



RESEARCH MATTERS

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Ask Early, Ask Often!

—by Joel Fritzler, *Research Matters* Editor

That was the repeated slogan at the National Science Foundation's regional conference in late October. The NSF is encouraging researchers to pick up the phone and contact NSF program officers even when you are at the "idea stage" of a possible proposal. It has become too easy to just send off a question or comment via e-mail; a personal contact via the phone is a better way to start a relationship with a future funder for your project, the agency recommends. Unlike many other federal agencies, NSF program officers have a voice in the funding decision of projects and they will be able to help you with your ideas and get you headed in the right direction. Telephone numbers for program officers are listed on every NSF program announcement and at the NSF website, www.nsf.gov.

A great way to get to know NSF program officers and the NSF funding process is to become an NSF reviewer for a program in your field. According to the NSF website, "Reviewers gain first-hand knowledge of the peer review process; learn about common problems with proposals; discover strategies to write strong proposals; and, through serving on a panel, meet colleagues and NSF program officers managing programs related to [their] interests." For information on becoming a reviewer, go to www.nsf.gov and, on the left side, click on **Merit Review**.

Would you recommend that your students read the assigned textbook for your class? The NSF recommends that you read or at least skim over the **NSF Grant Proposal Guide**. You can find it at www.nsf.gov. The NSF also recommends that you don't cut yourself short when preparing your budget. Requesting the maximum budget allowed may send up red flags, but if your research needs four graduate assistants to adequately conduct the work, then request four GAs in your budget. NSF program officers are researchers too, and they have a good idea how much your project will cost.

Are your successful students the ones that sit in the back of the class and ask no questions? Ask early, ask often! Your first NSF proposal may not get funded, but if you don't even apply or ask questions to prepare yourself to write a successful proposal, it's guaranteed that you will never get an NSF grant.

LAST CALL FOR SEED GRANT APPLICATIONS

Reminder: Faculty Seed Grant applications are due to ORDA on **Monday, November 12**. For information about this program and the current application packet, see www.siu.edu/orda/internal/seed_grants.html.

RESEARCH DIGEST

2007 Ig Nobel Prize Winners

—from the *Annals of Improbable Research*, www.improbable.com

The following 2007 Ig Nobel Prizes were awarded on October 4, at the 17th Ig Nobel Prize Ceremony.

AVIATION: Patricia Agostino, Santiago Plano, and Diego Golombek of Universidad Nacional de Quilmes, Argentina, for their discovery that Viagra aids jetlag recovery in hamsters.

BIOLOGY: Prof. Dr. Johanna E.M.H. van Bronswijk of Eindhoven University of Technology, The Netherlands, for doing a census of all the mites, insects, spiders, pseudoscorpions, crustaceans, bacteria, algae, ferns, and fungi with whom we share our beds each night.

CHEMISTRY: Mayu Yamamoto of the International Medical Center of Japan, for developing a way to extract vanillin—vanilla fragrance and flavoring—from cow dung.

ECONOMICS: Kuo Cheng Hsieh, of Taichung, Taiwan, for patenting a device, in the year 2001, that catches bank robbers by dropping a net over them.

LINGUISTICS: Juan Manuel Toro, Josep B. Trobalon, and Núria Sebastián-Gallés, of Universitat de Barcelona, for showing that rats sometimes cannot tell the difference between a person speaking Japanese backwards and a person speaking Dutch backwards.

LITERATURE: Glenda Browne of Blaxland, Blue Mountains, Australia, for her study of the word “the”—and of the many ways it causes problems for anyone who tries to put things into alphabetical order.

MEDICINE: Brian Witcombe of Gloucester, UK, and Dan Meyer of Antioch, Tennessee, for their penetrating medical report “Sword Swallowing and Its Side Effects.”

NUTRITION: Brian Wansink of Cornell University, for exploring the seemingly boundless appetites of human beings, by feeding them with a self-refilling, bottomless bowl of soup.

