent, describe the types of problems that deaf adults report. Because of the anatomical proximity of the vestibular organs to the hearing organs, it is feasible to predict that deaf individuals experience more dizziness and balance difficulties than hearing individuals. Literature suggests greater balance difficulties in deaf children; however, prolonged effects into adulthood have not been reported. Due to recent evidence suggesting that lifelong vestibular deficits affect spatial memory and cognitive capacities in advanced adulthood, it is imperative to identify the risk population and implement preventative strategies.

#### Principal investigators

• Tamaki, Chizuko • Hearing, Speech, and Language Sciences

# Project D3: Interactive learning environment for optimizing technology use

See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

# Project R1: Enhanced aural rehabilitation for cochlear implant users via telerehab technology

See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

# Project R2: User-driven customization of cochlear implant programming

See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

# A quantifiable posturography screening measure using the Wii Fit Plus

Status: Completed Start date: May 2014 End Date: December 2016

This study will describe normative values for the Nintendo Wii balance board as a quantifiable screening measure for balance disorders for individuals with and without sensorineural

hearing loss. Twelve healthy young adults (ten with no hearing loss; two with severe to profound sensorineural hearing loss) completed the modified Clinical Test of Sensory Integration and Balance (mCTSIB) on the Wii Fit balance board. Normative values for each condition of mCTSIB were based on standard deviation from the mean score in three sets: "Center of Balance", Balance Maintenance Duration, and Stability Score. Furthermore, the correlation between Body Mass Index (BMI) and results on the FT tests were analyzed. A statistically significant negative correlation was found with BMI in relation to Condition 4 FT time. Within the population of participants, there was a large percentage of participants presenting with vestibular (33.3%) or somatosensory (50%) patterns. The Wii fit Balance board has been previously shown to be comparable to Computerized Dynamic Posturography with good reliability and validity. Using it as a portable tool for quantifying mCTSIB has potential for clinical use. However, due to the high percentage of abnormal mCTSIB results in the sample and a strong negative correlation between BMI and FT time in Condition 4, further study is necessary before adopting the Wii Fit as a clinical tool.

# Principal investigators

- Tamaki, Chizuko Hearing, Speech, and Language Sciences
- Vilendrer, Jessica Hearing, Speech, and Language Sciences

# Various Earphone Models for iPhones: Do They Make a Difference When Used With a Hearing App?

Status: Ongoing Start date: September 2015 End Date: April 2017

In recent years, downloadable applications have become available to transform iPhone and Android mobile devices into personal sound amplifiers. The United States Food and Drug Administration (FDA) defines Personal Sound Amplification Products (PSAP) as "wearable electronic products that are intended to amplify sounds for people who are not hearing impaired." Generally, PSAPs have consisted of portable amplifying systems; however, with the advent of downloadable amplifying software, this category has broadened to include amplifier applications that can be downloaded to a user's mobile device. One question concerning the use of smartphones with downloadable amplifier apps is whether the type of in-the-ear earphones makes a difference to performance. The proposed study compares "aided" objective and subjective performance in a group of listeners expressing difficulty hearing in everyday settings, yet whose loss did not result in a recommendation for hearing aids. Performance was examined between three in-theear earphones using the same smartphone-based amplification application.

## **Principal investigators**

- Ruggiero, Katie (Student) Hearing, Speech, and Language Sciences
- Bakke, Matthew Hearing, Speech, and Language Sciences

## Additional investigators

 Medwetsky, Larry • Hearing, Speech, and Language Sciences

#### **Funding sources**

Gallaudet Small Research Grant

# **Scholarly and Creative Activity**

Medwetsky, L. & Yoshinaga-Itano, C. (2016, April 15). Theoretical model for speech contrast perception and its application to assessment and habilitation. *Presented at The American Academy of Audiology*, Phoenix, AZ.

Medwetsky, L. & Yoshinaga-Itano, C. (2016, April) *Auditory Discrimination of English Phonemes: Hierarchy of Difficulty.* Presented at the American Academy of Audiology, Phoenix, Az

Medwetsky, L. (2016, April). *Interpreting Central Auditory Processing Test Findings: Not That Straightforward*. Presented at the American Academy of Audiology, Phoenix, Az.

Medwetsky, L. (2016, April). *Spoken-Language Processing Approach: Encompassing Auditory Processing Within a Broader Framework.* Presented at the American Academy of Audiology, Phoenix, Az.

Medwetsky, L. (2016, June). *Hearing Aid Connectivity: Bridging a Closer Connection to the World of Sound.* Presented at the Hearing Loss Association of America convention, Washington, DC.

Medwetsky, L. (2016, June). *Interpreting Spoken-Language Test Findings: Not That Straightforward.* Presented at the Louisiana Speech and Hearing Association. Lafayette, La.

Medwetsky, L. (2016, June). *The Spoken-Language Processing Approach: Broadening our Conceptualization of Central Auditory Processing*. Presented at the Louisiana Speech and Hearing Association. Lafayette, La.

Medwetsky, L. (2016, June). *Understanding the Audiogram and Audiometric Testing: So What?* Presented at the Hearing Loss Association of America convention, Washington, DC.

Medwetsky, L. (2016, May). *Hearing Needs Assessment: Individualizing the Recommendations*. Presented to the Hearing Loss Association of DC.

Medwetsky L (2015). Mobile device apps for people with hearing loss: Part 2. *Hearing Loss Magazine*. November-December: 26-32.

Medwetsky, L. (2015). Mobile device apps for people with hearing loss: Part 1. *Hearing Loss Magazine*; September-October: 20-23, 29.

Medwetsky, L. (2015, October). *Perception of Speech Contrasts as a Function of the Degree of Hearing Loss/Processing Related Deficits: Implications for Assessment and Intervention.* Presented at the HESP Seminar series at the Unversity of Maryland, College Park MD.

Medwetsky, L. (2016). Auditory brainstem response testing for early detection of hearing loss and abnormaslities of the auditory nervous system. *Hearing Loss Magazine*. July-August: 40-43.

Medwetsky, L. (2016). I can hear but I can't understand. *Hearing Loss Magazine*. March-April: 28-30. Medwetsky, L. (2016). Otoacoustic emissions testing: A critical procedure for detecting hearing loss. *Hearing Loss Magazine*. May-June: 20-23.

Medwetsky, L. (2016, June). A Comprehensive Approach to Assessing/ Managing Spoken-Language Processing Disorders (S-LPD). Presented at the Louisiana Speech and Hearing Association. Lafayette, La.

Maul, K.K. & Segismundo, M.C.P. (2016, March). *Enhancing Spontaneous Verbalizations in Chronic Aphasia: Transfer Package of Intensive Language Action Therapy.* Presented at Speech-Language-Hearing Association of Virginia Conference, Chantilly, VA.

Maul, K.K. & Segismundo, M.C.P. (2016, March). *Enhancing* Spontaneous Verbalizations in Chronic Aphasia: Transfer Package of Intensive Language Action Therapy. Presented at the 2016 Gallaudet Research Expo, Gallaudet University, Washington, DC.

Yoshinaga-itano, C. (2016, April 20). *Early detection (newborn hearing screening) on early intervention impact on language development.* Presented at US-Russia Peer-to-Peer Program. St. Petersburg, Russia.

Yoshinaga-Itano, C. (2016, May 28). Speech takes a piggyback on sign language. *Presented at X International Workshop on Advances in Audiology*. Salamanca, Spain: Universidad Salamanca.

Yoshinaga-Itano, C. (2016, May 6). *The communication is the key.* Presented in Santiago, Chile.

Yoshinaga-Itano, C., Park, A., Nunez, L. (2016, April 9). *Evolution of a revolution: Universal newborn hearing screening.* Presented at National Academies of Practice, Baltimore, MD.

# History, Philosophy, Religion, and Sociology

The program incorporates traditional and innovative historical methods and approaches in its teaching and research, and maintains a strong tradition of high quality research. Research interests include Deaf history, the history of disability, Latin American history, French history, and urban history.

# **Research Projects**

**Deaf NYC** See in Center for Deaf Documentary Studies (CDDS)

**Peace Corps Stories** See in Center for Deaf Documentary Studies (CDDS)

# Targeting America's Defectives: the Exclusion of Deaf People from State Sterilization Programs

Status: Ongoing Start date: January 2016 End Date: October 2022

Harry H. Laughlin, best known as the expert on sterilization in the United States, drafted a model sterilization law for states to consider adopting. Laughlin identified people with deafness as a target for sterilization. However, none of the states that adopted sterilization laws in the United States included the deaf on the list. What is the rationale for leaving deaf people out of state eugenic programs? Why was deafness, a condition typically a category eligible for sterilization never actually in the law? This project seeks to explore the processes of excluding deaf people, and its rationale, as a target of sterilization.

### Principal investigators

**Greenwald, Brian •** History, Philosophy, Religion, and Sociology

### **Unpacking Sterilization Laws: The Deaf**

Status: Completed Start date: February 2016 End Date: September 2016

The leading proponent of sterilization in the United States was Harry Hamilton Laughlin, superintendent of the Eugenics Record Office at the Cold Spring Harbor Laboratory located on Long Island, New York. Those states that adopted sterilization laws usually were modeled after Laughlin's conceptual framework. Laughlin's list of "socially inadequate classes" included "the deaf" and was listed as a target for sterilization. However, none of the states that adopted sterilization laws in the United States included deaf people. What is the rationale for leaving deaf people out of state eugenic programs? Why was deafness, a condition typically started out as a category eligible for sterilization but never actually written into law? This project seeks to use Virginia as a case study to explore the processes and rationale for excluding deaf people from sterilization policies in that state.

#### Principal investigators

• Greenwald, Brian H. • History, Philosophy, Religion, and Sociology

# **Funding sources**

Gallaudet Small Research Grant

### US Navy/NASA Experiments on Deaf Men:

See in Center for Deaf Documentary Studies (CDDS)

# Scholarly and Creative Activity

Greenwald, B. H. (2015, November). *Signs of the Times in Body Politics: Disability in America*. Personal Interview with Back Story Radio. Retrieved from http://backstoryradio.org/ shows/body-politics/

Greenwald, B.H. (2016). Revisiting Memoir Upon the Formation of a Deaf Variety of the Human Race: Alexander Graham Bell and Deaf Autonomy. In B. H. Greenwald and J. J. Murray. (Eds.), In Our Own Hands: Essays in Deaf History, 1780-1970. (pp149-170). Washington, DC: Gallaudet University Press.

Greenwald, B.H. and Murray, J.J. (Eds.). (2016). *In Our Own Hands: Essays in Deaf History, 1780-1970* Washington, DC: Gallaudet University Press.

# **Honors Program**

The Honors program provides a comprehensive undergraduate program from recruitment to Honors graduation. It features in depth critical thinking, research opportunities, and personal and professional skill development needed for achievement in both the arts and the sciences as well as in technical fields and a variety of professions.

### **Research Projects**

#### **Capstone Honors**

Status: Ongoing End Date: September 2016

The Honors Capstone is the pinnacle of an undergraduate student's experience. During their Capstone experience, Honors graduates produce their first original scholarly or creative work. Motivated and capable students from all disciplines are invited to embark on this year-and-a-half journey. During this process, students select their committee, find a topic, propose their work, and then create their Capstone. Each student invests a huge portion of time and energy in completing the project.. The Capstone Presentation is the final requirement for graduation with University Honors.

### Principal investigators

- Shultz Myers, Shirley Honors Program
- Whitebread, Geoffrey Honors Program

## Products

Abbot, Zachary (2016). *Cochlear Implants and Related Neurotechnologies: Japanese Perspectives in Deaf Neuroethics*. (Honors capstone project). Gallaudet University, Washington, DC.

Biskupiak, Andrew (2016). *An Oral History of Homophobic Bullying in All-Deaf Schools and Mainstream Schools*. (Honors capstone project). Gallaudet University, Washington, DC.

Foreman, Paige (2016). *Ghost Stories: Philosophy Through Literature*.(Honors capstone project). Gallaudet University, Washington, DC.

Fox, Jenna (2016). *The White Church: A Young Adult Novel*. (Honors capstone project). Gallaudet University, Washington, DC.

Tian, Shuxu (2016). *Sign and Share: Full-Stack International Video Sharing Website.* (Honors capstone project). Gallaudet University, Washington, DC.

# Interpretation

The Interpretation Program offers a multidisciplinary approach, with a special focus placed on theory and research. Course research as well as encouraged research are done as ways for students to exercise theories and explore new strategies in problem-solving. The results of research done by students, faculty, and staff continually provide new insight to the interpretation field. Through its recently established Center for the Advancement of Interpreting and Translation Research (CAITR), the Interpretation Program also offers opportunities for scholars and students to collaborate on projects and promote initiatives that advance interpreting/translating research nationally and internationally.

## **Research Projects**

Comparative analysis of the signed output of a Deaf Interpreter working from English text and from an ASL interpretation

Status: Completed Start date: November 2015 End Date: May 2016

The use of Deaf interpreters has been gaining awareness in the field of interpreting and the number of Certified Deaf Interpreters registered with Registry of Interpreters for the Deaf have steadily increased in the last few years; however, research on the work of Deaf interpreters is very limited. Conference interpreting is a popular setting for Deaf interpreters teaming with hearing interpreters, and more recently, European Deaf translators/interpreters working from real-time captioning. This study aims to compare these two conference interpreting approaches, working from English into American Sign Language from an intermediary hearing interpreter and directly from English text, by looking at eye gaze behavior and pausing in the Deaf interpreter's interpretations. Two filmed monologic interpretations by the same Deaf interpreter working from two different inputs in a simulated conference lecture provide the data for linguistic feature analysis on ELAN, a linguistic annotator software. Results of this study will give us a better understanding of the Deaf interpreter's processes and bring to light what a "Deaf Translation Norm" might look like in English-to-ASL conference interpreting.

#### Principal investigators

• Konkel, Darla (Student) • Interpretation

# **Funding sources**

Gallaudet Small Research Grant

### **Coping Mechanisms for Mental Health Interpreters**

Status: Completed Start date: September 2015 End Date: May 2016

The research that has been done in the interpreting field focuses greatly on the work of the interpreters, e.g., translation strategies, working memory, controlling the interaction, language use, etc. Something that cannot be ignored, though, is the emotional impact certain assignments can have on interpreters. Previous studies explain that interpreters, especially those in the mental health field, should have strategies ready when faced with such emotionally charged situations. However, few suggestions are actually provided, with very little evidence of effective methods from interpreters themselves. The purpose of my research will be to explore available resources for mental health interpreters and, more specifically, their preferred coping mechanisms for particularly emotional jobs. This will allow us to further understand what resources are available to interpreters, and what improvements can be made in this area.

#### Principal investigators

• Knodel, Rebekah (Student) • Interpretation

#### **Funding sources**

Gallaudet Small Research Grant

# Do ASL/English Interpreters Demonstrate a Greater Command of English Synonyms than Monolingual Speakers of English?

**Status:** Completed **End Date:** September 2016

There has been much discussion regarding the importance of vocabulary in language-learning, with most linguists now saying that vocabulary is "at the heart of communicative competence" (Meara, 1996, p35). This exploratory, quantitative study aims to assess American Sign Language/English interpreters' knowledge of English synonyms, with the understanding that interpreters' performance in this area will impact their ability to produce fluid, natural-sounding English interpretations that most-closely mirror a signed message's meaning. This goal will be accomplished by comparing ASL/English interpreters' responses and monolingual English speakers' responses to a short (12-item) procedure, during which each participant will be asked to list English synonyms for words included in basic English vocabulary. Data will be collected via live and phone interactions, and will be audio recorded.

### Principal investigators

• Lutvak, Sarah Sura (Student) • Interpretation

#### **Funding sources**

Gallaudet Small Research Grant

# Educational Interpreters and Deaf Students from Non-English Speaking

# **Status:** Completed **End Date:** September 2016

This research will attempt to grasp a better understanding of sign language interpreters experience when interpreting with Deaf students from non-English(and non-ASL) speaking backgrounds (NESB) in the education setting. The research will be conducted using a phenomenological approach. The data will be collected by one-on- one interviews with current educational interpreters in a program with a large population of Deaf students from NESB, many of whom come from Spanish speaking homes. After completing the interviews, the information will be analyzed for common themes. The themes will illustrate what the interpreter's experience working with this group is like and will hopefully guide future research into understanding how educational interpreters can better meet the needs of this population of students.

#### Principal investigators

• Davies, Shannon (Student) • Interpretation

## **Funding sources**

Gallaudet Small Research Grant

# Educational Interpreters Incorporating Visual Phonics into Their ASL Interpretations: Perspectives and Practical Application

Status: Ongoing Start date: February 2016 End Date: February 2017

Educational interpreters working in K-12 classrooms are tasked with the challenge of visually representing phonological aspects of the English language. While conveying such information via American Sign Language interpretations can be difficult, scholars have conducted research on how some professionals working with deaf and hard of hearing students are using one system called Visual Phonics to relay information about phonological features of English. Based on the promising results of this research on the system's effectiveness, some public school systems are now requiring that educational interpreters incorporate Visual Phonics into their sign interpretations. However, no research currently exists that addresses educational interpreters' use of the system within their sign products. Through the use of a survey and analysis of video recordings of educational interpreters incorporating Visual Phonics into their sign interpretations, this study aims to address the absence of research in this area by reporting the perspectives of educational interpreters implementing Visual Phonics into their work and describing ways in which they are utilizing the approach.

#### Principal investigators

• Cranston, Jennifer (Student) • Interpretation

#### **Funding sources**

Gallaudet Small Research Grant

# Educational interpreting: working with Deaf children who have autism spectrum disorders/ additional special needs

**Status:** Completed **End Date:** September 2016

A significant amount of research is available related to sign language interpreters who work with Deaf children in the K-12 educational setting. There is also some research that addresses the difficult task of educating Deaf children who also have an Autism Spectrum Disorder (ASD). However, currently there is a lack of research that includes these two focuses of study in order to examine the unique needs of interpreters for Deaf children with ASD. The purpose of this study is to explore experiences, coping mechanisms, and specific tools that educational interpreters utilize when working with Deaf children with ASD. This research will consist of a qualitative study incorporating ethnographic interviews of educational interpreters who have experience working extensively with Deaf children who are also diagnosed with Autism Spectrum Disorder. Follow-up interviews will also be administered of the same interpreters to gather an in-depth, rich, and substantive accumulation of data. By exploring their unique perspectives, this study seeks to gain insight into their experiences as a whole and more specifically, strategies, techniques, actions, and decisions to promote communication. This research will provide an analysis of emergent themes present in the interviews to contribute to the growing body of knowledge and resources about interpreting for Deaf ASD students.

#### **Principal investigators**

Morgan, Mary Beth (Student) • Interpretation

# **Funding sources**

Gallaudet Small Research Grant

Exploring the hegemonic whiteness in sign language interpreter education. Program curricula: A discussion with students, faculty and administrators

**Status:** Completed **Start date:** January 2015 **End Date:** January 2016

Prior to the establishment of formal training for sign language interpreters, Deaf community members selected and trained individuals to provide these services. After the implementation of laws calling for the provision of sign language interpreting services, formal sign language Interpreter Education Programs (IEPs) were established to provide skilled practitioners in the field. According to professional membership numbers and other data associated with racial diversity in the field of sign language interpretation, the number of African Americans/ Blacks in the field has not grown at a steady pace, particularly within sign language IEPs. This research study will examine how IEPs are addressing the call for diversity in their programs specifically related to African American/Black students.

#### Principal investigators

• Williams, Leandra (Student) • Interpretation

### Interactive interpreting: teaching and learning strategies 2

Status: Completed Start date: September 2014 End Date: October 2015

American Sign Language (ASL)/English interpreters often interpret in interactive situations where there are multiple speakers. When this occurs, the participants often learn who is speaking when the interpreter indicates who is initiating each utterance, a practice known as source attribution (SA). When interpreting from English into ASL, SA may be indicated via body shifting, changing eye gaze, index-to-source (pointing at who is speaking), or naming/describing the speaker. Although attributing interpreted utterances is a critical skill for interpreters, there is no known quantitative, experimental data verifying the use of teaching methods on this skill within the Interpreter Education Programs (IEPs) curricula. This study aims to examine the effects of SA instruction on interpreting students by using a pre-test/instruction/post-test design. It is hypothesized that the results will indicate an increased ability of the interpreting students to incorporate SA into their interactive

interpreting work. This study will provide an initial basis for the use of this type of research within interpreter education.

#### Principal investigators

Maddux, Laura (Student) • Interpretation

# Interpreting decisions and power: Interpreters working in legal settings

Status: Completed Start date: April 2012 End Date: December 2015

The primary aim of this applied research project is to investigate the decisions made by interpreters in legal settings that address the power relationship differential frequently found among participants in these settings. The project will expand knowledge about the various ways in which interpreters adopt practices designed to recognize, use, and potentially limit the impact of their power as the interpreter in a legal interaction. The objectives are to: (1) Assess awareness of interpreters in legal settings about the ways in which their decisions can positively or negatively affect the balance of power within an interpreted interaction; (2) Explore strategies used by interpreters when selecting the mode of interpretation in order to address power differentials in interactions; (3) Examine ways in which active preparation for legal assignments can contribute to producing a more effective interpretation, thus bringing closer alignment between parties in the legal interaction; (4) Investigate how Deaf/non-deaf interpreter teams affect an interpreted interaction and how the team is perceived by others in the legal interaction and; (5) Identify working conditions that contribute to the shared responsibility in addressing the power relations among all participants in a legal interaction.

#### Principal investigators

- Shaw, Risa Linguistics
- Clark, LeWana (Student) Interpretation
- Cranston, Jennifer (Student) Interpretation
- Russell, Debra University of Alberta

# Interpreting for Deaf academics: Perceptions of credibility by non-signers

**Status:** Completed **End Date:** September 2016

ASL-English interpreters working in post-secondary academic settings typically have not attained the same advanced level of

education as the Deaf academics for whom they interpret. As a result, lectures that are delivered in American Sign Language (ASL) and interpreted into English may not adequately reflect the vocabulary and delivery that were expressed by the Deaf academic. This mismatch between the source text in ASL and the target text in English may lead to misperceptions about the Deaf academic's level of knowledge and expertise. This study will examine perceptions of credibility by non-signers of a Deaf academic whose lecture is interpreted from ASL into English. To investigate this issue, three professional ASL-English interpreters will be audio recorded as they interpret into English a short video recording of a lecture delivered in ASL by a Deaf academic. The audio from these interpretations will then be presented to non-signing native English-speaking participants, who will rate the speaker's knowledge and expertise based on a number of bipolar sets of adjectives (e.g., knowledgeable/ignorant). Deaf ASL signers will be also asked to rate the ASL source video on the same set of adjectives. Participants in both groups will also be asked to comment on the qualities of the speaker's delivery that may have motivated their rating. The aim of this study is to identify whether judgments of credibility and expertise differ between the Deaf and non-signing raters who access an ASL lecture directly from the Deaf academic or via an interpreter.

#### Principal investigators

• Kraminitz, Alix (Student) • Interpretation

## Funding sources

Gallaudet Small Research Grant

## Literal interpretation stratagies of English-ASL interpreters

**Status:** Completed **End Date:** September 2016

This project focuses on mouthing strategies interpreters use while performing literal interpretation (commonly referred to as transliteration). Interpreters are often required to provide this form of interpreting to suit Deaf consumers who prefer more access to the source language. Part of this work is the inclusion of mouthings that display the visual phonological aspects of the original English words. It has been noted in previous research that interpreters do make many kinds of changes to their product when producing a literal interpretation. This includes interpreters' using and modifying their output mouthings compared to the source input. This project will analyze interpreter mouthings in this literal form by analyzing their interpretation as well as interviewing them to obtain their thinking process while interpreting. This research has the potential to help us understand better the strategies interpreters have developed in providing literal interpretations as well as help us to apply this knowledge to improve our work and to teach future generations of interpreters.

#### **Principal investigators**

Breckenridge, Devlin (Student) • Interpretation

## **Funding sources**

Gallaudet Small Research Grant

#### Male Privilege in the Field of ASL/English Interpreting

Status: Completed Start date: November 2015 End Date: September 2016

The purpose of this study will be to examine the idea of "male privilege" within the field of ASL/English interpreting. By first reviewing social issues in the workplace related to gender, it will establish a baseline for the study. Next, focus groups with both male and female interpreters will discuss these issues. We hope to find some common threads to begin to unpack the ideas of gender inequality and how it may impact the field.

#### **Principal investigators**

• Pittman, Jay (Student) • Interpretation

#### Funding sources

Gallaudet Small Research Grant

# Metalinguistic References in Interpreting: Deaf-Hearing Relay Interpreting Teams

Status: Ongoing Start date: October 2015 End Date: December 2017

The project investigates metalinguistic references in interactions mediated by Deaf-hearing interpreting relay teams. Metalinguistic function is the use of language to talk about language. Creating an interpretation can be challenging when language is used at the metalinguistic level. Interpreting metalinguistic references is especially challenging for bimodal (sign-speech) interpreters, because working between different modalities does not allow for providing a verbatim example from the source text. Due to modality constraints, signed language interpreters must employ strategies to render the communicative intent that is present in the source, but which is not accessible through the mere presentation of the original words or signs. Similarly, the coordination effort involved in a Deaf-hearing interpreting relay team may have important ramifications for the management of metalinguistic references.

#### Principal investigators

- Dively, Valerie Interpretation
- Nicodemus, Brenda Interpretation

#### Additional investigators

- Halley, Mark (Student) Interpretation
- Petitta, Giulia Interpretation

#### Funding sources

Gallaudet Small Research Grant

# Research methods in psycholinguistic investigations of signed language processing

#### Status: Completed

This chapter provides an overview of methods used to investigate the comprehension and production of signed languages. In a methodological review of 61 published studies, we found that psycholinguistic studies have been carried out on a very restricted range of signed languages. The majority of investigations used experimental methods conducted in laboratory settings. The populations studied consisted primarily of proficient adult Deaf signers, with some inclusion of hearing signers. The methods used were best suited for testing specific hypotheses about signed language processing, rather than documenting or discovering norms and preferences for language use within social contexts. We conclude our review with a discussion of the challenges researchers face when conducting psycholinguistic investigations of signed language processing.

## Principal investigators

- Nicodemus, Brenda Interpretation
- Morford, Jill University of New Mexico
- Wilkinson, Erin University of Manitoba

# Signed language interpreter responses to interpreters in the media

Start date: October 2014 End Date: May 2017

Social media has become a pervasive part of American culture, with a number of professionals using it in different ways including the spreading of wide reaching viral videos. With an increase in American Sign Language-English interpreters in the popular media, reactions to viral videos from professional interpreters need to be recorded. This study will look at how interpreters make use of social media, what sort of items they post, and how they react to posts from others. In addition to collecting basic information on how interpreters use social media, the study will explore reactions from interpreters to posts of viral videos portraying interpreters in the media. Reactions often border on that of horizontal violence as interpreters can begin to "cyber-bully" each other. Interpreters may also react negatively to posts about incidents occurring in and around the workplace, which may be perceived violations of the NAD-RID Code of Professional Conduct. Focus groups made up of self-identified working interpreters who use social media will be used to collect data about these topics. This project hopes to have a lasting impact on knowledge about interpreter social media trends along with impacts that this has on the profession.

#### Principal investigators

• Hunt, Danielle • Interpretation

# Tasks of a Trilingual Interpreter

**Status:** Completed **End Date:** September 2016

The specialization of trilingual interpreting (English, American Sign Language, and Spanish) is complex in its nature. Researching the work of trilingual interpreters within medical settings will allow us to acknowledge what processes involved and also what tasks the interpreter is coordinating while working. The working interpreter must manage the use of three languages, three cultures, and potentially three participants in a medical environment. With the research and new findings it will contribute to the profession of trilingual interpreting and may assist in defining what type of tasks are occurring in a medical setting when a trilingual interpreter is working. A trilingual interpreter may encounter various dialects of Spanish from the Spanish-speaking participant as well as being exposed to new signs or vocabulary from the Deaf participant. These

factors can potentially increase the load of linguistic encoding that is placed on the trilingual interpreter.

### Principal investigators

Candelaria, Jesús (Student) • Interpretation

### **Funding sources**

Gallaudet Small Research Grant

# Undergraduate and graduate level interpreter education: Pedagogical considerations

Status: Completed Start date: October 2015 End Date: October 2016

This chapter focuses on pedagogical issues addressed in a U.S. academic department that educates interpreters at both the undergraduate and graduate levels. These are based on teaching cognitive processes in discourse-based curricula organized around field-specific coursework. In both curricula, foundation skills begin in the first semester to provide students with grounding in the linguistic structure of both languages in order to develop an understanding of relevant discourse features, develop skills to analyze discourse in an evidencebased fashion, and to focus on pre-translation intra-lingual and cognitive processes pre-translation. Subsequent semesters emphasize the development of cognitive abilities through skills courses focused on translation, and consecutive and simultaneous interpretation taught within the context of field-specific domains, paralleled with professional practice courses that incorporate elements of professional conduct and ethics, and real-world observations with supervised practical field experiences. The chapter is based on a multi-layered project focusing on curriculum standardization over time; specifically mapping the spiraled content of the curricula while maintaining the distinction between undergraduate and graduate interpreter education. The authors propose research regarding appropriate student learning outcomes by educational level, such as surveys of U.S. interpreter education programs regarding specific aspects of their curricula to determine what areas of pedagogy are occurring at the undergraduate two-year (associate of arts/ applied science), four-year (bachelor of arts/science), and graduate (master of arts/science) levels. A descriptive contrast between these levels in Gallaudet University's interpreter education programs will be included, along with a discussion of the inter-relationship of foundational skills as they map onto subsequent skills and professional practice courses.

#### **Principal investigators**

- Hunt, Danielle Interpretation
- Metzger, Melanie Interpretation

#### Products

Metzger, M., Cagle, K., Hunt, D. I. J. (2016, July). Undergraduate and Graduate Level Interpreter Education: Pedagogical Considerations. Presented at the Critical Link, Edinburgh, UK.

# Unpacking Stakeholder Perspectives on Interpreter's Presence on Social Media

**Status:** Completed **End Date:** September 2016

Social networking is a new tool that people use to showcase, and even to brag about events happening in their lives. Moreover, people are beginning to use their social networking platforms to put the work they do in the spotlight. In general, social media has impacted the field of interpreting in some positive ways, but it has also been extremely damaging for some interpreters. There has been much debate within our field about the appropriateness of interpreters using social networking platforms to showboat their work, as well as use it as means to spread their knowledge of American Sign Language. All of which has caused tension between the Deaf community and other interpreters who may disagree with posting photos, video, or tags about their work. The aim of this study is to provide stakeholders with a clear understanding of what perceptions and expectations Deaf consumers, interpreters, and non-deaf/non-interpreter professionals have when it comes to professional participation in social media.

#### Principal investigators

• Davis, Bryan (Student) • Interpretation

#### **Funding sources**

Gallaudet Small Research Grant

# **Scholarly and Creative Activity**

Maddux, L., & Nicodemus, B. (2016). "The committee in my head": Examining self-talk of American Sign Language-English interpreters. Translation and Interpreting Studies 11(2), 177-201.

Nicodemus, B., Cole, J., & Swabey, L. (2016). Storied classrooms: Narrative pedagogy in American Sign Language-English

*interpreter education.* International Journal of Interpreter Education 17(2).

Petitta, G., Halley, M., & Nicodemus, B. (2016). *Managing metalinguistic references in bimodal interpreted discourse: An analysis of an American Sign Language-English interpretation.* Presented at the Rivista di Psicolinguistica Applicata, Roma, Italy.

Swabey, L., Nicodemus, B., Cagle, K., & Beldon, J. (2016). 'My fellow citizens': Deaf perspectives on translating the opening line of a presidential inaugural address into American Sign Language. *Journal of Interpretation*, 25(1): 9. Retrieved from http://digitalcommons.unf.edu/cgi/viewcontent. cgi?article=1064&context=joi

Swabey, L., Nicodemus, B., Taylor, M. M., & Gile, D. (2016). Lexical decisions and related cognitive issues in spoken and signed language interpreting: A case study of Obama's inaugural address. Interpreting 18(1), 34-56.

# Laurent Clerc National Deaf Education Center

### **Research Projects**

The effect of elaboration: non elaboration of sign list recall tasks on rate of learning in Deaf individuals *See in Education* 

# Linguistics

The Department of Linguistics is heavily dependent on research for both learning and teaching because sign language linguistics is a field that has so much more to discover. The ongoing, innovative research carried out by the linguistics faculty and graduate students is contributing substantially to what is known about the structure and use of sign languages.

## **Research Projects**

Examining the correlations between social network ties and linguistic production

Status: Completed Start date: October 2013 End Date: March 2016

This linguistic project examines how the social network tie between two Deaf individuals affects their production of ASL and how production differs when conversing with others. Research finds that tie causes intra-speaker variation on multiple linguistic levels. While previous sign language studies describe linguistic variation, this project examines social network's influence on such variations. This project has three research questions: (1) Are there patterns of departure from handedness and hand dominance citation forms? (2) Do these patterns correlate with the type of social network tie? 3) Do these patterns correlate with the strength of the tie? For data collection, participants were video-recorded responding to questionnaires and engaging in free conversation with different partners. Linguistic behaviors of each participant are transcribed from their respective videos. Data analysis examines participants' use of citation and non-citation sign forms, and identifies patterns. Statistical tests will compare participants' ties and their strengths with those patterns. The hypothesis is that forms will exhibit unique patterns, and there will be positive correlations between the patterns and types as well as the strengths of social ties. This project's findings will expand our understanding of social network's influence, and its quantitative evidence may rectify long-held beliefs in sign language linguistics that heretofore have been based upon subjective observations.

#### Principal investigators

Morris, Carla (Student) • Linguistics

# Examining the use of depiction across American Sign Language Proficiency Interview assessment levels

**Status:** Completed **Start date:** September 2014 **End Date:** December 2016

The linguistic feature to be investigated is depiction, "the ability to visually represent semantic components." The aim of this research is to determine how depiction usage compares among signers of different ASLPI levels in order to gain a better understanding of types of depiction evidenced at various levels of proficiency and identify problem areas related to depiction usage of less skilled signers. Throughout this project, designed to bridge the gap of information between assessment of language proficiency and features of depiction that need to be taught, the research team will analyze language samples from individuals assessed at each level of proficiency on the ASLPI. Using ELAN to compare depiction usage between signers, the research team will identify patterns and gain insight into the type and occurrence of depiction usage at various levels of fluency from newer signers to proficient signers. This information can later be applied to a larger project to include development of curriculum and teaching materials for ASL, development of

strategies to enhance assessment of ASL, and ultimately lead to improving language proficiency.

# **Principal investigators**

• Thumann, Mary • Linguistics

#### Additional investigators

- Dudley, Sadi (Student) Linguistics
- Kish, Megan (Student) Linguistics
- Medugno, Miranda (Student)

#### Funding sources

Gallaudet Priority Research Fund

# Gallaudet Scholarship of Teaching and Learning — Cohort 2

See in Center for Bilingual Teaching and Learning

# The Grammatical Incorporation of Pointing in Pro-Tactile American Sign Language at Gallaudet

Status: Ongoing Start date: November 2016 End Date: September 2017

The broad aim of this research is to understand how routine patterns in embodied interaction can influence the grammatical organization of language. In order to achieve this aim, we will focus on the ways that pointing is incorporated into the grammar of Pro-Tactile American Sign Language (PTASL) among DeafBlind people at Gallaudet University, over a threeyear period. The pro-tactile movement, which began in Seattle in 2007, is based on the idea that all human activity can be realized via touch--that hearing and vision are not necessary for such things as co-presence, navigation, social interaction, and communication. One of the implications of this view is that DeafBlind people no longer need to rely on sighted interpreters to communicate in and about their environment. Instead, they can develop practices for communicating directly with other people about the dimensions of the world that are knowable through kinesthetic, tactile, olfactory, and thermal senses. Building on prior work in the Seattle Deafblind community and informed by research about pointing and deictic systems in both spoken and signed languages, we predict that the pro-tactile movement will lead DeafBlind people at Gallaudet to point to objects and events in the immediate environment in new ways, and that pointing will be integrated with the grammar to yield linguistic forms, patterns and processes

that are not found in American Sign Language. This project promises to generate new knowledge about pointing in tactile signed languages, and in doing so, provide insights about how embodied interaction can influence language structure.

#### Principal investigators

• Edwards, Terra • Linguistics

#### Funding sources

• Gallaudet Priority Research Fund

# Interpreting decisions and power: Interpreters working in legal settings

See in Interpretation

# Perceptual narrowing in sign exposed and nonsign exposed infants

Status: Completed Start date: January 2016 End Date: September 2016

This project will investigate how early language experience affects the development of perceptual narrowing in deaf infants by comparing the perceptual abilities of young deaf children with and without sign exposure. Previous research has indicated that young infants have an inherent bias to attend to linguistic signals in their environment. Initially, the bias is broad, but at around 10-12 months old, children become more attuned to the differences that are contrastive in their native language. Emergent research has indicated that linguistic experience can significantly alter the timeframe for this perceptual narrowing. A significant question, then, is how the experience of young deaf children impacts their perceptual trajectory, both in terms of onset and length. This project will determine if children can distinguish between unknown sign languages by using sign models who are bilingual in two distinct sign languages. I will use a preferential looking paradigm to assess when perceptual narrowing occurs in sign-exposed versus non-sign-exposed children. In addition to unpacking the effects of early language experience on cognitive and linguistic development, this project will help ascertain what features of language infants attend to in determining whether it is a novel or known language.

#### Principal investigators

• Blau, Shane (Student) • Linguistics

#### **Funding sources**

Gallaudet Small Research Grant

# Philadelphia signs

Status: Completed Start date: August 2015 End Date: August 2016

The purpose of this study is to collect interviews of native deaf Philadelphians in order to capture the Philadelphia ASL Dialect for language documentation.

#### Principal investigators

- Tamminga, Meredith University of Pennsylvania
- Fisher, Jamie University of Pennsylvania
- Hochgesang, Julie Linguistics

# Sign Language Annotation, Archiving and Sharing (SLAASh)

Status: Ongoing Start date: September 2014 End Date: August 2019

SLAASh focuses on the construction of infrastructure to support the archiving and distribution of sign language corpora, focusing upon previously collected longitudinal samples of the development of child ASL.

