

## **Announcing International Research Opportunities for CLS Graduate Students**

**Fall 2011**

Penn State's *Center for Language Science* (CLS) announces an exciting and unique opportunity for graduate students working with CLS faculty. With the generous support of funding from the National Science Foundation program *Partnerships for International Research and Education* (PIRE), the CLS will award travel grants to up to six graduate students each year to support travel to international sites for the purpose of conducting research on the science of bilingualism. The PIRE grant "***Bilingualism, mind, and brain: An interdisciplinary program in cognitive psychology, linguistics, and cognitive neuroscience***," awarded to the CLS on August 15<sup>th</sup> 2010 for a 5- year period, will allow graduate students working with CLS faculty to travel for 2 months to a semester during the academic year or summer to conduct innovative research on bilingualism at leading collaborating institutions in Europe and Asia. These include Bangor University (UK), Max Planck Institute Leipzig (Germany), Radboud University Nijmegen (the Netherlands), University of Granada (Spain), University of Pompeu Fabra, Barcelona (Spain), Beijing Normal University (China), and University of Hong Kong (China). Funding will cover stipend and tuition for the semester in which the student travels, airfare, housing and meals, and some research expenses. Applications are due April 20, 2011 for travel during the Fall 2011. Awards will be announced by May 5, 2011. Applications should be sent to the CLS committee at [piregrads@gmail.com](mailto:piregrads@gmail.com). No hardcopy applications will be accepted. Note that a new round of applications will be invited for the Spring and Summer, 2012 with a deadline of October 15, 2011. Applications will be evaluated by the CLS faculty committee in consultation with the relevant foreign PIRE partner.

### **1. Application materials:**

- (1) Copy of applicant's Curriculum Vitae
- (2) A statement of no more than 2-3 single spaced pages indicating how the research-abroad experience will enhance the applicant's future educational and professional plans. The statement should specifically provide a justification for the way in which the requested international experience will enhance the planned research and will further the student's professional development. If the student has already had international research experience, it will be critical to explain how the proposed visit will provide unique benefits above and beyond those from these past experiences.
- (3) A letter of recommendation from the CLS faculty research advisor. The letter of recommendation must be sent directly to CLS committee at [piregrads@gmail.com](mailto:piregrads@gmail.com).

### **2. Eligibility requirements:**

- (1) To be eligible for the PIRE graduate travel award, candidates must be US citizens. A single award at the same level will be available each year to support one CLS graduate student who is a non-US citizen working within the College of Liberal Arts.
- (2) Must be actively conducting research with a CLS faculty member.

- (3) The planned project for the proposed research experience should fit with the goals of the CLS PIRE project and with the existing PIRE partners and host sites (see the abstract for the PIRE grant appended below). Note that there are also opportunities for CLS graduate students who wish to seek training at one of the two domestic PIRE sites (Haskins Laboratories or Gallaudet University) but those opportunities must be coordinated with eventual research abroad.
- (4) Eligible students will have a minimum of at least one semester in residence remaining at Penn State after returning from research abroad experience.

**IMPORTANT:**

Graduate students interested in applying for a PIRE award are encouraged to meet with their faculty mentors to discuss the content and timing of their applications.

Award#0968369 – PIRE: Bilingualism, mind, and brain: An interdisciplinary program in cognitive psychology, linguistics, and cognitive neuroscience

This PIRE project, a collaboration between three U.S. and seven foreign institutions in Europe and Asia, will investigate the cognitive and neural consequences of bilingualism to understand the ways in which multiple languages are learned and used. Recent behavioral and neuroscience evidence suggests that there is more extensive processing interaction between the two languages of a bilingual than previously thought, and this is true even when bilinguals are using only one language. Bilingual science therefore provides a tool for revealing fundamental principles about the mind and the brain otherwise obscured in research focused on monolinguals. The next stage of research on bilingualism calls for national and international collaborations to unify our understanding of the nature of the bilingual mind and brain, the process of bilingual language development, and the consequences of bilingualism for cognition. International collaboration is essential for accessibility to widely differing bilingual populations of several spoken, written, and signed languages. This award enables an international network of collaborators with common research goals and methods to exploit unique and complementary opportunities to investigate properties of human languages. Leveraging the diverse perspectives inherent in interdisciplinary and cross-cultural research will facilitate the establishment of a world-class research context for investigating bilingualism science, enable generalization of research findings, and exploit bilingualism as a tool for investigating the representation and processing of language in the mind and brain. This PIRE project will bring together the complementary international expertise of collaborators studying bilinguals who communicate in a variety of languages (e.g., Spanish, Catalan, Welsh, and Chinese). A unique feature of this project is the partnership of U.S. and Dutch scientists exploring the consequences of bimodal bilingualism in deaf people. The NSF-funded VL2 Science of Learning Center at Gallaudet University, a world leader in education for deaf students and research on topics related to deaf people, focuses on issues of visual language processing recognizing deaf readers as bilinguals using a signed language for communication yet reading a written language. Researchers in The Netherlands also study sign language and gesture, deaf literacy development, and speech-sign translation but using different signed and written languages. The convergence of these projects provides a unique opportunity for cross-linguistic collaboration and training that would not be possible in the U.S. alone. Enthusiasm for bilingualism research naturally draws an unusually diverse group of students, scientists, and research participants. This PIRE project will be committed to harnessing that excitement to create opportunities for broadening participation in science

by research participants from a broad spectrum of ages and linguistic abilities, and by students and researchers from groups under-represented in the sciences. This PIRE project will provide training and research opportunities to students and scientists not possible without the international collaboration, such as conducting research abroad, participating in virtual international colloquia, developing and sustaining international collaborations, and training by industrial partners with specific expertise in speech, literacy, and neuroimaging. The project also provides institutional opportunities for research with diverse populations, enriching undergraduate, graduate, and post-doctoral training, and increasing opportunities for early career faculty to develop research programs globally engaged and solidly grounded in cross-disciplinary collaborations. The nature of the science of bilingualism is inherently interdisciplinary and cross-cultural and this project provides opportunities for the participating U.S. institutions to strengthen international offices and activities, develop survey tools to evaluate student's international experiences, and provide energy and synergy for integration and for strengthening links across disciplinary units. This project will strengthen the U.S.'s scientific capital through international training not otherwise available in the U.S. U.S. institutions will benefit from attracting international visiting researchers and students to enrich the internationalizing initiatives and cultures on their campuses. The U.S. population is also increasingly bilingual with ever-diversifying demographic and cultural characteristics so research results are expected to reach well beyond academia. U.S. project partners include The Pennsylvania State University, Gallaudet University (D.C.), and Haskins Laboratories at Yale University (CT). International partners include ESRC Centre for Research on Bilingualism in Theory and Practice, Bangor University (Bangor, UK), the Max Planck Institute for Human Cognitive and Brain Sciences (Leipzig, Germany), Universidad de Granada (Granada, Spain), Universitat Pompeu Fabra (Barcelona, Spain), Radboud University Nijmegen (Nijmegen, The Netherlands), Beijing Normal University (Beijing, China), and the University of Hong Kong (China). This project was jointly funded by NSF's Office of International Science and Engineering and the Division of Behavioral and Cognitive Sciences.