Re: Federal Funding Opportunities in International Research and Education

This memorandum provides an overview of federal trends and funding opportunities in international research and education. Reflecting the diversity of topics encompassed in international affairs, funding for international research and education is dispersed across a wide range of federal agencies. Furthermore, while research, faculty and student exchanges, workshops, and university partnerships have traditionally received limited federal funding, additional opportunities are expected to emerge as a result of President Obama’s elevation of development and diplomacy as key elements of the country’s foreign policy portfolio.

Below are details of specific initiatives, focus areas, funding mechanisms, and policy influence opportunities at federal agencies responsible for international research and education. Please note that this is not an exhaustive list.

U.S. Agency for International Development
In partnership with the Department of State, the U.S. Agency for International Development (USAID) is primarily responsible for implementing the nation’s global development agenda. While USAID has historically faced criticism for lax oversight and inefficient management, the agency has received renewed attention as President Obama and Secretary of State Hillary Clinton have utilized robust global development policies as a tool of diplomacy on a level above that of previous administrations. Consistent with this goal, new USAID Administrator Rajiv Shah outlined a comprehensive reform agenda for the agency on June 2, 2010. The agenda proposes a strategy for overcoming the inefficient management and oversight which have plagued USAID in recent decades and caused steep declines in its budget authority and effectiveness. Among the components of the reform agenda pertaining to the academic community are:

A shift towards evidence-based work: Cited as the first major change that will occur at the agency, Dr. Shah announced that USAID will rely more heavily on evidence-based knowledge to drive effective programs. Assisting in the development of the necessary evidence appears to be an area where researchers can benefit USAID moving forward.

Creation of a Bureau of Policy, Planning, and Learning: While the Bureau is still forming, its core functions will be to support strategic planning, investments in science and technology as a driver of economic growth, and long-term, country-specific planning strategies (which would represent a major shift from the current annual operational planning used by USAID missions). This new Bureau represents USAID’s first ever policy shop, and will provide an entry point for researchers to assist in shaping development policy.

Adoption of programs designed to build local and country-level capacity: Acknowledging that USAID has validly been criticized for building “parallel systems that are not visible to local government, that are not doing everything we possibly can to build local institutional capacity, and that are not aligned with the long-term strategic and financial capabilities of the governments with whom we hope to partner,” Dr. Shah announced that future efforts will be geared towards building capacity at the local level to ensure continued improvements following the departure of USAID employees and programs from a country. Universities are expected to play an important role in designing USAID programs which are more sustainable in the long-term.
More work with a larger number of small organizations: Many in the Administration and Congress believe that USAID has too often relied on a few large outside contractors to design, develop, and implement agency programs. These contractors have been subject to little oversight, with many creating programs that are unsustainable following the end of USAID support. Going forward, Dr. Shah indicated that USAID will insource program design, monitoring, and evaluation, and reduce the size of awards to encourage greater competition for agency contracts. Moreover, discussions with USAID officials indicate that additional work with universities will be a priority as USAID attempts to reshape its relationship with outside entities.

Coupled with President Obama’s increased budget request for USAID for fiscal year (FY) 2011, these changes should generate additional funding and policy influence opportunities for university researchers. USAID’s bureaus and missions are authorized to fund a wide range of projects in the agency’s priority areas of: Agriculture; Democracy and Governance; Economic Growth and Trade; Environment; Global Health; and Humanitarian Assistance. In addition, USAID maintains crosscutting programs in: Civilian Response; Conflict Management; Climate Change; Information Technology; Urban Programs; Water; and Women in Development.

While USAID issues periodic solicitations for targeted research, much of the funding authority lies with individual missions throughout the world. With this in mind, it is important for interested faculty to begin making contact with personnel in the appropriate USAID bureaus and country missions in order to highlight their research. This can be accomplished through a trip to Washington to meet with staff at USAID headquarters or conference calls with relevant program officers. Lewis-Burke stands ready to facilitate these meetings, which are often the first step in building the relationships necessary to secure funding through the agency. In addition, providing USAID staff with a 2-3 page white paper describing a researcher’s capabilities and future proposals can elevate the faculty member’s profile within the agency and provide the base for future funding.