#### Principal investigators

• Lillo-Martin, Dianne • University of Connecticut

## Additional investigators

- Catt, Donovan (Student) Linguistics
- Medugno, Miranda (Student)
- Sever-Hall, Aimee Towson University

# Signing with an accent: ASL L2 phonology and Chinese signers

Status: Completed Start date: July 2010 End Date: September 2016

This project investigates the phenomenon of "sign accent," or systematic phonological errors made by signers acquiring ASL as a second language (L2). This topic has been virtually ignored in the sign language literature, despite extensive discussion of accent in spoken L2s and a common assumption that some counterpart exists for signed L2. The investigations will focus on handshape, approaching the phenomenon of L2 signing accent. Native Chinese Sign Language Users in Beijing, China, will be recorded signing ASL, and data collected will be analyzed for an accent.

# Principal investigators

• Palmer, Jeffrey L. (Student) • Linguistics

## **Scholarly and Creative Activity**

Dudis, P. G. (2015, Fall). *Conventions in projecting multiple entities to spatial regions in ASL discourse* Presented at the Special Symposium in Honor of Dr. Phyllis P. Wilcox, University of New Mexico, Albuquerque.

# Office of Academic Quality

The Office of Academic Quality is dedicated to institutional effectiveness by providing leadership for continuous assessment and improvement of programs and services. Research is essential in this process because it assures that the decisions made are the right ones to improve the quality of the programs and services across the university.

# **Research Projects**

# Obesity: Understanding Disparities Among Deaf and Hard of Hearing Adults

Status: Completed Start date: October 2015 End Date: September 2016

Trends of obesity have increased over the last three decades, with the obesity rate doubling from 1980 to 2010. Despite these concerning statistics, certain groups, such as people with a disability, are more likely to experience health disparities, including obesity, compared to the general population. Yet, obesity research among those with a specific disability, such as deaf and hard of hearing people, is limited. Thus, the purpose of this cross-sectional study is to examine the obesity prevalence and the nutritional and physical activity behaviors among randomly sampled deaf and hard of hearing adults, aged 20 years and older, in the United States, using the theoretical framework of Social Cognitive Theory. This study will examine the association between obesity prevalence and factors of hearing level and deaf acculturation style. Further, this study will examine the association between nutritional and physical activity behaviors and factors of hearing level and deaf acculturation style. Multiple linear regression will be used to assess the associations between nutritional and physical activity behaviors and factors of hearing level and deaf acculturation style. The proposed study would contribute to design and implementation of programs and policies aimed at improving the health of deaf and hard of hearing adults.

# **Principal investigators**

• Buchko, Lindsay • Office of Academic Quality

# Psychology

The Psychology Department provides a rigorous academic and applied curriculum that addresses important core areas of psychology; encourages students to explore the implications of psychological research, theory, and practice; and includes the application of psychology in internship settings. The department also commits itself to producing scholarly work in scientific and applied areas.

# **Research Projects**

Acceptance of disability, coping strategies, and perception of social support among veterans with acquired physical disability

Status: Ongoing Start date: April 2015 End Date: August 2017

Contrary to popular belief that the majority of disabled veterans suffer from Post-Traumatic Stress Disorder (PTSD), current data shows that the most frequent disabilities are the result of hearing loss, traumatic brain injury (TBI), and bodily injuries, such as amputations, burns, and spinal cord injuries. Research also shows that the physical and emotional consequences of wounds sustained during military service significantly impact veterans' lives long after they stop active duty. When compared with non-disabled veterans, disabled veterans report more difficulties in psychological and social functioning. Still, the number of studies that investigate psychological functioning of physically disabled veterans is shockingly small. This research attempts to fill the gap. However, due to the fact that there are no available studies on psychological adaptation to physical disability in veterans, this study has an exploratory character and attempts to investigate the psychological impact of acquired physical disability on military veterans, specifically, adjustment to the disability, employed coping strategies, and general quality of life.

#### Principal investigators

- Dziura, Joanna (Student) Psychology
- Brice, Patrick Psychology

#### **Funding sources**

Gallaudet Small Research Grant

# Alternative approaches: Exploring yoga as a treatment for PTSD

Status: Completed Start date: June 2014 End Date: May 2016

Emerging research suggests that yoga may be effective in the treatment of Post-Traumatic Stress Disorder (PTSD) and other mental illnesses. However, the research conducted thus far has been conducted on small sample sizes and focused on traditional yoga classes that involve movements that are sometimes impossible for military veterans who frequently suffer from chronic pain and limited mobility. The current research examined the impact of drop-in gentle yoga classes on the mental health of military veterans after two months, with a focus on PTSD symptoms. Using a naturally created control group, exploratory and descriptive statistics were utilized to examine the differences between those that attended gentle yoga and those that had not. Results were consistent with previous literature, and the gentle yoga group experienced a greater decrease in various domains compared to the control group. The differences and implications are discussed. However, a limited sample size did not allow for the original hypotheses and proposed analyses to be conducted. Nevertheless, the results from this study warrant for future research to be conducted using a larger sample size.

#### Principal investigators

Courtney, Rena (Student) • Psychology

Additional investigators

Brice, Patrick • Psychology

The biological basis of language and reading in monolingual and bilingual children and adults (discoveries of the reading brain, the bilingual brain, and the bilingual reading brain)

See in Brain and Language Laboratory (BL2)

#### Body image, cultural, and media

Status: Ongoing End Date: December 2018

This project combines multiple studies using experimental design and survey methods to examine associations between media use and body image. In one study, data was collected from Latina adolescents who viewed media images of white women and provided qualitative and quantitative responses. A second study surveyed Gallaudet undergraduates about their media use, body image, and acculturation experiences.

## **Principal investigators**

• Schooler, Deborah • Psychology

#### Additional investigators

• Aldular, Aileen (Student) • Psychology

Cochlear implants and the brain: The biological basis for language and cognition in infants, children, and adults with cochlear implants See in Brain and Language Laboratory (BL2)

### Deaf Signers' Experience with Seeking Health Information

Status: Ongoing Start date: August 2015 End Date: July 2018

The National Cancer Institute's Health Information National Trends Survey (HINTS) is heavily dependent on English, which presents serious language barriers to Deaf patients who use American Sign Language (ASL). The availability of HINTS and similar surveys in ASL and English that are valid for users of accessible technology and services will provide important insights on understanding the trends in Deaf people's use of the Internet for health-related purposes, and therefore improving health communication models that will lead to better personal and public health within this underserved population. The research plan builds on Dr. Poorna Kushalnagar's prior research on health communication and quality of life outcomes with a Deaf population. The proposed research plan involves a development component (translation) and a research component (health information). Results from this study will provide a better understanding of the trends in using the Internet for health-related purposes, which may vary across Deaf sub-groups.

#### Principal investigators

- Kushalnagar, Poorna Psychology
- Harris, Raychelle ASL and Deaf Studies
- Paludneviciene, Raylene Psychology

# **Funding sources**

• National Institutes of Health (NIH)

#### Products

Kushalnagar, P. and Kushalnagar, R. (2016). *Making Cancer Health Text on the Internet Easier to Read for Deaf College Students who use American Sign Language*. Presented at the International Cancer Education Conference, Bethesda, MD.

Kushalnagar, P., Smith, S., Hopper, M., Ryan, C., Rinkevich, M., & Kushalnagar, R. (2016). *Making Cancer Health Text on the Internet Easier to Read for Deaf People who use American Sign Language*. Journal of Cancer Education.

# Developing an Understanding of Quality Communication in Families with Hearing Caregivers and a Deaf Child, percieved by the Child

**Status:** Ongoing **Start date:** January 2016 **End Date:** May 2017

In the field of child and family psychology, a hot topic has been the parent-child relationship, and what can possibly improve it. A less common area of study is how quality communication develops within parent-child relationships. Parents of deaf children are often faced with additional obstacles in terms of developing quality communication with their child, namely, the ability to communicate. It is for this reason that the previously established definitions of quality communication and what it entails may not be appropriate to define the relationship between deaf children and hearing parents. The proposed study is an exploratory study to gain insight into what quality communication could possibly look like in these families, as perceived by a deaf child.

#### Principal investigators

- Strauss, Gillie (Student) Psychology
- Day, Lori Psychology

## **Funding sources**

Gallaudet Small Research Grant

The diagnosis of Attention Deficit Hyperactivity Disorder in college-aged Deaf individuals: Exploring the accuracy of the Barkley Adult ADHD rating scale-IV and the Attention Deficit Scales for Adults, Sign Language Version

Status: Ongoing Start date: October 2013 End Date: May 2017

Attention Deficit Hyperactivity Disorder (ADHD), which has been found to impair one's social, familial, scholastic, and occupational adjustment, is one of the most comprehensively examined neurodevelopmental disorders. For deaf individuals, language and executive functioning have important implications for cognitive and academic functioning, but it is not clear to what extent cognitive and academic functioning are impacted in Deaf individuals with ADHD, as the amount of research conducted with deaf individuals with ADHD has been limited, especially within the realm of deaf adults. There are many areas that need to be explored in relation to ADHD, executive dysfunction, deaf individuals, and language acquisition/secondary language delay. Before these areas can be formally studied, however, the ADHD diagnostic process in deaf individuals needs to be investigated. A clear diagnostic classification of deaf individuals with ADHD must be demonstrated to ensure a distinction between deaf individuals with ADHD and those without ADHD. This study will examine the ADHD diagnostic evaluation process with college-aged deaf individuals. Specifically, this study will explore whether or not the Barkley Adult ADHD rating scale-IV and the Attention Deficit Scales for Adults, Sign Language Version, can clearly distinguish those who identify having a prior diagnosis of ADHD compared to those who do not self-identify or have a previous diagnosis of ADHD. In addition, the study will explore the potential influences of executive dysfunction and language acquisition/secondary language delay in deaf individuals on the ADHD diagnostic process.

### Principal investigators

- Farber, Gregory (Student) Psychology
- Day, Lori Psychology

# The effects of early visual language exposure on deaf children's linguistic and non-linguistic visual processing: An Eye-Tracking and fNIRS brain imaging investigation of emergent readers

See in Brain and Language Laboratory (BL2)

Emotion regulation and effortful control in deaf children as a function of parenting behavior and communication quality

Status: Completed Start date: February 2014 End Date: September 2016

In hearing children, intra-individual emotion regulation skills such as effortful control are heavily influenced by the manner and style with which parents engage children in extra-individual emotion regulation. By means of parent modeling of intraindividual regulation and positive parenting, children learn to engage in increasingly complex forms of emotion regulation. Research on emotion regulation with hearing parent-child dyads assumes there is fluent communication. However, research with language-impaired hearing children and with typically developing deaf children suggests that the efficacy with which the parent is able to communicate with the child plays a major role in the efficacy of the child's intra-individual emotion regulation and effortful control skills. It is widely acknowledged that deaf children of hearing parents encounter communication barriers that most hearing children do not. What is not known is the effect of parent-child communication on parenting behavior and on the child's emotion regulation as well as their effortful control skills in families where fluent communication may not be present. Parent perception of communication, their own emotion regulation, the child's emotion regulation, and effortful control skills will be collected to explore these relationships. Measures include The Emotion Regulation Checklist, The Coping with Children's Negative Emotions Scale, The Child Behavior Questionnaire, and The Communication Quality Questionnaire for Deaf Children.

#### Principal investigators

- Letteri, Amy (Student) Psychology
- Pick, Lawrence H. Psychology

# Emotional Display Rules of the Deaf Culture: An Evaluation of Emotional Expression

Status: Ongoing Start date: January 2016 End Date: September 2017

Display rules refer to the culturally prescribed rules of how, to whom, when, and which type of emotion is expressed in specific situations. These rules depend on cultural norms such as individualism and collectivism. With research supporting that the Deaf community has its own collectivistic culture, the proposed study seeks to identify the display rules used within

the deaf culture. The current study will use the Display Rule Assessment Inventory and the Deaf Acculturation Scale as primary measures of emotional display rules and acculturation occurring in the deaf culture. The proposed study is comprised of two objectives; the first is to evaluate the display rules used within the deaf culture in order to advance the literature and understanding for emotional processes within the deaf culture. The second objective includes an exploratory analysis of three additional questions, such that a) How does the primary language used by the participant influence, if at all, the level of emotional expressiveness? b) How does the primary language used at home, if at all, effect the level of emotional expressiveness? c) Does the use of hearing assistive technology such as a cochlear implant or hearing aid influence the level of expressivity?

# **Principal investigators**

Gala, Nicolas (Student) • Psychology

#### **Funding sources**

Gallaudet Small Research Grant

Examining the effects of visual language experience on visual attention in young Deaf emergent readers with eye-tracking: A pilot study for innovation in e-literacy and signing creatures avatar design See in Brain and Language Laboratory (BL2)

Exploring the feasibility of utilizing PCIT in families of hearing parents and a deaf child with a weak shared communication

Status: Ongoing Start date: September 2015 End Date: August 2017

There is mounting evidence that Parent Child Interaction Therapy (PCIT) is an important psychotherapeutic intervention for deaf children, particularly those at risk for co-morbid language and behavior difficulties. The aim of the current study is to collect preliminary evidence on the use of PCIT with hearing parents with deaf children, specifically with regard to behavioral and language outcomes.

#### Principal investigators

- Previ, Danielle (Student) Psychology
- Day, Lori Psychology

Exploring the foundations of iconicity in language: Evidence from an fNIRS brain imaging study on the neural basis of ASL classifiers See in Brain and Language Laboratory (BL2)

Feasibility study on the use of head mounted displays in parent child interaction therapy

Status: Completed Start date: June 2015 End Date: October 2015

The current pilot study examined the feasibility and usability of Head Mounted Displays (HMDs) in the course of conducting Parent-Child Interaction Therapy (PCIT) with a child and caregiver who are Deaf and communicate via American Sign Language (ASL). Preliminary studies that have evaluated the effectiveness of PCIT with Deaf families suggest that PCIT is a promising treatment option, despite communication and methodological concerns. For families and therapists who communicate via spoken language, PCIT therapists provide real-time coaching to caregivers using a "bug-in-the-ear" approach, which allows for direct coaching with minimal distraction. A prominent methodological difference in existing PCIT research with Deaf families is the lack of comparable coaching practices. HMDs are glasses with an embedded computer screen that live stream a video of the therapist signing from the observation room. The technology allows for the parents to receive hands-free visual access to coaching similar to the bug-in-the-ear approach. Using a mixed methods design, this study evaluated the usability of HMDs with a Deaf caregiver and a young child over the course a baseline assessment and three CDI coaching sessions. Both qualitative and quantitative information was collected to obtain feedback on the utility and comfort of using an HMD during PCIT and to gather initial evidence on whether or not PCIT was functioning as expected. Results suggest that there is promising utility of HMDs in PCIT, however, there are also limitations. Recommendations and considerations for future studies in adapting treatment methodology for Deaf families is discussed.

## Principal investigators

- Day, Lori Psychology
- Caverly, Colleen (Student) Psychology

# HINTS-ASL: Deaf Signers' Experience with Seeking Health Information

Status: Ongoing End Date: August 2018

This project describes the national trends in Deaf people's use of the Internet for cancer health information.

# **Principal investigators**

Kushalnagar, Poorna • Psychology

#### Additional investigators

- Harris, Raychelle ASL and Deaf Studies
- Kushalnagar, Raja Science, Technology, and Mathematics
- Paludneviciene, Raylene Psychology

#### **Funding sources**

• National Institutes of Health (NIH)

#### Products

Kushalnagar, P. & Paludneviciene, R. (2016). HINTS-ASL: Inclusion of Deaf Adults in Cancer Health and Internet Research. Poster presented at the *International Cancer Education Conference*, Bethesda, MD.

Ryan, C., Kushalnagar, P., & Kushalnagar, R. (2016). Social Network Sites: Comparison of Deaf and Hearing Adult Users of SNSs for Health Related Purposes. Poster presented at the *Undergraduate Research Symposium*, Rochester, NY.

# Media Objectification and Implicit Gender Bias

Status: Ongoing Start date: May 2016 End Date: December 2019

This project evaluates the effects of sexually objectifying advertisements placed in the context of news stories about men and women in positions of power. The studies in this project use experimental design to examine the effects of the objectifying ads on implicit gender bias.

# **Principal investigators**

• Schooler, Deborah • Psychology

#### Additional investigators

- Anderson, Ashley (Student) Psychology
- Doleac, Kelly (Student) Psychology
- Fleischer, Ryssa (Student) Psychology

# Media objectification in the context of online news: Effects on implicit gender bias

Status: Completed Start date: May 2016 End Date: September 2016

My previous research demonstrated that exposure to print advertisements showing a sexually objectified woman led to significantly stronger implicit gender bias and negative evaluation of women in positions of power. Funds are requested to support a new study evaluating the effects of sexually objectifying images of both men and women in the context of online news stories about male and female political candidates. The study builds on my prior work and uses a 2 (gender of candidate) x 3 (content of ad) x 2 (gender of the consumer) experimental design to examine whether the effects of the objectifying ads on implicit gender bias are moderated by the genders of both the political candidates and the consumer. This study will provide an opportunity for Gallaudet psychology majors to work as research assistants.

### Principal investigators

• Schooler, Deborah • Psychology

#### **Funding sources**

Gallaudet Small Research Grant

# NIH Research Supplements to Promote Diversity in Health-Related Research

Status: Ongoing End Date: August 2017

This NIH research supplement to promote diversity in healthrelated research was used to provide post-B.A. fellow Sheila Bruce with a research experience that will strengthen her ability to conduct qualitative and quantitative research with deaf and hard of hearing adults in the U.S.

#### Principal investigators

Kushalnagar, Poorna • Psychology

### Additional investigators

• Bruce, Sheila (Student) • Psychology

### **Funding sources**

• National Institutes of Health (NIH)

### Products

Bruce, S., Kushalnagar, P., Atcherson, S, Cella, D, Paludneviciene, R., Schlehofer, D., Gardner, E., & McCaw-Maxwell, D., (2015). Population Health Research with Deaf and Hard of Hearing Adults. Poster presented at the *UNYTE Scientific Session: Transforming Population Health Research: Advances, New Methods, and Community Partnerships.* Rochester, NY. Best Trainee Poster Award.

Kushalnagar, P., Bruce, S., Sutton, T., & Leigh, I. (2016). Retrospective Parent-Child Communication Difficulties and Risk for Depression in Deaf Adults. *Journal of Physical and Developmental Disabilities*. DOI: 10.1007/s10882-016-9501-5

## Ongoing analysis and follow-up study of the Early Education Longitudinal Study Participants

See in Science of Learning Center on Visual Language & Visual Learning (VL2)

## PROMIS-ASL: Inclusion of Deaf Adults in Patient-Reported Outcomes Research

Status: Ongoing Start date: September 2015 End Date: August 2020

This project adapts and translates patient-reported outcome measures to ASL, and then administers them to a nationwide sample of deaf and hard of hearing adults. The research plan builds on Dr. Poorna Kushalnagar's prior research on quality of life outcomes with a deaf and hard of hearing population.

#### Principal investigators

- Bruce, Sheila (Student) Psychology
- Kushalnagar, Poorna Psychology

#### Additional investigators

- Atcherson, Sam University of Arkansas at Little Rock
- Cella, David Northwestern University

- Maxwell-McCaw, Deborah Psychology
- Paludneviciene, Raylene Psychology

#### **Funding sources**

• National Institutes of Health (NIH)

#### Products

Kushalnagar, P. & Bruce, S. (2016, April). *Population Health Research with Deaf and Hard of Hearing Adults.* Paper presented at the PacRim Disability and Diversity Conference, Hawaii Convention Center, Hawaii.

Kushalnagar, P., Atcherson, S., Paludneviciene, R., Schlehofer, D., Bruce, S., Gardner, E., McCaw-Maxwell, D., & Cella, D. (2016). *PROMIS-ASL: Patient Reported Outcomes Measure for Deaf/HH Adults.* Poster presented at the 23rd International Society for Quality of Life Research, Copenhagen, Denmark.

## Psychological stress in sign language interpreters

Status: Completed Start date: July 2013 End Date: June 2016

This research investigates vicarious stress in ASL interpreters, either in live or remote interpreting situations. The study also investigates what methods they use for coping with the stress, adaptive or maladaptive.

#### Principal investigators

Corbett, Carolyn • Psychology

#### Additional investigators

- Courtney, Rena (Student) Psychology
- Joharchi, Hannah (Student) Psychology

# A qualitative perspective on deaf women's experiences of sexual assault disclosure

**Status:** Completed **Start date:** January 2015 **End Date:** January 2016

Deaf women experience sexual assault at an alarmingly higher rate than the general hearing population. There is a paucity of research regarding disclosure patterns, the act of telling someone about a personal experience of sexual assault, in this community. Some research has indicated that most deaf survivors

seek help from informal as opposed to formal support sources. Deaf women are more likely to seek support from deaf sources rather than hearing sources. Studies in the hearing population reveal that the healing process can be significantly damaged when women perceive reactions from other people as negative. On the other hand, when a woman discloses and receives a supportive or positive reaction, the healing process is significantly unaffected. The purpose of this qualitative study is to explore the disclosure experiences among deaf women through semistructured interviews.

#### Principal investigators

Opsahl, Laura Noelle (Student) • Psychology

The RAVE Revolution for Children with Minimal Language Experience During Sensitive Periods of Brain and Language Development See in Brain and Language Laboratory (BL2)

# Resilience in Deaf Children With Additional Disabilities: The Role of the Parent-Child Relationship in Social Skills

Status: Ongoing Start date: August 2015 End Date: May 2017

Deaf children with additional disabilities face complex challenges in social functioning. Despite the high proportion of children in this subgroup, little research has been done to investigate factors that support the development of social skills in the presence of deafness and an additional disability. Preliminary research suggests that aspects of the parent-child relationship serve a protective function for child psychosocial skills in this population. However, what remains unclear is a better understanding of the dynamic between the parent and child that fosters the child's optimal social functioning. Consistent with a transactional model of the parent-child relationship and child development, the proposed research aims to identify how the personality traits of the parent, parent stress, child age, and child gender interact to support social skills among the unique, underserved, and high-risk population of children with comorbid deafness and an additional disability.

### Principal investigators

- Day, Lori Psychology
- Turner, Angela (Student) Psychology

### **Funding sources**

Gallaudet Small Research Grant

#### SFA1: Visual and cognitive plasticity

See in Science of Learning Center on Visual Language & Visual Learning (VL2)

# Signs of aggression: Translating the peer conflict scales into American Sign Language

Status: Ongoing Start date: September 2013 End Date: May 2017

Bullying and aggression among children and adolescents are prominent issues in the United States. Deaf and hard of hearing children are no less likely to be bullied or to have high levels of aggression than their hearing counterparts. This study proposes to translate a measure of aggression, the Peer Conflict Scale – Youth (PCS-Y) version, into American Sign Language (ASL) and adapt it an interactive assessment tool for signers. Therefore, this study will have two parts: (1) Translation, and (2) Running the validity and reliability of the PCS-ASL with bilingual Deaf and hard of hearing adolescents.

#### Principal investigators

- Dowtin, Ryleigh La Trice (Student) Psychology
- Day, Lori Psychology

#### A study of excellent teaching at Gallaudet University

Status: Completed Start date: January 2012 End Date: August 2016

This study identified five excellent teachers at Gallaudet University after chairpersons and faculty members were asked to nominate excellent teachers. Over 400 students responded to a survey rating their teachers this semester. The goal was not to find the best teachers, but rather to identify a diverse sample of excellent teachers on campus. They have been interviewed and video recorded in a class by ASL Diagnostic and Evaluation Services. American Sign Language and the visual nature of teaching and learning is what makes Gallaudet unique, so a classroom observation is essential. While there is research on what makes a good college teacher, there are no studies that look at the interplay of teaching strategies and techniques, and ASL and visual learning. The interview transcripts and video recordings are being reviewed for evidence of excellent teaching. Preliminary results show all five teachers to have very good signing skills, and they also exhibit classic examples of excellent teaching, including creating safe learning environments and encouraging deep processing of information.

## Principal investigators

Galvan, Dennis B. • Psychology

# Why are you here?: Certified Deaf Interpreters' psychological well-being and coping mechanisms

Status: Ongoing Start date: January 2016 End Date: May 2017

The proposed study investigates Certified Deaf Interpreters' psychological well-being when working with Language and Learning Challenged (LLC) Deaf patients in medical settings. The philosophical assumption of the proposed study follows the transformative paradigm, which focuses mostly on issues of power inequities and marginalized people. The phenomenological approach is used in the proposed study to share participants' point of view, rather than through the researcher. Findings in Guardino's (2014) study revealed concerns about CDIs frequently feeling frustrated and doubtful at their jobs, and there were some patterns of microaggression and oppression in the work place. According to the literature, research studies have focused on this area of interest (e.g., vicarious trauma) in hearing sign language interpreters (Harvey, 2001); however, this is the first research that focuses on CDI's wellbeing when working with the Deaf LLC population. This research attempts to describe CDIs' experience working with Deaf LLC individuals, techniques they use to communicate with them, challenges and frustrations when interpreting, their coping mechanisms, and what can be improved to help with their frustrations, stress, and coping mechanisms. It is hoped that results of this research would contribute to the existing literature on CDIs and the Deaf LLC population.

## Principal investigators

Guardino, Donna (Student) • Psychology

# **Funding sources**

Gallaudet Small Research Grant

# WPPSI-IV & WISC-V special population study: Deaf and hard of hearing children

Status: Completed Start date: December 2014 End Date: March 2016

Wechsler intelligence tests are commonly utilized measures for assessing the intellectual abilities of members of the deaf and hard of hearing population. Obtaining valid and useful assessment results from the administration of these tests to members of the deaf and hard of hearing population; however, it is a complex issue that requires the consideration of numerous factors, including examiner qualifications, test administration, communication mode, interpreter use, normative data, and reliability and validity issues. Further studies are needed to explore issues of reliability and validity of the Wechsler Intelligence Scale for Children - Fifth Edition (WISC-V) and Wechsler Preschool and Primary Scale of Intelligence - Fourth Edition (WPPSI-IV) with the deaf and hard of hearing population. The present study begins to fill this gap in the literature by administering the WISC-V and WPPSI-IV via standardized American Sign Language (ASL) instructions to deaf and hard of hearing children in order to obtain special group norms for deaf children who communicate via ASL.

### Principal investigators

- Day, Lori Psychology
- Bridgett, Tiffany (Student) Psychology

## Scholarly and Creative Activity

Brice, P.J. & Strauss, G. (2016, April 21). Deaf adolescents in a hearing world: A review of factors affecting psychosocial adaptation. *Journal of Adolescent Health, Medicine and Therapeutics* 7:67-76. Retrieved from https://dx.doi.org/10.2147/ AHMT.S60261

Plotkin, R.M., Reesman, J., & Brice, P.J. (2015, July). *Parent Personality and Stress as Predictors of Adjustment in Deaf Children with or without a Cochlear Implant.* Presented at the ICED, Athens, Greece.

Szarkowski, A. & Brice, P.J. (2016). Hearing Parents Appraisals of Parenting a Deaf or Hard-of-Hearing Child: Application of a Positive Psychology Framework. *Journal of Deaf Studies and Deaf Education*. Retrieved From doi: 10.1093/deafed/ enw007

Szarkowski, A. & Brice, P.J. (2016, March). *Utilizing a Positive Psychology Framework in Interviewing*. Workshop presented at the American Deafness and Rehabilitation Association Breakout Conference, Colorado Springs, CO.

Miller, B. D. (2016, April). *How hearing impacts development and learning*. Presented at the Lancaster-Lebanon Intermediate Unit 13 Early Intervention Program, Lancaster, PA.

Miller, B. D. (2016, March). *Progress monitoring*. Presented at the Lancaster-Lebanon Intermediate Unit 13 Early Intervention Program, Lancaster, PA.

Allen, T.E. & Morere, D.A. (2016, April 11). *Early access to language and the young deaf child's acquisition of reading.* Presented at the American Educational Research Association Annual Meeting, Washington, DC.

Morere, D.A & Pick, L. (2016). Psychological Evaluations and Testing. In Genie Gertz, Patrick Boudreault, & Geoffery Golson (Eds.) The Deaf Studies Encyclopedia. Sage. Pp 750 – 753.

Morere, D.A. (2016, August). *The DSM-5 and Testing Accommodations*. Presented at the Pearson VUE Accommodations Retreat 2016, Bloomington, MN.

Pick, L. & Morere, D.A. (2016). Neuropsychology. In Genie Gertz, Patrick Boudreault, & Geoffery Golson (Eds.) The Deaf Studies Encyclopedia. Sage. Sup. 715 – 720.

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Paludneviciene, R. & Harris, R.L. (2016). *Cochlear Implants.* In G. Gertz & P. Boudreault (eds.), The SAGE Deaf Studies Encyclopedia. Thousand Oaks: SAGE Publications.

Paludneviciene, R. (2016, October). *Efficacy of Video Lectures as Supplementary Materials for English Language Learners.* Poster presented at the International Society of Scholarship of Teaching and Learning Conference, Los Angeles, CA. Aldalur, A., Pick, L.H., Schooler, D., & Maxwell-McCaw, D. (2016, August). *Preliminary psychometric properties of the Deaf Acculturative Stress Inventory.* Presented at the 124th Annual Convention of the American Psychological Association, Denver, Colorado.

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Opsahl, L.N. & Pick, L.H. (2016, July). An exploratory qualitative investigation regarding experiences of sexual assault disclosure among deaf women. Presented at the 31st International Congress of Psychology, Yokohama, Japan.

Pick, LH. & Morere, D. (2016). Neuropsychology. In G. Gertz & P. Boudreault (Eds.), The SAGE Deaf Studies Encyclopedia (pp.715-720). Thousand Oaks, CA: SAGE.

# Research Support and International Affairs (RSIA)

The Research Support component of Gallaudet University's Office of Research Support and International Affairs (RSIA) strives to support the University's legislated obligation to conduct research and disseminate findings on topics of concern to Deaf people and those who live, work with, and educate them. To this end, RSIA aspires to stimulate students, faculty, and staff in pursuit of new knowledge of value to their scholarly growth and to their discipline, and by providing editing assistance with grant proposals.

In FY 2014, 24 campus researchers, both students and faculty members, were awarded grants by virtue of RSIA's administration of the Priority Research Fund and Small Research Grants programs. RSIA expanded its technical support to campus researchers by making available a robust research survey software called RedCap. Further, the unit promoted achievements of this nature by reporting on the University's contributions to research and scholarship when requested by the National Science Foundation and other agencies. In addition, RSIA continued the long tradition of its predecessor, the Gallaudet Research Institute, as a leading source of demographic and educational data about Deaf youth throughout the United States by carrying out the 2013-14 *Annual Survey of Deaf and Hard of Hearing Youth*. Finally, RSIA continued its ongoing research and activity on bilingual language planning.

# Staff

- Benaissa, Senda Senior Research Associate/International Academic Coordinator
- Blanchette McCubbin, Mona Immigration Compliance Officer/International Student Advisor
- Byrd, Todd Senior Scientific Writer/Editor
- Fakunle, Oluyinka Executive Secretary
- **Musa, Lawrence** Coordinator of Immigration Compliance and International Procedures
- Nover, Stephen Research Scientist: Language Planning
- Showalter, Brian Database Administrator
- Reilly, Charles Executive Director
- Torres, Danilo Enrique Vargas International Liaison
  Specialist
- Winiarczyk, Rowena Coordinator of Research and Global Projects

#### **Priorities addressed**

- Development of Signed Language Fluency
- Development of English Literacy
- Studies that Inform Public Policies and Programs
- Assessment

Additional information regarding the Office of Research Support and International Affairs can be found at research. gallaudet.edu

## **Research Projects**

#### Deaf Weight Wise 2.0

Status: Ongoing Start date: September 2015 End Date: September 2018

The Deaf Weight Wise (DWW) research study is to establish the effectiveness of an intervention to reduce weight gain and obesity in Deaf people who use American Sign Language (ASL) as their primary language. Participants in the DWW research study are randomly assigned one of two intervention groups. The first group will receive the intervention in the first period, and the second group will receive the intervention in the second period. The intervention is a 16-week healthy lifestyle program. Each week, participants will communicate with Gallaudet counselors through videophone calls. They will learn about healthy living, healthy food choices and cooking, and fun ways to be physically active. All groups will be led by deaf counselors. Counselors emphasize daily self-monitoring of food intake, number of fruit and vegetable servings, calorie intake, and minutes of physical activity. Participants will be asked to visit RPRC:NCDHR five times to take ASL health surveys and have physical measurements taken (height, weight, blood pressure, blood sample, etc.).

### Principal investigators

- Benaissa, Senda Research Support and International Affairs (RSIA)
- DeWindt, Lori NCDHR University of Rochester
- Matthews, Kelly NCDHR University of Rochester

#### Additional investigators

- Barnett, Steven NCDHR University of Rochester
- Schooler, Deborah Psychology
- Sutter, Erika NCDHR University of Rochester

#### Funding sources

• National Institutes of Health (NIH)

#### **Priority Research Fund**

Status: Ongoing Start date: October 2007

Gallaudet's Priority Research Fund supports campus research studies on 13 areas that have been determined to be of high importance to the university. Studies are supported for up to three years; the review and administration processes are aligned with standard and federal grant application processes in order to help prepare campus researcher to effectively apply for external funding. Applicants are expected to first seek external funding; if funded by PRF, by study's end they should be actively applying externally for continuance.

## **Principal investigators**

- **Reilly, Charles** Research Support and International Affairs (RSIA)
- **Benaissa, Senda** Research Support and International Affairs (RSIA)

### **Funding sources**

Gallaudet funding

# **Small Research Grants**

Status: Ongoing Start date: October 2007

Gallaudet's Small Research Grants Program (SRG) fosters research activity by Gallaudet and Clerc Center faculty and professional staff, as well as by university students, by funding of small studies and durations of a year or less. We accept proposals for studies on any topic of academic significance using any accepted research method. The Office of Research Support and International Affairs reviews, awards, and administers the grants in collaboration with faculty members and academic departments. Details on all of the funded studies can be seen under the various academic departments in this chapter and by searching the "research & scholarship at Gallaudet" database at http://research.gallaudet.edu/ara.

## **Principal investigators**

- Reilly, Charles Research Support and International Affairs (RSIA)
- Benaissa, Senda Research Support and International Affairs (RSIA)

#### **Funding sources**

Gallaudet funding

# Science, Technology, and Mathematics

Research challenges faculty and students to transform learning, observations, and ideas into new solutions and products. This unit has active research in nanotechnology, remote sensing, limnology, pharmacognosy, organic synthesis, and biomedical areas. Mentored research, university collaborations and internships provide students experience for work, advanced degrees, and medical/pharmaceutical professional careers.

#### **Research Projects**

#### Advancing students' science literacy

Status: Ongoing Start date: August 2013 End Date: August 2018

The goal of this study is to advance students' science literacy and improve biology laboratory courses. Becoming science literate involves developing skills related to accessing science information beyond the classroom. However, science literacy is more than science knowledge and skills. Science literacy also involves seeing oneself as capable of engaging with science -- or being a "science person" -- and seeing science in everyday life. With positive attitudinal growth, students are more likely to engage with science outside of class. Using a mixed methods approach, the project focuses on learning about how students' self-conception as a science person and attitudes about science influence science literacy development. The study focuses on learning how teaching practices can foster positive growth in students' attitudes toward science. The project will uncover student-informed strategies to cultivate students' affinities for science. Findings will be used to improve undergraduate science learning.

#### Principal investigators

• Gormally, Cara • Science, Technology, and Mathematics

#### Additional investigators

• Marchut, Amber (Student) • Education

#### **Funding sources**

- American Association for University Women Fellowship.
- Gallaudet Priority Research Fund

#### Products

Gormally, C. and A. Marchut. (2016, July). "Science isn't my thing:" Exploring non-science majors' science identities. Poster presented at the Society for the Advancement of Biology Education Research (SABER), Minneapolis, MN.

Gormally, C. and A. Marchut. (2016, March) "Science isn't my thing:" Exploring non-science majors' science identities. Poster presented at the 2016 Gallaudet University Research Expo, Washington, DC.

Gormally, C., Sullivan, C. S., & Szeinbaum, N. (2016). Uncovering Barriers to Teaching Assistants (TAs) Implementing

Inquiry Teaching: Inconsistent Facilitation Techniques, Student Resistance, and Reluctance to Share Control over Learning with Students . *Journal of Microbiology & Biology Education, 17*(2), 215–224. Retrieved from http://doi.org/10.1128/ jmbe.v17i2.1038

### Creation of a DNA repository to identify deafness genes

Status: Ongoing Start date: July 2001 End Date: September 2018

This project is a collaborative effort between Gallaudet (Department of Biology and the Office of Research Support and International Affairs) and the Department of Human Genetics at the Medical College of Virginia to establish a large repository of DNA samples from deaf individuals and their families. These DNA samples are screened for common forms of deafness and then made available to other investigators for studies of hereditary deafness.

#### Principal investigators

- Arnos, Kathleen S. Science, Technology, and Mathematics
- Nance, Walter E. Virginia Commonwealth University

### Additional investigators

• Pandya, Arti • University of North Carolina

#### Effectiveness of mentoring in science research

Status: Ongoing Start date: October 2014 End Date: January 2018

Disabled individuals, women, and cultural and ethnic minorities continue to be underrepresented in STEM. Research has shown that mentoring increases success for underrepresented individuals. Available mentoring survey instruments have all been developed for the majority population and were not intended to capture factors for successful mentoring of underrepresented groups. In this project, we are developing and validating a next-generation mentoring survey drawing from prior mentoring instruments, but also incorporating capital theory and critical race theory. From critical race theory, this survey includes community cultural wealth, which is thought to be instrumental to the success of individuals from minority communities. Our survey focuses on mentoring relationships between Deaf and hard of hearing protégés and their research advisors. From the pilot survey results we have identified three segregating factors. The first two factors contain traditional capitals. The third factor, community cultural wealth, was well conferred when Deaf protégés were paired with mentors who were either Deaf or had knowledge of American Sign Language and Deaf culture. This next-generation survey is geared for improving the success of underrepresented groups in STEM and can be used for hypothesis testing or for generating constructive feedback for mentors. Our results so far suggest that cultural awareness training may be a strategy for improving mentoring effectiveness.

#### Principal investigators

- Braun, Derek Science, Technology, and Mathematics
- Clark, Diane Education
- Gormally, Cara Science, Technology, and Mathematics

#### Additional investigators

• Nuzzo, Regina • Science, Technology, and Mathematics

# Evolutionary and functional analysis of dubious open reading frames suggest a functional role in yeast genomes

Status: Ongoing Start date: August 2015 End Date: February 2017

The Saccharomyces cerevisiae genome has been studied extensively since it was first sequenced 20 years ago. A number of open-reading frames in this genome are still classified as "dubious," including those that overlap open-reading frames known to encode functional proteins. We reexamined whether this status is still warranted given the large increase in data from numerous sources. These data include genomic information from other members of the Saccharomyces clade and transcriptome information from S. cerevisiae grown under a number of different conditions. Using genomic data we first examined the conservation of these ORFs compared to other members of the clade. Second, we examined existing data from tiling microarray and RNA-seq experiments. Our data show that these ORFs are in fact conserved and many of them are differentially expressed, suggesting a functional role.