PEACE: The Air Force Wright Laboratory, Dayton, Ohio for instigating research & development on a chemical weapon—the so-called “gay bomb”—that will make enemy soldiers become sexually irresistible to each other.

PHYSICS: L. Mahadevan of Harvard University and Enrique Cerda Villablanca of Universidad de Santiago de Chile, for studying how sheets become wrinkled.

America in Science Race

—excerpted from *The Chronicle of Higher Education*, Oct. 12, 2007

Fifty years ago, the Soviet Union launched the world’s first artificial satellite, Sputnik 1, an event that transformed American higher education. Americans felt threatened by the “red moon” overhead and communist know-how, and Congress supported a flurry of federal spending that helped to greatly expand the number of American research universities and scientists. Today the country sees a new challenge: that other countries might outpace America economically through the production of technology-based goods. During the past two years, academic and business leaders have called for the government to respond by increasing science spending on a scale comparable to what it did after Sputnik. The government has answered, enacting a law, the America Competes Act.

A centerpiece of the act is a plan calling for a doubling of spending over seven years on physical-sciences research supported by the National Science Foundation and the Energy Department. The bill provides no actual money and expires after three years, but Congress’s Democratic leadership has vowed to find the dollars. After Sputnik, the growth was more meteoric. The NSF’s budget doubled in the first year alone, and all federal support for academic research quadrupled in seven years.

Federal spending for all academic research has steadily grown since Sputnik. But most of that growth has come for biomedical research financed by the National Institutes of Health. Money for

all other scientific disciplines has stayed flat since 1970. Supporters of a realignment say that research in chemistry, physics, engineering, and computer science has the potential to lead to valuable new commercial technologies, like the transistor and the Internet.

Members of Congress concluded that rather than trying to produce more scientists and engineers, the clearest need was earlier in the educational pipeline, in schools, where a clear target for federal help exists. Nationally, about two-thirds of high-school chemistry and physics teachers lack a degree or certification in those fields. And studies have shown that that correlates with poor student performance on math and science tests.

In spirit, though, the America Competes Act does echo the federal response after Sputnik, in its focus on broad scientific literacy and school education. And there is plenty of room for improvement: Nearly 30 percent of adults surveyed in 2004 for the National Science Foundation did not know that the earth revolves around the sun.

U.S. Not to Participate in Next Global Test of Advanced Math, Science Students

—excerpted from *Science*, Sept. 28, 2007

In 1995, the U.S. lagged behind most of the world on a test of advanced mathematics and physics taken by graduating high school students from 16 countries. That won’t happen again, as the National Center for Education Statistics (NCES), part of the U.S. Dept. of Education’s Institute of Education Sciences (IES), says it is bowing out of 2008 TIMSSA, an advanced version of the Trends in International Mathematics and Science Study given quadrennially to younger students, because it can’t fit the \$5 million to \$10 million price tag into its flat budget. Officials also question whether the target cohort—students finishing secondary school who have taken advanced mathematics and physics courses—is comparable around the world.

But many leaders in the mathematics community believe that the Administration opted out because it feared another poor U.S. performance would reflect badly on its signature education program, the 2002 No Child Left Behind Act.

International tests have proliferated in recent years as countries seek ways to measure how well they are preparing students for jobs in a global economy. Although fourth- and eighth-grade U.S. students have performed adequately on the TIMSS tests, high school seniors have not. In 1995, the last time that cohort was measured, U.S. students topped only Austria in advanced math and ranked last in physics.

Planning for 2008 TIMSS-A began in 2006 at the urging of Norway and Sweden. Although 16 countries participated in the first test, only nine—the two proponents plus Russia, Italy, the Netherlands, Slovenia, Iran, Lebanon, and Armenia—have ponied up for the new test, which covers geometry, algebra, and calculus as well as mechanics, electricity and magnetism, heat and temperature, and atomic and nuclear physics. Some time last year, NCES quietly decided not to get involved, and since then Australia, Germany, and Finland have also dropped out.