U.S. Department of State
The U.S. Department of State offers funding opportunities for education and exchange programs through its Bureau of Educational and Cultural Affairs (ECA). With a mission of fostering “mutual understanding between the people of the United States and the people of other countries to promote friendly and peaceful relations,” ECA conducts a variety of programs including educational exchanges and leadership development programs for both faculty and undergraduate and graduate students. The FY 2010 omnibus appropriations bill provides $635 million for educational and cultural exchange programs at the Department of State, many of which are administered by nongovernmental organizations through memorandums of understanding with the Department. In addition to the highly-regarded Fulbright Program for Scholars, examples of programs funded by ECA include:

Distinguished Fulbright Awards in Teaching: The Distinguished Fulbright Awards in Teaching send U.S. teachers abroad and bring international teachers to the U.S. for a semester to pursue individual projects, conduct research, take courses for professional development, and lead classes or seminars for teachers and students. Additional information is available at: http://exchanges.state.gov/globalexchanges/distinguished_awards.html.

English Language Fellowship Program: The English Language Fellow Program sends highly qualified U.S. educators in the field of Teaching English to Speakers of Other Languages (TESOL) on ten-month fellowships to academic institutions in all regions of the world. Applicants must
possess a Master’s degree with a TESOL focus. More information is available at: http://exchanges.state.gov/englishteaching/el-fellow.html.

English Language Specialist Program: The English Language Specialist Program recruits U.S. academics in the fields of Teaching English as a Foreign Language (TEFL) / Teaching English as a Second Language (TESL) and Applied Linguistics for short-term (two to four weeks) assignments abroad. Assignments may include curriculum projects, teacher training seminars, textbook development, English for Specific Purposes, and program evaluation. More information about the program is available at: http://exchanges.state.gov/englishteaching/el-specialist.html.

In addition to programs for U.S. scholars and educators, ECA maintains numerous programs for foreign academics and professionals, many of which involve a residency at a U.S. institution of higher education. Hosting an exchange for an individual or group of foreign scholars can elevate the university’s reputation within the Department of State and strengthen its ties to the agency, potentially leading to future funding and partnership opportunities. If interested in hosting foreign faculty participating in Department of State sponsored programs, you should reach out to ECA to highlight university strengths and resources. Additional information is available on the ECA website at: http://exchanges.state.gov/.

Beyond research opportunities, agency officials are often willing to meet with faculty to discuss their research and its effects on policy development. Similar to USAID, meetings should target State Department officials assigned to the country or region in which the faculty member works.

Department of Health and Human Services
In addition to USAID, numerous other federal agencies have renewed their focus on global health under the Obama Administration, including the Department of Health and Human Services (HHS). The Office of Global Health Affairs is the lead policy office for HHS global health initiatives, and currently serves predominantly a coordinating and informational role. Additional information about specific programs and partnerships administered by the office is available at: http://globalhealth.gov/initiatives/index.html.

The lead for research in HHS is the National Institutes of Health (NIH), though the Centers for Disease Control and Prevention (CDC) has major roles in disease detection and surveillance. In that regard, the FY 2010 appropriations bill includes funds for the establishment of three CDC global disease detection regional centers based on World Health Organization regions. The global health foci for CDC in recent years have been HIV/AIDS, malaria, polio, and measles. Those directions will continue in the near term under the new leadership of CDC Director Thomas R. Frieden, M.D., M.P.H., as he has been predominantly focused on reinvigorating the agency and dealing with seasonal and pandemic influenza. Illustrating this point, the Administration recently announced a comprehensive National HIV/AIDS strategy with the goals of reducing the number of new infections, increasing access to care and optimizing health outcomes for people living with HIV and AIDS, and reducing health-related disparities. Community-based organizations remain the most significant recipients of CDC support; hence, any expanded role for academic institutions in future CDC initiatives is uncertain at present. Additional information about the Administration’s National HIV/AIDS Strategy is available at: http://aids.gov/federal-resources/policies/national-hiv-aids-strategy/.
Since beginning his tenure as NIH Director, Francis Collins has stated repeatedly that it is important for NIH to expand its support for global health issues, and increasing NIH’s work in global health is one of his five priorities for the agency. A newly created Trans-NIH Global Health Research Working Group will build upon a two-year effort by agency leaders who analyzed global health research activities at NIH and identified better ways to coordinate, both across NIH and throughout the government. Fogarty International Center Director Roger I. Glass, who also serves as the NIH associate director for international research, co-chairs the group. Three overarching issues comprise the initial undertaking: improving data collection on NIH international activities; ensuring clinical trials supported by NIH meet the highest possible standards no matter where they take place; and developing strategies to position the NIH to play a strategic role in the U.S. government’s global health activities.