#### **Principal investigators**

Arora, Gaurav • Science, Technology, and Mathematics

#### Additional investigators

Rosenwald, Anne • Georgetown University

# Products

Arora, G. (2016, July). *Evolutionary and functional analysis of dubious open reading frames suggest a functional role in yeast genomes*. Presented at the TAGC, Orlando, Fl.

# Experiences of LGBTQIA-Identified Faculty in Biology Classrooms

Status: Ongoing Start date: September 2015 End Date: August 2017

Individuals who identify as lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) make up an estimated 3.6% of the overall US population. As a group, LGBTQIA individuals have been thought to be historically underrepresented in science, technology, engineering, and math (STEM), but few empirical studies have been done. We know very little about LGBTQIA instructors in STEM. This study seeks to understand what LGBTQIA Biology faculty perceive to be advantages, disadvantages, barriers, challenges, benefits, and opportunities of coming out on campus and the role of their identity in their professional lives.

#### Principal investigators

- Gormally, Cara Science, Technology, and Mathematics
- Brownell, Sara Arizona State University

## Forward to professorship: "Pay it forward"

Status: Completed End Date: December 2016

The goal of this grant is to encourage the advancement of women and minority faculty in Science, Technology, Engineering, and Mathematics (STEM) fields. Several workshops have been offered with a cadre of trained leaders who are able to provide a structured workshop targeted at specific regions, disciplines, or societal groups across the United States and its territories. The teams selected drew participants from various demographic and geographic regions. A number of Gallaudet faculty participated in these workshops as participants, panelists, and presenters. Forward was designed to address the shortage of women and underrepresented minorities in the full range of STEM fields. For example, by working with undergraduates, researchers envisioned the opportunity to encourage them to continue to graduate school. By working with pretenured faculty, the researchers sought to enable them to move to the next level in their career. The goal of Forward was to enable the messages, information, and skills developed in the

workshops to reach a wider audience, targeting specific underrepresented populations, disciplines, and geographic regions, all with their own unique challenges.

#### Principal investigators

• Sabila, Paul S. • Science, Technology, and Mathematics

# Genetic deafness in alumni of Gallaudet University

Status: Ongoing Start date: April 2004 End Date: September 2018

This project, designed to extend the 1898 study of Deaf families by Gallaudet's President at the time, Professor E.A. Fay, is a collaborative effort between Gallaudet's Department of Biology and the Department of Human Genetics at the Medical College of Virginia. The goal is to identify and characterize rare genes that interact to cause deafness. A novel molecular genetic approach to identifying these genes will be used in the Deaf offspring of Deaf parents.

# **Principal investigators**

• Arnos, Kathleen S. • Science, Technology, and Mathematics

#### Additional investigators

- Blanton, Susan H. University of Miami
- Nance, Walter E. Virginia Commonwealth University
- Pandya, Arti Virginia Commonwealth University

## Image processing for NASA applications

Status: Ongoing Start date: May 2002 End Date: January 2020

Software is being developed to improve geolocating Corona spy satellite photos from the 1960s. The winter and spring (2014), studies were done of how the accuracy of mapping depended on the starting point for optimization software. Five hundred good starting points were identified for each frame of a Corona image, and automated searches were done to minimize mapping error. It was expected that these searches would identify a few local minima where the search software would get stuck and some of the searches would find a true minimum error state. It was discovered that the lowest minimum error corresponded to the 30m resolution of the images used for calibrating the mapping. Other minima were scattered over

the parameter space instead of clustering at a few points. At the suggestion of a National Aeronautic Space Administration colleague, mapping points were recalibrated on higher resolution imagery over several months. The starting point studies need to be repeated. Work continues on providing and updating data resources for the www.oceanmotion.org educational website. The updates are typically done twice a year.

### Principal investigators

• **Snyder, Henry David** • Science, Technology, and Mathematics

# Influence of consistently high levels of ammonium on food web dynamics in the Anacostia River

Status: Ongoing Start date: March 2016 End Date: February 2017

The Anacostia River in Washington, D.C. is classified as an impaired river from pollution based on several indicators; however, it is not well known how nutrient pollution and the different nitrogen (N) forms (i.e., NO3-, NH4+, urea) vary temporally or spatially or which N forms are of greatest concern. Such shifts in N form often influence the physiology of phytoplankton that lead to shifts in algal species and harmful or disruptive algal blooms. Recent literature is starting to suggest that excessive concentrations of NH4+ can lead to suppression of phytoplankton growth, which may have implications for migratory anadromous fish species that are filter feeders. Shifts in both phytoplankton community composition and fish communities will impact which fish are present in the Anacostia River for recreational and subsistence fishing. In order to properly assess N and food web dynamics in the Anacostia River, it is necessary to determine the effects of changing N form and proportions on phytoplankton and fish community composition and productivity. This project aims to assess the impact of NH4+ on phytoplankton and fish productivity and community composition in the Anacostia River's N-enriched waters by both sampling of the River and conducting bioassay experiments. Samples will be collected over the course of a year bi-weekly from eleven sampling sites for assessment of nutrients, chlorophyll, and bacteria and phytoplankton community composition. Bioassay experiments done over several days will involve samples from certain sites that will be variably enriched with NH4+ and NO3-, with and without supplemental additions of phosphate (P) to produce a range of nutrient supply ratios. Data from the two-prong approach will be analyzed along with fish community data from District Department of the Environment to understand the impact on fisheries. Currently, there are regulatory advisories

against fishing and thousands of people fish along the river for sustenance. This project will directly contribute to monitoring the influence of the pre- and post-construction of green and gray infrastructure on local phytoplankton and fish populations and the resulting impacts on local residents who fish in the Anacostia River.

## **Principal investigators**

• **Solomon, Caroline** • Science, Technology, and Mathematics

### Additional investigators

- Salazar, Ana (Student) Science, Technology, and Mathematics
- **Vazquez, Giovanna** (Student) Science, Technology, and Mathematics

#### **Funding sources**

 U.S. Geological Survey-DC Water Resources Research Institute

# Investigating the microbial abundance and biodiversity of the Anacostia River

Status: Ongoing Start date: May 2016 End Date: August 2017

The Anacostia River is in one of the most densely populated watersheds in the Chesapeake Bay drainage basin with over 800,000 residents. As a result, development and associated increases in impervious surfaces cause storm discharges to be flashy, thus enhancing downstream fluxes of nitrogen. In hopes of improving water quality in the Anacostia River, a multibillion dollar project is underway that will reduce combined sewage overflows, along with many other restoration projects throughout the watershed; however, it is expected that it will take time for these projects to be fully implemented and for the system to respond. Given the increasing number of restoration efforts and investments being made in the watershed, it is essential to understand the effect of nutrients on the microbial community abundance and composition. The overall goal of this study was to evaluate the impact of varying nutrient dynamics (nitrogen & phosphorus) on microbial community composition and productivity as it has an impact on higher trophic levels such as fish. Currently, not much is known about which microbes thrive and flourish in the Anacostia River. One way to investigate the biodiversity of the microbial community is through genetic analyses. Water samples will be

collected from three sites with distinct nutrient regimes, processed for DNA extraction then sent off for DNA sequencing. The DNA sequence data will be analyzed using bioinformatics techniques to determine the microbial community abundance and composition.

#### Principal investigators

- **Solomon, Caroline** Science, Technology, and Mathematics
- Braun, Derek Science, Technology, and Mathematics

#### Additional investigators

- **Bergeron, Ashley** (Student) Science, Technology, and Mathematics
- Hem, Charles RIT

# Investigating the water quality of two freshwater ecosystems: The Anacostia River (DC) and the Brainerd Area Lakes (MN)

Status: Ongoing Start date: January 2013 End Date: August 2017

This study examines and compares the water quality of two freshwater systems (Anacostia River, Washington, DC, and Brainerd Area Lakes, Minnesota). The Anacostia River, which recently received a grade of F by the Anacostia Watershed Society for ecosystem health, suffers from uncoordinated monitoring efforts. It currently receives run-off and direct input from DC's combined sewage outfall after periods of heavy rainfall because the system cannot handle the excess amount of water. This input may contain organic nitrogen, which historically has not been monitored closely, which may promote harmful algal blooms. In order to better understand the water quality of the Anacostia River, sampling was done over a year for both inorganic and organic nutrients as well as phytoplankton composition and responses (nutrient uptake and utilization rates). The second freshwater system focuses on six north central Minnesota lakes of different degrees of water quality, management, and history. One of the lakes is a Superfund site where a scrapyard was in operation nearby from 1952-1982. Investigation of each lake includes watershed analysis by geographic information system, nutrient analysis, zooplankton population studies, and well water chemical tests. The data provides information for how to change land use practices and how climate change impacts Minnesota lakes.

#### **Principal investigators**

- **Solomon, Caroline** Science, Technology, and Mathematics
- Lundberg, Daniel J. Science, Technology, and Mathematics

#### Additional investigators

- **Beldon, James** (Student) Science, Technology, and Mathematics
- **Bergeron, Ashley** (Student) Science, Technology, and Mathematics
- **Call, Brandon** (Student) Science, Technology, and Mathematics
- **Callahan, Kiel** (Student) Science, Technology, and Mathematics
- **Evans, Ian** (Student) Science, Technology, and Mathematics
- Flink, Isaac (Student) Science, Technology, and Mathematics
- Flores, Elija ASU Student Intern
- Haney, Fallon (Student) Science, Technology, and Mathematics
- Hem, Charles RIT
- Hines, Amberlin (Student) Science, Technology, and Mathematics
- **Jacobi, Tobias** (Student) Science, Technology, and Mathematics
- Kohn, Carolina (Student) Science, Technology, and Mathematics
- **McCall, Anna** (Student) Science, Technology, and Mathematics
- Montgomery, Kent Central Lakes College
- **Ocampos, Jeronimo** (Student) Science, Technology, and Mathematics
- **O'Donnell, Sheena** (Student) Science, Technology, and Mathematics

- Rubiayat, Muhammad Science, Technology, and Mathematics
- Salazar, Ana (Student) Science, Technology, and Mathematics
- **Seguin, Zachary** (Student) Science, Technology, and Mathematics
- **Symes, Scott** (Student) Science, Technology, and Mathematics
- Temple, Amanda Jo University of Minnesota-Twin Cities
- Van Wey, John (Student) Science, Technology, and Mathematics
- **Vazquez, Giovanna** (Student) Science, Technology, and Mathematics
- Zager, Lauren WIU

## Products

Bergeron, A., Hem, C., Braun, D.C., Arora, G., Solomon, C.M. (2016). *Achieving complete cell lysis of Microcystis aeruginosa and Chlorella vulgaris.* Presented at Gallaudet University, Washington, DC.

Bergeron, A., Seguin, Z., Van Wey, J., Montgomery, K., & Lundberg D.J. (2015). *The case of Agate Lake: lake monitoring using Carlson's trophic state index 30 years after the Environmental Protection Agency's involvement.* Presented at Gallaudet University, Washington, DC.

Call, B., Montgomery, K., & Lundberg D.J. (2015). *The correlation of zooplankton and total phosphorus in Minnesota lakes.* Presented at Gallaudet University, Washington, DC.

Call, B., Montgomery, K., & Lundberg D.J. (2015). *The correlation of zooplankton and total phosphorus in Minnesota lakes.* Presented at the 18th Annual Undergraduate Symposium at the University of Maryland-Baltimore County, Baltimore, MD.

Call, B., Ocampos, J., Vazquez, G., Montgomery, K., & Lundberg D.J. (2015). *Agate Lake – water quality, three-dimensional imaging, and zooplankton.* Presented at the meeting of the Agate Lake Association, Lake Shore, MN.

Call, B., Ocampos, J., Vazquez, G., Montgomery, K., & Lundberg D.J. (2015). Crow Wing Lake and the quality of its pour-

*points from its subwatersheds.* Presented to the Crow Wing Lake Executive Board at Central Lakes College, Brainerd, MN.

Callahan, K, Salazar, A., Vazquez, G. Solomon, C.M. (2016). *Potential Toxicity of Ammonium and its Effect on the Anacostia Phytoplankton Community.* Presented at Gallaudet University, Washington, DC.

Flink I., Haney F., Temple A.J., Lundberg, D.J. (2016). *Agate Lake: an update on water quality, mercury concentrations, and shallow groundwater flow.* Presented at the meeting of the Agate Lake Association, Lake Shore, MN.

Ocampos, J., Montgomery, K., & Lundberg D.J. (2015). Using geographic information system (ArcGIS) on lakes in northcentral Minnesota. Presented at Gallaudet University, Washington, DC.

Ocampos, J., Montgomery, K., & Lundberg D.J. (2015). Using geographic information system (ArcGIS) on lakes in northcentral Minnesota. Presented at the 18th Annual Undergraduate Symposium at the University of Maryland-Baltimore County, Baltimore, MD.

Salazar, A, Callahan, K., Shangguan, Y. Vazquez. G. Solomon, C.M. (2016). *Response of the Microbial Community of the Anacostia River to Different Nutrient Treatments*. Presented at Gallaudet University, Washington, DC.

Vazquez, G., Montgomery, K., & Lundberg D.J. (2015). *Comparing anthropogenic land use, its impact on Agate Lake and Crow Wing Lake.* Presented at Gallaudet University, Washington, DC.

Vazquez, G., Montgomery, K., & Lundberg D.J. (2015). *Comparing anthropogenic land use, its impact on Agate Lake and Crow Wing Lake.* Presented at the 18th Annual Undergraduate Symposium at the University of Maryland-Baltimore County, Baltimore, MD.

# Investigations of the effect of catalyst loading on crossmetathesis reaction

Status: Ongoing Start date: October 2012 End Date: December 2020

Investigations were carried out using various cross-metathesis catalysts to determine effect of catalyst concentration on the reaction. This has a potential application in chemical, polymer, and pharmaceutical industries, as it could potentially lead to reduced cost of production.

## **Principal investigators**

• Sabila, Paul S. • Science, Technology, and Mathematics

#### **Funding sources**

National Science Foundation (NSF)

### Learning to teach science as inquiry

Status: Completed Start date: August 2012 End Date: October 2015

The goal of this study is to characterize and analyze the challenges that new instructors face as they learn to teach science using inquiry teaching practices. Inquiry-based teaching practices have been widely adopted in college biology courses, following calls to improve undergraduate science education. Inquiry-based learning is an evidence-based instructional approach, designed to mimic scientists' practices: students problem-solve by developing and testing hypotheses. However, most lab classes are taught by teaching assistants (TAs) and other instructors new to teaching. Our research design focused around the theoretical framework of inquiry learning, using multiple sources of data to characterize TAs' teaching practices and beliefs about teaching and learning before, during, and after their first year of teaching. This knowledge will inform the development of more effective pedagogical training programs for TAs and faculty.

## **Principal investigators**

• Gormally, Cara • Science, Technology, and Mathematics

#### Additional investigators

- Sullivan, Carol Subiño Georgia Institute of Technology
- Szeinbaum, Nadia Georgia Institute of Technology

#### Nanowire array production and characterization

#### Status: Completed

A nanowire array intended for thermoelectric applications was produced and it was characterized by Raman spectroscopy and a scanning electron microscope. The goal of this project is to design a method for producing bismuth telluride nanowires arrays using high pressure. The nanowire will be then be tested for various electrical and electronic properties including thermoelectric applications which have potential applications in the fabrication of devices that convert heat to electrical energy.

#### **Principal investigators**

- Huber, Tito Chemistry Howard University
- Sabila, Paul Science, Technology, and Mathematics

## National Space Grant College Fellowship

Status: Completed Start date: August 2015 End Date: August 2016

Gallaudet University, along with other local universities and organizations comprising the District of Columbia Space Grant Consortium, participates in supporting educational and student financial assistance programs that develop infrastructure related to the National Aeronautics and Space Administration and its strategic missions. This grant supported: (1) Stipends for summer research internships in labs at Gallaudet; (2) Participation of Model Secondary School for the Deaf students in the DC regional Botball competition and Deaf Space Camp; (3) Equipment for high school and undergraduate programs in robotics and electronics that supported PHY154 lab, and 3 GSR courses (philosophysics, climate change and skateboarding); and (4) Software for faculty research in remote sensing.

#### **Principal investigators**

Snyder, Henry David • Science, Technology, and Mathematics

#### Additional investigators

 Thuahnai, John • Laurent Clerc National Deaf Education Center

# NextGen Genome Solver

Status: Ongoing Start date: September 2015 End Date: July 2017

Preparing students for 21st century employment in STEM fields is an important goal for all undergraduate science faculty. The PIs conduct a series of innovative portable workshops at selected sites around the country as a means of providing Biology faculty with tools and techniques proven to successfully engage students in research in two rapidly developing fields in biology-bioinformatics and microbial genomics. The research skills practiced at the workshops are accessible to everyone with a computer and an Internet connection, making participation in the project cost-effective for anyone, even at severely

resource-limited institutions. Bioinformatics studies facilitate student understanding of evolution, information flow, structure and function, and biological systems. Students exposed to the thinking necessary for tackling bioinformatics problems gain experience in computational analyses and modeling, both important to understanding how human beings and the world around them function and interact. The significance and importance of this project is that it will enhance and expand a previous successful pilot effort to help biology faculty introduce more computational approaches into both introductory and advanced biology courses. A wide spectrum of institutions, ranging from community colleges to highly selective doctoral institutions, will act as hosts or participate in these workshops. This project will add to the research base concerning what is known within science education research about effective approaches to faculty enhancement in undergraduate biology education and what is known about an important concept in biology, horizontal gene transfer (HGT) as a driver of bacterial evolution. The PIs previously developed and implemented the Genome Solver Community of Practice, training faculty via face-to-face workshops conducted at the J. Craig Venter Institute and developing an online forum for communication (http://genomesolver.org). The community developed through that project is exploring the rich DNA data sources emerging from the Human Microbiome Project. The current project, called Genome Solver On-the-Go, greatly expands the reach of the workshops while reducing costs of individual workshops and establishes strong local nodes of expertise that can act as regional catalysts for disseminating the information and skills imparted by the workshops. New features introduced in this phase of the project include engaging faculty and students in a multi-dimensional, community bioinformatics project. Faculty and their students will examine bacteria/phage pairs for evidence of HGT, then submit their data to a centralized curated database. The biological question in the HGT project is not one that can be easily approached by a small number of researchers; understanding the extent to which HGT occurs between bacteriophages and bacteria, and how this drives bacterial evolution, will require many individual contributions to the centralized dataset.

### Principal investigators

- Arora, Gaurav Science, Technology, and Mathematics
- Rosenwald, Anne Georgetown University

#### Additional investigators

Mathur, Vinayak • Georgetown University

#### **Funding sources**

National Science Foundation (NSF)

#### Products

Arora, G. (2016, Janurary). *NextGen Genome Solver*. Workshop conducted at the Harford Community College, Hardford, CT.

Arora, G. (2016, July). *NextGen Genome Solver*. Workshop conducted at the meeting of the ASMCUE, Denver, CO.

Kyrillos A, Arora G, Murray B and Rosenwald AG. (2015). The Presence of Phage Orthologous Genes in Helicobacter pylori Correlates with the Presence of the Virulence Factors CagA and VacA. Helicobacter, 21 (3), 226-233

# Nitrogen and Phosphorus Excretion by Native Freshwater Mussels and Invasive Chinese Mystery Snails in Nova Scotia

See in Biology

Overcoming barriers to STEM success for deaf undergraduates

Status: Ongoing Start date: May 2013 End Date: April 2018

This project provides scholarships to deaf students majoring in biology, chemistry, or mathematics, thereby addressing the severe under-representation of deaf individuals in STEM fields by providing a specific plan to prepare them for STEM careers. The goals of this plan are realized through the following objectives: (1) Recruit Deaf students into STEM majors; (2) Provide scholarships to talented deaf STEM students with documented financial need (S-STEM Scholars Program, funded by the National Science Foundation); (3) Provide individual and group activities to support undergraduate S-STEM Scholars; (4) Assist Deaf S-STEM Scholars in overcoming cultural and linguistic barriers; and (5) Provide support services to deaf S-STEM Scholars to help them ultimately enter STEM careers. Broader impacts result from increasing the number of talented deaf students who choose a STEM major, and increasing the number of deaf STEM majors who are well prepared to enter STEM careers. Deaf S-STEM Scholars will interact with deaf mentors and deaf scientists to understand that they truly can make significant contributions to STEM fields. There is a need for replicable best practices in educating deaf undergraduates in STEM disciplines, and this project can help develop such practices. Plans are in place to disseminate these best practices through a variety of venues.

### Principal investigators

- Arnos, Kathleen S. Science, Technology, and Mathematics
- Nuzzo, Regina Science, Technology, and Mathematics
- Sabila, Paul Science, Technology, and Mathematics

### Additional investigators

- Mertens, Donna Education
- Zimmerman, Heather (Student) Education

#### **Funding sources**

• National Science Foundation (NSF)

# Partnership in reduced dimensional materials (PRDM): Preparation of molybdenum disulfide nanomaterials

Status: Ongoing Start date: October 2012 End Date: December 2020

The project worked on developing strategies for the preparation of molybdenum disulfide nanomaterials, which have potential applications in fabrication of electronic devices and semi-conductors. Two approaches for synthesis of nanomaterials were explored. The first strategy was successful in depositing molybdenum disulfide films on silicon wafers. The resulting products were analyzed using a Scanning Electron Microscope, which produces images of a sample by scanning it with a focused beam of electrons and contains information about the sample's surface composition and features. Further analyses are done using Energy Dispersive X- Ray Spectroscopy and Profilometer.

#### Principal investigators

• Sabila, Paul • Science, Technology, and Mathematics

#### Additional investigators

- **Cha, John** (Student) Science, Technology, and Mathematics
- Garcia, Nicolas (Student) Science, Technology, and Mathematics
- Habtemichael, Amelework (Student) Science, Technology, and Mathematics

- Herlod, Brienna (Student) Science, Technology, and Mathematics
- Houghton, Mandy (Student) Science, Technology, and Mathematics

## Funding sources

• National Science Foundation (NSF)

## Partnerships for material research (PREM)

Status: Ongoing Start date: October 2010 End Date: September 2020

This research is on nanotechnology-related projects at Howard University. Students were able to use lithography to prepare nanotechnology samples. They also had hands-on experience with various instrument techniques, including Scanning Electron Microscopy (SEM), Nuclear Magnetic Resonance Spectroscopy (NMR), FTIR spectroscopy, and MS Spectrometry. The students synthesized a variety of organic precursors that will be used for the synthesis of nanomaterials by chemical vapor deposition method. Three Gallaudet students participated in an internship under the supervision of Dr. Sabila. This internship also tested a new template that could be used for future research collaborations between Gallaudet and other universities where Deaf and hard of hearing Gallaudet students work in a hearing research environment.

#### Principal investigators

• Sabila, Paul S. • Science, Technology, and Mathematics

#### Additional investigators

- Habtemichael, Amelework (Student) Science, Technology, and Mathematics
- Houghton, Mandy (Student) Science, Technology, and Mathematics
- Marceaux, Brandt (Student) Science, Technology, and Mathematics
- Van Wey, John (Student) Science, Technology, and Mathematics
- Yang, Fang (Student) Science, Technology, and Mathematics
#### **Funding sources**

National Science Foundation (NSF)

#### Population genetics of connexin 26 deafness

Status: Ongoing Start date: January 2010 End Date: January 2018

The researchers aim to explore two anthropological explanations for the high prevalence and mutational diversity of deafness-causing G/B2 mutations in the North American population, as well as the association of specific G/B2 mutations within ethnic groups. The first is heterotic balancing selection, in which GJB2 heterozygotes may have increased fitness, possibly due to resistance to bacillary dysentery. A second explanation is linguistic homogamy, meaning in this case that culturally Deaf individuals have actively sought mates with compatible fluency in signed languages. This mate-selection phenomenon may have begun ~200 years ago with the introduction of signed language in residential schools for the Deaf. The significance of linguistic homogamy in Deaf communities is that in the broader human population, the same mechanism may have driven the inexplicably rapid evolution of FOXP2 and 21 other genes implicated in human speech since their appearance in early humans 100,000-200,000 years ago.

#### Principal investigators

Braun, Derek • Science, Technology, and Mathematics

#### Additional investigators

- Armstrong, David F. (Retired)
- Arnos, Kathleen S. Science, Technology, and Mathematics
- Herlod, Brienna (Student) Science, Technology, and Mathematics
- Nance, Walter E. Virginia Commonwealth University
- Pandya, Arti Virginia Commonwealth University
- Tekin, Mustafa Miller School of Medicine University of Miami

#### **Funding sources**

- Sorenson Legacy Foundation
- Mellon Foundation
- NASA-Space Grant

#### Potential societal impact of advances in genetic deafness

Status: Ongoing Start date: September 2003 End Date: September 2018

This project was designed to assess the impact of testing for genes for deafness on the Deaf community and hearing parents of deaf and hard of hearing children. The first goal was to conduct focus groups and perform a survey of these groups to determine the attitudes and concerns related to genetics technologies and advances in the identification of genes for deafness. A second goal was to assess the impact of genetic testing on culturally Deaf couples by measuring its influence on selection of a marriage partner.

#### **Principal investigators**

- Arnos, Kathleen S. Science, Technology, and Mathematics
- Pandya, Arti Virginia Commonwealth University

#### Additional investigators

- Blanton, Susan H. University of Miami
- Nance, Walter E. Virginia Commonwealth University
- Norris, Virginia Science, Technology, and Mathematics

#### **REU AMI Site**

Status: Ongoing Start date: February 2015 End Date: February 2018

The Accessible Multimedia Interfaces REU site program provides students with research experiences that enhance multimedia content accessibility through browser or mobile application interfaces for consumers who have sensory disabilities (deaf, hard of hearing, blind, or low vision). They collaborate with peers and mentors who have sensory disabilities. The diverse teams provide students with the experience and knowledge to recognize the range and complexity of accessibility challenges in accessing multimedia and to

evaluate the efficacy of proposed solutions in a unique research environment. Students with sensory disabilities are extremely underrepresented in academics at the graduate level, especially in STEM. The REU site creates a critically needed pipeline of these students for graduate school and encourages them to participate in undergraduate and graduate programs in accessible computing and computer science. The REU student teams learn to identify, analyze, and address unsolved accessibility challenges to multimedia content interfaces. They also learn how to collaborate with diverse peers in an inclusive research environment. They gain experience in designing and producing practical solutions that increase accessibility and usability of multimodal information, especially for consumers with sensory disabilities. They will learn to create and disseminate their research outcomes through seminar training and participation in college and institutional conferences.

#### Principal investigators

 Kushalnagar, Raja • Science, Technology, and Mathematics

#### Additional investigators

- Haddad, Fadi (Student) Science, Technology, and Mathematics
- Harvey, Susie (Student) Psychology

#### **Funding sources**

National Science Foundation (NSF)

#### Site-directed mutagenesis of RasGRP2

**Status:** Completed **Start date:** October 2008 **End Date:** February 2016

Extracellular ligands, such as drugs, tumor promoters, and natural ligands, activate receptors located on the cellular membrane to elicit intracellular responses. This leads to a multitude of downstream signaling cascades, modulated by intracellular proteins. The researchers' project focuses on the Ras guanyl nucleotide-releasing protein (RasGRP). After activation of receptors located at the cellular membrane, the activated Ras-GRP "turns on" the Ras protein "switch." Activated Ras then broadcasts signals from the cell surface to other parts of the cell, such as downstream signaling on the Ras gene, triggering cell proliferation and differentiation, essential for sustaining life. However, mutations on proteins that activate this pathway can stimulate cell division inappropriately, promoting the development of cancer. In collaboration with the National Cancer Institute, the Gallaudet University Molecular Genetics Laboratory utilizes site-directed mutagenesis to mutate specific residues of RasGRP1 and RasGRP2 isoforms to identify the reasons behind different binding affinities of the isoforms to phorbol esters, which are tumor-promoting ligands. Mutations of the RasGRP isoforms, DNA, and protein purification are performed in the Gallaudet University Molecular Genetics Laboratory. The National Cancer Institute then performs radioligand binding assays with phorbol esters to determine the binding affinities (increased or decreased Ras activation) of the mutated RasGRP. The long-term goal of this project is to develop novel strategies for manipulation of signaling pathways that involve RasGRP.

#### **Principal investigators**

 Lundberg, Daniel J. • Science, Technology, and Mathematics

#### Additional investigators

- Blumberg, Peter National Cancer Institute
- Braun, Derek Science, Technology, and Mathematics
- Merritt, Raymond C. Science, Technology, and Mathematics

#### **Funding sources**

- National Cancer Institute
- Beverley Taylor Sorenson Student Fellowship

#### Synthesis of bismuth telluride nanomaterials

Status: Ongoing Start date: May 2015 End Date: August 2024

To synthesize nanomaterials of bismuth telluride using chemical exfoliation method. We have successfully used chemical exfoliation to prepare molybdenum disulfide nanomaterials and films. We wanted to see if the same approach could be applied to bulk bismuth telluride to prepared thin films (2-dimensional materials). Bismuth telluride has been shown to exhibit interesting thermoelectric properties that convert heat to electricity. The goal of this project is to design a method for producing bismuth telluride films on silicon wafers. The films will be analyzed using Scanning Electron Microscopy (SEM), optical microscopy and Raman spectroscopy. We are also interested in studying the depth and density of deposited bismuth telluride films on silicon wafers.

#### **Principal investigators**

• Sabila, Paul • Science, Technology, and Mathematics

#### Additional investigators

 Marceaux, Brandt (Student) • Science, Technology, and Mathematics

#### **Funding sources**

National Science Foundation (NSF)

#### Scholarly and Creative Activity

Arora, G. (2016) *Genome Solver On-the-Go: Creating Local Support Networks for Bioinformatics Instruction.* Presented at Gallaudet University, Washington, DC.

Arora, G. (2016). *Genome Solver: creating a Community Science Project in Bioinformatics.* Presented at Gallaudet University, Washington, DC.

Arora, G. (2016). NextGen Genome Solver: Faculty Development in Bioinformatics. Presented at Gallaudet University, Washington, DC.

Kyrillos A, Arora G, Murray B and Rosenwald AG. (2015). The Presence of Phage Orthologous Genes in Helicobacter pylori Correlates with the Presence of the Virulence Factors CagA and VacA. *Helicobacter*, 21 (3), 226-233

Rosenwald, A., Arora, G., Ferrandino, R., Gerace, EL.,Mohammednetej, M., Nosair, W., Ratilla, S., Subic, AZ., Rolfes, R. (2016).Identification of Genes in Candida glabrata Conferring Altered Responses to Caspofungin, a Cell Wall Synthesis Inhibitor. G3, 6 (3), 2893-2907.

Gormally, C. (2016). *Designing your case: Building teachable units and assessing learning.* Presented at the National Socio-Environmental Synthesis Center. Annapolis, MD.

Jones, J., Khan, T., Laskey, K., Nelson, A., Laamanen, M., and White, D. (2016). *Inferring Previously Uninstalled Applications from Digital Traces.* Proceedings of the Conference on Digital Forensics, Security and Law.

Kushalnagar, R. S. (2015). *Optimal viewing distance between deaf viewers and interpreters*. Journal on Technology and Persons with Disabilities, 3 (22).

Kushalnagar, R. S., Behm, G. W., Kelstone, A. W., & Ali, S. (2015, October). *Tracked Speech-To-Text Display: Enhancing Accessibility and Readability of Real-Time Speech-To-Text.* In

Proceedings of the 17th International ACM SIGACCESS Conference on Computers & Accessibility (pp. 223-230). ACM.

Kushalnagar, R. S., Kushalnagar, P., & Haddad, F. (2016, July). *SingleScreenFocus for Deaf and Hard of Hearing Students*. 15th International Conference on Computers Helping People with Special Needs, (pp. 433-437).Springer International Publishing, New York, NY.

Habtemichael, A., Mbochwa, C., Sabila, P. (2016, March 24). *Preparation and analysis of Molybdenum Disulfide Nanomaterials*. Poster presented at the 2016 Gallaudet Research Expo. Gallaudet University, Washington DC.

Marceaux, B., Houghton, M., Huber, T., Snyder, H. D., Sabila, P. (2016, March 24). *Exfoliation of Bismuth Telluride*. Poster presented at the 2016 Gallaudet Research Expo. Gallaudet University, Washington D.C.

Mbochwa, C., Habtemichael, A., Sabila, P. (2016, March 24). Growth of Molybdenum Disulfide Films on Silicon Wafers. Poster presented at the 2016 Gallaudet Research Expo. Gallaudet University, Washington D.C.

Mbochwa, C., Huber, T., Johnson, S., Snyder, H. D., Sabila, P. (2016, August) *The Effect of Reaction Time and Solvent System on MoS2 Exfoliation.* Presented at the Harvard University Summer 2016 Convocation, Cambridge, MA.

Sabila, P. (2016, June 2). CIQM, PRDM and Gallaudet University: Nanotechnology research experience for Deaf, Hard-of-Hearing Students. Presented at the Howard University Summer 2016 Internship Orientation, Washington, DC.

### World Languages and Cultures

Our department seeks to broaden student perspectives through language and cultural studies pertaining to both Deaf and hearing communities worldwide. Research interests and creative endeavors tend to focus on pedagogy, community building, literary study, and linguistic analysis of both signed and written/spoken languages.

#### **Research Projects**

#### Literacy skills in deaf readers

Status: Completed Start date: December 2015 End Date: December 2016

This study includes a series of experiments that use eye-tracking technology to investigate sentence processing in hearing monolingual, hearing bilingual, and deaf bilingual readers.

#### **Principal investigators**

- Traxler, Matthew University of California, Davis
- Piñar, Pilar World Languages and Cultures

#### Additional investigators

- Dae-Kun, Kim (Student) Education
- **Previ, Danielle** (Student) Psychology

#### Funding sources

• National Institutes of Health (NIH)



Student organization representatives pose for the camera on April 20, 2016, wearing their "It's On Us!" t-shirts. The campus "It's On Us" campaign, a nationwide iniiative to address sexual assault on college and university campuses, hosted a Day of Action on April 20, 2016. Students, faculty, and staff engaged in discussion about domestic violence and ways to prevent it, healthy relationships, rape and sexual assault and the impact they carry, bullying, stalking, and addressing stereotypes.

Photo by: Zhee Chatmon

### VI. Sponsored Programs

The Office of Sponsored Programs (OSP) provides services and support to Gallaudet faculty and professional staff seeking external sponsorship for research and scholarly projects including both the University and the Clerc Center. The primary source of these funds comes from competitively awarded federal agency competitions and occasionally cost-reimbursable awards from non-federal sponsors with federal-like requirements. The OSP offers guidance in the development of proposals and budgets and formally submits, negotiates, finalizes, and accepts awards on the university's behalf. The OSP is committed to increasing institutional resources in order to enhance the University's research and educational programming. For up-to-date information on the OSP, consult the OSP's website, which is located at: www.gallaudet.edu/office\_of\_sponsored\_programs/ about\_osp.html

#### **Overview**

Gallaudet faculty and professional staff compete for grants and contracts where sponsored projects are awarded on the basis of rigorous review by experts in the field. The OSP directly supports Goal E of the University's Strategic Plan, specifically Strategy E.3.2: "Develop and implement research-based educational innovations and evaluate their impacts on student learning through research, PK-12 school and university partnerships, and cooperative relationships among community organizations, private foundations, museums, government programs, and industry." Gallaudet students directly or indirectly benefit from the relationships forged between Gallaudet faculty/staff and sponsored programs collaborators. The participation in the sponsored programs process in the past fiscal



year by the Gallaudet community has resulted in a number of significant opportunities for the institution.

The following is a list of other major universities, nonprofits, and for-profit organizations collaborating with Gallaudet on sponsored programs:

- American Institutes for Research
- AT&T
- American University
- Boston Museum of Science
- Boston University
- Cleveland Clinic
- Columbia University
- Consumer Technology Association
- Cornell University
- District of Columbia Coalition Against Domestic Violence
- Edvantia
- El Camino College
- Georgia Institute of Technology
- Georgetown University
- Greater Baltimore Medical Center
- Hand and Voices
- Harvard University
- Hearing Loss Association of America
- Howard University
- Julstrom Consulting and Development
- Labyrinth
- Marymount University
- Massachusetts Institute of Technology
- Measuring Usability
- Northeastern University
- Northwestern University Feinberg School of Medicine
- Nova Web Development
- Omnitor AB, Sweden
- Pennsylvania State University
- Prince George's Community College
- Reliable Systems

- Rochester Institute of Technology
- San Diego State University
- St. Catherine's University
- TCS Associates
- University of Alberta, Canada
- University of Arkansas at Little Rock
- University of California-Davis
- University of California Los Angeles
- University of California-San Diego
- University of Colorado at Boulder
- University of Connecticut
- University of the District of Colombia
- University of Eastern Kentucky
- University of Kentucky
- University of Hawaii/ Kapiolani Community College
- University of Illinois-Urbana-Champaign
- University of Iowa
- University of Manitoba
- University of Maryland, College Park
- University of Maryland Center for Environmental Sciences
- University of New Mexico
- University of North Florida
- University of Northern Colorado
- University of Pittsburgh
- University of Rochester
- University of Rochester Medical Center
- University of South Florida
- University of Southern California
- University of Texas-Austin
- University of Washington
- University of Wisconsin-Madison
- VTCSecure
- Washington University in St. Louis
- Western Oregon University
- Yale University
- ZVRS

The following pie chart shows the dollar amount of awards received by sponsor. Gallaudet continues to see a decline in funding which we attribute to the highly competitive environment created by cuts in federal funding. Although we have seen a decline in awards, Gallaudet saw an increase in the number of proposals submitted for funding. In FY 2016, there were 39 proposals submitted compared to 31 submitted in FY 2015. Gallaudet continues to submit highly competitive research proposals which is a positive indicator of the university's pursuit of achieving Goal E. A total of \$2.4 million in federal funding was awarded to Gallaudet in FY 2016. This includes approximately \$639,343 in awarded National Institution of Health grants transferred to Gallaudet University from the Rochester Institute of Technology to support Gallaudet's newly established Deaf Health Communication and Quality of Life Research Lab. In addition, Gallaudet, in collaboration with the Consortium of Universities of the Washington Metropolitan Area, continues its support in educating the campus community on dating and sexual violence. Gallaudet was also awarded a grant from the National Endowment for the Humanities to document the American deaf community's cultural heritage through photographs, family letters, artifacts, and 3D objects.