In defending their decision, NCES officials note that they are already supporting international assessments such as the regular 2007 TIMSS for fourth and eighth graders, a fourth-grade reading exam, a math and science assessment of 15-year-olds, and a planned survey of adult literacy.

FUNDING OPPORTUNITIES

For more information about these programs, contact Joel Fritzler, ORDA Information Specialist, at 453-4530 or jcfritz@siu.edu.

SIUC: Undergraduate Research/Creative Activity (REACH) Awards

SIUC's undergraduate research program, REACH (Research-Enriched Academic Challenge), makes 20 awards each year to support original research and creative projects by undergraduates working under the guidance of a faculty mentor. The awards fund up to \$1,500 in supplies/services and a 10-hour-per-week undergraduate assistantship.

Students in all disciplines are eligible to apply for the 2008-09 awards. We urge faculty to encourage promising students with an interest in independent research and/or creative activity to consider applying to this competitive program. In some cases, award recipients may receive academic credit for their project; students should check with their faculty mentor for details.

Applicants must have a GPA of 2.25 or better and be a full-time degree-seeking student enrolled for at least one semester during the 2008-09 academic year. Past winners of this award are ineligible to apply again.

Applications may be downloaded at www.siu.edu/~reach/awards.html. This page also links to listings of past winners and their projects.

Awards will be announced at the 2008 Undergraduate Research Forum on March 31. Projects will begin in July 2008 and end in June 2009. Award winners must present research posters describing their work and preliminary findings at the 2009 Undergraduate Research Forum.

For more information about REACH, the awards, or the forum, see www.siu.edu/~reach or e-mail reach@siu.edu.

DEADLINE: Jan. 26

ORAU: Junior Faculty Enhancement Awards

Ralph E. Powe Junior Faculty Enhancement Awards provide seed money for research by junior faculty at Oak Ridge Associated Universities member institutions (SIUC is a member). These awards are intended to enrich the research and professional growth of young faculty and to result in new funding opportunities.

Full-time assistant professors within two years of their initial tenure-track appointment (2/1/2006 through 2/1/2008) at the time of application are eligible. Proposed research projects must be in one of the following five disciplines: **Engineering and Applied Science; Life Sciences; Mathematics/Computer Sciences; Physical Sciences; or Policy, Management, or Education.**

The award amount provided by ORAU is \$5,000, matched by at least \$5,000 from the applicant's institution. Last year, ORAU made 30 awards.

Applicants are encouraged to develop research collaborations with governmental, private-sector, and other academic researchers. Substantive interdisciplinary research and inter-institutional research partnerships will increase an applicant's chances for success. Interactions with the Oak Ridge National Laboratory (ORNL) are particularly encouraged.

Several SIUC faculty have won Powe Awards and succeeded in using them to leverage much larger grants to support their research.

This is a limited-submissions program; only two applications per member institution are allowed. If you wish to apply, submit a preliminary application and nomination letter from your department chair to ORDA for review/selection no later than January 2. Full details about the information to be included in this preliminary application are online at www.siu.edu/orda/orau.pdf. For more information about the Powe program, see <http://tinyurl.com/ynvhr6> or contact Ann Farler (865-576-1898, Ann.Farler@orau.org).

DEADLINES: SIUC (Preliminary Applications)—Jan. 2; ORAU—Feb. 1

NSF: Research and Evaluation on Education in Science and Engineering

The Division of Research on Learning in Formal and Informal Settings (DRL) in the National Science Foundation's Directorate for Education and Human Resources supports basic and applied research and evaluation that enhances science, technology, engineering, and mathematics (STEM) learning and teaching. The division's Research and Evaluation on Education in Science and Engineering (REESE) program aims at advancing research at the frontiers of STEM learning, education, and evaluation, and at providing the foundation knowledge necessary to improve STEM teaching and learning at all educational levels and in all settings. This solicitation calls for four types of proposals: Knowledge Diffusion, Empirical Research, Large Empirical Research, and Diffusion and Evaluation.