In addition to infectious diseases and HIV/AIDS, efforts will be expanded into chronic conditions that include cancer, cerebrovascular disease, and obesity and lifestyle factors. Some aspects of these areas, and others, have been a focus of institutes such as the National Heart, Lung, and Blood Institute, the National Institute of Diabetes and Digestive and Kidney Diseases, and the National Institute of Child Health and Human Development.

Complementary with NIH’s new efforts for more effective coordination, the Fogarty International Center will be continuing its portfolio of programs with minimal changes from recent years. Capacity building to ensure a global health research workforce remains a mainstay of Fogarty’s programs, such as research training for international scientists in the U.S. and implementation grants for work upon return to their home countries. Partnering of foreign scientists with U.S. scientists is intended to encompass HIV/AIDS, malaria, tuberculosis and other infectious diseases, noncommunicable diseases such as brain disorders, cancer, autism, and tobacco related illness as part of Fogarty’s research agenda.

Examples of current grant opportunities available through the Fogarty Center include:

Brain Disorders in the Developing World: The Research Across the Lifespan (BRAIN) program supports collaborative research and capacity building projects on brain disorders throughout life, relevant to low- and middle-income nations. Funded projects focus on neurological disorders and function (including sensory, motor, cognitive and behavioral) and the impairment they lead to throughout life. R21 grants provide support to conduct pilot studies and to organize, plan for, prepare, and assemble an application for a more comprehensive R01 grants. R01 awards involve substantial collaboration between developed and developing country investigators and incorporate both research and capacity building. Additional information is available at: http://www.fic.nih.gov/programs/research_grants/brain_disorder/index.htm.

Fogarty International Research Collaboration Award (FIRCA): FIRCA fosters international research partnerships between NIH-supported scientists and their collaborators in low and middle income countries (LMIC). It aims to benefit the research interests of both collaborators while increasing and enhancing research capacity at the LMIC site. Scientists who have an eligible NIH grant may apply. Special consideration will be given to proposed research that addresses significant global health problems, particularly those problems of high relevance to the foreign country or region. More about the program can be found at: http://www.fic.nih.gov/programs/research_grants/firca/index.htm.

Ecology of Infectious Diseases Initiative (EID): This program funds interdisciplinary research projects that strive to elucidate the underlying ecological and biological mechanisms that govern the
relationships, environmental changes, and the transmission dynamics of infectious diseases. The focus of this program is on the development of predictive models for the emergence and transmission of diseases in humans and other animals, and ultimately to facilitate the development of strategies to prevent or control them. Further information is available at: [http://www.fic.nih.gov/programs/research_grants/ecology/index.htm](http://www.fic.nih.gov/programs/research_grants/ecology/index.htm).

In addition to the programs funded by the Fogarty Center, many programs through regular NIH institutes and centers permit the use of funds for study in foreign countries. Researchers should contact their NIH program officers to determine whether international research can be supported with funding from a particular program.

**National Science Foundation**

The National Science Foundation (NSF) provides a variety of opportunities for U.S. researchers to pursue international research and collaborations. However, it should be noted that NSF primarily funds U.S. researchers either to work in foreign countries or enable collaborations with foreign researchers, and does not provide money directly to foreign institutions to carry out research. In addition to awards made through its Office of International Science and Engineering (OISE), NSF provides selected funding for international activities through discipline-specific programs administered by individual directorates and through other cross-cutting NSF programs which stress the importance of international activities, with the agency often providing supplemental funding for such efforts.

**OISE:** OISE coordinates international science and engineering activities across the agency’s directorates. While OISE makes grants of its own, the Office’s goal of promoting international collaboration across NSF directorates and programs was also stressed at a recent meeting of the OISE Advisory Committee. Specifically, OISE allows investigators to include international components in all proposals to relevant NSF programs or to request supplemental funding to an existing NSF grant for international activities. OISE works with other NSF directorates to fund new awards and supplements for international work which meet the criteria of: 1) promoting true international collaboration with a foreign research partner; 2) forming a new, rather than established, international partnership; 3) bringing a clear benefit to the U.S. science and engineering community through expertise, facilities, or resources; and 4) involving active research engagement of U.S. students and junior researchers at the foreign site.