\*Federal Pass-Through: American University (NASA) 11%; DC Coalition Against Domestic Violence (USDOJ) 9%; Georgetown University (NSF) 9%; Howard University (Harvard & NSF) 42%; University of California- Davis (NIH) 25%; University of the District of Colombia (U.S. Geological Survey) 4%. Other Sponsors: VTC Secure .13%; ZVRS .04%

### **Research Compliance**

In support of Goal E, Objective 2, the OSP collaborated with the dean and the assistant dean of the Graduate School and Continuing Studies to restructure the University's Responsible Conduct of Research (RCR) Training Program. In FY 2016, two training sessions on research misconduct were held. During FY 2017, sessions will focus on conflicts of interest. Training presentations have been developed for deans and department chairs/budget unit heads on reviewing funding proposals in compliance with department and/or university requirements. Upcoming changes to the OSP website will provide the campus community with up-to-date information on hot topics in research compliance.

Principal Investigator	School/ Division	Department Center	Title	Sponsor	Begin/ End Dates	Award Amount	Award Date
RESEARCH RELA		DS					
PI: Arora, Gaurav	CAS	Science, Technology, and Mathematics	NexGen Genome Solver	Georgetown University (National Science Foundation)	08/16/2005- 05/31/2017	\$23,089	10/22/2015
PI: Benaissa, Senda	Academic Affairs	Office of Research Services & International Affairs	Videophone Interven- tion to Improve Health of Deaf Sign Language Users	University of Rochester	09/30/2015- 06/30/2017	\$42,522	5/20/2016
PI: Kushalnagar, Poorna	CAS	Psychology	Deaf Sign Language Users' Experiences in Seeking Health Information	National Institutes of Health	08/10/2016- 07/31/2018	\$267,503	8/8/2016
PI: Kushalnagar, Poorna	CAS	Psychology	PROMIS-Deaf Profile: Inclusion of Deaf Patients in Disability and Outcomes Research	National Institutes of Health	09/01/2016- 08/31/2017	\$371,840	7/22/2016
Pl: Petitto, Laura- Ann (Fellow: Kartheiser, Geo)	Academic Affairs	PhD Program in Educational Neuroscience	Neuroplasticity of Spatial Working Memory in Signed Language Processing	National Institutes of Health (Eunice Kennedy Shriver National Institute of Child Health and Human Development)	08/20/2016- 8/19/2017	\$38,544	8/5/2016
PI: Petitto, Laura- Ann (Fellow: Stone, Adam)	Academic Affairs	PhD Program in Educational Neuroscience	Neural Systems For Infant Sensitivit to Phonological Rhythmic-Temporal Patterning	National Institutes of Health (Eunice Kennedy Shriver National Institute of Child Health and Human Development)	07/30/2016- 07/29/2017	\$43,576	7/30/2016

#### FY 2016 Awards

### FY 2016 Awards (continued)

PI: Pinar, Pilar	CAS	Foreign Languages, Literatures and Cultures	Literacy Skills in Deaf Readers	University of California-Davis (National Institutes of Health)	12/01/2016- 11/30/2017	\$64,909	1/5/2016
PI: Sabila, Paul	CAS	Science, Technology, and Mathematics	Center for Integrated Quantum Materials	Howard University (National Science Foundation)	10/01/2015- 09/30/2016	\$65,257	9/1/2016
PI: Sabila, Paul Co-PI: Snyder, Henry	CAS	Science, Technology, and Mathematics	Center for Reduced Dimensional Systems	Howard University (National Science Foundation)	06/01/2015- 05/31/2016	\$45,214	3/2/2016
PD: Snyder, Henry	CAS	Science, Technology, and Mathematics	National Space Grant College and Fellowship Program	American University (National Aeronautics and Space Administration)	08/26/2015- 08/25/2016	\$30,000	3/1/2016
PI: Solomon, Caroline	CAS	Science, Technology, and Mathematics	Influence of Consis- tently High Levels of Ammonium on Food Web Dynamics in the Anacostia River	University of the District of Columbia (U.S. Geological Survey)	03/01/2016- 02/28/2017	\$10,000	3/2/2016
PI: Vogler, Christian	Academic Affairs	Technology Access Program	Proposal for RERC on Improving the Accessibility Usability and Performance of Technology for Individuals who are Deaf or Hard of Hearing	U.S. Department of Health and Human Services (Administration for Community Living)	09/30/2015- 09/29/2016	\$950,000	9/1/2016
			ARCH RELATED AWARD	S (12 Awards, 9 Pl	/PDs, 1 Co-Pl/PDs)		\$1,952,454
TRAINING, SCHO			WARDS				
PI: Arnos, Kathleen Co-PIs: Nuzzo, Regina & Sabila, Paul	CAS	Science, Technology, and Mathematics	S-STEM Scholars: Overcoming Barriers to STEM Success for Deaf Undergraduates	National Science Foundation; Directorate for Education and Human Resources	05/15/2016- 04/30/2017	\$103,574	5/3/2016
PD: Bergey, Jean	Academic Affairs	Center for Deaf Docu- mentary Studies	Capturing Deaf Heritage	National Endowment for the Humanities	01/01/2016- 12/31/2016	\$12,000	12/23/2015

### FY 2016 Awards (continued)

PD: Gannon, Christine	Student Affairs and Academic Support	Health and Wellness Programs	Enhancing the Campus Response to Dating and Sexual Violence Initiative	DC Coalition Against Domestic Violence (U.S. Department of Justice)	10/01/2014- 09/30/2017	\$22,500	1/28/2016
PD: Lytle, Linda	SEBHS	Counseling	Dual Certification Through a Hybrid Program of Studies: A Masters of Arts Degree in School Counseling Combined with a Deaf and Hard of Hearing Infants, Toddler, and Their Families Collabo- ration and Leadership Interdisciplinary Graduate Certificate	U.S. Department of Education; Rehabilitative Services Agency	01/01/2016- 12/31/2017	\$159,203	7/7/2016
PD: Smith, Kendra Co-PD: Hufnell, Mary	SEBHS	Counseling	RSA Long-Term Training Grant	U.S. Department of Education; Rehabilitation Services Administration	10/01/2016- 09/30/2017	\$150,000	8/11/2016
Pl: Vogler, Christian	Academic Affairs	Technology Access Program	SOLVES Interoperability Testing Statement of Work	VTCSecure	06/15/2016- 06/22/2016	\$3,136	7/19/2016
PI: Vogler, Christian	Academic Affairs	Technology Access Program	Z70 Interoperability Testing Statement of Work	ZVRS	06/28/2016- 07/27/2016	\$1,045	8/22/2016
Т	OTAL TRAIN	IING, SCHOLA	RSHIPS, & OTHER AWAR	DS (7 Awards, 6 Pl/	PDs, 3 Co-Pl/PDs)		\$451,458
				GRAND TO	OTAL (19 Awards)		\$2,403,912

#### School/ Principal Department **Begin/ End** Proposed Proposed Title Sponsor Center Date Investigator Division Dates Amount **RESEARCH RELATED PROPOSALS** University of 7/8/2016 PI: Allen, Thomas Academic Visual Replication Study of 08/01/2017-\$93,377 Affairs Language and Strategic and Interactive Tennessee 07/31/2021 Visual Writing Instruction (U.S. Department of Education; Learning (VL2) Institute of Education Sciences) PI: Allen, Thomas Academic Visual Washington-Baltimore Howard 09/01/2016-\$154,856 6/1/2016 Affairs Alliance for Graduate University 08/31/2021 Language and Education and the Pro-(National Science Visual Learning fessoriate Foundation) (VL2) PI: Barac-Cikoja, SEBHS Hearing, Evaluation of low-gain National Institutes 04/01/2017-\$119,988 8/7/2016 Dragana Speech, and hearing aids as treatof Health 03/31/2019 (National Institute (Fellow: Language ment for patients with Kokx-Ryan, Sciences normal hearing threshon Deafness and Melissa) olds who exhibit audi-Other tory processing deficits. Communication Disorders) PI: Barac-Cikoja, SEBHS National Institutes 09/01/2016-4/8/2016 Hearing, Evaluation of low-gain \$61,865 08/31/2018 Speech, and of Health Dragana hearing aids as treat-(Fellow: Language ment for patients with (National Institute Kokx-Ryan, Sciences normal hearing threshon Deafness and Melissa) olds who exhibit audi-Other tory processing deficits Communication Disorders) SEBHS 8/7/2016 PI: Barac-Cikoja, Visual Vertigo and National Institutes 04/01/2017-\$117,439 Hearing, Dragana Speech, and Visual Dependence of Health 03/31/2019 (Fellow: Language Characteristics in (National Institute Zaleski-King, Sciences Patients with Vestibular on Deafness and Ashlev) Dysfunction Other Communication Disorders) PI: Barac-Cikoja, SEBHS Hearing, Sensory Influences on National Institutes 09/01/2016-\$61,865 4/8/2016 Dragana Speech, and Verticality Perception in of Health(National 08/31/2019 (Fellow: Individuals with Institute on Language Zaleski-King, Sciences Vestibular Dysfunction Deafness and Other Ashley) Communication Disorders)

#### FY 2016 Proposals

PI: Chacon, Gerardo	CAS	Science, Technology, and Mathematics	Variable Exponent Function Spaces	National Science Foundation; Directorate for Mathematical and Physical Sciences	05/01/2017- 04/30/2020	\$119,438	9/30/2016
PI: Chacon, Gerardo	CAS	Science, Technology, and Mathematics	Variable Exponent Function Spaces	National Science Foundation; Directorate for Mathematical and Physical Sciences	05/01/2016- 04/30/2019	\$117,195	10/6/2015
PI: Day, Lori	CAS	Psychology	CHS: Small: Collaborative Research: Head mounted displays for sign language communication when the signer is out of view	National Science Foundation; Directorate for Computer & Information Science & Engineering	06/01/2016- 05/31/2018	\$194,418	11/18/2015
PI: Edwards, Terra	CAS	Linguistics	What you see is what you feel: Sign Language Phonology in a Pro-Tactile World	National Science Foundation; Directorate for Social, Behavioral, and Economic Sciences	03/01/2017- 02/28/2022	\$580,542	7/15/2016
PI: Gormally, Cara	CAS	Science, Technology, and Mathematics	CAREER: Is Science For Me? The Role of Goal Congruity in the Recruitment & Persistence Biology	National Science Foundation; Directorate for Education & Human Resources	09/01/2017- 08/31/2022	\$779,917	7/20/2016
PI: Gormally, Cara	CAS	Science, Technology, and Mathematics	RELATES Incubator: Research Establishing & Linking Argumentation To Education in Science	National Science Foundation; Directorate for Biological Sciences	09/01/2016- 08/31/2017	\$49,904	12/18/2015
PI: Herzig, Melissa Co-PIs: Malzkuhn, Melissa & Quandt, Lorna	Academic Affairs	Visual Lan- guage and Visual Learning (VL2)	SL-CN: Complex Word- play in ASL Stories: Perspectives from Ethnography, Motion Capture, and Neurosci- ence	National Science Foundation; Directorate for Social, Behavioral & Economic Sci- ences	09/30/2016- 09/29/2019	\$750,000	4/1/2016

PI: Kuntze, Marlon	SEBHS	Government and Public Affairs	Mediated Approach to Literacy Development: An Exploratory Study of Teachers Becoming Mediators of English Development through Reading for Deaf Students in 2nd and 3rd Grades	U.S. Department of Education (Institute of Education Sciences)	09/01/2017- 08/31/2021	\$1,399,990	8/4/2016
PI: Kushalnagar, Poorna	CAS	Psychology	Deaf Sign Language Users' Experiences in Seeking Health Informa- tion	National Institutes of Health (National Institute on Deafness and Other Communication Disorders)	08/01/2016- 07/31/2018	\$272,250	5/31/2016
PI: Kushalnagar, Poorna	CAS	Psychology	PROMIS-Deaf Profile: Inclusion of Deaf Patients in Disability and Outcomes Research	National Institutes of Health (National Institute on Deafness and Other Communication Disorders)	09/01/2016- 08/31/2017	\$1,105,184	5/31/2016
PI: Kushalnagar, Poorna	CAS	Psychology	Educational Character- istics as a Predictor of Cancer Health Information Seeking and Decision Making Behaviors in Deaf Adults	National Institutes of Health (National Cancer Institute)	09/01/2017- 08/31/2019	\$144,676	6/13/2016
PI: Langdon, Clifton (Fellow: Andriola, Diana)	Academic Affairs	PhD Program in Educational Neuroscience	The Neurobiological Correlates of Sign Language Phonological Awareness in Deaf Adult Readers	National Institutes of Health (National Institute on Deafness and Other Communication Disorders)	09/01/2016- 08/31/2018	\$90,926	4/7/2016
PI: Mulrooney, Kristin	Academic Affairs	Center for Bilingual Teaching and Learning	Impact and Satisfaction of Bilingual Materials for an Online Art Course	University of Wisconsin- Milwaukee (U.S. Department of Education)	12/01/2015- 06/01/2017	\$20,000	10/30/2015
PI: Petitto, Laura-Ann (Fellow: Stone, Adam)	Academic Affairs	PhD Program in Educational Neuroscience	Neural Systems For Infant Sensitivity to Phonological Rhythmic-Temporal Patterning	National Institutes of Health (Eunice Kennedy Shriver National Institute of Child Health and Human Development)	07/01/2016- 06/30/2018	\$102,624	12/10/2015

PI: Sabila, Paul	CAS	Science, Technology, and Mathematics	Center for Integrated Quantum Materials Interpreting Supplement	Howard University (National Science Foundation)	12/01/2015- 09/30/2018	\$115,648	12/7/2015
PI: Snyder, Henry	CAS	Science, Technology, and Mathematics	National Space Grant College and Fellowship Program	American University (National Aeronautics and Space Administration)	08/26/2015- 08/25/2016	\$10,626	12/9/2015
PI: Solomon, Caroline	CAS	Science, Technology, and Mathematics	Influence of consistently high levels of ammonium on food web dynamics in the Anacostia River	University of the District of Columbia (U.S. Geological Survey)	03/01/2016- 02/28/2017	\$10,000	11/13/2015
PI: Vogler, Christian Co-PI: Murray, Joseph	Academic Affairs	Technology Access Program	SL-CN: A Collaborative Network to Improve Accessibility in Digital Learning	Harvard University (National Science Foundation)	09/30/2016- 09/29/2019	\$145,401	3/23/2016
PI: Yuknis, Christina	SEBHS	Education	Role of Deeper Learning on Special Education Gap	American Educational Research Association	08/01/2017- 12/31/2017	\$19,574	6/10/2016
	тот	AL RESEARCH	RELATED PROPOSALS (2	25 Proposals, 17 Pl	/PDs, 3 Co-Pl/PDs)		\$6,637,703
TRAINING, SCHO	LARSHIPS,	AND OTHER PR	OPOSALS				
PD: Bauman, Hansel	Adminis- tration & Finance	Office of Administration	Crossing The Street: Building DC's Inclusive Future through Creative Placemaking	DC Office of Planning	03/01/2016- 12/31/2016	\$125,000	1/11/2016
PD: Bradbury, Jill	CAS	English	Theater for the Deaf- Blind Initiative	National Endowment for the Arts	02/15/2017- 05/15/2018	\$81,417	3/3/2016
PD: Bradbury, Jill	CAS	English	An Exploration of Shakespeare in ASL and Visual Shakespeare	National Endowment for the Humanities	10/01/2016- 03/31/2018	\$170,854	12/9/2015
PD: Cooper, Audrey Co-PD: Harris, Raychelle	Graduate School & Continu- ing Studies	International Development	The Vietnamese Deaf Culture an Signed Language Curriculum Development Project	U.S. Department of Education; Office of Postsecondary Education	09/30/2016- 03/31/2018	\$99,998	8/1/2016

PD: Gannon, Christine	Student Affairs and Academic Support	Health and Wellness Programs	2016 National Crime Victims' Rights Week	National Association of VOCA Assistance Administrators (U.S. Department of Justice)	01/20/2016- 04/16/2016	\$5,000	11/17/2015
PD: Greenwald, Brian	CAS	History	Deaf NYC: Signs of Change	National Endowment for the Humanities	05/01/2016- 04/30/2021	\$100,000	5/4/2016
PD: Hollrah, Beverly	SEBHS	Interpretation	Preparation and Education of the Trilingual Interpreter	U.S. Department of Education; Rehabilitative Services Administration	01/03/2017- 12/31/2022	\$2,000,000	9/12/2016
PD: Jacobs, Lisa	Academic Affairs	Office of National Outreach	Navigating Student Suc- cess in the Pacific	College of Marshall Islands (U.S. Department of Education)	06/01/2016- 05/31/2021	\$116,137	12/4/2015
PD: Lytle, Linda	SEBHS	Counseling	School Counseling M. A. with a Focus on Language & Learning Challenged Deaf Students	U.S. Department of Education;	7/1/2015- 6/30/2020	\$1,173,575	12/5/2014
PD: Mitchiner, Julie Co-PD: Batamula, Christi	SEBHS	Education	Safeguarding, Engag- ing, and, Educating Deaf Students Project (SEEDS)	U.S. Department of Education; Office of Special Education and Rehabilitative Services	08/01/2016- 07/31/2021	\$1,173,324	12/11/2015
PI: Solomon, Caroline	CAS	Science, Technology, and Mathematics	NSF INCLUDES: South East Alliance for Persons with Disabilities in STEM (SEAPD-STEM)	Auburn University (National Science Foundation)	10/01/2016- 03/31/2018	\$16,569	6/24/2016
PD: Tamaki, Chizuko	SEBHS	Hearing, Speech, Language Sciences	Project EPIC: Prepar- ing Audiologists with Educational, Pediatric, and Interprofessional Competencies	U.S. Department of Education; Office of Special Education and Rehabilitative Services	08/01/2016- 07/31/2021	\$1,137,202	12/14/2015
PI: Vogler, Christian	Academic Affairs	Technology Access Program	SOLVES Interoperability Testing Statement of Work	VTCSecure	06/15/2016- 07/22/2016	\$3,136	7/19/2016

#### FY 2016 Proposals (continued)

GRAND TO				
TOTAL TRAINING, SCHOLARSHIPS, & OTHER PROP	OSALS (14 Proposals, 12	2 PI/PDs, 2 Co-PI/PDs)		\$5,739,076
PI: Vogler, Academic Technology Z70 Interoperation   Christian Affairs Access Testing Statement   Program Work	bility ZVRS ent of	06/16/2016- 06/22/2016	\$1,045	6/30/2016

On May 5, 2016, Capstone students had a poster session to showcase their work. Andrew Biskupiak, pictured, showcased his work. "An Oral History of Homophobic Bullying in All-Deaf and Mainstream Schools: The Experiences of Deaf Lesbian and Gay Persons", consisted of Oral History interviews of deaf lesbian and gay students at Gallaudet University that documented the prevalence and impact of verbal and physical homophobic bullying at all-deaf and mainstream schools. His director was Dr. David Penna, Government and International Studies; his second reader was Dr. Barry Bergen, History Program, Department of History, Philosophy, Religion, and Sociology.

Photo by: Zhee Chatmon



### VII. Office of National Outreach

The Office of National Outreach brings its wealth of resources, services, and programs to deaf people, families, and profession-

als around the country through Gallaudet University Regional Centers (GURCs), youth programs, and Pacific initiatives.

	Activities	People Served
Training & Technical Assistance	582	11,107
Exhibits & Performances/Recruitment	100	23,472
Marketing & Press Releases	116	85,072
Other Information Dissemination	16	13,861
Social Media Efforts	477	473,633
TOTAL	1,291	607,145

#### FY 2016 National Outreach Activities

Source: Activity Summary/Contact Log Database

### **National-Level Initiatives**

Members of the Office of National Outreach work together as a team to accomplish national-level objectives. In addition, each of the GURCs conducts its own region-specific programs, specifically designed to meet the needs of Gallaudet University constituents within the region. During FY 2016, the scope of national outreach and GURC initiatives continued to be streamlined and priorities remained aligned in support of the Gallaudet Strategic Plan. National Outreach and the GURCs documented 11,107 people served through training and technical assistance/consultation, and 23,472 through exhibits, performances, and recruitment activities. Through our advertising efforts, 85,072 were reached through marketing and press releases, and 13,861 through other forms of information dissemination, including listservs. In addition, our social media efforts resulted in a total of 473,633 views.

#### National Outreach Conference

The office of the Gallaudet University Regional Center–Midwest took the lead in planning the 2016 National Outreach Conference (NOC) in Kansas City, Mo., in collaboration with the Kansas School for the Deaf. Seventy participants, representing 29 outreach programs throughout the country, gathered at the conference where the theme was developing new collaborations and exchanging ideas. The Kansas School for the Deaf Outreach Program and the Wisconsin Educational Services Program for the Deaf and Hard of Hearing Outreach were highlighted during the conference.

#### **Articulation Agreements**

Working with the Interpretation Department, the regional centers facilitated collaborative agreements with interpreting training programs within their region to boost educational opportunities for future sign language interpreters. This partnership allows students in the two-year associate of applied science degree in interpreter training education to transfer credits into Gallaudet's four-year bachelor of arts in interpretation (BAI) program. Students will live and study with deaf and hard of hearing people from the United States and abroad on Gallaudet's bilingual campus. FY 2016 saw an addition of two more agreements, now totaling five. The two newer agreements with partner institutions include:

- Ohlone College, Fremont, Calif.
- John A. Logan College, Carterville, Ill.

More agreements with other institutions are currently underway and expected to be completed in FY 2017.

#### **Social Media Efforts**

A conscientious effort was put into developing and maintaining the office's social media outlets during FY 2016. In 2015-2016, the office posted 477 times, amassing a total of 473,633 views. The term "views" is defined as the total number of people who viewed each post and not as the total number of individuals reached.

#### FY 2016 Social Media Efforts

	Posts	Views
GURCs	215	229,626
Youth Programs	262	244,007
TOTAL	477	473,633

### **Youth Programs**

Gallaudet's Youth Programs serves deaf and hard of hearing students from elementary through high school. The programs promote academic excellence, provide learning opportunities, and encourage social interaction amongst deaf and hard of hearing students. This is achieved through the national and regional Academic Bowl competitions, the annual Battle of the Books, the National Literary Competition, and Summer Youth Programs.

#### **National Academic Bowl**

FY 2016 marked the 20th anniversary of the Gallaudet University Academic Bowl for deaf and hard of hearing high school students. During FY 2016, Youth Programs awarded scholarships to the players on the 1st and 2nd place teams at the National Academic Bowl. Each player on the 1st place team won a \$3,000 scholarship and each player on the 2nd place team won a \$1,000 scholarship. Additionally, during FY 2016, Youth Programs established a new hall of fame to recognize outstanding individual players, coaches, and staff for their achievements within the Academic Bowl. Recognition was given in the form of plaques and induction to the hall of fame. This highly successful event was established with the goal of promoting academic excellence and achievement among deaf and hard of hearing students. In addition to promoting a spirit of academic competition and sportsmanship, the Academic Bowl provides social opportunities for development and collegiality between students from around the country. It serves as public recognition for the honor and importance of academic achievement and is a major recruitment program for the University.

During FY 2016, the Academic Bowl held five regional competitions and one national competition. During the 2016 competition year, 77 high school teams participated, with a total of 297 students and 153 coaches. Of the 101 seniors who participated in the competitions, 39—39 percent—enrolled at Gallaudet in fall 2016.

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Schools/Programs	79	78	80	76	77
Teachers/Staff	154	150	156	148	153
Students	313	306	316	300	297

#### Participation in National Academic Bowl for Deaf and Hard of Hearing Students Trend

#### **Regional Academic Bowls**

ing the former GURC format of five regions: east, Midwest, southeast, southwest, and west.

During FY 2016, five regional competitions were held follow-

#### FY 2016 Participation in Regional Academic Bowl for Deaf and Hard of Hearing Students

	Midwest	Northeast	Southeast	Southwest	West
Schools/Programs	15	18	18	9	17
Teachers/Staff	30	36	36	17	34
Students	55	71	71	35	65

Coordinating the regional competitions was a major responsibility and a highlight for the GURCs. It included working with schools and programs to promote academic achievement and high expectations for all deaf and hard of hearing students while at the same time introducing students, parents, and educators to the opportunities available at the university. The regional competitions took place at the following schools:

#### FY 2016 Regional Academic Bowl Host Institutions

GURC	Regional Academic Bowl Host Institution
Midwest	Ohio School for the Deaf, Columbus, Ohio
Northeast	New York School for the Deaf, White Plains, N.Y.
Southeast	Kentucky School for the Deaf, Danville, Ky.
Southwest	Rocky Mountain Deaf School, Denver, Colo.
West	California School for the Deaf, Fremont, Calif.

#### **Battle of the Books**

During FY 2016, Gallaudet's Battle of the Books entered its fourth year. The purpose of the Battle of the Books is multifaceted: to promote literacy, to foster a spirit of academic competition and good sportsmanship, and to develop critical thinking skills among deaf and hard of hearing middle school students. During the 2016 competition, 82 teams from 42 schools/programs participated with a total of 320 students and 82 chaperones. There will not be any data in regards to enrollment rates until the first group of 8th grade students from our first year of competition (2012-2013) are eligible to enroll at Gallaudet starting in the fall of 2017.

	FY 2014	FY 2015	FY 2016
Schools/Programs	31	36	42
Teachers/Staff	60	69	82
Students	305	330	320

#### Participation in Battle of the Books Trend

#### **National Literary Competition**

During FY 2016, Youth Programs established the National Literary Competition, which is co-sponsored by the Phi Kappa Zeta sorority of Gallaudet University. There are two categories in the competition: ASL and writing. The purpose of the ASL competition is to further the development of academic ASL, to promote creativity and originality in the use of ASL, and to foster a sense of pride in ASL among deaf and hard of hearing students. The purpose of the writing competition is to allow deaf and hard of hearing students to showcase their ability to express themselves in written English, and to instill pride and ownership in their ability to do so.

#### FY 2016 Participation in the National Literary Competition

Division	Participants
ASL Competition	265
Written English Competition	58
TOTAL	323

#### **Summer Youth Programs**

During FY 2016, our Summer Youth Programs (SYP) were held from June 25-July 3. There are three programs under SYP: Immerse into ASL, Discover Your Future, and Exploring the Sciences. Immerse into ASL is an intensive program in which deaf, hard of hearing, and hearing students come to campus in order to experience a total immersion into deaf culture and learn ASL. Discover Your Future is a career-oriented program designed for deaf and hard of hearing students. Exploring the Sciences is for deaf and hard of hearing students who have an aptitude for science.

#### **Total Participation in Summer Youth Programs Trend**

	FY 2013	FY 2014	FY 2015	FY 2016
Number of Campers	97	133	89	90

#### FY 2016 Participation in Summer Youth Programs

Program	Participants
Discover Your Future	33
Exploring the Sciences	11
Immerse Into ASL	46

### **Gallaudet University Regional Centers**

Through partnerships with the GURC host institutions, the regional centers share Gallaudet's undergraduate and graduate programs and the Clerc Center's resources and expertise. This is done through training programs, workshops and conferences, youth programs, technical assistance, and consultation.

In FY 2016, the Office of National Outreach redefined the GURC regions and reduced the number of centers from five to four in order to align with Gallaudet's admissions counselors and their regions. In the transition from five to four centers, 50 states and territories were redistributed to create the new east, Midwest, south, and west regions. The new regions and host institutions are:

GURC Region	Host Institution	Location
East	Northern Essex Community College	Massachusetts
Midwest	John A. Logan College	Illinois
South	Austin Community College	Texas
West	Ohlone College	California
Pacific Initiatives	Office of National Outreach	Washington, D.C.

#### Gallaudet University Regional Center Locations

The GURCs play a significant role in accomplishing the goals and objectives of the Gallaudet Strategic Plan (GSP) and disseminating the programs and services of the Clerc Center. Each GURC develops and implements a multi-tiered plan of outreach that serves constituents in their respective region, and responds to the strategic plan. The primary scope of their work aligns with GSP: Goal A (grow Gallaudet's enrollment), GSP: Goal C (secure sustainable resource base through revenues and partnerships, and GSP: Goal E (establish Gallaudet as the epicenter of research, development and outreach). Examples of the center's work includes sponsoring conferences/exhibits, providing youth leadership training, coordinating extension courses, planning family learning events, and presenting about Gallaudet University, in addition to many other initiatives. This section focuses primarily on the GURC role in enhancing "outreach integrating research and practice, particularly to benefit deaf and hard of hearing PK-12 students" (GSP objective E.3) by seeking "partnerships with universities, PK-12 programs, community organizations, private foundations, government programs, and businesses aimed at developing, implementing, and assessing educational innovations and impacts on student learning" (GSP strategy E.3.2).

In addition, the GURCs also make GSP: Goal A, increasing enrollment and recruiting a diverse student population, a priority. The GURCs promote Gallaudet as the first choice for deaf and hard of hearing students throughout the world, as well as hearing students pursuing fields related to deaf and hard of hearing people.

	Activities	People Served
Training & Technical Assistance	582	11,107
Exhibits & Performances/ Recruitment	100	23,472
Marketing & Press Releases	116	85,072
Other Information Dissemination	16	13,861
TOTAL	814	133,512

#### FY 2016 GURC Activities and People Served

	East	Midwest	Pacific	South	West	National	TOTAL
ACTIVITIES							
Training & Technical Assistance	247	80	37	165	49	14	685
Exhibits & Performances/Recruitment	18	20	10	34	9	9	100
Marketing & Press Releases	65	11		28	11	1	116
Other Information Dissemination	3		9	4			16
ACTIVITIES TOTAL	333	111	56	231	69	24	917
PEOPLE SERVED							
Training & Technical Assistance	5,235	817	404	3,070	1,135	446	11,107
Exhibits & Performances/Recruitment	3,310	3,438	1,553	11,192	1,481	2,498	23,472
Marketing & Press Releases	11,534	21,144		35,152	17,202	40	85,072
Other Information Dissemination	129		13,711	21			13,861
PEOPLE SERVED TOTAL	20,208	25,399	15,668	49,435	19,818	2,984	133,512

#### FY 2016 GURC Activities and People Served by Region

Source: Activity Summary/Contact Log Database

### **Regional Initiatives**

## GURC-East Region at Northern Essex Community College, Haverhill, Mass.

#### Conferences

- Exhibited at the annual Working Together Conference in Manchester, N.H. The theme of this conference was "Post-Secondary Transition Success: Building Capacity and Sustainability" and it was hosted by the PepNet 2 N.H. State Transition Team. Dr. Jay Innes provided the keynote presentation.
- Worked to maximize Gallaudet's visibility at the Clarke School Mainstream Conference in Sturbridge, Mass. GURC-East assisted with the Gallaudet Admissions office booth. The Clerc Center was also represented.
- Exhibited at the Great Beginnings Conference, an event specifically for early intervention providers and families, the Massachusetts Early Intervention Consortium, Ameri-

can School for the Deaf's Family Learning Weekend, and the annual Conference on Educating Deaf and Hard of Hearing Students.

#### **Collaborations with Admissions**

- Provided an exhibit table at NECC's Transfer College Day. Arrangements were also made for admissions staff to present to students at NECC.
- Facilitated Gallaudet's presence at American School for the Deaf's Transfer Day and at both the MA PepNet 2 and Boston Children's Hospital's Transition events.
- Assisted admissions staff at Hearing Education Services' Transition Fair for all mainstream New York City deaf and hard of hearing students.
- Worked closely with admissions and two potential students from this region, assisting with the admissions process as well as the enrollment process. One of the students is currently enrolled in the Honors Program and the second student has deferred admission to the spring semester.

#### Presentations

- Provided a poster session featuring the Family Sign Language Program at the Coalition for Global Hearing Health Conference, an international conference, held at Gallaudet University.
- Collaborated with Horace Mann School for the Deaf in Boston and the Thom Early Intervention Center to provide a Reading to Deaf Children workshop for family members. Francisca Rangel of the Clerc Center provided the workshop.
- Collaborated with St. Joseph's School for the Deaf, Bronx, N.Y., to provide two professional development trainings this academic year—one presented by Dr. Stephen Nover and the second by Dr. Laurene Simms and Susanne Scott.

#### **Academic Bowl**

 Worked closely with NYSD (Fanwood) to successfully host the 2016 Northeast Regional Academic Bowl. Eighteen teams participated. Highlights included a volunteer training, a Gally Club gathering, a family luncheon, and a dinner for school administrators with President Cordano.

#### **Vocational Rehabilitation Collaborations**

• Initiated the opportunity for Gallaudet staff to present at a state-wide meeting of the Rehabilitation Counselors for the Deaf (RCDs) in Mass. This meeting opened doors for ongoing communications, including a presentation of "Gallaudet 101" to this group in the spring.

#### Working with Families

- Successfully competed for the Massachusetts Family Sign Language Program contract. GURC-East will continue to operate the program through FY 2021.
- GURC-East's Shared Reading Saturday Program entered its 12th year providing monthly sessions for families with young deaf and hard of hearing children offered in spoken Spanish, English, and ASL.
- Initiatives in the state of Rhode Island are growing with an increase of families receiving sign language instruction in their homes and the GURC's participation on early intervention committees in the state.

## GURC-Midwest Region at John A. Logan College, Carterville, III.

#### **Recruitment Efforts**

- In May 2016, John A. Logan College (JALC) President House and Gallaudet University President Cordano signed paperwork for an articulation agreement allowing JALC's Interpreter Training Program (ITP) graduates to continue their education at Gallaudet University for interpreter preparation.
- Collaborated with the North Dakota School for the Deaf Outreach Program and visited different schools in Fargo, Grand Forks, and Bismarck, N.D. The students, faculty, and administrators at the North Dakota School for the Deaf in Devils Lake, N.D., met with GURC-MW to learn more about Gallaudet. GURC-MW also shared information about Gallaudet's bachelors of arts in interpretation (BAI) at Lake Region State College's Interpreting Preparation Program in Devils Lake, N.D.
- Established a partnership with Harper Community College and the Illinois Resource Center, GURC-MW attended a new Search, Empower, and Experience Deaf (SEED) conference for high school deaf and hard of hearing children from Chicago and the western suburbs. GURC-MW led a college-readiness presentation and shared information about Gallaudet's undergraduate programs. Several Spanish-speaking families attended this event and GURC-MW distributed Gallaudet materials in Spanish.
- GURC-MW worked closely with Gallaudet's Admissions Office and visited various schools in Nebraska, Illinois, Kansas, Kentucky, North Dakota, and Missouri to promote Gallaudet to potential students.

#### Partnerships in Outreach and Pre-K-12 Education

- Partnered with the Wisconsin Educational Services Program for the D/HH Outreach and co-sponsored a trainer from Gallaudet's VL2 Lab to lead several workshops at the 2015 Annual Wisconsin Statewide Professional and Family Conference on October 22-25.
- Partnered with the Iowa School for Deaf (ISD) to sponsor several valuable workshops led by Dr. Melissa Herzig from the Gallaudet University National Science Foundationfunded Science of Learning Center on Visual Language and Visual Learning (VL2). On January 18, Dr. Herzig revealed studies from VL2 Lab research on bilingualism and the brain. She also shared helpful VL2 resources and

teaching tools available for professionals and families. This all-day training was conducted at ISD and was livestreamed for people in Iowa, Nebraska, and Kansas.

 Collaborated with the St. Louis Storytelling Festival Director and a teacher of the deaf in St. Charles, Mo., at arranging a deaf storytelling event on May 10 in St. Charles, Mo. Deaf and hard of hearing students from PreK-12 grades from the Francis Howell School District attended this event. GURC-MW shared information about Gallaudet and Gallaudet's Youth Programs.

#### **Professional Development and Collaboration**

- Worked with the Kansas School for the Deaf Outreach Program and the 2016 National Outreach Conference (NOC) Planning Committee at organizing the 2016 NOC on April 11-12 in Kansas City, Mo.
- Partnered with the Clerc Center and Family Literacy Program at Madonna University in Detroit, Mich., to provide training to deaf mentors and diverse family members in Detroit, Mich. GURC-MW co-sponsored a literacy training focusing on Clerc Center's 15 Principles to Reading to Deaf Children.
- Attended the Illinois/Iowa Association on Higher Education and Disability (ILLOWA AHEAD) conference and the Indianapolis AHEAD conference. GURC-MW had an exhibit booth at each conference and shared Gallaudet's undergraduate and summer youth programs materials, and transition information from the Clerc Center to post-secondary disability professionals.
- Gave a presentation about college and work readiness skills at the Convention of American Instructors of the Deaf (CAID) conference in Louisville, Ky., on June 27. GURC shared many resources from Gallaudet and the Clerc Center relating to transition and career/college readiness skills.

## GURC-South Region at Austin Community College, Austin, Texas

#### **MOU/Articulation Agreement Planning**

 Continued to facilitate between Gallaudet University and community colleges within the region to work on a number of articulation agreements where students can transfer credits from the two-year interpreting training programs to an undergraduate bachelor's degree in Interpretation at Gallaudet. It is GURC-South's goal to have the agreements completed in FY 2017.

## Transition Fairs/Conference Exhibits/Deaf Community Expos

Attended and/or provided exhibition and technical assistance for: transition fairs and conferences where Gallaudet University was one of the several trade schools, colleges, universities, and employment agencies to appear and provide information and resources to deaf/hard of hearing students, parents, and staff members who work with deaf/hard of hearing individuals. From October 2015-July 2016, GURC-South attended six transition fairs, seven conferences, and three deaf community expos. These events were held in Texas, South Carolina, Kentucky, Arizona, and Florida. These events are imperative to marketing Gallaudet University's programs and services to prospective students and families.

#### Start Here...Get There!

 GURC-South's ongoing technical assistance for Gallaudet University and Austin Community College was achieved by establishing an annual presentation called "Start Here...Get There!" which is Austin Community College's tagline. Gallaudet University and Austin Community College have two articulation agreements for the 2+2 transfer program for General Studies and the Interpreter Training Program. This annual presentation invites the community and current and prospective students to attend a two-hour seminar to share information on Austin Community College and Gallaudet University's current and new programs and allows the audience to ask questions and discuss any thoughts or concerns on how to improve program structure.

#### Transition/Networking/Professional Development

GURC-South's success comes with the support of local and regional organizations, agencies, and educational partners. In FY 2016, GURC-South was in a continued transition period, as Gallaudet University and the Regional Centers realigned their regions. GURC-South relinquished six of eight states in the southwest region to the West and Midwest, and gained 11 new states from the former Southeast region. GURC-South has been working closely with the south admissions team to establish better relationships by information sharing, collaborating on Gallaudet 101 presentations and family nights, and attending transition fairs and expos together. GURC-South has attended various events such as conferences, retreats, and expositions, and met with vocational rehabilitation and deaf community organizations across the south region to network with their new state professionals. In FY 2016, GURC-South traveled across Texas and to Louisiana,

North Carolina, South Carolina, Kentucky, Florida, and Georgia.

