**Gallaudet University**

**Stage 1: New Program: Preliminary Proposal**

**Prepared by Professor Laura-Ann Petitto**

The New Program Preliminary Proposal is submitted via the Office of Academic Quality to the **New Program Review Committee** (NPRC) consisting of the following members: the Chief Enrollment and Marketing Officer, Provost, University Budget Director, Senate representative, and the appropriate Dean(s). If assistance is needed in developing this proposal see Pat Hulsebosch, Executive Director- Office of Academic Quality. All Stage 2 Proposals must also be reviewed by the appropriate Dean and Department Chair. The Stage 1 review typically requires 4-6 weeks. See NPR website for more details on process.

1. **Suggested Name of Program**: Gallaudet University’s PhD Program in Educational Neuroscience (“PENS”)
2. **Suggested Program Administrative Home** (Department and/or College): The Graduate Dean’s Office (Associate Provost for Research/Dean of the Graduate School)

1. **Program Type**
   1. Undergraduate major
   2. Undergraduate distinct minor
   3. Graduate Master’s degree
   4. Graduate certificate
   5. Graduate/Research Doctoral degree (PhD) \_\_ YES
2. **Mode of Delivery** (check all that apply)
   1. On-campus only \_\_No
   2. Distance Education (50% of the class is other than face-to-face) \_\_YES
      1. Hybrid (some on-campus; 50% or more through distance education) \_\_YES
      2. Fully distance education (typically on-line)
         1. Synchronous
         2. Asynchronous
      3. Program Includes a summer component \_\_YES
3. **Intended Audience** (*check all that apply*)
   1. Students seeking a baccalaureate degree
   2. Students seeking a master’s degree \_\_NO. This is intended to be a leading PhD program for students seeking serious scholarship culminating in a PhD (a degree that they desire from the outset of their application for entrance into the PhD program). Students may be admitted into the PhD program who do or do not have a Master’s Degree. As with other PhD programs, with appropriate work, Master’s Degrees may be conferred en route to the PhD. But students will *not* be admitted into this PhD program who *only* seek to gain a terminal Master’s Degree at the time of their application to the program.
   3. Students currently enrolled in an approved graduate program at Gallaudet \_\_NO. Students seeking dual degrees will not be accepted into this PhD program in Educational Neuroscience. Only students seeking full-time entrance into this PhD program will be considered for admission into this program.
   4. Students who are seeking PST credit \_\_NO. All courses will not be offered for both graduate credit and PST credit. However, PST credit may be offered to students regarding a very small select number of classes, for example, the annual and publically available “Educational Neuroscience Seminar Series.”
   5. Students not enrolled in a graduate program and not intending to enroll in graduate degree program\_\_ NO. This PhD program is not open for “auditing” and/or to other students simply wanting to “sit in” in a casual manner.
   6. Other, please describe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Students seeking a PhD in Educational Neuroscience who were admitted into this PhD Program.
4. **Degree/Product**
   1. Student receives an undergraduate degree
   2. Student receives graduate degree \_\_YES
   3. Student receives a certificate or other product
5. **Rationale for Program**

The proposed *PhD Program in Educational Neuroscience* constitutes an important part of an overarching vision and plan of the *National Science Foundation*’s *Science of Learning Center*, *Visual Language and Visual Learning, VL2,* at Gallaudet University. At the most general level, the rationale is to catapult forward radically the education of students at Gallaudet University in the neurosciences (spanning its advances, research, and translations), and to create new career paths and choices for Gallaudet’s students. This specific *PhD Program in Educational Neuroscience* has been consistently and enthusiastically promoted by the *National Science Foundation* for the past 5 years of the VL2 Center’s existence. The creation of this exciting new *PhD Program in Educational Neuroscience* is indeed fully expected by the National Science Foundation, and, crucially, our Gallaudet University Administration has promised it to them.

The new discipline of Educational Neuroscience (now roughly a decade into its launch) has attracted international and national esteem, with Educational Neuroscience departments and programs being created around the United States, and world, with much international recognition. See, for example, <http://news.vanderbilt.edu/2012/05/educational-neuroscience/> One rationale for the present proposed Gallaudet University *PhD Program in Educational Neuroscience* is that it will thrust forward Gallaudet’s position at the forefront of educating its students in this important new discipline – indeed to be a major player on the world stage.

The Gallaudet University *PhD Program in Educational Neuroscience* propels forward both Gallaudet University and university goals (at large) to provide its students with the most cutting-edge knowledge, powerful critical analysis and reasoning skills, and utterly advanced knowledge of, and expertise in, contemporary behavioral and neuroimaging research – and its principled application – which are vital to education and society.

A further rationale is that the new *PhD Program in Educational Neuroscience* will deeply advance Gallaudet’s Strategic “Goal E” to promote great research and scientific advance at Gallaudet University. Further, the attraction of new students to our university will advance Gallaudet President Hurwitz’s new initiative “Enrollment Matters.”