The goals of the REESE program are: (1) to advance discovery and innovation at the frontiers of STEM learning, education, and evaluation; (2) to stimulate the field to produce high-quality, robust research results through the advancement of theory, method, and human resources; and (3) to help coordinate advances in education, learning research, and evaluation efforts.

REESE advances its mission by developing an interdisciplinary research portfolio focusing on core scientific questions of learning in real and emerging educational contexts, from childhood through adulthood, and from before school through graduate school and beyond into the workforce. In addition, research questions related to education and evaluation are central to the REESE activity.

It is estimated that 25 to 35 awards will be made from an anticipated funding amount of \$30 million. For more information about this program, see <http://tinyurl.com/3yjevd> or contact NSF (703-292-8650, drlreese@nsf.gov).

DEADLINE: Jan. 8

USDA: Nanoscale Science and Engineering for Agriculture and Food Systems

Nanotechnology is a new enabling technology that has the potential to revolutionize the agriculture and food systems. The goal of this program is to provide knowledge, expertise, and highly qualified R&D human capital in nanotechnology for food and agricultural systems. Applicants are strongly encouraged to read the entire Program Description section (see web address below) for current priorities.

It is estimated that total program funding will be \$5 million, with awards of up to \$500,000. For information about this program, see <http://tinyurl.com/yootx3> or contact Hongda Chen (202-401-6497, hchen@csrees.usda.gov).

DEADLINE: Jan. 17

NSF: Political Science

The National Science Foundation's Political Science Program supports scientific research that advances knowledge and understanding of citizenship, government, and politics. Research proposals are expected to be theoretically motivated, conceptually precise, methodologically rigorous, and empirically oriented. Substantive areas include, but are not limited to, American government and politics, comparative government and politics, international relations, political behavior, political economy, and political institutions.

In recent years, program awards have supported research projects on bargaining processes; campaigns and elections, electoral choice, and electoral systems; citizen support in emerging and established democracies; democratization, political change, and regime transitions; domestic and international conflict; international political economy; party activism; political psychology and political tolerance. The program also has supported research experiences for undergraduate students and infrastructural activities, including methodological innovations, in the discipline.

For more information about this program, see <http://tinyurl.com/3b99xh> or contact Brian Humes (703-292-7284, bhumes@nsf.gov) or Philip Paolino (703-292-7848, ppaolino@nsf.gov).

DEADLINE: Jan. 15

NSF: Cognitive Neuroscience

The National Science Foundation's Cognitive Neuroscience Program seeks highly innovative and interdisciplinary proposals aimed at advancing a rigorous understanding of how the human brain supports thought, perception, affect, action, social processes, and other aspects of cognition and behavior, including how such processes develop and change in the brain and through time.

It is estimated that 15 to 40 awards will be made from an anticipated funding amount of \$5 million. For information about this program, see <http://tinyurl.com/2v2exx> or contact Stacia Friedman-Hill (703-292-8121, sfriedma@nsf.gov) or Douglas Whalen (703-292-7321, dwhalen@nsf.gov).

DEADLINE: Jan. 14

NAMM Foundation: Scientific Grants on Music Making

The NAMM Foundation (formerly the International Foundation for Music Research/IFMR) seeks proposals from researchers and research teams in the fields of **music research, neuroscience, psychology, education, and health-related fields** to explore the effects of hands-on music-making. Short-term studies (less than one year) will be considered; a very limited number of longitudinal studies (two to three years) will be considered.

The Research Division seeks innovative and exacting study designs that explore effects and outcomes of hands-on music-making on various functions, including cognitive processes, development and learning, skill development and retention, and psychological, biological, and social or emotional aspects in target

populations (early childhood, school-age, adult, elderly—well and infirm).

Innovative studies exploring the role of hands-on music making in educational and health-related settings will receive priority. Priority will also be given to cross-disciplinary teams of researchers working collaboratively.