#### Gallaudet 101 and Family Nights

GURC-South's goal is to maintain its partnership with Gallaudet University's Office of Admissions. In this respect, collaboration has ensued on school visits and planning/implementing family nights. This allowed not only the connection of prospective students and keeping parents informed of what Gallaudet has to offer, but also for GURC-South to connect with new regional states. For FY 2016, from November-May, GURC-South completed a total of ten Gallaudet 101 presentations, which included visits to deaf and mainstreamed schools as well as community colleges, and hosted three successful family nights. In addition, the Office of Admissions and GURC-South collaborated in planning Gallaudet's first official academic acceptance signing ceremony, which was hosted by GURC-South and conducted at McAllen Memorial High School in McAllen, Texas, for a female student who is now a freshman at Gallaudet. Building strong connections to regions in the South with the Office of Admissions and GURC-South strengthens Gallaudet's recruitment efforts and markets Gallaudet's wonderful programs and services in a new light.

#### **GURC-West at Ohlone College, Fremont, California**

#### **Creating Professional Partnerships**

Continued to cultivate professional partnerships that benefit Gallaudet University with the Center for Childhood Deafness and Hearing Loss (CDHL) in Washington State. This agency is the umbrella agency for the Washington School for the Deaf and provides outreach and professional development throughout the state. GURC-West is a member of their statewide outreach team as the Gallaudet liaison. Working with CDHL and their constituencies, GURC-West continues the development of professional learning opportunities for teachers and interpreters to participate in from Washington State. During FY 2016, GURC-West also strengthened its commitment to the students and families of Washington State with involvement in the expansion of the CDHL program through Junior Achievement (JA). In addition, GURC-West and GURC-South were invited to participate in a leadership exchange and collaboration of administrators and policy makers between the states of Washington and Georgia focused on increasing literacy rates among deaf and hard of hearing students.

#### **Transition & Transfer Students**

- Visited preschool through high school programs in Anchorage, Alaska, to provide information on youth programs, college studies, and college preparedness at Gallaudet University. Also included this year was a youth empowerment/college preparedness training opportunity for middle school through high school students at the Montana School for the Deaf and the Blind (MSDB) Family Learning Weekend.
- Continued to provide information to potential transfer students and identify programs for university partnership. Working with Gallaudet's Office of Admissions, the GURC-West provided representation at the Ohlone College Transfer Day event in Fremont, Calif.
- Working with the bachelors of arts in interpretation (BAI) department at Gallaudet, GURC-West completed the process for Ohlone College's BAI 2+2 agreement. GURC-West continued to facilitate potential BAI partnerships with a new prospective community college, and it is GURC-West's goal to complete it in FY 2017.

#### **Supporting Families**

Providing information to parents builds opportunities for student growth, and school/college/career readiness. The work of the GURC-West continues to support a longstanding partnership with the Montana School for the Deaf and the Blind (MSDB) to provide learning opportunities for families in remote rural areas. Families attending the Family Learning Weekend at MSDB learned about empowering their children in a workshop provided by the Clerc Center. Deaf and Hard of Hearing students learned about empowerment and college preparedness from the GURC-West.

#### **Diversity & Multicultural Involvement**

- Continued to support workshops and trainings related to diverse communities. Work with the deaf Asian community included support of the 20th annual celebration of deaf Asian culture.
- The CDHL/Junior Achievement activities in Washington State included workshops open to parents to learn about services from the Department of Rehabilitation, Deaf Services in the State of Washington, and Gallaudet University. Students and families from all over the state participated, including several Spanish-speaking and Russian-speaking families.

 Work with interpreters of color and deaf-parented interpreters was supported through visibility at the RID Region V Conference. GURC-West supported a professional opportunity for interpreters in San Diego County (Calif.) to learn about power and privilege.

#### **Deaf Education**

 Continued to support professional development among professionals in deaf education by providing consultation and Gallaudet representation to the remaining two conferences for educators in the Western region; the California Educators of the Deaf (CAL-ED) and the Washington Combined Summer Institute (CSI).

#### **Pacific Initiatives**

Through various initiatives in the Pacific, the Office of National Outreach shares Gallaudet's undergraduate and graduate programs and the Clerc Center's resources and expertise through training programs, workshops and conferences, youth programs, technical assistance, and consultation. The next section focuses on programs currently offered:

#### Deaf WorldTeach in the Pacific

A major Pacific initiative, Deaf WorldTeach, is a collaborative project between Gallaudet University and WorldTeach, Inc. (a nonprofit organization based in Cambridge, Mass.). Deaf WorldTeach supported three Deaf WorldTeach volunteer teachers on two islands in the Republic of the Marshall Islands—Majuro and Ebeye—to teach approximately 70 deaf students pre-K through high school. They served along with former Deaf WorldTeach volunteers serving as contract teachers. The Deaf WorldTeach volunteers also taught college and community sign language classes and worked with families with deaf children. The Deaf WorldTeach volunteers were funded by the Ministry of Education of the Republic of the Marshall Islands.

#### Navigating Student Success in the Pacific Project

Gallaudet's National Outreach office is collaborating with the College of the Marshall Islands (CMI) and University of Hawai'i Center on Disability Studies on a federally funded project, "Navigating Student Success in the Pacific" (NSSP). The NSSP project will support two new B.A.-level special education teacher certification programs at CMI in deaf education and severe disabilities to train Pacific teachers to work with Pacific students. Based on the critical shortage of qualified teachers in the region, these two specialization strands are intended to build capacity within Pacific jurisdictions by preparing high quality local teachers to educate local students who are deaf, deafblind, or who have severe disabilities.



During the student presentations portion of the Research Expo on March 24, 2016, undergraduate student Maggie Kopp, with the Department of English, gave a presentation titled: "How High The Moon: Sensory Difference and Space Research."

Photo by: Zhee Chatmon

## **VIII. Professional Studies and Training**

### Enrollment

Professional Studies and Training (PST) courses are offered on campus, online, and at sites across the United States. The fol-

lowing tables show enrollment figures of student enrollment in PST classes during FY 2016.

#### **PST Annual Headcount Enrollment Trend**

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Students enrolled only in PST courses	664	616	604	588	525
Undergraduate/Graduate students also enrolled in PST courses	178	136	113	87	68

#### PST Enrollment Counts per Class by Student Type

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Students enrolled only in PST courses	1,099	901	887	806	768
Graduate students enrolled in PST courses	157	129	112	122	68
Undergraduate students enrolled in PST courses	92	56	47	18	23
TOTAL	1,348	1,086	1,046	946	946
Faculty/Staff	69	46	61	59	48
Online	289	317	380	376	389
Extension <sup>1</sup>	141	85	18		

<sup>1</sup>Extension courses have been put on hold since 2015 as part of a strategic shift toward strengthening online and on-campus offerings in continuing education. In addition, many extension courses were offered through the Gallaudet University Regional Centers (GURCs), which have shifted their own priorities as well. These shifts better meet current needs of the university and its students.

#### PST Fall Census Enrollment Trend<sup>1</sup>

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
147	122	119	119	151

<sup>1</sup>Excludes graduate and undergraduate students enrolled in PST courses.

Gallaudet also offers a number of non-credit activities throughout the year from the provision of conferences, trainings, and special events. Participation in these events is not part of the PST figures (headcount or enrollment in courses).

#### Non-Credit Program Offerings and Participation Trend (outside of PST courses)

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Activities	23	26	30	32	23
Participants	1,351	7,069	2,200	1,295	913

#### FY 2016 Non-credit Enrollment by Program

	Activities	Participants
Conferences/Special Events	1	200
External Contract Programs	2	200
Non-Credit Courses	20	513
TOTAL	23	913



In collaboration with Boston Children's Hospital, one of the products the Clerc Center disseminated this year was Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf or Hard of Hearing, a web-based resource on early identification, intervention, and language acquisition.

Photo by: Susan Flanigan

### **IX. International Affairs**

The outreach activities reported here are those specifically conducted in support of the international goals in the Gallaudet Strategic Plan, specifically: (A) Increasing enrollment of international students; (B) Preparing students for career success and career opportunities; (C) Increasing revenues, scholarships and donations; and (E) Establish Gallaudet as the epicenter of research, development and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all humanity.

International Affairs (IA) is a component of the Office of Research Support and International Affairs (RSIA), which is under the auspices of the Office of the Provost, and reinforces Gallaudet University's commitment to global education and outreach. IA strives to more effectively fulfill the University's mission to enhance scholarly research and engage the global deaf community.

IA serves as the initial point of contact for international visitors and scholars from outside the U.S. who travel to the Gallaudet campus. Another key function of IA is to cultivate and strengthen international partnerships that benefit Gallaudet students and deaf people around the world, and encourages personal and academic growth for the University's faculty and students by overseeing and facilitating international and intercultural education opportunities.

Gallaudet University's many programs for scholars around the world are supported by IA. These allow scholars to come to campus on long- or short-term bases to study, conduct research, or take advantage of the University's notable resources on Deaf culture.

Achievements during FY 2016 include:

### 'Global Connection'

The RSIA published its first issue of Global Connection, a newsletter dedicated to disseminating information about Gallaudet University's programs aimed at improving the lives of deaf people around the world through education and advocacy. It highlights the University's outreach efforts, including partnerships it has formed with other countries, and shares the success stories of international scholars whose lives have been changed for the better through their connection with Gallaudet. The newsletter also reports on steps the University has taken, and previews future plans, to offer and oversee international and intercultural education opportunities for Gallaudet students and faculty, as well as the global community, through enrollment and retention, research, development, and outreach.

Global Connection also showcases the opportunities Gallaudet departments offer to promote research and study abroad programs related to educational pursuits, including coursework, internships, cross-cultural studies, and scholarly exchanges. It demonstrates Gallaudet's commitment to producing graduates who understand the importance of connecting with other societies around the world and sharing their knowledge.

### IDMA Students Attend United Nations' Event

Six students from Gallaudet's Master's in International Development (IDMA), B.A in International Studies, and Master's in Public Administration (MPA) programs had an opportunity to learn more about the work of the United Nations (UN) and current trends in the field of international development and global work by attending a September 24 side event to the UN Sustainable Development Summit 2015, held at the UN in New York. Their attendance was made possible thanks to the support of the Nippon Foundation.

### International Scholars on Campus

A total of 41 countries were represented in Gallaudet University's student enrollment in FY 2016. That year, 36 international students—22 at the bachelor's level and 14 at the master's level —graduated from the University.

Gallaudet welcomed 37 new students from 15 countries to International Student Orientation (ISO) prior to the start of the fall 2016 semester. Student leaders and representatives from many departments across campus shared their time and expertise to assist RSIA with ISO. Their efforts helped ease these new students' transition to campus and academic life at Gallaudet, and therefore help ensure their success and wellbeing. ISO is a component in Gallaudet's ongoing commitment to provide "transition support" for entering international students to facilitate their indoctrination to a new country with a different language and culture. This includes access to ASL learning in JumpStart—a four-week summer program for first year and transfer students to help them get off to a good foundational start before the fall semester begins—and regular informational events.

FY 2016 was an historic occasion for Gallaudet in another very significant way: it is believed to be the first time that both Gallaudet's undergraduate and graduate student speakers were international students. Representing the Class of 2016 were Ardavan Guity, from Tehran, Iran, who graduated with a Bachelor of Arts degree in Deaf Studies, and spoke on behalf of the undergraduate students. Tong Song, from Beijing, China, who earned her Bachelor of Science degree in Accounting at Gallaudet in 2013 and graduated this year with a Master of Public Administration degree, spoke for the graduate students.

#### International Special Student Program (ISSP)

The International Special Students Program (ISSP) provides a tremendous learning experience for non-U.S. students who are not pursuing an academic degree at Gallaudet University. While at Gallaudet they can audit courses, be exposed to what is happening on campus, and visit schools, organizations, and agencies. International special students (non-degree) are now offered an opportunity to develop a customized "learning agreement" to assist them in choosing the courses and support services that they need to reach their goals at Gallaudet, including preparing to enter a degree program. In FY 2016, there were 12 ISSP participants on campus from Denmark, Japan, Finland, Netherlands, Dominican Republic, and Egypt.

#### International Visiting Researcher Program (IVRP)

The International Visiting Researcher Program (IVRP) at Gallaudet University was established to accommodate a limited number of scholars who wish to use the facilities at Gallaudet University each academic year to work on their research studies. During FY 2016, there were three IVRP participants on campus from Ireland, Italy, and Japan.

Visiting researchers are sponsored by a variety of organizations, including the U.S. State Department's Fulbright Scholars program. The Fulbright Program aims to increase mutual understanding between the peoples of the United States and other countries, through the exchange of knowledge and skills.

#### World Deaf Leadership Scholarship (WDL)

The World Deaf Leadership (WDL) Scholarship is an endowed scholarship funded by the Nippon Foundation, Tokyo, Japan. Gallaudet selects WDL Scholars from developing nations who demonstrate the ability to become international leaders and make significant contributions to their nation and possibly the world. On campus during FY 2016 were two WDL Scholars, who came from Egypt and Vietnam.

An excellent example of WDL's impact in empowering deaf professionals in FY 2016 was Thuy Tien Nguyen, of Ho Chi Minh City, Vietnam, who had the distinction of becoming the first student from her country to graduate from Gallaudet with a master's degree. Nguyen applied for and was awarded a WDL scholarship, which provided her full tuition to earn a master's degree in Sign Language Education. She plans to return to Vietnam to teach sign language at the University of Dong Nai, and to train sign language teachers. In the months leading up to graduation, Tien embarked on an ambitious internship with far-reaching benefits to the Vietnamese deaf community: conducting Ho Chi Minh City Sign Language teacher training and instruction and researching deaf Vietnamese people's experiences with sign language teacher training.

#### International Scholarships

The Sasakawa International Scholarship (SIS) Fund provides financial assistance to qualified, deserving, deaf international students who are enrolled in at least their second year of a degree-granting program at Gallaudet University to help ensure they have the financial means to complete their degree and graduate. Preference is given to students who are residents of developing countries. For FY 2016, 15 continuing undergraduate and graduate students from China, Ghana, India, Iran, Mongolia, Nigeria, and Sri Lanka were working on their degrees at Gallaudet, thanks to SIS scholarships.

In addition, 12 smaller but equally important scholarships helped make a Gallaudet education possible for another 20 international students.

Jessica Norteg, the Ghanaian student who benefited from an SIS scholarship, first heard of Gallaudet at age 15 from her Ghana Sign Language teacher. Being unfamiliar with the school, Norteg looked it up online. It seemed like an idyllic place for a deaf person to study, she recalled thinking, but far too expensive to do anything more than dream about. Thanks to SIS, Norteg walked across the stage at Gallaudet's 2016 Commencement exercises to receive her degree in accounting. What she most looked forward to, she said, was starting the new job she'd been offered in the Payroll Office of Gallaudet's Human Resources Services.

#### International Visitors

The University regularly receives requests for visits from individuals outside the United States. These range from leaders in higher education and special education who look to Gallaudet to share its expertise in improving opportunities for their country's deaf and hard of hearing population, to individuals and small groups planning to visit the U.S. who are familiar with Gallaudet's world renowned reputation and want a tour of campus to be part of their itinerary when visiting landmarks in Washington, D.C.

Gallaudet welcomed 171 visitors representing 36 countries in FY 2016. These visitors came to campus for a variety of reasons, including attending workshops, seminars, and presentations; observing classes; consulting with faculty on best practices in educating deaf and hard of hearing students; or simply to tour the University and learn more about deaf history and culture. Support for these visitors was provided by the U.S. Department of State, embassies, educational agencies and organizations, and many others.

#### **China Study Abroad**

Six Gallaudet undergraduates carried on in the footsteps of other small groups of students from the past two years by being immersed in the culture, art, history, and architecture of China, one of the world's oldest civilizations. Like the 2013 and 2014 two-week study abroad excursions, this year's group was based at Beijing Union University (BUU), which co-hosts the study abroad with RSIA through a cooperative agreement with the U.S. Department of State.

The study abroad to China follows a spring semester World Languages and Cultures 395 course, which varies by theme each year. The title of this year's course was "DeafSpace Principles in Ancient Chinese Architecture," co-taught by Hansel Bauman, executive director of Campus Design and Construction, and Derrick Behm, project coordinator for the Office of Program Development. Behm led the May 17 to 28 study abroad, with collaboration from Jiayi Zhou, a former World Deaf Leadership Scholar from China who received her master's degree in International Development at Gallaudet.

RSIA had an opportunity to reciprocate on the hospitality offered by BUU by hosting a group of 12 students and two faculty members from BUU from July 27-August 8. During their stay, the students took workshops within their academic major and the faculty learned ways to teach deaf students more effectively. The BUU group visit to Gallaudet was part of the China Study Abroad Program, co-hosted by BUU and RSIA, and a cooperative agreement with the U.S. Department of State.

#### International Internships

In FY 2016, 17 Gallaudet students interned in 10 countries. Undergraduate and graduate students who are interested in enhancing their education by attaining a global perspective find that interning, working, or volunteering abroad offers an invaluable perspective. International internships are often part of a student's academic program and students earn credits toward graduation. Student internship duties vary, and have included activities such as teaching, recreational program management, advocacy work, community involvement, and research. Along with gaining knowledge and skills in any of a wide variety of areas, these students are able to network with professionals working in another part of the world.

In addition to Thuy Tien Nguyen, of Ho Chi Minh City, Vietnam, whose internship experience was mentioned earlier in this section, Phoebe Tay, from Singapore, a dual-degree student in the M.A. programs of Linguistics and International Development, had a highly significant internship, spending nine weeks conducting field-based research on language and identity with the Singapore Association of the Deaf as part of her International Development internship activities. She conducted fieldwork research on language and identity in the Singapore Deaf Community to uncover and document historical change across four generations of Deaf and hard of hearing people in Singapore. News of her work reached the World Federation of the Deaf (WFD), whose chairman of the Regional Secretariat for Asia (RSA) invited her to present her research at the WFD RSA conference. Tay credits the Philanthropic Educational Organization for making it possible for her to be in graduate school by awarding her two International Peace scholarships.

#### Partnerships

Gallaudet University's formal agreements with universities around the globe aim to advance opportunities to share knowledge. These agreements include student exchange and technical cooperation. Gallaudet also seeks ways for more people outside the U.S. to study at the University, thereby enriching their lives and the cultural diversity of the campus community. During FY 2016 there was varied partnering activity, notably:

#### China

As part of Gallaudet's ongoing cooperative agreement with Beijing Union University (BUU) and the U.S. Department of State, BUU students and officials engaged in a study abroad based at the Gallaudet campus from July 24 to August 6. The group attended morning and afternoon classes on American Sign Language, learned about the history of the University and had the opportunity to tour many of the world renowned social, political, and cultural sites that Washington, D.C. has to offer. BUU has reciprocated the learning experience in past years, hosting groups from Gallaudet who were immersed in the culture, art, history, and architecture of China, one of the world's oldest civilizations. Note: This activity is funded by U.S. State Department grant S-ECAAS-12-GR-127KF, with the aim of strengthening Gallaudet's study abroad program, especially in China.

#### **Czech Republic**

FY 2016 saw the first interns from Gallaudet, Nam Quyen-To and Noe Turcios, now alumni of the Master of Sign Language Education Program (MASLED), who taught American Sign Language as a second signed language for deaf and hard of hearing students at Masaryk University, the second largest university in the Czech Republic. The internships are part of a five-year educational exchange agreement between Gallaudet and Masaryk that was signed last year. After gaining the necessary proficiency in ASL, the agreement allows Masaryk students at both the undergraduate and terminal degree levels to enroll as special students at Gallaudet to take courses or conduct research toward completion of their degree requirements. The agreement also encourages exchanges and academic visits of faculty and staff and joint research projects, particularly in the fields of deaf studies and sign language research and interpreting, as well as for teaching the oral languages of deaf people. "It was incredibly eye-opening," said Quyen-To about her experience in the Czech Republic. "I learned their culture and bonded with some very extraordinary people. Thank you, Gallaudet, for sponsoring me!"



Danilo Torres, international liaison specialist for the Office of Research Support and International Affairs (RSIA), provides information on the International Special Student Program (ISSP) to a member of the Brazilian volleyball team at the 2016 International Committee of Sports for the Deaf World Deaf Volleyball Championships, held in the Gallaudet Field House July 6 - 15. Men's and women's teams from Brazil, Canada, India Japan, Poland, Russia, Turkey, Ukraine, and the United States competed in the event. The ISSP, which is managed by RSIA, is a one- or two-semester program designed for non-U.S. students who are not pursuing an academic degree at Gallaudet.

### X. Burstein Center on Excellence, Leadership and Innovation

The Burstein Center on Excellence, Leadership and Innovation (BCELI) (formerly The Gerald "Bummy" Burstein Leadership Institute), was re-organized in 2014-2015, and is housed within the Department of Government and Public Affairs. BCELI provides an array of high-quality and innovative programs for deaf and hard of hearing individuals that are designed to help them progress to the next level in their careers or personal life paths. BCELI addresses leadership knowledge and skills development in education and other social service professions, including deaf-centric, for-profit and non-profit agencies and corporations. Program offerings utilize engaged learning formats with a focus on experiential learning, problem solving, and transformation.

BCELI programs and courses focus on the following areas:

- Agency leadership
- Entrepreneurial leadership
- Consumer, family, and community advocacy
- Advocacy training for deaf people internationally
- Deaf women's leadership
- Educational leadership
- Change leadership
- Early education professional development leadership
- Parliamentary procedures
- Project management
- Life coaching
- Theater arts leadership for deaf and hard of hearing people of color

FY 2016 highlights include:

### **Deaf Women's Leadership Seminar**

BCELI provided leadership training for six deaf women from across the country. The Deaf Women's Leadership Seminar provides deaf women with an invigorating environment for self-awareness, exploration, actualization, and leadership development. The seminar also strives to improve the quality of participants' lives through community engagement, service, and development. Training modules are offered by nationallyrecognized deaf female leaders, who engage participants in learning how to effectively advocate for their causes and to develop the skills necessary to achieve results. The training this year focused on self-awareness, identification of participant leadership styles, leadership styles in for-profit and non-profit corporations and agencies, effective professional communication, conflict resolution strategies, community development, networking, and fundraising. Six students were able to participate in this seminar in summer 2016.

### Leadership Training in Theater Arts for Deaf and Hard of Hearing People of Color

The BCELI provided an intensive one-week leadership training in theater arts for 11 participants. This training was designed specifically for deaf people of color, who were interested in leisure or professional participation in deaf theaters. Participants acquired knowledge and skills in three distinct areas: history of deaf theater and theater arts of color, actor movements, and play production. The class utilized their newly acquired skills to present a production on the final day of class which was attended by the campus community. This training was led by a nationally and internationally renowned deaf theater arts professional and his team of trainers. Eleven students participated in this training in summer 2016.

#### **Pre-Law Workshop**

This one-day workshop included background on the legal profession and the law school admission process, as well as law school admission test training. Participants took a mock LSAT exam and were given feedback and results, as well as pre-law counseling. In fall 2015, 12 people participated in the workshop.

During FY 2016, 29 people were served through BCELI offerings.

### XI. English Language Institute

The Gallaudet English Language Institute is a non-federallyfunded, self-supported English as a Second Language (ESL) program for deaf students. The program is currently the only ESL program serving deaf international students in the United States that is accredited by the Commission for English Language Accreditation (CEA). Last year, the ELI's accreditation was renewed for four years. The program continues to make progress towards continuing accreditation.

During FY 2016, the ELI continued its international recruitment efforts with recruitment trips to the Korean Association of Deaf 70th Year Celebration Convention in Seoul, South Korea, May 30 to June 7, 2016, and to the India Deaf Expo in Coimbatore, India, December 14, 2015 to January 5, 2016. The ELI continued to be a source of international student enrollment for Gallaudet's graduate and undergraduate programs. Twenty-seven ELI students entered the undergraduate program in FY 2016.

Two international ELI graduates—one from Iran and one from China—were chosen as the undergraduate and graduate commencement speakers at the 2016 commencement ceremony, and both mentioned the ELI in their speeches as a key step in their careers. The ELI is proud of the achievements of its graduates.

#### **English Language Institute Enrollment Trend**

FY 2012		FY 2013		FY 2014		FY 2	2015	FY 2016		
Fall 2011	Spring 2012	Fall 2012 Spring 2013		Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	
65	72	90	77	64	78	81	91	73	71	



President Roberta J. Cordano gave her Welcome Back Address to the campus community on September 8, 2016, at Elstad Auditorium. This was followed by the 3rd annual Berry Blossom Festival at JSAC, where lunch was provided and various student organizations had booths to answer questions.

Photo by: Lorian Jones

### XII. American Sign Language as a Second Language (ASL2) Program

In direct support of Gallaudet University's bilingual mission, the American Sign Language as a Second Language (ASL2) Program provides instruction to faculty, staff, and students as well as students from other area schools and colleges, federal government employees, area businesses and other individuals interested in learning the language. It offers ASL I-VI, classifiers and visual gestural communication, credit-bearing courses, and other ASL learning opportunities, such as short courses focusing on specialized aspects of ASL (e.g. non-manual markers, fingerspelling) or tailored for the needs of specific disciplines, departments, or units on campus. The program also offers ASL I and II classes online. The area businesses, government agencies, schools, and organizations that contract with Gallaudet for ASL classes include the Department of Navy, the Securities and Exchange Commission, the Office of the State Superintendent of Education, and the White House, among others.

During FY 2016 (fall 2015 through summer 2016), the program saw an increase in online enrollment, with a total of 165 students in ASL classes compared to 135 students in the previous year. A total of 611 students took onsite courses during fall, spring, and summer. An increase is also seen with offsite contract courses with a total of 467 participants from 150 participants in FY 2015. Each student placement in the online and onsite courses was conducted by the ASL2 program by completing the ASL Screening Interview.

# ASL Program Highlights for FY 2016 include:

• Twenty-two percent increase in enrollment for ASL online courses from AY 2015

- Increase in participants in offsite workshop and classes by 211 percent
- Began and implemented new online curriculum for ASL I
- Currently developing ASL II & III curricula for online courses
- Fifty percent increase in inquiries and requests for ASL Certificates for students to show the completion of a series of ASL classes

### **Strategic Planning**

The ASL2 Program and the Department of ASL and Deaf Studies are engaged in a strategic marketing plan designed to expand ASL onsite and online courses and to increase contracts with external organizations and agencies. The ASL2 Program's presence will be visible by means of media and advertising.

### **Increased Inquiries**

As a result of increased interest in ASL online, the Department of ASL and Deaf Studies pushed forward an extensive project from 2015, ASL Connect, in which a grant of \$250,000 from the Cafritz Foundation awarded to the university is used to support the development. ASL Connect is finalizing curriculum content for ASL I and ASL II for fall 2016 online and will be developing ASL III and ASL IV online contents for spring 2016. Other contents such as free online ASL lessons, an ASL certificate program, deaf studies certificate program, ASL placement testing, and ASL tutoring are currently in the works.

		FY	2014		FY 2015				FY 2016			
	Fall 2013	Spring 2014	Summer 2014	Total	Fall 2014	Spring 2015	Summer 2015	Total	Fall 2015	Spring 2016	Summer 2016	Total
CLASSES		-										
On-site	10	12	33	55	12	11	30	53	10	15	27	52
Online	6	6		12	6	7		13	8	10		18
Contract				13				16				18
TOTAL CLASSES				80				82				88
ENROLLMENT												
On-site	75	91	368	534	107	89	356	552	84	88	274	446
Online	65	57		122	66	69		135	66	99		165
TOTAL ENROLLMENT	140	148	368	656	173	158	356	687	150	187	274	611

**ASL2 Program Classes and Enrollment** 



On March 24, 2016, the first annual Research Expo was hosted on campus, showcasing research work done by students. Pictured here are discussion panel members, from left: facilitator Dr. Marlon Kuntze (Government and Public Affairs), Dr. Paul Sabila (Science, Technology, and Mathematics), Dr. Brian Greenwald (History, and Center on Deaf Life and Documentary Studies), Dr. Carolyn McCaskill (ASL and Deaf Studies), Dr. Karen Garrido Nag (Hearing, Speech, and Language Sciences), Dr. Christian Vogler (Technology Access Program), Dr. Terra Edwards (Linguistics), Dr. Brenda Nicodemus (Interpretation and Translation Research Center), Dr. Laura-Ann Petitto (Brain and Language Laboratory for Neuroimaging, Visual Language and Visual Learning Center), and Dr. Clifton Langdon (Brain and Language Laboratory for Neuroimaging).

Photo by: Zhee Chatmon


Parents and infants take part in an interactive play and learning circle with teachers and staff in the KDES Parent Infant Program classroom.

Photo by: Susan Flanigan

# Laurent Clerc National Deaf Education Center

The Laurent Clerc National Deaf Education Center, a division of Gallaudet University, includes Kendall Demonstration Elementary School (KDES), the Model Secondary School for the Deaf (MSSD), and associated research, evaluation, training, and dissemination services. The primary purpose of the Clerc Center is to fulfill its federal mandate to serve the nation by developing and disseminating innovative curriculum, materials, and teaching strategies in order to improve the quality of education afforded to deaf and hard of hearing students from birth through age 21 across the country.

# I. Overview of the Clerc Center

While providing an exemplary education to the students attending Kendall Demonstration Elementary School (KDES) and the Model Secondary School for the Deaf (MSSD), the Clerc Center works in partnership with a network of programs and schools throughout the nation to identify and share best practices in the field. This partnership is the cornerstone for activities designed to have national impact. Its goal is the provision of quality educational opportunities to all students, with emphasis on students who are lower achieving academically, who come from families that speak a language other than English in the home, who have additional disabilities, who are members of diverse racial or cultural groups, or who live in rural areas. The Clerc Center publishes and disseminates materials and information, establishes and publicizes its research priorities through a process allowing for public input, and provides training and technical assistance to families of children who are deaf or hard of hearing and the professionals who work with them.

# FY 2016 Highlights

During FY 2016, the Clerc Center engaged in a number of activities designed to improve the education and outcomes for deaf and hard of hearing children at the Clerc Center and throughout the nation. Specifically, the Clerc Center maintained its focus on the achievement of all students by engaging and devoting significant resources for the continued implementation of the Common Core State Standards in English/language arts (ELA) and mathematics as well as the Next Generation Science Standards (NGSS). The Clerc Center also completed its inaugural administration of next generation assessments (NGA), including the ELA and math PARCC assessments and NGA science and alternate assessments. Further, the Clerc Center continued planning and implementation of initiatives in three demonstration school and three national priority areas that comprise the Clerc Center Strategic Plan 2020 (CCSP 2020).

### Highlights from KDES and MSSD:

• Used information from research and evidence-based practice to redesign instructional efforts to meet the needs of all students including focus and training on document-based questions (DBQs) for grades 6-12 ELA and social studies teachers, continued the use of flexible groupings for grades K-8 to implement ASL/English bilingual strate-

gies, and added flexible groupings for elementary and middle school math.

- Continued to refine strategies in the priority areas of reading/writing, mathematics, and school climate to enhance implementation efforts and resource allocation as part of the CCSP 2020.
- Successfully administered five new assessments, including the PARCC for English/language arts and math, the Maryland Science Assessment, the Maryland Science Assessment-Alternate, the Maryland High School Science Assessment in Biology, and the MSAA for English/language arts and math for students with significant cognitive disabilities.
- Began initial planning for the demonstration school's accreditation self-study using the Middle States Association's Excellence by Design (EBD) protocol. The self-study will be underway in academic year 2016-2017 and will culminate with a site visit during winter or spring of 2018.
- Developed and provided instructional activities to practice the types of multi-step, complex processes students must use to respond to questions on the next generation assessments in ELA, mathematics, and science.
- Continued to refine implementation of the Teaching Strategies curriculum content by early childhood education (ECE) teachers with a focus on setting up the environment to support curricular investigations and better integrating information about student skill acquisition from the on-line assessment to present a more holistic view of each child's development to parents.

# Highlights from the Clerc Center's National Service:

- Completed the second year of implementation for the CCSP 2020. Work included project planning, development, and/or dissemination for 15 strategies in the three national priority areas:
  - Professional Development—The Clerc Center will support the needs of professionals by addressing gaps in their knowledge and facilitating the growth of necessary skills to meet the linguistic, academic, and social-emotional

development and achievement of children (birth through high school) who are deaf and hard of hearing.

- Family-School Partnerships—The Clerc Center will promote the development of knowledge necessary for effective partnerships between families and professionals with schools or service agencies to effectively meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.
- Collaboration—The Clerc Center will facilitate the recognition that productive collaborations among organizations at the national level are essential in meeting the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

### Resources that resulted from strategies during FY 2016:

- Tips to Go, a five-part bookmark series, provides guidance and resource information to classroom teachers who have little training or experience working with deaf or hard of hearing students.
- The 2016 issue of *Odyssey* magazine, with the theme of "The Power and Potential of Collaboration," published in partnership with pepnet 2, focused on state and national collaboration and featured an article written by Clerc Center authors based on a literature review of current research and practices in this priority area.
- A Spanish-language version of *Setting Language in Motion: Family Supports and Early I*ntervention for Babies Who are Deaf or Hard of Hearing, a web-based, seven-module series on language access and early intervention services for deaf and hard of hearing children and their families, was developed. Each module is now available in American Sign Language (ASL), English, and Spanish. The initial product was the result of a collaboration between the Clerc Center and the Deaf and Hard of Hearing Program of Boston Children's Hospital.
- An on-line tutorial was developed to support the effective use of *Students with Cochlear Implants: Guidelines for Educational Program Planning* by educational planning teams. The guidelines were the result of a collaboration between

the Clerc Center and the Deaf and Hard of Hearing Program of Boston Children's Hospital.

- Two evidence-based webcasts, *Maximizing Language Acquisition: ASL and Spoken English* and *Educational Planning for Students with Cochlear Implants*, are now available in ASL and English with supporting reference lists for professionals and families.
- The sixth publication in the *Classroom Interpreting for Students Who are Deaf or Hard of Hearing* series, focusing on interpreting for students using cochlear implants, was completed. The series was developed in collaboration with Dr. Brenda Schick and Boys Town National Research Hospital.

#### Highlights from CCSP 2020:

- Expanded and improved outreach via electronic search engines and social media:
  - o Over a 500 percent increase in social media distribution with more than 384,000 individuals reached
  - Almost a 100 percent increase in Facebook followers this FY with the largest single post audience of 60,800 people reached
- Implemented the first stage of a multi-year outreach and dissemination effort, which included the initial use of a customer-relation management system, to enhance and expand efforts to reach professionals and parents of deaf and hard of hearing students in all educational environments, especially those in public school settings.
- Published the Clerc Center's research agenda aligned with the CCSP 2020 and reflective of its national priorities and public input. Three areas of focus for collaborative and internal research efforts: 1) family engagement, 2) educational best practices, and 3) social and emotional well-being. Led internally or partnered with external researchers on 10 activities consistent with the areas of focus.
- Completed a preliminary analysis of the Parent Advocacy Survey. Initial findings suggest that advocating was, at times, a difficult and challenging process and that it required parents to rely on numerous support networks specific to the needs of the child. Preliminary results were shared with Clerc Center project managers to guide

resource development as part of their CCSP 2020 work. Analysis of more than 300 survey comments also began in FY 2016 and will continue through the coming fiscal year.

- Completed the review and revision of the ASL Academic Content Standards for grades K-8 and prepared for a national open comment period on the content standards in the first part of FY 2017. This work, which also includes review and revision of draft content standards for grades 9-12, is being done in partnership with the California School for the Deaf, Fremont.
- Completed planning and began initial development of a Parent Advocacy app to support parents during Individualized Education Program (IEP) and Section 504 meetings. This app will be developed in partnership with Hands & Voices and the American Society for Deaf Children (two national parent advocacy groups) and the National Association of the Deaf.

The Clerc Center is pleased to provide this report of achievements.

As one of the Read Across America activities at KDES during the week of March 1-4, 2016, students, teachers, and staff gathered one day in the Great Hallway. Each person brought a favorite book to read for DEAR time: Drop Everything and Read.

Photo by: Susan Flanigan



# II. Education of the Deaf Act

The Education of the Deaf Act (EDA), reauthorized in 2008 (P.L. 110-315), directly impacts Gallaudet University and the Clerc Center, including KDES and MSSD. The EDA specifically outlines both the primary responsibilities of the Clerc Center and the demonstration schools and the reporting requirements for Gallaudet University, many of which also apply to the Clerc Center. This section includes excerpts of the EDA that apply to the Clerc Center.

Note: Where "..." appears below, sections of the EDA that do not apply to the Clerc Center have been removed.

## Primary Responsibilities of the Clerc Center

The EDA mandates activities specific to the Clerc Center. It authorizes the Board of Trustees of Gallaudet University to maintain and operate the Clerc Center to carry out exemplary elementary and secondary education programs, projects, and activities for the primary purpose of developing, evaluating, and disseminating innovative curricula, instructional techniques and strategies, and materials that can be used in various educational environments serving individuals who are deaf or hard of hearing throughout the nation.

The EDA requires the Clerc Center's elementary and secondary programs to serve students with a broad spectrum of needs, including students who are lower achieving academically, who come from families that speak a language other than English in the home, who have secondary disabilities, who are members of diverse racial or cultural groups, or who are from rural areas.

The EDA states that the elementary and secondary programs must include:

- KDES, to provide day facilities for elementary education for individuals who are deaf to provide such individuals with the vocational, transitional, independent living, and related services they need to function independently and to prepare such individuals for high school and other secondary study. (See section VII.)
- MSSD, to provide day and residential facilities for secondary education for individuals who are deaf, to provide such individuals with the vocational, transitional, independent living, and related services they need to function independently and to prepare such individuals for college,

other postsecondary opportunities, or the workplace. (See section VII.)

The EDA also mandates the Clerc Center to:

- Provide technical assistance and outreach throughout the nation to meet the training and information needs of parents of infants and children who are deaf or hard of hearing. (See section VI.)
- Provide technical assistance and training to personnel for use in teaching students who are deaf or hard of hearing in various educational environments and students who are deaf or hard of hearing with a broad spectrum of needs.... (See section VI.)
- Establish and publish priorities for research, development, and demonstration through a process that allows for public input. (See section III.)