Examples of programs funded by OISE include:

**Partnerships for International Research and Education (PIRE):** One of OISE’s most competitive programs, PIRE seeks to catalyze a higher level of international engagement in the U.S. science and engineering community by supporting innovative, international research and education collaborations. PIRE is funded in two-year cycles, and the next call for proposals is expected in late 2010 with awards to be made sometime in FY 2011. More about the PIRE program can be found at: [http://www.nsf.gov/funding/pgm_summ.jsp?pgm_id=12819](http://www.nsf.gov/funding/pgm_summ.jsp?pgm_id=12819).

**Enabling Programs:** In addition to PIRE, OISE funds five smaller programs designed to enable international science and education. These programs include fellowships, funding for projects to enhance research and dissertation projects, and international research and education workshops. These programs provide supplemental funding for international activities, but do not carry the same financial benefits as the more competitive PIRE program. Detailed information about OISE’s enabling programs is available on the main OISE page at: [http://www.nsf.gov/div/index.jsp?org=OISE](http://www.nsf.gov/div/index.jsp?org=OISE).
**Discipline Specific Programs:** In addition, NSF administers discipline-specific internationally focused programs through its individual directorates. Examples include:

Basic Research to Enable Agricultural Development (BREAD): A partnership between NSF and the Bill and Melinda Gates Foundation, the BREAD program supports innovative scientific research designed to address key constraints to smallholder agriculture in the developing world. In contrast to other NSF programs, proposals to BREAD must make a clear connection between the outcomes of the proposed research and its direct relevance and potential application to agriculture in the developing world. A complete program description is available at: [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503285](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503285).

Physical Sciences Programs: One example of an NSF program which encompasses significant international components is the Materials World Network program administered by the NSF Division of Materials Research. This program supports collaborations between U.S. and foreign researchers to promote continued progress in fundamental materials and condensed matter research. Additional information about the program is available at: [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12820](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12820).

Another example is the International Collaboration in Chemistry between U.S. Investigators and their Counterparts Abroad (ICC) program administered by the Division of Chemistry. This program works in conjunction with NSF’s foreign counterparts to solicit new bilateral collaborations in chemistry between U.S. and foreign investigators. Additional information about the program is available at: [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13627](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13627).

**International Elements in Cross-Cutting Programs:** A third mechanism through which NSF funds international research and education is by attaching extra money for international activities to other cross-cutting programs in order to incentivize the creation of international partnerships or facilitate international research. Examples include:

Integrative Graduate Education and Research Traineeship Program (IGERT): NSF’s IGERT program seeks to catalyze cultural change in graduate education by establishing innovative new models for graduate education and training in a fertile environment for collaborative research that transcends traditional disciplinary boundaries. NSF provides an additional $200,000 per year for new and existing awards that include strongly integrated international activities. Additional information about the program is available at: [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12759](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12759).

Networks of Researchers: The Research Coordination Networks (RCN) program uses novel networking strategies to advance a field or create a new direction in research or education, including across international boundaries. Additional information about the program is available at: [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11691](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11691).

A related program, the Research Networks in the Mathematical Sciences (RNMS) program, supports networks of researchers in ways that supplement individual investigator and research institute award mechanisms, providing new platforms to address complex problems by creating research collaborations that will cross intellectual, institutional, national, or other boundaries. Additional information about the program is available at: [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503461](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503461).
Networking Connections: NSF also has supported information technology (IT) for network connections internationally. The International Research Network Connections program makes awards for activities that include linking U.S. research IT networks with peer networks in other countries, improving the quality of end-to-end networking on international paths, and stimulating the deployment and operational understanding of emerging technologies. Additional information about the program can be found at: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503382.

Department of Energy
The Office of Policy and International Affairs (PI) oversees international research and outreach programs at the Department of Energy (DOE). While most of PI’s programs focus on climate change, recent solicitations have also targeted topics such as rare Earth minerals, energy efficiency, and renewable energy development. Additional information about opportunities through PI is available at: http://www.pi.energy.gov/index.htm.