The following topics will be considered for the 2008 funding cycle: (1) research that addresses the effects of active participation in music on cognitive growth, skill development, and learning in early childhood and school-age children, including studies exploring the effects of music-making on development and learning milestones; and (2) research on the effects of active music-making on health and wellness indicators for older adults (well and infirm), including medical, psychological, mental, psychosocial, and neurological factors.

For additional information about this program, see <http://tinyurl.com/32j944> or contact the foundation (info@nammfoundation.org).

DEADLINE: Jan. 15

Homeland Security: Student Internships

The U.S. Department of Homeland Security's HS-STEM Summer Internship Program provides a 10-week summer research experience for undergraduate students majoring in homeland-security-related science, technology, engineering and mathematics (HS-STEM) disciplines.

Students who demonstrate long-term goals aligned with the mission and objectives of the department will have the opportunity to conduct research in DHS mission-relevant areas at various federal research facilities. The goal of this program is to prepare a diverse, highly talented, educated, and skilled pool of scientists and engineers to address HS-STEM issues.

Students receive a \$500/week stipend and travel reimbursement.

DHS has partnered with the Oak Ridge Institute for Science and Education (ORISE) to manage the application

and review process, award notification, and program implementation. The DHS Science and Technology Directorate will review applications and make final award selections.

For more information about this program, see www.orau.gov/dhsinternships or contact ORISE (dhsed@orau.org).

DEADLINE: Dec. 14

NIH: Partners in Research

This National Institutes of Health program solicits research grant applications that propose to forge partnerships (1) to study methods and strategies to engage and inform the public regarding health science in order to improve public understanding of the methods and benefits of publicly funded research, and (2) to increase scientists' understanding of and outreach to the public in their research efforts.

The program supports two-year pilot or feasibility research studies of innovative activities designed to improve public understanding of biomedical and behavioral science, develop strategies for promoting collaboration between scientists and the community to improve public health, and identify conditions (e.g., settings and approaches) that will enhance the effectiveness of such activities.

It is estimated that 35 to 40 awards will be made from an anticipated funding amount of \$3 million. For information about this program, see <http://tinyurl.com/yqxgqc> or contact Alexis Bakos (301-594-2542, bakosa@mail.nih.gov).

DEADLINE: Jan. 11

American Heart Association: Fellow-to-Faculty Transition

The AHA supports research broadly related to cardiovascular disease and stroke. It funds research in clinical and basic sciences, bioengineering, biotechnology, and public health, and particularly encourages applications related to obesity, women and heart disease, and resuscitation.

The AHA's Fellow-to-Faculty Transi-

tion Award program provides funding for trainees with outstanding potential for careers as physician-scientists in cardiovascular or stroke research during the crucial period of career development that spans the completion of research training through the early years of the first faculty or staff position. The award provides a supportive mentored experience during this period of transition.

Awards are intended to (1) greatly enhance the awardee's chances of obtaining a high-quality faculty or staff appointment; (2) improve the awardee's success and retention in an investigative career in cardiovascular science; and (3) develop the mentoring skills of the awardee as a potential future mentor.

All basic disciplines are eligible for this program, as are epidemiological, community, and clinical investigations that bear on cardiovascular and stroke problems.

Individual awardees may take the award from the institution providing the research training component to another institution for the career development component (first faculty or staff appointment). The intent is to make the awardee a "free agent" who is empowered to stay at or move from the training institution while retaining the award. The mentor during the faculty stage of the award may or may not be the same person who was the mentor during the training phase.

For additional information about this program, see <http://tinyurl.com/2n9v88> or contact the AHA (214-360-6104, ncrp@heart.org).

DEADLINE: Jan 15

U.S. Army: Medical Research

The U.S. Army Medical Research and Materiel Command's (USAM-RMC) mission is to provide solutions to medical problems of importance to the American warfighter at home and abroad. The scope of this effort and the priorities attached to specific projects are influenced by changes in military and civilian medical science and technology, operational requirements, military threat assessments, and national defense

strategies. The extramural research and development program plays a vital role in the fulfillment of the objectives established by the Command, which makes research grants to educational institutions, nonprofit organizations, and private industry.