To the extent possible, the Clerc Center must provide the services required in an equitable manner based on the national distribution of students who are deaf or hard of hearing in educational environments, including regular classes; resource rooms; separate classes; separate, public, or private nonresidential schools; separate, public, or private residential schools; and homebound or hospital environments. (See section VI.)

In 2008, the EDA added language requiring the University, for the purposes of KDES and MSSD, to:

- Select challenging academic content standards, challenging student academic achievement standards, and academic assessments of a State, adopted and implemented, as appropriate, pursuant to the applicable provisions of the Elementary and Secondary Education Act of 1965 and approved by the Secretary; and implement such standards and assessments for such programs by no later than the beginning of the 2009-10 academic year;
- Annually determine whether such programs at the Clerc Center are making adequate yearly progress...; and
- Publicly report the results of the academic assessments, except where such reporting would not yield statistically reliable information or would reveal personally identifiable information about an individual student, and whether the programs at the Clerc Center are making adequate yearly progress.... (See section VII.)

# **Reporting Requirements for the EDA**

The Board of Trustees of Gallaudet University ... shall prepare and submit an annual report to the Secretary and to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate no later than 100 days after the end of each fiscal year, which shall include the following:

- 1. The number of students during the preceding academic year who enrolled and whether these were first-time enrollments, who graduated, who found employment, and who left without completing a program of study reported under each of the programs of the University (i.e., elementary, secondary).... (See sections VIII and IX.)
- 2. For the preceding academic year, and to the extent possible, the following data on individuals who are deaf and from minority backgrounds and who are students (at all educational levels) or employees:
  - A. The number of students enrolled full time and part time. (See sections VII, VIII, and IX below.)
  - B. The number of these students who completed or graduated from each of the educational programs. (See sections VII and IX.)

- C. The disposition of these students on the date that is one year after the date of graduation or completion of programs at...the University and its elementary and secondary schools in comparison to students from non-minority backgrounds. (See section IX.)
- D. The number of students needing and receiving support services (e.g., tutoring, counseling) at all educational levels. (See section VI.)
- E. Strategies (e.g., parent groups and training classes in the development of individualized education programs) used by the elementary and secondary programs and the extension centers to reach and actively involve minority parents in the educational programs of their children who are deaf or hard of hearing and the number of parents who have been served as a result of these activities. (See section VII.)

Note: This annual report satisfies these requirements.



KDES 6-8 graders visited the White House on December 11, 2015 to meet Gallaudet alumna Leah Katz-Hernandez [back row: far right] and ask her questions about her job. Katz-Hernandez, the Receptionist of the United States at The White House, welcomes all of the president's guests to the West Wing.

Photo by: Lia Bengtson

# III. Public Input

Through the EDA, the Clerc Center is required by the United States Congress "to establish and publish priorities for research, development, and demonstration through a process that allows for public input." In 2009, the Clerc Center redesigned its system to collect input from a broad range of stakeholder groups. Supported by the U.S. Department of Education, the new system included input mechanisms and processes that ensure the Clerc Center has a broad perspective based on a range of experiences. The input collected is used to inform the selection of national service priorities for the Clerc Center Strategic Plans.

## **Priority Setting**

During its most recent public input cycle, 2010-2012, the Clerc Center used a series of mechanisms to gather public input, including targeted meetings, surveys, conference exhibits, and individual contacts. Following analysis, public input information was used to guide the Clerc Center's priority setting process for the national service portion of the CCSP 2020 which began this fiscal year.

To establish its priorities, the Clerc Center convened a National Priority Setting Meeting in February 2013. Participating were parents, teachers, school professionals, early intervention service providers, organizational leaders, and university professionals from across the nation. The Clerc Center used the Structured Dialogic Design Process (SDD) designed by Dr. Alexander "Aleco" Christakis. Christakis has more than 35 years of working in the field of complex change and consulted with the Clerc Center to plan and execute this meeting or "co-laboratory." Co-laboratories are focused, action-oriented, democratic meetings during which every perspective is recognized and honored. The SDD process was selected because it promotes consensus building and shared ownership and would result in the identification of priorities based on the collective wisdom of Clerc Center stakeholders. By the end of the process, all participants developed a shared understanding of the challenges that, if addressed by the Clerc Center, would have a positive impact on the success of current and future generations of deaf and hard of hearing children.

The process resulted in the identification of three priorities that serve as the foundation for the CCSP 2020:

- 1. Professional Development The Clerc Center will support the needs of professionals by addressing gaps in their knowledge and facilitating the growth of necessary skills to meet the linguistic, academic, and social-emotional development and achievement of children (birth through high school) who are deaf or hard of hearing.
- 2. Family-School Partnerships The Clerc Center will promote the development of knowledge necessary for effective partnerships between families and professionals with schools or service agencies to effectively meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.
- 3. Collaboration The Clerc Center will facilitate the recognition that productive collaborations among organizations at the national level are essential in meeting the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

Based on a review of timelines for the current and next strategic planning processes, the Clerc Center began planning to review its public input process in FY 2016. It anticipates completing its review and sharing any proposed changes with the U.S. Department of Education in FY 2017. It will then commence the next cycle of public input collection to last into FY 2018 or FY 2019 depending on input collection mechanisms and timelines to ensure sufficient data collection.

# **IV. Clerc Center Strategic Plan 2020**

The CCSP 2020 focuses on the Clerc Center's national service and demonstration school activities through 2020. The national service portion of the plan supports professionals and parents of students (birth through high school) who are deaf or hard of hearing in accordance with the EDA, the Clerc Center's guiding federal legislation. The national service goal focuses on three priority areas identified during the Clerc Center's National Priority Setting Meeting which took place in February 2013 on the Gallaudet University campus in Washington, D.C.

The process to focus each priority area, develop the objectives, and select the strategies that the Clerc Center will undertake through 2020 was based on input and information from a number of national sources. These included dialogue during the National Priority Setting Meeting; collection and analysis of public input from 2010-2012, a summary of which can be found at www.gallaudet.edu/clerc-center/our-resources/ publications/pi-summary.html; evaluation feedback on select

trainings and products; and current research, practice, and resources in the priority areas. The strategies were carefully selected based on their potential impact in each priority area as well as on the Clerc Center's ability to complete them with the limited human and fiscal resources available. The completed strategic plan was carefully reviewed to ensure alignment among the Clerc Center mission, the national service goal and related objectives, the strategies, and compliance with the Education of the Deaf Act (EDA).

# **National Service Goal**

The Clerc Center supports professionals and families through the dissemination of resources, training, and evidence-based information in the areas of professional development, familyschool partnerships, and national collaborations to meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

### **Professional Development**

The Clerc Center will support the needs of professionals by addressing gaps in their knowledge and facilitating the growth of necessary skills to meet the linguistic, academic, and social-emotional development and achievement of children (birth through high school) who are deaf or hard of hearing.

#### **Objective 1**

Increase the understanding and awareness of teachers and professionals with limited knowledge or experience in teaching and/or working with children who are deaf or hard of hearing about how to foster student success and enrich their educational experiences through current teaching and professional practices.

#### Strategies worked on in FY 2016

- · Develop an information series for professionals
- · Publish annual Odyssey issues focused on priority areas
- · Develop a publication on interpreters working with students with cochlear implants
- · Complete a review and revision of training and technical assistance services

#### FY 2016 Major Activities

- · Completed the information series for professionals
- Published the 2016 issue of Odyssey, *The Power and Potential of Collaboration* in collaboration with Pepnet2. Issue focused on state-level collaborations focused on the transition of deaf and hard of hearing students.
- · Developed a publication on interpreters working with students with cochlear implants
- · Completed the review of training and technical assistance services and developed a proposal for revisions beginning FY2017

#### Additional Strategies for Objective 1

- · Develop a module on promoting fostering a positive sense of self in students who are deaf or hard of hearing
- · Design a workshop series to increase awareness and understanding among general education professionals

### **Professional Development (continued)**

#### **Objective 2**

Increase knowledge and strengthen effective teaching and professional practices of educators and other professionals who are knowledgeable and experienced in working with children who are deaf or hard of hearing.

#### Strategies worked on in FY 2016

- · Develop a series of professional development offerings on high-need, high-interest areas
- · Create a training on the effective use of Students with Cochlear Implants: Guidelines for Educational Planning
- Develop and Disseminate K-12 ASL Content Standards
- · Publish annual Odyssey issues focused on priority areas
- · Develop a publication on interpreters working with students with cochlear implants.
- · Complete a review and revision of training and technical assistance services

#### FY 2016 Major Activities

- Completed development of an online training to assist practitioners in using *Students with Cochlear Implants: Guidelines for Educational Planning.*
- Published Odyssey 2016 (see Priority 1, Objective 1)
- · Continued the development of ASL Content Standards.
  - Continued collaboration with California School for the Deaf-Fremont to develop the K-12 content standards
  - ° Completed and received feedback on the grades 3-8 standards from ASL teachers and specialists at the national ASL Round Table
  - (ASLRT)
     ° Completed the development of Grades 9-12 standards
  - Pilot tested the K-8 open comment process
- Completed review of training and technical assistance (see Priority 1, Objective 1)

#### Additional Strategies for Objective 2

- Develop resources for allied professionals that supports students who are hard of hearing and/or who are alone in general education settings
- · Transfer Shared Reading Project site training to a self-paced, on-line format
- Develop an action plan to support K-12 ASL Content Standards implementation and dissemination
- Host a Clerc Center symposium (focus TBD)

#### **Objective 3**

Adopt a comprehensive plan for improving the awareness of professionals with limited knowledge or experience in working with children who are deaf or hard of hearing as well as parents of those children across the United States about the resources, support, and activities of the Clerc Center.

#### Strategies worked on in FY 2016

- · Develop a comprehensive, multi-year dissemination plan
- · Redesign and expand Info to Go
- · Review products and training materials to ensure content is provided in language appropriate for the intended audience
- · Complete a review and revision of training and technical assistance services

#### FY 2016 Major Activities

- Developed a Customer Relationship Management (CRM) system to better reach and engage Clerc Center stakeholders
- · Continued implementation strategies to increase the Clerc Center presence and reach on social media.
  - <sup>o</sup> Distribution increased by 300%
  - Reached more than 23,000 people who had no prior experience or knowledge of the Clerc Center
- Completed review of training and technical assistance (see Priority 1, Objective 1)
- Developed and piloted a system to review resources to ensure that the language used in written publications is accessible and effective for the intended audience
- Began development of a process to ensure the language access and effectiveness for ASL based resources

### Family-School/Agency Partnerships

The Clerc Center will promote the development of knowledge necessary for effective partnerships between families and professionals with schools or service agencies to effectively meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

#### Objective 1

Disseminate resources and information to parents and caregivers to increase their knowledge to effectively advocate for the needs of their children who are deaf or hard of hearing when interacting with school or agency professionals.

#### Strategies worked on in FY 2016

- · Develop a literature review on parent advocacy for those parents who are disconnected, alienated, and under-served
- Create a parent advocacy app

#### FY 2016 Major Activities

- Completed a literature review on parent advocacy focusing on parents who are disconnected, alienated and under-served. This review discussed the following:
  - Parents most likely to advocate
  - ° Reasons parents do not advocate
- ° Key factors shown to improve advocacy, particularly for those parents who are disconnected, alienated, and under-served
- Continued development of Parent Advocacy App
  - ° Signed memorandum of understanding with three partner organizations
    - Completed the first iteration of the app including:
    - \* Content curation and packaging for mobile app format
    - \* Technical development, phase 1

#### Additional Strategies for Objective 1

- Expand content in Info to Go related to parent advocacy and parent-school partnerships
- · Develop materials to support parents' sharing the resources for allied professionals in support of their children's needs
- Add a Parent Advocacy section to the Deaf Students with Disabilities Network
- Publish annual Odyssey issues focused on priority areas (also listed in A-2-8)—an issue to address parent-school partnerships
- Develop materials for parents so they can share the information series for professionals listed in A-1-1 with school/agency professionals to support their children's needs



On one of the many field trips around the Washington D.C. area this year, MSSD visited the Smithsonian American Art Museum in October 1, 2015.

Photo by: Jesse Thomas

### Family-School/Agency Partnerships (continued)

#### **Objective 2**

Disseminate resources and information to increase the awareness and understanding of school personnel and administrators with limited prior knowledge of or experience with children who are deaf or hard of hearing about how to foster home-school/agency partnerships that value the parent and caregiver advocate role.

#### Strategies worked on in FY 2016

- · Develop a literature review on parent advocacy for those parents who are disconnected, alienated, and under-served
- Develop materials for professionals related to "Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf and Hard of Hearing" in ASL, English and Spanish to maximize use of the resource.
- Published the 2016 issue of Odyssey, *The Power and Potential of Collaboration* in collaboration with Pepnet2. Issue focused on state-level collaborations focused on the transition of deaf and hard of hearing students

#### FY 2016 Major Activities

- Completed a literature review on parent advocacy (see Priority 2, Objective 1)
- Completed the Spanish version of "Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf and Hard of Hearing"
- Developed activities for Early Interventionist related to Setting Language in Motion to use with parents or caregivers for dissemination in FY 2017
- Published the 2016 issue of Odyssey focusing on collaboration to be published in partnership with Pepnet2

#### Additional Strategies for Objective 2

· Develop an information series for professionals—one in the series would focus on family-school/agency partnerships

### Collaboration

The Clerc Center will facilitate the recognition that productive collaborations among organizations at the national level are essential in meeting the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

#### **Objective 1 (Years One and Two)**

Increase the internal capacity of the Clerc Center professionals to identify and carry out activities that will promote meaningful dialogues to identify areas for potential partnerships among agencies at the national level that will foster/enhance the educational experiences of all children who are deaf or hard of hearing and their families.

#### Strategies worked on in FY 2016

- · Review practices and processes of organizational collaboration
- Additional strategies were not addressed due to human and fiscal resource limitations. Strategies will be reviewed and revised as necessary in FY 2017

#### FY 2016 Major Activities

- Collaboration work continued at the institutional level in FY 2016
  - Completed the review of practices and processes for collaboration and identified the indicators and measurements of successful collaborations, with suggested ways the Clerc Center can further work in this area.
  - Authored article, "Collaboration: Definitions and explorations of an essential partnership" for the Odyssey 2016.
- Published the 2016 issue of Odyssey, The Power and Potential of Collaboration in collaboration with Pepnet2. Issue focused on statelevel collaborations focused on the transition of deaf and hard of hearing students.

#### Additional Strategies for Objective 1

- · Develop an infrastructure to provide co-laboratories for democracy to select schools or organizations
- · Establish a national collaboration focused on student transition
- Develop a collaboration objective and strategies for years three through five

# **Demonstration Schools Goal**

The goal of the demonstration schools is to implement teaching and learning practices and promote a school climate that maximizes the academic potential of students who are deaf or hard of hearing in preparation for graduation and transition to postsecondary education and/or the workplace.

### **Reading and Writing**

#### **Objective 1**

- By 2018, KDES students will improve their reading skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the Ohio Achievement Assessments (OAA) reading subtest. The 2010 baseline was 11 percent (N=38) for grades three through eight. The seven-year target is 75 percent.
- By 2018, MSSD students will improve their reading skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the Ohio Graduation Tests (OGT) reading subtest. The 2010 baseline was <10 percent (N=80) for grades 11 and 12. The seven-year target is 75 percent.</li>

#### Strategies worked on in FY 2016

- · Implement and monitor a systematic approach to reading and writing instruction across all content areas
- · Establish individual ASL/English bilingual plans for all students
- · Develop a system to provide students with opportunities to take Common Core on-line practice reading and writing assessments
- Select and implement a research-based reading intervention program(s)
- · Develop accurate and cohesive Individualized Education Programs (IEPs)
- · Develop and implement framework of strategies to individualize instruction
- · Use data to inform instruction

#### FY 2016 Major Activities

- · Reviewed close reading strategies with provided ongoing support and dialogue about implementation
- Provided training on a text-based reading and writing instructional strategy applicable across content areas document-based questions (DBQs)
- · Conducted ongoing support sessions with teachers to discuss and review implementation of text-based reading and writing strategies
- Continued flexible grouping K-8 to implement ASL/English bilingual strategies to develop linguistic skills in both languages
- · Provided training and support for teachers in use and collection of formative classroom data
- Provided training on additional aspects of developing accurate and cohesive IEPs and writing more precise and appropriate reading goals based on assessment results
- · Identified a reading intervention program to pilot at KDES

#### Additional Strategies for Objective 1

- · Continue work on interpreting the results of formative assessment data and adjusting instruction accordingly
- · Provide training on additional ASL/English bilingual instructional strategies

#### **Objective 2**

- By 2018, KDES students will improve their reading skills as measured by increasing the percentage of kindergarten through grade five students whose independent reading level is at grade level or above on the Developmental Reading Assessment 2 (DRA2). The 2011 baseline is 17 percent of students (N=42). The seven-year target is 75 percent.
- By 2018, MSSD students will demonstrate improved use of higher order thinking skills in reading as measured by increasing the percentage of grade 11 and 12 students who earn at least half of the available points on constructed response items on the OGT reading subtest. The 2010 baseline is <10 percent of students (N=80). The seven-year target is that 60 percent of students will earn at least half of the available points.

#### Strategies worked on in FY 2016

- · Implement and monitor a systematic approach to reading and writing instruction across all content areas
- · Establish individual ASL/English bilingual plans for all students
- · Develop a system to provide students with opportunities to take Common Core on-line practice reading and writing assessments
- Select and implement a research-based reading intervention program(s)
- · Develop accurate and cohesive Individualized Education Programs (IEPs)
- · Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction

### **Reading and Writing (continued)**

#### FY 2016 Major Activities

- · Reviewed close reading strategies with provided ongoing support and dialogue about implementation
- Provided training on a text-based reading and writing instructional strategy applicable across content areas document-based questions (DBQs)
- · Conducted ongoing support sessions with teachers to discuss and review implementation of text-based reading and writing strategies
- · Implemented practice on responding to BCR questions (brief constructed response) in preparation for taking the state assessments
- · Continued flexible grouping K-8 to implement ASL/English bilingual strategies and develop linguistic skills in both languages
- · Provided training and support for teachers in use and collection of formative classroom data
- Provided training on additional aspects of developing accurate and cohesive IEPs and writing more precise and appropriate reading goals
- Identified a reading intervention program to pilot at KDES

#### Additional Strategies for Objective 2

- · Continue work on interpreting the results of formative assessment data and adjusting instruction accordingly
- · Identify appropriate reading intervention strategies to use in the secondary school
- · Provide training on additional ASL/English bilingual instructional strategies

#### **Objective 3**

- By 2018, KDES students will improve their writing skills as measured by increasing the percentage of students who attain a score of 3 or above on the holistic scale of 1 to 5 on the Writing Assessment. The 2011 baseline was <10 percent for grades three through eight (N=40). The seven-year target is 70 percent</li>
- By 2018, MSSD students will improve their writing skills as measured by increasing the percentage of students who attain a score of 3 or above on the holistic scale of 1 to 5 on the Writing Assessment. The 2011 baseline was 34 percent for grades nine through 12 (N=137). The seven-year target is 80 percent.

#### Strategies worked on in FY 2016

- · Implement and monitor a systematic approach to reading and writing instruction across all content areas
- · Establish individual ASL/English bilingual plans for all students
- · Develop a system to provide students with opportunities to take Common Core on-line practice reading and writing assessments
- Select and implement a research-based reading intervention program(s)
- Develop accurate and cohesive Individualized Education Programs (IEPs)
- Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction
- · Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

#### FY 2016 Major Activities

- Provided training on a text-based reading and writing instructional strategy applicable across content areas document-based questions (DBQs)
- · Conducted ongoing support sessions with teachers to discuss and review implementation of text-based reading and writing
- · Provided training and support for teachers in use and collection of formative classroom data
- · Implemented practice on responding to BCR questions (brief constructed response) in preparation for taking the state assessments
- · Provided training on additional aspects of developing accurate and cohesive IEPs and writing more precise and appropriate writing goals
- Implemented instructional activities that mirror the more complex expectations contained in the next generation assessments (PARCC)
- · Provided students with opportunities to take Common Core on-line practice reading and writing assessments.

#### **Additional Strategies for Objective 3**

· Continue work on interpreting the results of formative assessment data and adjusting instruction accordingly

### **Mathematics**

#### Objective 1

- By 2018, KDES students will improve their mathematics skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the OAA mathematics subtest. The 2010 baseline was <10 percent (N=40) for grades three through eight. The seven-year target is 75 percent.</li>
- By 2018, MSSD students will improve their mathematics skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the OGT mathematics subtest. The 2010 baseline was 14 percent (N=80) for grades 11 and 12. The seven-year target is 75 percent.

#### Strategies worked on in FY 2016

- · Develop, implement, and monitor a systematic approach to math instruction
- · Develop a system to provide students with opportunities to take Common Core on-line practice math assessments
- · Select and implement a research-based math intervention program(s)
- · Develop accurate and cohesive IEPs
- · Develop and implement framework of strategies to individualize instruction
- · Use data to inform instruction

#### FY 2016 Major Activities

- Continued flexible grouping for math in grades 3-8
- Focused training on the use of manipulatives, representations/modeling (dot cards, 10 frames, open number lines), and other developmentally appropriate math instruction strategies, as well as concept-based instructional planning (concrete > representational > abstract)
- Continued work unpacking the math standards and reviewing math progressions across grades
- · Implemented instructional activities that mirror the more complex expectations contained in the next generation assessments (PARCC)
- · Provide students with additional opportunities to take Common Core on-line practice mathematics assessments

#### Additional Strategies for Objective 1

- Provided training on additional aspects of developing accurate and cohesive IEP development and writing more precise and appropriate math goals based on assessment results
- · Deploy new STEM instructional coaches to support more consistent implementation of best practices in math instruction

#### **Objective 2**

- By 2018, KDES students will improve their mathematics skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the OAA number, number sense, and operations standard. The 2010 baseline was 13 percent (N=40) for grades three through eight. The seven-year target is 75 percent.
- By 2018, MSSD students will improve their mathematics skills as measured by increasing the percentage of students who attain a score
  of 14 or above on the mathematics subtest of the ACT (Gallaudet's freshman admissions criterion). The 2010 baseline was 68 percent
  (N=47) for grade 11. The seven-year target is 90 percent.

#### Strategies worked on in FY 2016

- · Develop, implement, and monitor a systematic approach to math instruction
- · Develop a system to provide students with opportunities to take Common Core on-line practice math assessments
- · Select and implement a research-based math intervention program(s)
- Develop accurate and cohesive IEPs
- · Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction.
- · Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

### Math (continued)

#### FY 2016 Major Activities

- Continued flexible grouping for math in grades 3-8
- Provided training on the use of manipulatives, representations/modeling (dot cards, 10 frames, open number lines), and other developmentally appropriate math instruction strategies, as well as concept-based instructional planning (concrete > representational > abstract)
- · Piloted practice in math problem solving with ASL instruction services at KDES
- · Implemented math learning stations in KDES classrooms
- · Supported more collaborative planning among math teachers at MSSD
- · Continued work unpacking the math standards and reviewing math progressions across grades
- · Implemented instructional activities that mirror the more complex expectations contained in the next generation assessments (PARCC)
- · Provided students with additional opportunities to take Common Core on-line practice mathematics assessments

#### Additional Strategies for Objective 2

- Provided training on additional aspects of developing accurate and cohesive IEPs and writing more precise and appropriate math goals that are based on assessment results
- · Deploy new STEM instructional coaches to support more consistent implementation of best practices in math instruction

On June 10, MSSD celebrated its 45th commencement exercises. Forty-two students crossed the stage to receive their diplomas in Gallaudet University's Elstad Auditorium.

Photo by: Catherine Valcourt-Pearce



### **School Climate**

#### **Objective 1**

By 2018, Clerc Center school personnel will express positive feelings about school morale and involvement in decision making as measured by increasing the percentage of responses in the positive range on the Leadership and Professional Relationships dimensions of the Comprehensive School Climate Inventory (CSCI) to at least 85 percent on each dimension.

#### Strategies worked on in FY 2016

- · Select and implement school connectedness strategies for administrators, teachers, and students
- · Develop and implement a teacher induction program
- · Establish a shared decision-making matrix among administrators, teachers, and staff

#### FY 2016 Major Activities

- · Continued work with both schools' climate committees to plan and implement schoolwide activities to enhance school climate
- · Conducted discussions at schoolwide meetings to gather input and make collective decisions about selected school issues
- Shared data and collected input schoolwide on action plan strategies to implement as part of the School Improvement Plan (SIP) development process
- Revitalized the Employee Relations Committee (ERC) as a venue for teachers and staff to raise and resolve issues of concern
- · Provided new teachers with a three-day orientation program prior to the fall kick-off and ongoing support and mentoring activities

#### **Objective 2**

By 2018, MSSD students will express positive perceptions about school safety as measured by increasing the percentage of responses in the positive range on the Rules and Norms and Sense of Physical Security dimensions of the CSCI to at least 85 percent on each dimension and on the Sense of Social-Emotional Security dimension to at least 75 percent.

#### Strategies worked on in FY 2016

- · Implement Positive Behavior Interventions and Supports to develop a school climate that supports pro-social behaviors
- · Implement the Olweus Bullying Prevention Program with fidelity

#### FY 2016 Major Activities

- · Aligned PBIS and Olweus under one core committee at each school with new leadership
- Continued implementation of Tier 2 PBIS strategies
- · Provided orientation and training to new teachers and staff on Olweus and PBIS
- · Accessed school incident report data and made regular reports to the school community about current status
- · Administered the Olweus survey to students to assess current climate

#### Additional Strategies for Objective 2

Complete Tier 2 design and structure

#### **Objective 3**

By 2018, the Clerc Center community will perceive the school environment as welcoming and physically appealing as measured by obtaining at least 75 percent of responses in the positive range from all stakeholder groups (i.e., students, parents, school personnel) on both the School Connectedness/Engagement and Physical Surroundings dimensions of the CSCI.

#### Strategies worked on in FY 2016

- · Establish the Clerc Center's long-term facilities master plan
- Align the existing multi-year furniture replacement, construction, and maintenance plans with the Clerc Center's long-term facilities master plan and implement annual plans to ensure an environment that is welcoming and physically appealing. (Contingent upon resource availability)
- · Select and implement school connectedness strategies for administrators, teachers, and students
- · Implement strategies that will Increase parental involvement in the schools

### School Climate (continued)

#### FY 2016 Major Activities

- · Replaced MSSD gym floor and bleachers and renovated the KDES gym floor
- · Installed new signage throughout KDES building
- · Completed additional renovations to MSSD auditorium stairs and KDES auditorium lighting
- · Implemented an ongoing series of events with families to increase involvement with the school
- · Provided several workshops for parents in areas of interest, such a cyber-safety
- · Completed long-range planning with KDES parent-teachers organization
- · Began construction of new residential dormitory to house MSSD students
- · Implemented a series of activities/events designed and chosen by teachers/staff to improve morale and climate

#### Additional Strategies for Objective 3

· Move students into new dormitory, anticipated fall 2016



Throughout FY 2016, the new MSSD residence hall construction was chronicalled by a builder's web cam. Pictured here is how the site looked in early October 2015.



MSSD residence hall site during Snowzilla in January 2016.

Photo by: Oz Blue



In March 2016, the wings take shape.

Photo by: Susan Flanigan



In August 2016, the façade is in place and work on the interiors picks up the pace.

Photo by: Susan Flanigan

# Photo by: Susan Flanigan

# V. Research Plan, Priorities, and Projects

The Clerc Center's Research Agenda guides internal and collaborative research designed to improve the educational outcomes for deaf and hard of hearing children from birth through 21 years of age. It is aligned with the CCSP 2020 and addresses identified gaps in knowledge and research as they relate to national service and demonstration school priority areas. This published list of priorities within the Research Agenda fulfills mandates set forth by the EDA and agreements made with the U.S. Department of Education to "establish and publish priorities for research, development, and demonstration."

Gaps noted in the Research Agenda are based on current available research and practices as well as on the Clerc Center's national public input process. The agenda serves to delineate priority areas of focus for internal research, to establish priorities for collaborations with external researchers, and to call attention to key areas that researchers and agencies across the country should consider when identifying areas of research need. Clerc Center research efforts support its mandate to carry out exemplary elementary and secondary education programs, projects, and activities for the primary purpose of developing, evaluating, and disseminating innovative curricula, instructional techniques and strategies, and materials that can be used in various educational environments serving individuals who are deaf or hard of hearing across the nation as is mandated by the U.S. Congress and the EDA. The Clerc Center intends to communicate and disseminate findings concerning methods, materials, and ways of organizing research that are shown to be effective or ineffective in the education of students who are deaf or hard of hearing. The Clerc Center recognizes the need for collaboration with external researchers to address key priority areas within its Research Agenda. External researchers who are interested in working with the Clerc Center should use these priorities as a guide for ideas and topics that would be acceptable for collaborative research.

### **Establishing the Research Agenda**

The Clerc Center's Research Agenda was established in the spring of 2015 using data from its 2009-2012 public input process and is aligned with the priority areas of the CCSP 2020.

### **Resource 1: Public Input**

The formal collection of public input assists the Clerc Center in establishing and publishing priorities for research, development, and demonstration as required by Congress. During the three-year cycle of collection, as accepted by the U.S. Department of Education, input was sought from diverse stakeholder groups and individuals to ensure a broad range of perspectives was obtained. Public input findings from 2009-2012 were published in 2013 as Critical Needs of Students Who are Deaf or Hard of Hearing: A Public Input Summary. This summary included an analysis of over 1,400 comments from 775 respondents who provided input based on the following trigger question: "What are the barriers that prevent deaf and hard of hearing students from achieving their academic, linguistic, and social-emotional potential?" The analysis identified four thematic areas in and five major barriers to the education of children who are deaf or hard of hearing. The themes identified were:

- Deaf and hard of hearing students' need for language and communication access
- Limited resources (e.g., information, training and education, services) available for parents, teachers and professionals, and students who are deaf or hard of hearing
- Need to address deaf or hard of hearing students' socialemotional needs and development
- Lack of direct service personnel (e.g., teachers, professionals) qualified to meet the various needs of students who are deaf or hard of hearing in K-12

The overarching barriers identified were:

- Need for knowledge and education of caregivers, professionals, and the general public
- Collaborative efforts

- Qualified professionals and services
- Meeting the needs of the student within a given school system
- Child's own development of self-concept

The themes and barriers were similar for all respondents regardless of their background, race, ethnicity, communication modality, or setting in which they worked. This suggested that identified barriers to educating children who are deaf or hard of hearing transcend language, setting, and location. Complete public input findings are available on the Clerc Center website at www.gallaudet.edu/clerc-center/our-resources/publications/ pi-summary.htm.

#### Resource 2: CCSP 2020

The Clerc Center held its National Priority Setting Meeting in February 2013. Public input findings were provided to participants to use throughout the process, which resulted in the identification of three priority areas. These priority areas—professional development, family-school/agency partnerships, and collaboration—serve as the foundation for the Clerc Center's national service work for the next five years and are the basis for the national portion of the CCSP 2020. For more information on the CCSP 2020 and national priorities, please see Section V of this chapter about the CCSP 2020.

In addition to the Clerc Center's national service priorities, the CCSP 2020 also includes its priorities for KDES and MSSD, the Clerc Center's demonstration schools. These priorities reading and writing, mathematics, and school climate—were established as part of the schools' accreditation process, Excellence by Design. To read more about the demonstration school priorities, see the Demonstration Schools Goal section in the CCSP 2020.

### **Research Agenda Areas of Focus**

The Clerc Center's Research Agenda highlights three areas of focus: 1) family engagement, 2) educational best practices, and 3) social and emotional well-being. The areas of focus are designed to advance knowledge, best practices, curricula, intervention strategies, and resources for children who are deaf or hard of hearing, their families, and those who serve them. Information about the Research Agenda is available online at https://www.gallaudet.edu/clerc-center/research/research-agenda.html.

Each area of focus is described below along with related guiding research questions. These questions were devised based on a review of existing research and are consistent with findings from the Clerc Center's public input process. These research questions will serve as the foundation for the Clerc Center's long-term Research Agenda and will also help to ensure alignment with the CCSP 2020. The Research Agenda will be shared via the Clerc Center's website as well as in its *Annual Report of Achievements*. Annual updates will inform potential research about the initial development and ongoing refinement of the guiding research questions and related research activities. The Clerc Center recognizes that education is a dynamic field and, as such, the guiding questions and related projects will evolve in relation to changes in knowledge, available resources, and potential collaborating partners.

### Area of Focus #1: Family Engagement

Promoting parental engagement and family-school partnerships emerged as a priority during both the Clerc Center's National Priority Setting Meeting and the KDES/MSSD school accreditation process. This need is consistent with current research and educational practices that indicate the importance of understanding and promoting consistent and substantial parental engagement as crucial to the academic, linguistic, and social-emotional development of young deaf and hard of hearing children. These sources further suggest that a better understanding of how parents perceive their engagement and how schools and professionals foster involvement can minimize barriers and maximize student success.

Family engagement research of school-aged deaf and hard of hearing children is limited. While research shows that early family involvement in early intervention programs is linked with later positive outcomes (Moeller, 2000), the impact of family engagement and its relationship to the long-term successes of deaf and hard of hearing children in school is not known or well understood. For parents of children who are deaf or hard of hearing, involvement and engagement are rooted in parental self-efficacy (Desjardin, 2006), knowledge of the unique needs of the child, successful mediation of the parental stress of raising a child with a disability (Raya, Ruiz-Olivares, Pino, & Herruzo, 2013), and the ability of the parents to navigate their child's disability in the community and at school (Fishman & Nickerson, 2014). Current models (e.g., Hoover-Dempsey & Sandler, 2005) of family engagement and involvement and, ultimately, family-school partnerships may not fully consider these variables and thus may be incomplete for families of students who are deaf or hard of hearing,

including those with disabilities. Furthermore, since children who are deaf or hard of hearing are also at risk for multiple disabilities (van Dijk, Nelson, Postma, & van Dijk, 2010), behavioral challenges (Barker et al., 2009), and academic challenges (Marschark & Knoors, 2012), the role of family engagement and family-school relationships may be complicated in its perception and actualization. The Clerc Center believes parental engagement may be a key factor to long-term positive outcomes for deaf and hard of hearing students with disabilities.

The Clerc Center's focus on family engagement offers opportunities to contribute to the expansion of research in multiple disciplines (e.g., deaf education, special education, family engagement, child development), particularly since gaps have been identified in the research addressing the engagement of families in the education of deaf and hard of hearing children with and without disabilities. Results generated by research in this area will also support the Clerc Center's use of evidence to develop resources and information related to family engagement and advocacy, including a Parent Advocacy Literature Review and development of a Parent Advocacy app. It will further assist the demonstration schools in selecting possible strategies to facilitate family engagement and enhance school climate.

The research questions below are intended to guide possible research efforts internally, externally, and collaboratively. These research questions may be addressed by the Clerc Center but are also being shared in the hopes that other potential researchers will consider these topics and their related needs within the field of deaf education:

- How do parent engagement and parent-school partnerships impact the academic, emotional, or behavioral outcomes of a student?
- What is the role of parent advocacy, and what are the variables that may influence a parent's ability, knowledge, and/or willingness to advocate for the needs of his or her child?
- What are the perceptions of parents and professionals regarding family involvement and engagement, and how are these perceptions similar or different among these groups?
- Is the current Hoover-Dempsey model of parental involvement an accurate model for families of children who are deaf or hard of hearing?

- What school-based initiatives could yield positive parentschool partnerships for parents who do not feel knowledgeable about the needs of their child? How are the initiatives different than those for parents who feel more confident in their knowledge?
- Are there any established tests of measures that would effectively measure parent engagement in education or in other critical aspects in the lives of children who are deaf or hard of hearing?

### Area of Focus #2: Educational Best Practices

Professional development for educators new to working with children who are deaf or hard of hearing and for experienced educators addressing new content standards, instructional practices, and related assessments was identified as a priority during the Clerc Center National Priority Setting Meeting and for educators in the Clerc Center's demonstration schools.

The majority of professionals responsible for teaching or providing services to deaf and hard of hearing children are not deaf or hard of hearing themselves, and they likely have limited experience or training in working with students who are deaf or hard of hearing (e.g., Ferrell et al., 2014). This limited experience coupled with the ever-evolving demands of professionals creates further challenges to effectively plan for and meet the needs of individual students. Teachers experienced in working with deaf and hard of hearing students face their own challenges, including increasing accountability, a need to implement rigorous standards-based instruction and related assessments, and the ongoing move towards data-based decision making.

Current research poses significant gaps in the knowledge and understanding of what educational best practices are effective for specific subgroups of deaf and hard of hearing students from birth to high school (e.g., students exposed to sign language from birth vs. those who learn sign language later). There is a clear need for more qualified professionals, more resources, and a better understanding of how to adapt and implement evidence-based practices during academic instruction and early intervention. Some research is beginning to emerge identifying evidence-based programs and interventions that may be beneficial for children who are deaf or hard of hearing. For example, Ferrell et al. (2014), Marschark & Knoors (2012), and Luckner (2011) have all published in-depth summaries of evidence-based programs for reading, writing, and math for deaf and hard of hearing children. However, little is known about school-wide implementation, efforts to make these practices more consistent across educators, and what progress can be expected if programs are implemented with fidelity.

The Clerc Center's focus on educational best practices will contribute to a better understanding of effective practices in the classroom, at school, and at home. Results in this area will support the Clerc Center's development of resources and information, including new training, workshops, and printed resources for professionals. Further, the research will assist the demonstration schools in their practice of using research and data to inform instruction and implement effective classroom instruction and related student interventions.

The research questions below are intended to guide possible efforts internally, externally, and collaboratively. These research questions may be addressed by the Clerc Center but are also being shared in the hopes that other potential researchers will consider these topics and their related needs within the field of deaf education:

- What are the current evidence-based strategies for reading and mathematics interventions that may be applicable for students who are deaf or hard of hearing? What are the necessary modifications, if any, to those intervention programs in order to yield positive results?
- How can alternative classroom designs (e.g., grouping students by skills rather than grade, designing classrooms to capitalize on visual gain) assist in academic outcomes?
- Are there any strategies that effectively mediate early intervention delivery services to foster long-term language development?
- What is the role of new technology (e.g., LENA technology for spoken language, on-line testing vs. paper testing) in ensuring student outcomes are measurable?