One especially strong rationale for the creation of this new *PhD Program in Educational Neuroscience* is that Gallaudet has the critical strengths needed to bring together support to build a cutting-edge PhD Program of this type, including the fact that one of the founders of the discipline of Educational Neuroscience—indeed the individual who also named the new discipline—is now on faculty at Gallaudet (Professor Laura-Ann Petitto). Specifically, the critical strengths needed to build this exciting program include (i) exceedingly rich internal Gallaudet University departmental collaborations. Indeed, the very activity of building this new PhD Program will facilitate a new generation of collaboration across the Gallaudet campus (see list of Committee Members below); our (ii) external participation in the Washington DC University Consortium across the Greater Washington Area (GWA); our (iii) external University Partnership sponsors who have pledged support through opening their labs, courses, and other resources (University of California, Davis, University of New Mexico, Georgia Institute of Technology, and the Rochester Institute of Technology/National Technical Institute for the Deaf).

Another rationale is that this new *PhD Program in Educational Neuroscience* at Gallaudet University will permit Gallaudet to make a stunningly unique contribution to the Washington DC University Consortium in the GWA. No other university in the GWA has a *PhD Program in Educational Neuroscience.* They have new *PhD Programs in* *Cognitive Neuroscience*, and new *PhD Programs in Neuroscience*, butGallaudet, alone, will be able to provide this exciting new contribution to its neighboring academic institutions, thereby permitting us to move into a more central role in the area and to share these resources with others.

The new *PhD Program in Educational Neuroscience* will provide a new venue – and one that will become uniquely associated with a Gallaudet University advance – for bringing together a diverse group of deaf and hearing scholars and students in common exploration of issues at the core intersection of deaf education, science, and public educational policy.

Making this exciting *PhD Program in Educational Neuroscience* available to students and others at sites including our Gallaudet campus, the Consortium universities, and at our Partnership universities (through videoconferencing technology), will enrich many deaf and hearing students’ education and knowledge, and more: It will provide inspiration for career paths. The Program will effectively contribute to increasing the diversity among the professoriate as well as to increasing the number of deaf research scientists. Thus, through the new *PhD Program in Educational Neuroscience* and its students, there is the greater potential to impact public educational policy for young deaf children in profound ways.

**VIII. Goals of the Program**

Revolutions in modern understanding about how children learn, the optimal conditions for learning in development, and when in development children learn which types of information best, have led to the creation of a new discipline, called *Educational* *Neuroscience (e.g., Petitto & Dunbar, 2001, 2004; Petitto, 2009).* This exciting and timely new field provides a most relevant level of analysis for addressing today’s core problems in human development, learning, and education. Educational Neuroscience, known for being an interdisciplinary discipline, draws empirical strength from several fields, in particular, Cognitive Neuroscience, which combines decades of behavioral experimental advances from Developmental, Cognitive, and Perceptual Psychology, with neuroscience explorations of the brain basis of human knowledge and learning over the life span. For the first time, this new discipline offers a novel union of science and education and is bound by two driving overarching goals:

To marry leading scientific discoveries about how children learn knowledge that is at the heart of early schooling (e.g., language, reading, number, science, social-emotional) with core challenges in contemporary education, and to do so *in principled ways* through “two-way” communication and mutual growth between science and society.

To conduct state-of-the-art behavioral and neuroimaging research that renders new knowledge that is useable, and meaningfully translatable, for the benefit of society (spanning parents, teachers, clinicians, medical practitioners, and beyond).

The knowledge content of Gallaudet University’s PhD Program in Educational Neuroscience (PENS) will be utterly contemporary, with exciting focus drawn from prevailing questions and challenges in education today. At the most general level, students can expect to leave the PhD Program with knowledge of overarching issues in language learning and bilingualism, reading, child development (cognition, number, scientific concepts), educational assessment, educational intervention, school and educational policy, and social-emotional family processes associated with young children, especially young deaf visual learners. Students can also expect to achieve expert and specific knowledge in select domains above. In addition, students may expert to achieve outstanding competence in contemporary *brain* and *behavioral* research as it is applied in principled ways to prevailing problems in education—indeed, professional knowledge and experimental mastery at the very heart of the new discipline, *Educational Neuroscience*.

Petitto, L. A.(2009). New discoveries from the bilingual brain and mind across the lifespan: Implications for Education. *International journal Mind, Brain, and Education*, *3 (4),* pp. 185-197.

Petitto, L. A. and Dunbar, K. N. (2001). Dartmouth College, Official Web Page of the Department of Education’s newly created Department of Educational Neuroscience and Human Development, structure, vision, and mission.

Petitto, L. A., and Dunbar, K. N. (2004). [New findings from educational neuroscience on bilingual brains, scientific brains, and the educated mind](http://petitto.gallaudet.edu/%7Edunbarlab/pubpdfs/pettitodunbarIP.pdf). On-line chapter in K. Fischer & T. Katzir (Eds.), Building Usable Knowledge in Mind, Brain, & Education. Cambridge University Press.