The Command's Broad Agency Announcement (BAA) 07-1 provides a general description of its research programs, including specific areas of interest, general information, evaluation and selection criteria, and proposal preparation instructions. The appendices include forms that are required with the submission of a full proposal.

This is a continuously open announcement; preproposals must be submitted electronically and will be evaluated at any time throughout the year, unless timeframes are stated in a separate announcement. The electronic preproposal form is located at www.usamraa.army.mil under the BAA button.

For more information about this program, see <http://tinyurl.com/32w2q8> or contact Rebecca Tama, (301-619-2381, Rebecca.Tama@amedd.army.mil).

DEADLINE: Open

American Diabetes Association

The deadline is upcoming for several grant programs offered by the American Diabetes Association.

Research Awards provide grant support to both new and established investigators. Applications will be considered in any area that is relevant to the etiology or pathophysiology of diabetes and its complications. These awards provide \$20,000 to \$100,000 per year for up to three years. Up to \$20,000 for PI salary support and up to 15% for indirect costs may be requested. For information about this program, see <http://tinyurl.com/27v9ze>.

Innovation Awards are pilot and feasibility grants designed to support novel hypotheses that may lack preliminary data, but offer considerable promise for the cure, prevention, or treatment of diabetes. These awards are for a maxi-

imum of \$50,000 per year for two years. No indirect costs may be requested. For information about this program, see <http://tinyurl.com/yq4zam>.

The American Diabetes Association (ADA)—Association of Subspecialty Professors (ASP) **Young Investigator Innovation Award in Geriatric Endocrinology** provides grant support to new investigators. This program supports entry-level faculty to integrate geriatrics with novel basic, clinical, or health services diabetes research. Awards support pilot studies that may lack preliminary data, but offer considerable promise for the cure, prevention, or treatment of diabetes in an aging population. Awards are for a maximum of \$75,000 per year for up to two years. No indirect costs may be requested. For information about this program, see <http://tinyurl.com/ywg9xn>.

DEADLINES: Jan. 15 for all three programs

GRANT DEADLINES

December 2007 and January 2008

Information on many of the following programs is available from the Community of Science grants database at www.cos.com or from www.grants.gov. For web links to programs, contact Joel Fritzler (453-4530, jcfritz@siu.edu) or see the "External Funding" pages on ORDA's website.

December 2007

Federal Agencies

Agriculture

- Dec 06 CSREES: Biology of Weedy and Invasive Species in Agroecosystems
- Dec 19 CSREES: Food Safety—Epidemiological and Biological Approaches

Defense

- Dec 07 DARPA: Revolution in Fiber Lasers

Energy

- Dec 04 Office of Science: High-Energy Physics Outstanding Junior Investigator
- Dec 12 Office of Science: Advanced Detector Research

Health and Human Services

- Dec 01 Museum for Medical Research: Fellowship in the History of Biomedical Science and Technology
- Dec 01 NIH: Extramural Loan Repayment Program for Contraception and Infertility Researchers; Loan Repayment Program for Health Disparities Research
- Dec 04 NIH: International Cooperative Biodiversity Groups
- Dec 08 NIH: Fellowships for Human Embryonic Stem Cell Research
- Dec 10 NIAID: Exploratory Investigations in Food Allergy
- Dec 10 NIEHS: Outstanding New Environmental Scientist Award
- Dec 13 NIDDK: Identification of Factors Associated with Failure of Arteriovenous Fistulas to Mature in Hemodialysis Patients
- Dec 14 Fogarty Center: International Research Ethics Education and Curriculum Development
- Dec 14 NIAAA: Alcohol Research Centers
- Dec 15 NIH: Support for Conferences and Scientific Meetings
- Dec 18 NIH: Global Research Initiative, Basic/Biomedical Sciences
- Dec 18 NIH: Paul Beeson Career Development Awards in Aging
- Dec 20 NCI: Cancer Prevention Research Small Grants; Small Grants for Behavioral Research in Cancer Control; Multidisciplinary Fellowships in Cancer Nanotechnology Research

HHS cont.