### Area of Focus #3: Social and Emotional Well-being

Furthering the knowledge of the social and emotional well-being of deaf and hard of hearing children and young adults was identified as a need by the Clerc Center's public input process and the National Priority Setting Meeting. The public input summary reports that while there is considerable information about what deaf and hard of hearing children and young adults cannot do or do not do well related to their social and emotional well-being, little is known about the characteristics or strengths of those children who are happy and healthy. Research in this area has historically had a "weakness-based" or mental-health focus (e.g., Fellinger et al., 2005; Fellinger et al., 2007; Fellinger et al., 2009) rather than a "strength-based" one. Emerging research suggests the importance of identifying the proactive emotional and social strategies successful deaf and hard of hearing young adults use to navigate daily challenges as well as those associated with critical milestones in their lives, such as transitioning from school to college and/ or work (Cawthon, Schoffstall, & Garberoglio, 2014; Luft, 2013; Luft & Huff, 2011). Strength-based research specific to children who are deaf or hard of hearing suggests that variables such as self-control, sustained motivation, reframing negative thoughts, goal-oriented behavior, persistence, choosing social and professional settings that are a good fit, creatively learning proactive strategies, and resourcefulness may promote more healthy outlooks on life and greater overall happiness (Jacobs, 2012). Moving towards a strength-based approach would allow for investigation into the protective factors, resiliency factors, and positives of being deaf or hard of hearing.

Although societal challenges to social and emotional wellbeing of students who are deaf or hard of hearing may not be preventable, the Clerc Center seeks to provide these students and their families with tools and knowledge that can provide more positive social and emotional experiences. A strengthbased focus on 'what works' offers a richer understanding of quality social participation, characteristics of healthy personality (e.g., Hintermair, 2008), and a better understanding of the key variables that educators can foster to ensure deaf and hard of hearing children can become resilient self-advocates and ultimately happy and healthy adults.

There is also a need to consider how professionals working with and teaching deaf and hard of hearing children can foster positive social and emotional well-being for both the child and the family. The need for collaboration amongst professionals was often highlighted as essential to this effort. At the Clerc Center, the demonstration schools have recognized this by working to increase positive supports for students that ensure positive behavioral outcomes and implementing evidencebased programming aimed at reducing bullying and harassment (e.g., Olweus, PBIS).

The Clerc Center's focus on social and emotional well-being as part of its Research Agenda offers opportunities to better understand the whole child and family using a lens of strengths rather than deficits. Research in this area of focus has the potential to allow multiple disciplines (e.g., deaf education, special education, family engagement, child development) to consider deaf and hard of hearing children through

a positive lens, something that has historically been lacking in the research. Results generated by efforts in this area will also support the Clerc Center's development of resources and information, including an on-line training designed to teach professionals how to foster social and emotional well-being in their students. Further, research will support the demonstration schools in maintaining their commitment to promoting positive behavior, reducing the prevalence of bullying, and fostering a positive sense of community.

The research questions below are intended to guide possible research efforts internally, externally, and collaboratively. These research questions may be addressed by the Clerc Center but are also being shared in the hopes that other potential researchers will consider these topics and their related needs within the field of deaf education:

- What are the attributes that foster a positive sense of self leading to resiliency?
- Are there current measures and instruments available to help school-based personnel understand a child's strengths rather than weaknesses? How can this recognition lead to greater social and emotional well-being?
- Are school-wide intervention programs (e.g., Olweus, Positive Behavioral Interventions and Supports [PBIS]) designed to improve the social-emotional health of deaf and hard of hearing students effective?
- How does parent and/or educator self-efficacy and knowledge of deafness contribute to the social and emotional well-being of a student who is deaf or hard of hearing?
- What is the role of parent and/or educator advocacy and expectations on academic success and persistence of a student who is deaf or hard of hearing?

The Clerc Center strongly believes that by establishing and publishing its priorities for research, development, and demonstration in family engagement, educational best practices, and social and emotional well-being, it can establish collaborations with researchers across the country and draw attention to these areas of need as well as focus its efforts within the demonstration schools. This work affords the opportunity to advance knowledge, best practices, curricula, intervention strategies, and resources for children who are deaf or hard of hearing, their families, and those who serve them.

## Scope of the Research Agenda

The scope of the Clerc Center's Research Agenda covers applied research that will be carried out by the Clerc Center and other programs and organizations with which it collaborates. For example, while the Clerc Center may not initiate basic research in language acquisition and learning, it will encourage collaborative research in those areas where significant knowledge gaps exist through networking with other programs and organizations.

The Clerc Center also welcomes ongoing collaborations with research partners who engage in basic and applied research in identified priority area topics. Cooperative research includes research in which the Clerc Center has not been involved in the study design but agrees to participate by recruiting subjects and participating in data collection. The principal investigators will be encouraged to share their research findings with the Clerc Center to further its innovation and outreach work.

Research projects are implemented in two categories:

- 1. Current projects that fit the priority research topics identified in this Research Agenda and other immediate, important projects that can be conducted with currently available resources
- 2. Future research studies under consideration that will require additional resources, including grant funding or collaborative agreements, to plan and implement

# **Project Types Defined**

Following the subsequent sections detailing the three areas of focus is a data table which includes the names of the projects, the type of each project and its funding, and an estimated number of Clerc Center staff that were involved with the project. Both internal and external funding sources are reported.

Projects at the Clerc Center include:

- 1. Internal Projects conducted solely by Clerc Center personnel
- 2. Internal and collaborative Projects that originated with and were funded by the Clerc Center and involve researchers outside of the institution
- 3. External Projects funded and led by researchers outside of the Clerc Center but involve Clerc Center personnel

Specifically, internal funding refers to a project with fiscal resources allocated primarily by the Clerc Center, and, where appropriate, the project budget, the internal fiscal allocation for FY 2016, is provided. External funding sources are those that were provided by outside researchers, collaborators, or organizations and as such no budget information is provided. External projects often require Clerc Center personnel to facilitate logistics or data collection or to participate in the research study but do not necessitate the contribution of fiscal resources. Research projects resulting from both Clerc Center and outside funding are considered to be both internal and external.

### **Research and Evaluation Activities**

In accordance with the EDA, the Planning, Development, and Dissemination unit of the Clerc Center leads the development, evaluation, and dissemination of innovative curricula, instructional techniques and strategies, and materials that can be used in various educational environments by educators and families of deaf and hard of hearing students throughout the nation. Five research and evaluation staff members and two graduate assistants within Planning, Development, and Dissemination supported research and evaluation activities consistent with the above federal mandates.

The costs of research and evaluation activities in FY 2016 were \$330,020 in payroll and \$33,581 in non-payroll expenses.

During FY 2016, the Clerc Center began implementation of its new Research Agenda, which is aligned with its strategic plan, the CCSP 2020. It engaged in a limited number of related internal research activities and supported several external research projects. The Clerc Center also focused research and evaluation resources to support the planning and development of selected CCSP 2020 national service projects. This support included conducting literature reviews, leading guided discussions related to the research, and fostering project leaders' understanding of research and current practice related to their assigned projects. A significant amount of staff time was invested in the design and implementation of evaluation activities to ensure the Clerc Center obtained information about the relevance, usefulness, and quality of its new and forthcoming resources.

Examples of these activities included:

• Dissemination of the Research Agenda priorities during Gallaudet's Research Expo in March 2016, in the 2016 is-

sue of *Odyssey* magazine, and online on the Clerc Center's website.

- Compilation and analysis of feedback pertaining to the *Classroom Interpreting for Students with Cochlear Implants* series of guides. This feedback was then used to guide product revision prior to completion, publication, and dissemination.
- Compilation and analysis of feedback relating to Tips to Go, a five-part bookmark series, provides guidance and resource information to classroom teachers who have little training or experience working with deaf or hard of hearing students. This feedback was then used to guide product revision prior to completion, publication, and dissemination.
- Meetings with CCSP 2020 project leaders to discuss project design and to plan related research and evaluation needs.
- Meetings with external researchers to share information about research agenda priorities, Clerc Center procedures for research request submissions and Gallaudet University Institutional Review Board requirements, and provision of internal staffing support for approved research projects.

During FY 2016, work to enhance the Clerc Center's ability to better measure its impact and reach across the nation was continued. These efforts can best be seen via the Clerc Center's website on which identified resources are being tracked via an electronic pop-up survey that collects targeted demographic information. In addition, research and evaluation staff also spent time developing print evaluation materials to accompany Clerc Center select resources and trainings.

Planning for the next cycle of public input collection began in late FY 2016. The Clerc Center is mandated by the EDA to "establish and publish priorities for research, development, and demonstration through a process that allows for public input." The multi-stage public input process first established for the CCSP 2020 and accepted by the U.S. Department of Education in FY 2010 was reviewed. This internal review will provide the foundation for planning and implementing the new multi-year public input cycle to begin in FY 2017. Any proposed changes to the process will be shared with the U.S. Department of Education before implementation begins.

# Summary of FY 2016 Research Projects and Activities

### Area of Focus #1: Family Engagement

## Critical Review of Measures of Parent Engagement and Involvement

(Internal Research Project)

The Clerc Center investigated measures of parental engagement and involvement currently used by professionals. This information will inform Clerc Center work in this area. Since these measures have not typically been used with children who are deaf or hard of hearing, the information could be useful to other researchers as well. Current work focuses on the organization and preparation of this information for dissemination during FY 2017.

### Literature Review on Family Engagement and Parent Involvement

(Internal Research Project)

The Clerc Center conducted an in-depth review of family engagement and parent involvement literature. This work will supplement and enhance information relating to measures of family engagement and parental involvement. Current work focuses on the synthesis of the literature, leading to the development of a foundational document during FY 2017.

### Parent Advocacy Survey

(Internal Research Project)

The Clerc Center designed a survey to better understand the advocacy process experienced by parents of deaf and hard of hearing children. The Clerc Center intentionally selected variables that are unique to families of children who are deaf or hard of hearing. Over 1,000 parents and caregivers completed the survey. Preliminary analysis suggests that advocating was, at times, a difficult and challenging process and that it required parents to rely on numerous support networks specific to the needs of the child. During FY 2016, preliminary results were shared with Clerc Center project managers to guide resource development as part of their CCSP 2020 work. This project was also featured as one of the research projects in the March 2016 *Research at Gallaudet* publication.

Content analysis of more than 300 survey comments was begun during FY 2016 and will continue through FY 2017. During the latter part of FY 2017, results will be written and prepared for dissemination and publication activities. These results will also support the development of two additional parent advocacy surveys—one for families of color and the other for educators—anticipated for FY 2017.

### Literature Review on Family/Parent Advocacy for Parents Who Are Disconnected, Alienated, and Underserved (Internal Research Project)

To better understand the parent advocacy needs of families who may be disconnected, alienated, and underserved, the Clerc Center completed a review of the current literature and practices related to parent advocacy in this area. It explored parent advocacy generally and specifically to families of deaf and/or hard of hearing children, challenges diverse families face with their advocacy efforts, and implications of this research for consideration of future work. A foundational document, drawing from research, was developed in the latter part of FY 2016 for internal knowledge and capacity building as part of the CCSP 2020. External dissemination of this information will be explored in FY 2017.

### Area of Focus #2: Educational Best Practices

### American Sign Language Content Standards K-1

(Collaborative Research Project. Principal Investigators: Lori Lutz, PhD, and Susan Jacoby, PhD, Clerc Center; and Rory Osbrink, California School for the Deaf)

The Clerc Center maintains its commitment to ensuring the K-12 academic content standards are rooted in evidence and reflect the language and rigor of the Common Core State Standards (CCSS). In November 2015, the content standards for grades 4 to 8 were reviewed by ASL instructors at the national ASL Round Table (ASLRT). During FY 2016, work focused on completing the revision of standards for grades K-8 and of the research summary and rationale, which will be added to the standards. The California School for the Deaf completed draft standards for grades 9 to 12, which will be prepared for review by ASL instructors at the ASLRT in early FY 2017.

The Clerc Center also developed an open comment process to collect national feedback about the ASL Academic Content Standards. The Clerc Center collaborated with Kansas School for the Deaf and Gallaudet University to pilot test the open comment survey and to share early drafts of selected ASL Academic Content Standards with ASL instructors attending the ASL CIA conference in June 2016. Feedback from this group guided the final design of the open comment survey, which will be available during FY 2017.

#### Fingerspelling Our Way to Reading

(External Research Project. Principal Investigator: Dr. Brenda Schick, University of Colorado)

During FY 2016, the Clerc Center entered into an agreement with the Center for Literacy and Deafness (CLAD) at the University of Georgia to participate in a national research study using a randomized controlled trial (RCT) design to assess effectiveness of a new curriculum, Fingerspelling Our Way to Reading. This curriculum is designed specifically for young deaf and hard of hearing children. This will be one of the first studies of its kind involving deaf and hard of hearing children to be developed to meet What Works Clearinghouse (WWC) criteria for intervention efficacy. The purpose of the study, which is led by Dr. Brenda Schick, is to investigate the effects of the Fingerspelling Our Way to Reading curriculum on young children's early literacy skills. Work will focus on the implementation of the curriculum intervention at KDES during the latter part of FY 2016 and throughout 2017, with the possibility of continued participation in FY 2018.

### Understanding Best Practices—Collaborative Efforts

(Internal Research Project)

To understand how organizations can better work together to meet the needs of deaf and hard of hearing children and their families, the Clerc Center completed a review of the current literature and practices related to collaboration. It explored the foundational principles necessary for effective collaborations as well as potential pitfalls and challenges. An article focusing on collaboration was developed for the 2016 issue of Odyssey magazine. A collaboration paper, drawing from research and practice, was developed in the latter part of FY 2016 for internal knowledge and capacity building as part of the CCSP 2020. External dissemination of this information will be explored in FY2017.

### Need and Availability of Supports and Resources to Assist in Instruction of Students Who Are Deaf-Plus

(External Research Project. Principal Investigator: Holly Hyte)

The purpose of this study was to investigate perceptions of preschool or elementary educators of deaf or hard of hearing students about supports and resources relative to teaching students who are deaf-plus. Supports and resources included in the study were drawn from the literature on experiences of general and special educators teaching students with disabilities and correlate with positive teacher attitude and improved student outcomes. Internal staffing resources were used to support efforts to include Clerc Center teachers in the survey research study. Once the study is completed, opportunities to share findings from this national study with parents, educators, and professionals will be explored with the principal investigator.

#### Area of Focus #3: Social and Emotional Well-being

As part of the Research Agenda development process, a review of the current literature and practices related to social and emotional well-being was completed in FY 2015. This information will be used to support future internal research projects, collaborations with external researchers, and the development of CCSP 2020 projects in this area.

### **Resilience in Deaf Children with Additional Disabilities: Factors That Protect Social and Adaptive Skills** (External Research Project. Principal Investigator: Angela

Turner)

The purpose of this study was to learn from parents how their deaf or hard of hearing child who has a disability or special needs develops social skills. Findings from the study are intended to help other parents, educators, and healthcare professionals learn more about the needs and social skills of deaf and hard of hearing students with disabilities. Internal staffing resources were used to support efforts to include eligible Clerc Center families in the study. Once the study is completed, opportunities to share findings from this national study with parents, educators, and professionals will be explored with the principal investigator.

### **Additional Research Studies**

The Clerc Center has also supported research efforts of other external researchers because of the significance of their work as well as the potential for impact on the education of deaf and hard of hearing students. The level of the Clerc Center's involvement in these research efforts varied depending on the scope of the study. One example of a research study in which the Clerc Center committed internal resources to ensure its successful implementation includes:

### Deaf or Hard of Hearing Special Group Study of the Wechsler Intelligence Scale for Children—Fifth Edition (WISC-V) Research Study

(External Research Project. Principal Investigator: Dr. Lori Day)

Gallaudet University partnered with Pearson, one of the largest publishing testing and assessment companies, to conduct a research study, collecting information about deaf and hard of hearing students' test results after participating in the Wechsler Intelligence Scale for Children—Fifth Edition (WISC-V) testing. The Clerc Center worked closely with the principal investigator to support testing of KDES and MSSD students who participated in the study. Testing results were shared with these students' parents and/or caregivers. The research study supported Pearson's efforts to create special population samples to help clinicians and practitioners better understand how to interpret test results for deaf and hard of hearing students.

#### **Internal Fiscal Estimated number Project Title Funding Source Type of Project** Allocation for of Clerc Center Staff FY 2016 Involved Critical review of measures of parent 2 Staff, 1 Graduate Internal Internal Not Applicable engagement and involvement Student Literature Review on Family Engage-1 Staff, 1 Graduate Internal Internal Not Applicable ment and Parent Involvement Student 3 Staff, 2 Graduate Parent Advocacy Survey Internal Internal \$15,000 Student Literature Review on Family/Parent Advocacy for Parents Who are 1 Staff, 1 Graduate Internal Not Applicable Internal Disconnected, Alienated, and Student Underserved American Sign Language (ASL) Internal Internal \$19,581 2 Staff Content Standards K-12 Fingerspelling Our Way to Reading External External Not Applicable 1 Staff Understanding best practices -Internal 1 Staff Internal Not Applicable collaborative efforts Need and Availability of Supports and Resources to Assist in Instruction of External External Not Applicable 1 Staff Students Who Are Deaf-Plus Resilience In Deaf Children with Additional Disabilities: Factors That External External Not Applicable 1 Staff Protect Social and Adaptive Skills Deaf or Hard of Hearing Special Group Study of the Wechsler Intel-External External Not Applicable 2 Staff ligence Scale for Children -- Fifth Edition (WISC-V) Research Study

### Summary Information FY 2016 Research Projects

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# VI. Training and Technical Assistance

During FY 2016, the Clerc Center strategically allocated resources to reach families and professionals working with underserved populations and within all school systems where students who are deaf or hard of hearing are educated. The Clerc Center continues to ensure information and support are available to meet the needs of a broad range of stakeholders in both of these groups.

The Clerc Center provided support to families and professionals through the distribution of products and publications; direct outreach by exhibiting and presenting at conferences and events; and technical assistance and training through training workshops, a series of e-learning opportunities, collaborative relationships, and consultative relationships with programs across the country.

# **Products and Publications**

During FY 2015, the Clerc Center distributed products and publications at conferences and exhibits as well as through downloads from the Clerc Center website, e-mail distributions, social media, and sales. The number of materials distributed through each channel are as follows:

- Free distribution of products: 23,345 publications and products
- Free distribution of on-line resources and publications via e-mail: 73,667
- Free distribution of information and resources via social media: (Facebook, Twitter, on-line network): 598,518
- Odyssey magazine subscription list: 20,095 (includes schools, individual educators, libraries, parents, and other stakeholders); an additional 2,235 copies of the magazine were distributed at conferences and exhibits; articles can also be downloaded for free via the Clerc Center website
- Sales: 4,619 products

# **Web Products**

Setting Language in Motion: Family Supports and Early Intervention for Babies Who Are Deaf or Hard of Hearing includes seven web-based modules for early interventionists, allied professionals, parents, families, and caregivers. This project, a collaboration with the Deaf and Hard of Hearing Program of Boston Children's Hospital, was disseminated widely this year and is now available in ASL, spoken English, and Spanish. An accompanying activity guide to support use of the modules was in development in FY 2016 and will be ready for distribution in early FY 2017.

*Educating Students Who Are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings* is a resource designed for professionals working with deaf or hard of hearing students who have little or no experience or training in the field of deaf education. The on-line product includes three self-paced, multi-media, on-line modules: 1) an introduction to having deaf and hard of hearing students in the classroom, 2) instructional considerations for the classroom, and 3) educational planning. This resource was developed in collaboration with the Texas Education Service Center, Region 20. It was made available in the spring of 2016 with an emphasis on dissemination to general education professionals and teacher training programs across the country.

The Early Intervention Network is an on-line resource for early intervention providers based on five evidence-based factors and supporting program components shown to be essential for the development of linguistic competence in children who are deaf or hard of hearing. Various programs implementing these factors from throughout the country are highlighted. This year the Clerc Center initiated its first Online Learning Community discussion focusing on Factor One of the Early Intervention Network: Direct and daily access to language and communication is essential to facilitating each child's language and communication development. Based on the positive response, the discussion series will continue during FY 2017.

### Webcasts

New Webcasts: "Maximizing Language Acquisition: ASL and Spoken Language" launched in May 2016 with 1,019 people initially registered. The webcast was launched through the Clerc Center Online Learning Community, where a Q&A session took place after the initial airing. A total of 207 people registered for the on-line community forum. To date, the webcast has a total of 3,477 views. The second webcast, scheduled for release in late FY 2016, is entitled: "Looking Beyond the Technology: Education Planning for Students with Cochlear Implants." This webcast will feature Students with Cochlear

Implants: *Guidelines for Educational Program Planning* developed in partnership with the Deaf and Hard of Hearing Program of Boston Children's Hospital.

Archived webcasts: Webcasts shown in previous fiscal years were available in FY 2016 for viewing. Webcasts include: "More Than Meets the Eye: An Introduction to Autism Spectrum Disorders" with Dr. Christen Szymanski, "Strategies to Prevent Visual Split-Attention in Classes for Students Who Are Deaf or Hard of Hearing" with Dr. Susan Mather, "How Early Intervention Can Make a Difference: Research and Trends" with Dr. Beth Benedict, and "What the Eyes Reveal About the Brain: Advances in Human Language Acquisition— Insights from Visual Language and Visual Learning (VL2) and the Brain and Language Laboratory for Neuroimaging (BL2)" with Dr. Laura-Ann Petitto. To date, archived webcasts have been viewed almost 10,000 times.

# **Publications**

*Odyssey* magazine—During FY 2016, the Clerc Center partnered with pepnet 2 to publish the 2016 issue of *Odyssey* magazine with the theme of "The Power and Potential of Collaboration." The issue addressed the importance of building collaborations at the national and state levels. Specifically, it focused on how collaborations can facilitate the successful transition of deaf and hard of hearing students from secondary education to postsecondary education and employment. It featured 16 articles by 32 authors (professionals and parents from around the United States).

*Odyssey Extra*—*Odyssey Extra*, an on-line supplement to Odyssey magazine, will be published in late FY 2016 with three new articles.

Classroom Interpreting for Students Who are Deaf or Hard of Hearing: A Series of Guides for Parents, Professionals, and Students. A sixth guide was developed this year to provide information on classroom interpreting for students with cochlear implants. This series, developed through a collaboration with Dr. Brenda Schick (www.classroominterpreting.org) and Boys Town National Research Hospital, provides guidance to administrators, teachers, interpreters, parents, and students on the use of classroom interpreters. The publications focus on the effective involvement of educational interpreters working with students who are deaf or hard of hearing. All six publications are now available on the Clerc Center website as well as on the Boys Town National Research Hospital Center for Childhood Deafness Auditory Consultant Resource Network website and the Classroom Interpreting website.

Students with Cochlear Implants: Guidelines for Educational Program Planning—This resource was created through a collaboration between the Clerc Center and the Deaf and Hard of Hearing Program of Boston Children's Hospital. It is a tool designed to facilitate the planning of appropriate educational programs, supports, and services for students using cochlear implant technology in the classroom. It was disseminated through FY 2016 and is available online as well as in print. An on-line tutorial to support the use of the Guidelines was developed this year and will be disseminated in early FY 2017.

Deaf Students as a Linguistic and Cultural Minority: Shifting Perspectives and Implications for Teaching and Learning (2016), by Michael Higgins, a KDES early childhood teacher, and Amy Lieberman, was published in the Boston University School of Education's Journal of Education (Vol. 196[1]). This article discusses the linguistic, social, and cultural factors that shape a bilingual approach to deaf education and the implications of a linguistic and cultural minority perspective of deaf children on language development, teacher preparation, and educational policy.

# Training

The Clerc Center provided 43 presentations and workshops to 2,874 individuals who work with students who are deaf or hard of hearing. Presentations and workshops took place at mainstream and residential academic programs, professional conferences, training centers, Family Learning Weekends, community programs for families, and national training events hosted in the new Clerc Center Online Learning Community. The Clerc Center's archived webcasts from previous years continue to be relevant to new audiences reaching 6,698 new people this fiscal year. The goal of the Clerc Center training was to provide skills and knowledge to educators, service providers, and families who work with students who are deaf or hard of hearing with a range of abilities and needs.

During FY 2016, the Clerc Center provided a wide variety of training, including on-site and eLearning opportunities. On-site offerings included one Visual Phonics workshop, four literacy-based workshops, seven social-emotional workshops, two five-day workshops on family-school partnerships and advocacy, six language planning workshops, one presentation on differentiated instruction, one presentation on bilingual strategies in the classroom, two presentations on best practices in deaf education, six workshops addressing audiology and early intervention, three presentations on the educational and linguistic needs of students with cochlear implants, and five presentations designed for people who have limited knowledge about the products and services offered by the Clerc Center.

Clerc Center representatives gave presentations throughout FY 2016 including two keynote addresses. These were offered in a wide range of venues, including state, regional, and national conferences, such as the Maryland Early Hearing Detection and Intervention conference, the DC Speech and Hearing Association Conference, the Illinois Teachers of the Deaf conference, the American Speech-Language-Hearing Association conference, the New York State ESSP conference, the Early Hearing Detection and Intervention national conference, the Black Deaf Advocates annual conference, the Black Deaf Arts Symposium, the National Deaf Education Conference, the Convention of American Instructors of the Deaf (CAID) conference, and the Coalition of Global Hearing Health conference. The Clerc Center also provided over 45 hours of on-site training to parents of deaf and hard of hearing children at five family learning events around the country. In total, the Clerc Center delivered over 150 hours of live professional learning to parents, educators, and professionals.

In an effort to reach individuals working with rural and mainstreamed populations, the Clerc Center continues to target marketing and outreach efforts for its distance education training opportunities. Clerc Center resources were re-disseminated via social media outlets (Facebook and Twitter) in order to expand their reach and impact. In addition to the re-dissemination of these resources, the Clerc Center launched three new web products (Educating Students Who Are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings and Setting Language in Motion: Family Supports and Early Intervention for Babies Who Are Deaf or Hard of Hearing, and the Early Intervention Network) designed to provide information and resources to educators who work with students who are deaf or hard of hearing in a variety of academic settings and to family members with children who are deaf or hard of hearing. In an attempt to keep training and professional learning relevant, accessible, and beneficial to our stakeholders, the Clerc Centered offered professional learning in two on-line formats: 1) an asynchronous on-line discussion focusing on the first factor from the Early Intervention Network took place in the newly formed Clerc Center Online Learning Community. This forum involved approximately 80 participants; and 2) two live, six-hour workshops focusing on addressing power struggles with students were provided remotely to educators and professional staff in Oklahoma via videoconferencing.

# **Outreach - Conferences and Exhibits**

During FY 2016, the Clerc Center sent representatives to 23 events and conferences to make presentations, distribute and showcase materials, and provide information and support to event attendees. Events are carefully selected to ensure attendees are representing a wide cross-section of families and professionals, with an emphasis on those who work with deaf and hard of hearing students from traditionally underserved groups and in general education, public school programs. Events included the Division for Early Childhood Conference, the American Cochlear Implant Alliance, the Cochlear Implant 2015 Symposium, Clarke School's 36th Annual Conference on Mainstreaming, the 26th Annual CASE Conference, the American Speech-Language-Hearing Association conference, the Early Hearing Detection and Intervention conference, Virginia State's Opening Doors-Unlocking Potential conference, the National Outreach Conference, the Conference of Educational Administrators of Schools and Programs for the Deaf, the Hands & Voices Leadership Conference, the 6th Biennial Eastern Regional Black Deaf Advocates Conference, the Convention of American Instructors of the Deaf conference, the Alexander Graham Bell conference, the National Association of the Deaf conference, the National Deaf Education Conference, and the Joint CASE/NASDSE fall 2016 conference.

In order to expand outreach at these events, the Clerc Center provided showcase presentations and poster sessions as well as attending caucuses, board meetings, and other small group events at select conferences. Through these events, the Clerc Center shared materials, resources, and support to 29,123 participants.

# Collaborations, Consultation, and Technical Assistance

The Clerc Center offered consultation and technical assistance to schools and programs at their request and sought collaborations with organizations and programs for joint initiatives. The following is a summary of the major collaborations in these categories that occurred in FY 2016.

### D.C. Hears

The Clerc Center provided continued support to D.C. Hears, the newborn infant hearing screening program for the District of Columbia. A Clerc Center representative functions as chair of the intervention committee of the D.C. Hears board. This committee oversees early interventions services for all children identified as deaf or hard of hearing in the District of Columbia. Clerc Center support included providing meeting space and interpreters for intervention committee meetings and D.C. Hears board meetings. Members of the Clerc Center community were also actively involved in providing human resources for committee work and resource development.

### VL2—A Science of Learning Center on Visual Language and Visual Learning

The Clerc Center continued its collaboration with Visual Language and Visual Learning (VL2), one of six such centers funded by the National Science Foundation. The purpose of VL2 is to gain a greater understanding of the biological, cognitive, linguistic, sociocultural, and pedagogical conditions that influence the acquisition of language and knowledge through the visual modality.

As part of this collaboration, the Clerc Center worked with VL2's preschool through grade 12 engagement manager to support dissemination of materials to birth to grade 12 educators.

In FY 2016, the Clerc Center collaborated with VL2 for the following activities:

- The Clerc Center shared VL2 research briefs and information about their Parent Information Package, Growing Together, through exhibits, training, social media, and other dissemination mechanisms.
- The Clerc Center worked with VL2 to create a new handout that summarizes all of their research briefs in an effort

to more easily distribute this information to professionals in deaf education.

• VL2 staff offered professional development and family learning opportunities to the KDES community.

### **Gallaudet University Regional Centers**

The Clerc Center collaborated with the Gallaudet University Regional Centers (GURCs) to provide support for the sixth National Outreach Conference that was held in April 2016. The conference targeted outreach providers actively involved in the education of deaf and hard of hearing children (birth through age 21) and provided opportunities for networking and coalition building for outreach providers. The Clerc Center participated on the program committee, which designed activities so that each state outreach program had an opportunity to share their outreach services and strategies. The Clerc Center also continued its collaboration with the GURCs to coordinate training and technical assistance opportunities and to increase dissemination in each region.

#### Maryland Statement Department of Education

The Clerc Center established a partnership with the Maryland State Department of Education (MSDE) to focus on the provision of state-level, standards-based assessments for students who are deaf or hard of hearing as stipulated by the U.S. Department of Education within the EDA. Consistent with agreement, the Clerc Center established relationships or additional agreements with the test vendors to administer the PARCC Assessments, Maryland Science Assessment (MSA), the Alternative Maryland Science Assessment (Alt-MSA), the High School Science Assessment in Biology (HSA), and the Multi-State Alternate Assessment (MSAA). Through this collaboration, the Clerc Center communicated with state-level officials and school-based personnel to address topics such as test administration, accommodations provision, and state policy interpretation. Assessments were administered in grades 3-12 as defined by the EDA and consistent with Maryland's test administration protocol. In addition, because of our partnership with MSDE, the Clerc Center was invited to provide feedback on proposed guidelines for the sign language accommodation for the MSAA.

With an emphasis on accessible and equitable testing, the collaboration with MSDE provided the Clerc Center with greater insight into the assessment experiences of deaf and hard of hearing students in a range of public school settings as well as the Maryland School for the Deaf. It further allowed the Clerc Center to experience, first-hand, the administrator of "nextgeneration" assessments. These assessments were computer based with accommodations that were electronic, live-person, or paper-based depending on the stipulations of a particular assessment. It is anticipated that the Clerc Center's agreement will continue into the 2016-2017 school year.

### Pepnet 2

The Clerc Center continued its collaboration with the staff of pepnet 2 to support the transition of deaf and hard of hearing students from secondary to postsecondary education and employment settings. Pepnet 2's mission is to improve the postsecondary outcomes of deaf and hard of hearing students. During FY 2016, the Clerc Center partnered with pepnet 2 to publish the 2016 issue of Odyssey magazine with the theme of "The Power and Potential of Collaboration." Featuring authors from the pepnet 2 Summit Series entitled "Building State Capacity to Address Critical Issues in Deaf Education: Transition from Secondary Education to Postsecondary Options," the issue addressed the importance of building collaborations at the national and state levels. Specifically, it focused on how collaborations can facilitate the successful transition of deaf and hard of hearing students from secondary education to postsecondary education and employment.

The executive director of Planning, Development, and Dissemination continued to serve on the pepnet 2 advisory panel, providing insight into the transition needs of deaf and hard of hearing high school students as well as allied professionals and families. In January 2016, the executive director was invited to again serve as a facilitator for the Building State Capacity Summit Series. This summit provided participants with an opportunity to learn from content experts, meet with state team members, and exchange information related to developing and implementing state team plans. Pepnet 2 submitted a proposal for continuation of their federal grant. Assuming they are successful, the Clerc Center intends to continue its successful partnership with pepnet 2 into FY 2017.

### California School for the Deaf-Fremont

The Clerc Center and the California School for the Deaf-Fremont (CSD) have partnered to complete development of ASL Academic Content Standards for K-12. Through this collaboration, CSD ASL specialists are drafting the standards and the Clerc Center is designing and overseeing the review, revision, and publication production process. In FY 2016 draft content standards for grades K-8 were completed. The content standards for grades 3-8 were reviewed via a structured process with a select group of participants at the ASL Round Table (ASLRT) conference. Standards in grades K-8 were then revised based on obtained feedback. Preparations also got underway at the Clerc Center for the design of a national open-comment period for grades K-8 standards planned for early FY 2017. Additional work during FY 2016 included the initial drafting of content standards for grades 9-12, early work on a glossary of key terms, and the development of the introduction/rationale to accompany the content standards. This partnership will continue throughout FY 2017 as the standards are reviewed and finalized, publication details are defined, and national release and dissemination plans are established.

# Deaf and Hard of Hearing Program-Boston Children's Hospital

The multi-year collaboration with the Deaf and Hard of Hearing Program at Boston Children's Hospital produced two products that are being disseminated widely this year. The first is Setting Language in Motion: Family Supports and Early Intervention for Babies Who Are Deaf or Hard of Hearing, a web-based resource that supports professionals, families, and caregivers of young children in their understanding of the importance of early identification, intervention, and language acquisition for the development of linguistic competence. This resource now includes a Spanish version, with accompanying activity guides on how to use this resource with parents available in FY 2017. The second resource is Students with Cochlear Implants: Guidelines for Educational Program Planning, a publication designed to support full linguistic access for deaf students with cochlear implants. The Guidelines support educational program planning regardless of the student's language or communication modality. An on-line tutorial to facilitate use of the Guidelines was in development in FY 2016 with release anticipated in early FY 2017. The Clerc Center continues to collaborate with Boston Children's Hospital in the dissemination of these resources through co-presenting at conferences, exhibiting at appropriate events, and through coordinated marketing plans.

#### **Texas Education Service Center, Region 20**

The Clerc Center collaborated with the Texas Education Service Center, Region 20, to develop *Educating Students Who Are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings*, a resource composed of three on-line modules designed for educators who have limited experience working with deaf and hard of hearing students. The modules provide introductory information about deafness as well as information on how to support the effective education of children who are deaf or hard of hearing in mainstream settings.

### **Holley Institute**

The Clerc Center has had an ongoing relationship with the Holley Institute, located in Detroit, Michigan, supporting its efforts to provide training and technical assistance to families of deaf and hard of hearing children in Michigan with an emphasis on families of diverse racial and ethnic backgrounds. The Clerc Center has sent trainers and consultants to the Holley Family Village in Brooklyn, Michigan, to train parents and families of deaf and hard of hearing children and to provide them with information on evidence-based practices in the areas of social-emotional development, transition, parent advocacy, and literacy. This year's collaboration involved providing training on early literacy and parent/school partnerships and advocacy. This collaboration also offered observation, consultation, and targeted professional learning for deaf ASL mentors for hearing families in the Detroit area and extended to involve funding support from Madonna University's Deaf Literacy Program, the GURC-Midwest, and a trainer from the Texas School for the Deaf Outreach Program.

# Center for Literacy and Deafness (CLAD) at the University of Georgia

During FY 2016, the Clerc Center entered into an agreement with CLAD at the University of Georgia to participate in a national research study using a randomized controlled trial (RCT) design to assess effectiveness of a new curriculum, Fingerspelling Our Way to Reading. This curriculum is designed specifically for young deaf and hard of hearing children. This will be one of the first studies of its kind involving deaf and hard of hearing children to be developed to meet What Works Clearinghouse (WWC) criteria for intervention efficacy. The purpose of the study is to investigate the effects of the Fingerspelling Our Way to Reading curriculum on young children's early literacy skills. Work will focus on the implementation of the curriculum intervention at KDES during the latter part of FY 2016 and throughout FY 2017, with the possibility of continued participation in FY 2018.

### Kansas School for the Deaf and Gallaudet University Department of Education—ASL Curriculum, Instruction, and Assessment conference (ASL-CIA)

The Clerc Center collaborated with Kansas School for the Deaf and a faculty member from the Gallaudet University Department of Education to pilot test the open comment survey and to share early drafts of selected ASL Academic Content Standards for grades K-8 with ASL instructors attending the ASL-CIA conference in June 2016. Feedback from this group guided the final design of the open comment survey that will be available during FY 2017.

## **Outreach Efforts by Region**

During FY 2016, the Clerc Center, in partnership with the GURCs, documented 54,800 people served throughout the various geographical regions of the country through training and technical assistance, information dissemination, and exhibits/performances. Technical assistance includes services that the Clerc Center provides to cooperating programs or assistance to individuals, programs, or agencies in relation to educating students who are deaf or hard of hearing. It includes information sharing and referrals, eLearning opportunities, and training about programs or strategies.

Information dissemination refers to information that was specifically requested and then disseminated, often through social media, individual e-mails and calls to Clerc Center teachers and staff, and in packets for conference participants. Exhibits and performances include exhibit booths of products and services offered by the Clerc Center at national and regional conferences related to serving children who are deaf or hard of hearing.

### **Types of Requesting Programs Served**

The recipients of the training and technical assistance and disseminated information varied considerably. In FY 2016, they included early intervention professionals, professionals at schools that serve deaf and hard of hearing students, teachers and administrators in general education programs, students enrolled at a college or university, professionals who run teacher training programs, professionals who work at hospitals, parent organizations, individuals served by nonprofit organizations, parents and caregivers of students who are deaf or hard of hearing, and others. The next two charts illustrate the various types of programs requesting training and technical assistance by geographic region and similar data about informa-

tion that was disseminated. Please note that totals for overall training and technical assistance and information dissemination on these two tables vary from the totals on the preceding chart due to the diversity of those receiving the information from a single training or event. For example, a teacher from a school for the deaf and a teacher from a general education program could attend the same workshop.