Dec 22 NIDA: Field-Deployable Tools for Quantifying Exposures to Psychosocial Stress and to Addictive Substances for Studies of Health and Disease

Homeland Security

Dec 03 Tunnel Detection Technologies Project
Dec 14 Student Summer Internships
Dec 17 SAFE Container Program

NASA

Dec 12 Instrument Incubator Program
Dec 20 Constellation Space Suit System

National Archives and Records Administration

Dec 15 Truman Library Institute: Scholar's Award

National Science Foundation

Dec 01 GEO: Earth Sciences: Geophysics; Hydrologic Sciences; Petrology and Geochemistry; Tectonics
Dec 03 SBE: Physical Anthropology
Dec 06 Increasing Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE): Institutional Transformation Awards and Institutional Transformation Planning Grants
Dec 06 MPS: Computational Mathematics
Dec 07 CISE: Foundations of Computing Processes and Artifacts
Dec 12 Ecology of Infectious Diseases
Dec 12 MPS: NSF/DOE Partnership in Basic Plasma Science and Engineering
Dec 23 CISE: Information and Intelligent Systems: Advancing Human-Centered Computing, Information Integration and Informatics, and Robust Intelligence

Other Agencies**American Federation for Aging Research**

Dec 17 Various Research Grants and Awards for Faculty and Post-doctoral Fellows
Dec 18 Career Development Awards in Aging Research

American Geriatrics Society

Dec 04 Career Development Scholars Award
Dec 07 Health Outcomes Research

American Institute for Maghrib Studies

Dec 31 Grants

American Institute for Sri Lankan Studies

Dec 03 Fellowships

American Society for Engineering Education

Dec 04 Office of Naval Research: Summer Faculty Research

American Society of Nephrology

Dec 01 New Directions Grant for Established Investigators

Association of American Geographers

Dec 31 Research Grants

Association for Research in Vision and Ophthalmology

Dec 01 Travel Grants

California Energy Commission

Dec 14 Research, Development, and Demonstration Projects for Waste Heat Recovery from Industrial Processes in California

East-West Center

Dec 31 POSCO Fellowship (Policy Research on Northeast Asia)

Greenwall Foundation

Dec 01 Faculty Scholars Program in Bioethics

Klingenstein Fund

Dec 07 Neurosciences Fellowships

McKnight Fund for Neuroscience

Dec 01 Technological Innovation Grants

National Blood Foundation

Dec 15 Research Grants

National Headache Foundation

Dec 01 Research Grants

Organic Farming Research Foundation

Dec 17 Grants for Research, Education, and Outreach

Social Science Research Council

Dec 01 U.S.-Japan Program: Fellowships

United States-Israel Binational Science Foundation

Dec 20 Supported Workshops

West African Research Association

Dec 01 Postdoctoral Fellowship

William Morris Society

Dec 15 Fellowships

Wilson Center for Scholars

Dec 01 East European Studies: Short-Term & Research Grants
Dec 01 Advanced Russian Studies: Title VIII Research Scholarships

January 2008**Federal Agencies****Agriculture**

Jan 17 CSREES: Water and Watersheds
Jan 17 CSREES: Nanoscale Science and Engineering for Agriculture and Food Systems

Defense

Jan 03 DARPA: Integrated Crisis Early Warning System
Jan 11 DARPA: Revolution in Fiber Lasers
Jan 12 ONR: Young Investigator Program

DOD cont.