# FY 2016 Outreach Efforts

Outreach efforts in FY 2016 focused on contacting and building relationships with state and district-level programs, national organizations, and state outreach programs serving students who are deaf or hard of hearing. As part of this effort, the Clerc Center focused on the development of targeted distribution lists and the design and implementation of a customer relations management system. In addition, intentional efforts were made to increase the Clerc Center's outreach via social media. New strategies to expand the Clerc Center's presence on Facebook and Twitter positively impacted outreach and dissemination efforts. For example, Facebook reach more than tripled during FY 2016. Other efforts included the Clerc Center's continued support for the planning of the National Outreach Conference, which provided opportunities for networking and coalition building among outreach providers.

The Clerc Center has developed several knowledge-building products to reach stakeholders via distance learning formats. It also launched a new Online Learning Community that has hosted discussions for professionals across the country.

The Clerc Center continued to be intentional in the selection of conferences and events to reach professionals and parents of traditionally underserved students as well as educators and families in general education programs. During FY 2016, it redesigned its website, including the Info to Go section, expanding resources and making the site easier to use. This redesign includes a page for families of deaf and hard of hearing students and a page for professionals new to deaf education. The Clerc Center will continue to expand its outreach efforts to reach the identified audiences mentioned above as part of its strategic planning efforts.

One of the MSSD Earth Day activities on April 22, 2016, focused on renewable energy sources. The science department set up a mock solar oven to demonstrate the use of light magnified through glass and reflective surfaces to create heat. Students measured the capability and timing of the heat source and then enjoyed eating sample Simores warmed in the oven.

Photo by: Susan Flanigan



# VII. Demonstration Elementary and Secondary Schools

Both KDES and MSSD play a vital role in the Clerc Center's national mission. They are a place where innovative ideas, strategies, training, and technology applications begin and can later become national mission projects. Students in the schools are representative of deaf and hard of hearing students across the United States, making the schools excellent sites for developing and evaluating promising educational practices that could be replicated at other schools and programs throughout the country.

# Implementing Standards-based Instruction and Assessment



As we move forward with implementing standards-based instruction and assessment, the following overarching themes continue to guide our thinking and planning:

- Identifying a long-range strategy to implement change following the above model progression
- Continuing ongoing focus on the Common Core State Standards (CCSS) for English/language arts (ELA) and mathematics and the Next Generation Science Standards for science that serve as the foundation for curriculum and instruction through implementing newly-developed curricular units aligned with these standards for all classes from grades K-12
- Using information from research and evidence-based practice to redesign instructional efforts to meet the needs of all students
- Providing support for teacher instructional planning through a variety of job-embedded professional learning opportunities (e.g., weekly meetings; professional learning communities; mini-workshops; individual consultation

from instructional support personnel, including coordinators of instructional support/differentiation and inclusion) and allocated planning time on professional development days and other times throughout the year

- Planning for multi-year allocation of resources
- Creating new instructional support positions to reinforce and sustain the work to change practice

### Instruction

Implementing standards-based instruction continues to evolve within the Clerc Center. The 2015-2016 school year witnessed the fourth year of implementing CCSS-aligned curricula in ELA and mathematics K-12, with an ongoing focus on understanding and implementing the key instruction shifts. In science, teachers began to explore the Next Generation Science Standards that were adopted by our new state partner, Maryland, and identify needed curricular changes that this change in standards will necessitate.
#### **Reading and Writing**

- Opened the school year with a focus on text-based reading and writing, including training on document-based questions for 6-12 ELA and social studies teachers, to build upon the foundation of close reading strategies as defined in the CCSS key instructional shifts
- Provided training on the use of text-dependent questions for reading, writing, and signing; better collection and use of classroom data; broadening assessment possibilities in ASL and English; and adjusting instruction to meet the needs of unique learners, such as students with attention deficits
- Implemented weekly planning and discussion sessions on teaching and learning—Collaborating, Learning and Aiming Wednesdays
- Continued flexible grouping K-8 to implement ASL/English bilingual strategies and develop linguistic skills in both languages
- Initiated flexible grouping in math in elementary and middle school
- Developed and provided instructional activities to practice the types of multi-step, complex processes students must use to respond to questions on the next generation assessments

Raising the reading and writing achievement of the deaf and hard of hearing students attending our programs remains a significant challenge. The project implementations listed above testify to an intentional effort to develop and deliver a comprehensive language and literacy program. However, these have not yet resulted in the rise in achievement on the assessments that the schools would like to see. Achievement is tempered by complicating factors within the student population in both schools. In the time since our accreditation in 2011, the school community has reviewed research-based instructional strategies from general, special, and deaf education; adopted the CCSS; developed an entirely new CCSS-aligned curriculum; and provided training and support to teachers for planning and implementing the new curriculum. Instructional support positions have been created to work directly coaching teachers on planning and implementing research-based instructional strategies. We have begun the work to identify appropriate and accessible intervention programs in reading and math. The schools have consistently reviewed student achievement data and made changes to the school action plans and strategies accordingly. This intentional approach to raising student achievement will continue to guide instruction and professional learning in the schools.

#### **Mathematics**

- Implemented flexible grouping for math in grades 3-8
- Continued the focus on the use of manipulatives, representations/modeling (e.g., dot cards, 10 frames, open number lines), and other developmentally appropriate math instruction strategies
- Maintained the focus on concept-based instructional planning (e.g., concrete > representational > abstract) at the high school
- Continued work unpacking the math standards and reviewing math progressions across grades
- Implemented instructional activities that mirror the more complex expectations contained in the next generation assessments (e.g., PARCC)
- Provide students with additional opportunities to take CCSS on-line practice mathematics assessments

The schools have followed a similar path as described in the previous section with regards to math instruction. In the time since accreditation in 2011, the school community has reviewed research-based instructional strategies from general, special, and deaf education; adopted the CCSS; developed an entirely new CCSS-aligned curriculum; and provided training and support to teachers for planning and implementing the new curriculum. New instructional support positions have been created to work directly coaching teachers on planning and implementing research-based instructional strategies. The next step is to identify appropriate and accessible intervention programs in math.

Throughout this accreditation period, the Clerc Center has engaged the services of a math consultant who authored the CCSS-aligned math curriculum and has worked frequently with our teachers on reviewing the standards and delving into curriculum. This collaboration has extended to classroom observations, meetings with teachers, and "coaching the coaches."

This year, the schools' focus remained on teaching math concepts incorporating a continuum from concrete, to representational, to abstract. With younger students, training and coaching focused on use of specific manipulative techniques to build math concepts: the use of dot cards and 10 frames to build number sense and the use of open number lines to develop the foundation for fraction and other number concepts. This work will continue into FY 2017.

#### **Flexible Grouping**

The KDES language arts program has been using a flexible grouping model for the past three years. This strategy aligns with best practices in bilingual language instruction as well as those of ASL/English deaf bilingual programs. This dynamic bilingual model benefits all deaf and hard of hearing learners with a variety of ASL and English language skills and recognizes that all learners are at different places on the continuum of social and academic language skills and modalities. Students are placed in instructional groupings for ASL and English language based on assessment data on their current skill level. This way teachers can concentrate on developing those language skills students need most in appropriately paced settings. Periodic ongoing assessments inform teachers about language skill development and impact instructional and grouping decisions.

The goal of flexible grouping is for all students to demonstrate full linguistic and communicative competency in both ASL and English. In order to achieve this, teachers meet weekly to discuss and review student data and then plan accordingly for instruction. As a result of regular reviews of student progress, teachers are able to make recommendations for necessary changes in group placement throughout the year to maximize students' language learning. Teachers make consensus group placement decisions strictly based on the collection of language assessment data.

The following assessments are included to review and discuss students' growth in both academic ASL and English languages:

- Developmental Reading Assessment 2nd edition (DRA-2)
- Writing samples using the 6+1 Writing Traits model and rubrics
- Conversational Proficiency Levels
- Formative assessments (e.g., classroom-based assessments: observations, work samples, reading progress observations, other data)
- Discovery Education Assessment (standards-based benchmark assessment)

The focus in FY 2016 was on refining the use of data to make instructional and grouping decisions. KDES experienced an influx of students during the school year which necessitated more frequent changes in grouping to accommodate different learning needs and to provide appropriate accessibility to the curriculum. FY 2017 priorities include piloting remediation and intervention strategies as well as more attention to interpreting assessment results and using those to inform teaching and instructional decision-making.

# Teaching Strategies (Formerly the Creative Curriculum®)

In FY 2016, early childhood education (ECE) teachers continued to refine implementing the Teaching Strategies curriculum content in an effective and engaging manner in addition to orienting a new teacher to the curriculum. The focus has been on setting up the environment to support the curricular investigations. Additionally, teachers worked to streamline and better integrate the information about student skill acquisition entered into the on-line assessment component of Teaching Strategies in order to present a more holistic view of each child's development for parents. In addition, the ECE teachers worked on sharing the Teaching Strategies curriculum and online portfolio content with parents at parent-teacher conferences in January and May. Efforts in these areas will continue in FY 2017.

#### Language and Communication Profile

Assessment and documentation of language development and proficiency is a key component in language planning. In FY 2016, the Clerc Center continued its use of the Language and Communication Profile, a profile developed at KDES. This profile provides consolidated documentation of each child's language and communication functioning in both ASL and English to guide allocation of language use in the classroom and recommendations for goals to support skill development in each language. This profile can also be used to track development of a student's growth in each language.

In FY 2016, the use of the Language and Communication Profile continued to support the flexible scheduling initiative with ongoing assessment of student progress in developing both ASL and English skills. The focus during FY 2017 will be on using this profile to track results of the reading intervention program implementation pilot in grades 3-5.

#### **Excellence By Design Accreditation Protocol**

In FY 2012, the demonstration schools began executing the action plans in reading/writing, mathematics, and enhancing school climate. Numerous projects in these goal areas have been implemented under the action plans. In FY 2015, the schools completed a mid-cycle report as directed by the Excellence by Design protocol. This report included a review of our context, planning process, and accreditation standards, all student achievement data since accreditation, the improvement objectives, and action plans. During this process, the action plans were streamlined to focus on strategies most likely to improve student achievement.

The following priority strategies have been identified for FY 2017:

- Continue to implement close reading and text-based writing activities (inclusive of bilingual strategies and language planning) more consistently in the classroom
- Increase number sense and fluency in grades K-5 students through the use of dot cards, 10 frames, and open number lines
- Use concept-based planning for math instruction following the Concrete-Representational-Abstract progression
- Demonstrate evidence of bilingual strategies/language planning and ASL in lesson plans, in the classroom, and in discussions with supervisors/coaches
- Identify and address unique student learning needs and implement IEP goals and accommodations with fidelity through collaborative teams of teachers and staff
- Collect formative assessment data to inform instruction, to document in IEPs, and to develop measurable standards-based objectives

FY 2017 will signal the start of the next accreditation selfstudy cycle. The schools will again be following the Excellence by Design protocol from the Middle States Association (MSA) and will seek joint accreditation from both MSA and the Conference of Educational Administrators of Schools and Programs for the Deaf. The self-study will take 18 months to two years to complete and prepare for an accreditation visit.

#### **Emerging Signers Program**

The Emerging Signers Program (ESP) is a systematic, comprehensive, and individualized support system designed to ensure academic success and linguistic development for deaf and hard of hearing students who have been raised with spoken language only, have minimal signed language skills, or come from a country that educates deaf and hard of hearing students in a signed language other than ASL. The ESP provides a process for an emerging signer to make a smooth transition into a visual learning environment through provision of interpreting support until the student is able to function in class independently. Additionally, the ESP seeks to create an environment that supports social development and emotional intelligence, and it encourages students to examine their identity as it relates to being deaf or hard of hearing.

Each student's needs are different, and students attain linguistic independence at different paces. Therefore, students are provided with the services that best meet their needs, and those services are gradually reduced in direct correlation to the student's expanding skills and independence.

Direct ASL instruction and social-emotional support are put in place for a full academic year. The student's teachers and the interpreters working with the emerging signer observe and document how the student is functioning. In addition, the lead interpreter, the interpreter coordinator, and/or the ESP coordinator also observe the student in class regularly. Information about the student's abilities, progress, and continued needs, as well as information about accommodations that are no longer needed, are then discussed with the IEP team for decisions regarding continuation, decrease, or termination of services.

The focus in FY 2016 has been on maintaining an effective structure for the program to ensure continuity of service provision. Under the guidance of the interpreter coordinator, the program continues to build a team of freelance interpreters who understand the program's goals, which differ from typical interpreting assignments, in order to provide a coordinated and consistent level of service. In addition, reviewing of applicant profiles will assist in predicting the demand for these services in the fall and throughout the academic year.

## Assessments

The mandates of the EDA require the Clerc Center to partner with a state, use its standards and assessments, and publicly report results. The Clerc Center has partnered with the state

of Ohio for the past six years. When Ohio adopted the new CCSS in reading and mathematics, the Clerc Center followed suit. Subsequently, the Clerc Center rolled out a new curriculum K-12 in ELA and math that aligns with the CCSS. After several years of partnership with Ohio ended, the Clerc Center entered into a new partnership with the Maryland State Department of Education (MSDE) in 2015.

Maryland uses the Maryland College and Career-Ready Standards for Language Arts and math in all schools across the state. These Maryland standards are based on the CCSS. Since these standards so closely align with the CCSS, little change in curriculum was needed. In 2013, Maryland adopted the Next Generation Science Standards. These are a set of rigorous and internationally benchmarked standards for K-12 science education, which are different from the previous Ohio standards we have been using. Work is beginning to align curriculum with these new standards. As a result of this change in state partners, the Clerc Center administered five new assessments this year. The PARCC for ELA and math, the MSA, the MSA-Alt and HSA in science, and the MSAA for ELA and math with students with significant cognitive disabilities.

#### Assessments in Language Arts and Math

# Partnership for Assessment of Readiness for College and Careers (PARCC)

PARCC's summative English language arts/literacy tests were administered in grades 3-8 and high school. The assessments include a performance-based component with longer questions that usually require multiple steps. It measures critical thinking; reasoning; and the ability to apply skills and knowledge in reading, writing, and mathematics.

- ELA/literacy—Students read and analyze passages from real texts (fiction and nonfiction) and sometimes watch video. They write using what they have learned from the passages and multimedia to support their arguments. These skills are critically important for students in college and in the workplace. PARCC measures writing at every grade because it is key to showing readiness for the next academic work and, in high school, readiness for college and career.
- Mathematics—Students solve multi-step math problems that require reasoning and address real-world situations. This requires students to reason mathematically, make sense of quantities and their relationships to solve realworld problems, and show their understanding. Many

previous assessments focused mostly on rote procedure only.

#### The Multi-State Alternate Assessment (MSAA)

The MSAA was administered to a small number of students. This assessment was created by the National Center State Collaborative to assess students with the most significant cognitive disabilities who are unable to participate in the PARCC assessment, even with accommodations. The alternate assessment is based on alternate achievement standards in ELA and mathematics and is administered online.

#### Assessments in Science

# Maryland School Assessment (MSA) and High School Assessment (HSA)

Students in grades 5 and 8 participated in taking the MSA, and students in grades 10-12 took the HSA in biology. This assessment is delivered online.

# The Alternate Maryland School Assessment—Science (Alt-MSA)

This assessment was administered to two students with significant cognitive disabilities. The Alt-MSA is a portfolio assessment that measures students' progress on indicators and objectives individually selected from the state's curricular standards. This year was the final year this assessment was offered in the state of Maryland. A new alternate science assessment will be administered in FY 2017.

These new assessments were designed to measure the full range of the CCSS, the Next Generation Science Standards, and the full continuum of student abilities, including the performance of high- and low-performing students. The PARCC assessments tested writing skills at every grade level and critical thinking and problem-solving skills in an in-depth manner. The assessments feature a mix of items—short answer, longer open-response questions, richer multiple choice items, and technology-enhanced items—to better reflect the full range of content and skills found in the CCSS.

The new assessments are all delivered online in a computerbased format. This allows for additional technology enhancements in both the content presented and in student response modes. The Clerc Center invested a significant amount of time and resources in planning, preparing teachers and staff, ensuring technological support, and administering these five new assessments. The on-line format was new to most, if not all, of our students and will require a few years for students to adjust to the change. The expectations and cognitive demands of these assessments are significantly higher and the format is unfamiliar. As has been the case with other states administering the new assessments, the initial results are disappointing but not unexpected. Results for the spring administration are presented in the following tables. There is no reportable summary information on students taking the alternate assessments since the n was less than 10.

# Student Achievement – English Language Arts (ELA) and Mathematics PARCC Summary Information

		Partic	ipation			Perfo	rmance Leve	ls	
	Number of Students with Valid Scores	Number of Students Enrolled During Testing	Percent of Students Participating	Mean Scale Score	Percent Scoring at Did Not Yet Meet Expectations	Percent Scoring at Partially Met Expectations	Percent Scoring at Approached Expectations	Percent Scoring at Met Expectations	Percent Scoring at Exceeded Expectations
ELA	125	125	>95.0	694	64.8	21.6			
Mathematics	127	127	>95.0	703	40.9	41.7	11.0		

Note: No information will be reported when the number of students is less than 10.

Results are reported using the Maryland State Department of Education's student performance standards in accordance with federal regulations.

## Student Achievement - Science: HSA Biology and MSA Science Summary Information

		Particip	ation		Performance Levels			
	Number of Students with Valid Scores	Number of Students Enrolled During Testing	Percent of Students Participating	Mean Scale Score	Percent Scoring at Basic	Percent Scoring at Proficient	Percent Scoring at Advanced	
Science	119	119	>95.0	369	76.5	22.7		

Note: No information will be reported when the number of students is less than 10.

Results are reported using the Maryland State Department of Education's student performance standards in accordance with federal regulations.

# Student Achievement – Disaggregated Information

		Reading			Mathematic	s		Science	
	Number of Students Enrolled During Testing	Percent of Students Participating	Percent of Students Meeting Standards	Number of Students Enrolled During Testing	Percent of Students Participating	Percent of Students Meeting Standards	Number of Students Enrolled During Testing	Percent of Students Participating	Percent of Students Meeting Standards
White	20	>95.0		20	>95.0		16	>95.0	
Black or African American	45	>95.0		47	>95.0		32	>95.0	
Hispanic/Latino	20	>95.0		20	>95.0		18	>95.0	
Asian	10	>95.0		9			8		
American Indian/Alaska Native	0			0			0		
Native Hawaiian or Other Pacific Islander	0			0			0		
Two or More Races	44	>95.0		45	>95.0		42	>95.0	26.2
Other	6			6			3		
Race Not Specified	0			0			18	>95.0	72.2
Non-LEP Students	125	>95.0	8.0	127	>95.0		119	>95.0	23.5
LEP Students	0			0			0		
Low Income <sup>1</sup>									
Male	67	>95.0		67	>95.0		54	>95.0	
Female	58	>95.0		60	>95.0		47	>95.0	
Sex Not Specified	0			0			18	>95.0	77.8

Note: No information will be reported when the number of students is less than 10. To protect individual student privacy and confidentiality as required by the Family Educational Rights and Privacy Act (FERPA), results are reported as less than 10% or greater than 95% when reporting results that are over or under these percents, respectively.

Results are reported using the Maryland State Department of Education's student performance standards in accordance with federal regulations.

<sup>1</sup>Low income data was not available for any of the 2016 assessments.

The results for students at the Clerc Center reflect low levels of proficiency on the assessments. This is partly a consequence of the significant change in assessment format (i.e., online) and the performance demands of the assessments (i.e., synthesizing information from multiple sources, multi-step problems, and more complex constructed responses). The Clerc Center believes the following points remain relevant as it continues standards-based implementation with a focus on the key instructional shifts identified in the CCSS initiative. Literature regarding instructional change suggests that change is a slow process requiring adoption of strategies by the teachers as well as students acquiring empowering knowledge and skills both in test taking and the curriculum from previous grades. Low levels of performance reflect students' relative inexperience with both the performance demands and the on-line format. Students, having become more familiar with the process of testing, will now face the additional challenges posed by the next generation of on-line assessments. As teachers at the Clerc Center gain greater facility with the CCSS, and as students have more time in a CCSS- and Next Generation Science Standards-based learning environment and additional experience with the on-line assessment process, it is expected that their scores will rise. These results underscore the need to continue redirecting instructional attention to supporting students' achievement of grade-level expectations.

At the Clerc Center, most students participated in the assessment with the use of one or more accommodations, such as ASL interpretation or small group administration. It is not yet known whether these accommodated test conditions adequately support students' access to the assessment and their ability to demonstrate their knowledge and skills. Thus it is not entirely clear that the assessment, even under accommodated testing conditions, yields meaningful scores for all students at the Clerc Center. Over time, as students have increased opportunities to learn to high standards and more is understood about how to accurately assess what deaf and hard of hearing students know and can do, it is anticipated that performance will increase.

# Accountability

Accountability principles at the Clerc Center, like elsewhere in the country, are meant to ensure processes, programs, and systems are in place and functioning well to support continuous improvements in student achievement. Under the accountability provision of the EDA, the Clerc Center is required to calculate annually the proportion of students scoring at or above the "proficient" level of performance on the spring assessment and to report this information publicly. The Clerc Center has fulfilled this requirement and an on-line report is operational:

- Reported PARCC, MSA/HSA/MSA-Alt, and the MSAA results in accordance with EDA requirements via the Clerc Center website
- Met all other Maryland and federal assessment and reporting requirements within the designated timelines
- Provided ongoing communication about progress with teachers, staff, families, and the community

The Clerc Center's results for the 2015-2016 school year are available online at www.gallaudet.edu/Documents/ Clerc/2016-Clerc-CenterAYP.pdf.

MSSD alumnus Seth Washington directed a production of Disney's Beauty and the Beast, from April 28-30, 2016 at Theatre Malz.

Photo by: Susan Flanigan



# VIII. KDES Student Characteristics, Related Educational Services Received, and Achievement

# Enrollment

KDES serves students from birth through age 15 who reside in the Washington, D.C., metropolitan area. On September 15, 2015, 106 students were enrolled at KDES. Seven eighth grade students completed the KDES program in June 2016.

				Elen	nentary Gra	ades		м	Middle School			
	All Students		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8		
September 15, 2015	106	47	8	7	7	9	5	9	7	7		
First-time enrollments	35	23	2	1	3	3	0	1	1	1		
Completed program	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7		
Left before completing program	4	4	0	0	0	0	0	0	0	0		

AY 2015-2016 En	rollment at KDES
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<sup>1</sup> Early Childhood Education (ECE) includes the Parent-Infant Program, preschool, and kindergarten.

# **Student Characteristics**

## Hearing levels of KDES students

Fifty-one percent of KDES students had hearing losses measured at the profound level (91 decibels and greater).

In 2015-2016, the number of KDES students with cochlear implants was 10, or 9 percent of the school population. Seven of those students were still using their implants.

	All Stu	All Students <sup>1</sup>		CE	Eleme	entary	Middle School	
All levels	87 100%		29	100%	35	100%	23	100%
Normal <sup>2</sup> (<27dB)	2	2%	1	3%	0	0%	1	4%
Mild (27-40 dB)	5	6%	1	3%	4	11%	0	0%
Moderate (41-55 dB)	7	8%	3	10%	3	9%	1	4%
Moderately severe (56-70 dB)	6	7%	2	7%	1	3%	3	13%
Severe (71-90 dB)	17	20%	4	14%	8	23%	5	22%
Profound (91 dB & above)	50	56%	18	62%	19	54%	13	57%

# KDES Students by Hearing Level and Instructional Grouping

Note: Hearing level categories are based on the Better Ear Average. Percentages may not sum to 100 percent due to rounding.

<sup>1</sup> Current test data is not available for eight students.

<sup>2</sup> Two students had unilateral hearing loss.

# **Traditionally Underserved Racial/Ethnic Groups**

Sixty-four percent of KDES students were members of traditionally underserved racial/ethnic groups.

# KDES Students by Race/Ethnicity and Instructional Grouping

	All T	eams	EC	ЭE	Eleme	entary	Middle	School
All groups	106	100%	47	100%	36	100%	23	100%
White	38	36%	21	45%	14	39%	3	13%
Traditionally underserved racial/ ethnic groups	68	64%	26	55%	22	61%	20	87%
Black/African American	37	35%	12	26%	10	28%	15	65%
Hispanic of any race	13	12%	5	11%	7	19%	1	4%
Two or more or other racial/ ethnic groups	18	17%	9	19%	5	14%	4	17%

Note: Percentages may not sum to 100 percent due to rounding.

## **Additional Disabilities**

Twenty-two percent of KDES students were identified as having additional physical or cognitive disabilities.

# KDES Students with Disabilities by Instructional Grouping

	All Stu	udents	ECE		Elementary		Middle School	
All conditions	106	100%	47	100%	36	100%	23	100%
No disabilities	83	78%	46	98%	26	72%	11	48%
Deaf students with 1 or more additional disabilities	23	22%	1	2%	10	28%	12	52%
Intellectual/Learning disability	14	13%	0	0%	4	11%	10	44%
Attention Deficit Disorder (ADD/ADHD	5	5%	0	0%	4	11%	1	4%
Other conditions (includes developmental delay and autism)	8	8%	1	2%	4	11%	3	13%

Note: Percentages may not sum to 100 percent due to rounding.

# **Support Services**

Sixty-eight percent of KDES students received one or more support services. At KDES, students from traditionally underserved racial/ethnic groups received higher rates of support services than other students.

	All Stu (N=	All Students (N=106)		ECE (N=47)		entary :36)	Middle School (N=23)	
No support services	34	32%	29	62%	5	14%	0	0%
1 or more support services	72	68%	18	38%	31	86%	23	100%
Audiology	11	10%	5	11%	1	3%	5	22%
Speech language	68	64%	17	36%	29	81%	22	96%
Counseling	12	11%	1	2%	9	25%	2	9%
Other services (includes OT, PT, ASL, Communi- cation Group, Travel Training, Home Visits, 1 on 1 Aide, and Transition)	27	26%	7	15%	12	33%	8	35%

# **KDES Students Receiving Support Services by Instructional Grouping**

Note: Percentages may not sum to 100 percent due to rounding.

	All Students (N=106)		White Stud	ents (N=38)	All Traditionally Underserved Racial/ Ethnic Group Students <sup>1</sup> (N=68)		
No support services	34	34 32%		50%	15	22%	
1 or more support services	72	68%	19	50%	53	78%	
Audiology	11	10%	2	5%	9	13%	
Speech language	68	64%	16	42%	52	77%	
Counseling	12	11%	4	11%	8	12%	
Other services (includes OT, PT, ASL, Communication Group, Travel Training, Home Visits, 1 on 1 Aide, and Transition)	27	26%	4	11%	23	34%	

# KDES Students Receiving Support Services by Race/Ethnicity

Note: Percentages may not sum to 100 percent due to rounding.

<sup>1</sup>Due to the small numbers of students in some racial/ethnic groups, information for the specific racial and ethnic categories is not reported.

# IX. MSSD Student Characteristics, Related Educational Services, and Outcomes

# Enrollment

MSSD serves high school students between the ages of 14 and 21 from the United States and its territories. On September 15, 2015, 166 students were enrolled at MSSD. Forty-two seniors graduated in June 2016.

	All Students	Grade 9	Grade 10	Grade 11	Grade 12
September 15, 2015	166	45	31	39	51
First-time enrollments	64	42	6	8	8
Left before completing program	12	6	2	1	3
Completed program	42	N/A	N/A	N/A	42

# AY 2015-2016 MSSD Enrollment

# **Student Characteristics**

## Hearing levels of MSSD students

Eighty-seven percent of MSSD students had hearing losses measured at the severe or profound levels. In 2015 -2016, 39 MSSD students, or 23 percent of the school population, had cochlear implants. Twenty-nine of those students were currently using their implants.

	All St	udents	Gra	de 9	Grad	de 10	Grad	de 11	Grad	de 12
All levels	166	100%	45	100%	31	100%	39	100%	51	100%
Normal <sup>1</sup> (<27 dB)	1	1%	0	0%	0	0%	0	0%	1	2%
Mild (27-40 dB)	1	1%	0	0%	1	3%	0	0%	0	0%
Moderate (41-55 dB)	8	5%	3	7%	1	3%	3	8%	1	2%
Moderately severe (56-70 dB)	11	7%	4	9%	2	7%	3	8%	2	4%
Severe (71-90 dB)	39	24%	9	20%	10	32%	12	31%	8	16%
Profound (91 dB & above)	106	64%	29	64%	17	55%	21	54%	39	77%

## MSSD Students by Hearing Level and Grade

Note: Hearing level categories are based on the Better Ear Average. Percentages may not sum to 100 percent due to rounding. <sup>1</sup>One student had unilateral hearing loss.

# Traditionally Underserved Racial/Ethnic groups

Forty-nine percent of MSSD students were members of traditionally underserved racial/ethnic groups.

	All Teams		Grade 9		Grade 10		Grade 11		Grade 12	
All groups	166	100%	45	100%	31	100%	39	100%	51	100%
White	84	51%	21	47%	17	55%	20	51%	26	51%
Traditionally underserved racial/ethnic groups	82	49%	24	53%	14	45%	19	49%	25	49%
Black/African American	34	21%	5	11%	5	16%	9	23%	15	29%
Hispanic of any race	27	16%	11	24%	5	16%	4	10%	7	14%
Two or more and other racial/ethnic groups	21	13%	8	18%	4	13%	6	15%	3	6%

# MSSD Students by Race/Ethnicity and Grade

Note: Percentages may not sum to 100 percent due to rounding.

# **Additional Disabilities**

Fifteen percent of MSSD students were identified as having additional physical or cognitive disabilities. The most prevalent disability among MSSD students was intellectual/learning disability.

# MSSD Students with Disabilities by Grade

	All Students		Grade 9		Grade 10		Grade 11		Grade 12	
All conditions	166	100%	45	100%	31	100%	39	100%	51	100%
No disabilities	142	86%	38	84%	26	84%	35	90%	43	84%
Deaf students with 1 or more additional disabilities	24	15%	7	16%	5	16%	4	10%	8	16%
Intellectual/Learning disability	12	7%	5	11%	2	7%	0	0%	5	10%
Attention Deficit Disorder (ADD/ ADHD)	8	5%	1	2%	2	7%	4	10%	1	2%
Other conditions (includes OHI, language disorder, autism)	8	5%	3	7%	1	3%	2	5%	2	4%

Note: Percentages may not sum to 100 percent due to rounding.

# **Support Services**

Sixty-nine percent of all MSSD students received one or more support services. At MSSD, 75 percent of students from traditionally underserved racial/ethnic groups received some type of support service compared to 62 percent of white students.

	All Students (N=166)		Grade 9 (N=45)		Grade 10 (N=31)		Grade 11 (N=39)		Grad (N=	de 12 =51)
No support services	52	31%	15	33%	8	26%	12	31%	17	33%
1 or more support services	114	69%	30	67%	23	74%	27	69%	34	67%
Audiology	54	33%	13	29%	13	42%	12	31%	16	31%
Speech-language	91	55%	23	51%	18	58%	24	62%	26	51%
Counseling	18	11%	5	11%	1	3%	6	15%	6	12%
Other services (includes OT, PT, ASL, Communication Group, and Transportation)	4	2%	1	2%	1	3%	0	0%	2	4%

# MSSD Students Receiving Support Services by Grade

Note: Percentages may not sum to 100 percent due to rounding.

# MSSD Students Receiving Support Services by Race/Ethnicity

					Traditionally Underserved Racial/Ethnic Groups									
	All Students (N=166)		White Students (N=64)		All Traditionally Underserved Racial/Ethnic Group Students (N=82)		Black/ African American (N=34)		Hispanic of Any Race (N=27)		Two or More and Other Racial/ Ethnic Groups (N=21)			
No support services	52	31%	32	38%	20	24%	7	21%	4	15%	9	43%		
1 or more support services	114	69%	52	62%	62	75%	27	79%	23	85%	12	57%		
Audiology	54	33%	30	36%	24	29%	8	24%	8	30%	8	38%		
Speech-language	91	55%	35	42%	56	68%	25	74%	20	74%	11	52%		
Counseling	18	11%	10	12%	8	10%	5	15%	2	7%	1	5%		
Other services (includes OT, PT, ASL, Communication Group, and Transportation)	4	2%	2	2%	2	2%	1	3%	1	4%	0	0%		

Note: Percentages may not sum to 100 percent due to rounding.

# **Student Outcomes**

#### **Student Reading Achievement**

The reading comprehension attainment of MSSD students is measured annually using the Stanford Achievement Test (10th edition) or the Test of Academic Skills (TASK). Thirty-five percent of MSSD students were reading at the fourth grade level or lower. Twenty-five percent had reading grade equivalent levels between fifth and seventh grade. Forty percent had reading grade equivalents of eighth grade or higher. The freshmen had the lowest reading levels, with an average grade equivalent of 5.8. The juniors had the highest average reading grade equivalent at 7.8.

	All Students		Grade 9		Grade 10		Grade 11		Grade 12	
All levels	155	100%	38	100%	31	100%	36	100%	50	100%
Post high school	29	19%	5	13%	5	16%	8	22%	11	22%
12.0-12.9	3	2%	0	0%	1	3%	1	3%	1	2%
11.0-11.9	3	2%	1	3%	0	0%	2	6%	0	0%
10.0-10.9	12	8%	1	3%	3	10%	1	3%	7	14%
9.0-9.9	7	5%	1	3%	2	7%	2	6%	2	4%
8.0-8.9	9	6%	3	8%	2	7%	2	6%	2	4%
7.0-7.9	9	6%	2	5%	1	3%	5	14%	1	2%
6.0-6.9	14	9%	6	16%	1	3%	5	14%	2	4%
5.0-5.9	16	10%	4	11%	4	13%	3	8%	5	10%
4.0-4.9	12	8%	2	5%	3	10%	3	8%	4	8%
3.0-3.9	22	14%	6	16%	6	19%	1	3%	9	18%
2.0-2.9	18	12%	6	16%	3	10%	3	8%	6	12%
1.0-1.9	1	1%	1	3%	0	0%	0	0%	0	0%
Mean grade equivalent level			5.8		6.5		7.8		7.3	

## MSSD Graduates Reading at Different Grade Levels by Race/Ethnicity

Note: Includes students enrolled as of September 15, 2015, who were still enrolled at the time of spring testing. Scores are based on the Reading Comprehension subtest of the Stanford Achievement Test (10th Edition) and the Test of Academic Skills (TASK). Percentages may not sum to 100 percent due to rounding.

#### **Reading Achievement of Graduates**

According to the Gallaudet Research Institute, about half of high school-age deaf and hard of hearing students leaving special education programs read below the fourth grade level. The average grade equivalent reading level of MSSD graduates was 8.3. Twenty-seven percent of the graduates were reading at the fourth grade level or below; 19 percent were reading between the fifth and seventh grade levels, and 54 percent were reading at or above the eighth grade level. Graduates who were members of traditionally underserved racial/ethnic groups had an average reading level of 5.1, while white students had an average grade equivalent level of 10.7.

	All Gra	duates <sup>1</sup>	White G	raduates	All Traditionally Under- served Racial/Ethnic Groups		
All levels	41	100%	24	100%	17	100%	
Post high school	10	24%	9	38%	1	6%	
12.0-12.9	1	2%	1	4%	0	0%	
11.0-11.9	0	0%	0	0%	0	0%	
10.0-10.9	7	17%	6	25%	1	6%	
9.0-9.9	2	5%	1	4%	1	6%	
8.0-8.9	2	5%	2	8%	0	0%	
7.0-7.9	1	2%	0	0%	1	6%	
6.0-6.9	2	5%	2	8%	0	0%	
5.0-5.9	5	12%	0	0%	5	29%	
4.0-4.9	2	5%	0	0%	2	12%	
3.0-3.9	5	12%	2	8%	3	18%	
2.0-2.9	4	10%	1	4%	3	18%	
1.0-1.9	0	0%	0	0%	0	0%	
Average grade equivalent	8.	3	10	.7	5.1		

#### MSSD Graduates Reading at Different Grade Levels by Race/Ethnicity

Note: Includes students enrolled as of September 15, 2015 who were still enrolled at the time of spring testing. Scores are based on the Reading Comprehension subtest of the Stanford Achievement Test (10th Edition) and the Test of Academic Skills (TASK). Percentages may not sum to 100 percent due to rounding. <sup>1</sup>One graduate had no SAT-10 reading comprehension test data.

# **Disposition of 2015 MSSD Graduates**

A one-year follow-up was conducted of the 38 students who graduated from MSSD in 2015. The response rate for this follow-up was 66 percent.

Sixty-four percent of graduates responding to the one-year survey reported that they were enrolled solely in a postsecondary program. Eight percent of the respondents were enrolled in a postsecondary program and were also working.

	All Res Grad	ponding uates	White G	raduates	All Traditionally Under- served Racial/Ethnic Groups		
All outcomes	30	100%	14	100%	16	100%	
Entered college or university	21	70%	11	79%	10	63%	
Working	2	7%	0	0%	2	13%	
Working and enrolled in a post- secondary program	2	7%	1	7%	1	7%	
Not working/not enrolled in a post- secondary program	5	17%	2	14%	3	19%	

MSSD 2015 Graduates' One-Year Outcomes by Race/Ethnicity

Visiting Deaf artist Takiyah Harris conducted workshops with MSSD and KDES students on May 3, 2016. Harris introduced the students to her to the multi-media, multi-sensory approach she uses in her artwork, and guided the students to make their own creations. Seen here Harris assists a KDES student during a workshop in the art studio.

Photo by: Susan Flanigan



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#### Front Cover:

Zamica Gage, a graduate in the Class of 2016, makes the most of an opportunity by taking a selfie with President Roberta Cordano, as she receives her degree at the Gallaudet's 146th Commencement on May 13, 2016. Soon after she was selected by the Board of Trustees to become president of the University in fall 2015, Cordano launched a "Get your Selfie with President Cordano" Twitter campaign, #Bobbi4GU, encouraging students and others to meet her and to take a selfie photo with her. Cordano started her term as the University's 11th president in January 1, 2016 and was formally inaugurated on September 30, 2016.

Photo by: Danielle Seiss

### **Inside Covers:**

During her Inauguration Community Celebration, held at Union Market's Dock 5 reception hall on the evening of September 30, 2016, students gather with President Roberta J. Cordano. The celebration followed Cordano's installation, held during the afternoon in the Field House.

Photo by: Zhee Chatmon

#### **Back Cover:**

Students from Kendall Demonstration Elementary School surround Gallaudet alumnus Nyle DiMarco,'13, on a flying visit to the Gallaudet campus during the Dancing With the Stars competition in spring of 2016. DiMarco, who had already won Cycle 22 of the CW's America's Next Top Model in December 2015, went on to win Season 22 of Dancing with the Stars in May 2016. On September 7, 2016, DiMarco was honored by Maryland Governor Larry Hogan for his commitment to early language acquisition among deaf and hard of hearing children during a reception at the Maryland State House.

Photo by: Zhee Chatmon



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