- Jan 14 DARPA: Microsystems Technology
- Jan 20 DARPA: Photonic Analog Signal-Processing Engines with Reconfigurability
- Jan 24 ONR: Navigation and Time-keeping Technology
- Jan 25 USAF: National Intelligence Community Enterprise Cyber Assurance

Energy

- Jan 15 NETL: Solid State Energy Conversion Alliance Core Technology
- Jan 25 Office of Science: Experimental Program to Stimulate Competitive Research—Implementation Awards

Health and Human Services

- Jan 11 NIH: Partners in Research Program
- Jan 14 NIH: Development of High-Resolution Probes for Cellular Imaging
- Jan 18 NIGMS: Support of Competitive Research (various areas)
- Jan 25 NCI: Cancer Education and Career Development
- Jan 25 NEI: Translational Research on Therapy for Visual Disorders
- Jan 25 NIAID: Science Education Awards
- Jan 25 NICHD: Developmental Mechanisms of Human Structural Birth Defects
- Jan 25 NIH: Collaborative Neurological Sciences Award
- Jan 25 NIH: Translational Research for the Prevention and Control of Diabetes and Obesity
- Jan 25 NINDS: Institutional Center Core Grants to Support Neuroscience Research

National Science Foundation

- Jan 07 OCI: Sustainable Digital Data Preservation and Access Network Partners
- Jan 08 BIO, GEO, SBE: Dynamics of Coupled Natural and Human Systems

NSF cont.

- Jan 08 HER: Research and Evaluation on Education in Science and Engineering
- Jan 09 BIO: Opportunities for Promoting Understanding Through Synthesis; Population and Evolutionary Processes; Systematic Biology; Ecosystem Science
- Jan 10 EHR: Course, Curriculum, and Laboratory Improvement
- Jan 10 MPS: Instrumentation for Materials Research
- Jan 11 OPP: Postdoctoral Fellowships in Polar Regions Research
- Jan 12 BIO: Behavioral Systems; Developmental Systems; Neural Systems; Physiological and Structural Systems; Cluster for Biomolecular Systems
- Jan 13 MPS: Mathematical Biology
- Jan 14 BIO: Grants to Broaden Participation in the Biological Sciences
- Jan 14 SBE: Cognitive Neuroscience
- Jan 15 SBE: Developmental and Learning Sciences: A Multidisciplinary Program of the Children's Research Initiative
- Jan 15 SBE: Social Psychology; Cultural Anthropology; Perception, Action, and Cognition; Law and Social Science; Political Science; Linguistics
- Jan 16 GEO: Sedimentary Geology and Paleobiology; Geomorphology and Land Use Dynamics; Geobiology and Low-Temperature Geochemistry
- Jan 16 SBE: Methodology, Measurement, and Statistics
- Jan 17 CISE: Software for Real-World Systems
- Jan 18 SBE: Economics
- Jan 20 MPS: Program for Research and Education with Small Telescopes
- Jan 21 BIO: Plant Genome Research
- Jan 22 MPS: Chemistry Research Instrumentation and Facilities: Instrumentation Development

Transportation

- Jan 18 Federal Highway Administration: Exploratory Advanced Research

Other Agencies**American Diabetes Association**

- Jan 15 Awards: Career Development; Junior Faculty; Research; Innovation; and Young Investigator Innovation in Geriatric Endocrinology

American Heart Association

- Jan 15 National Scientist Development Grants
- Jan 15 Fellow-to-Faculty Transition Grants

American Otological Society

- Jan 31 Research Grants

CEC ArtsLink

- Jan 15 Artslink Project (support to work with counterparts in Central Europe, Russia, and Eurasia)

Fox Foundation for Parkinson's Research

- Jan 24 Therapeutics Development Initiative

Kosciuszko Foundation

- Jan 16 Graduate Study and Research in Poland

Kress Foundation

- (European Art)
- Jan 15 Old Masters in Context

McKnight Endowment for Neuroscience

- Jan 02 McKnight Scholar Award

National Pancreas Foundation

- Jan 11 Research Grants

Newberry Library

- Jan 06 NEH Fellowships

AWARDS PROCESSED

Externally funded grants and contracts processed during October 2007

Title	Investigator(s)	Department(s)	Agency	Award
Research Awards				
*Investigating Fluorescence Resonance Energy Transfer in Conjugated Liposomes	P. Kohli	Chemistry	USDHHS/NIH	\$216,750
*Nanostructured Fuel Cell Catalysts with Molecularly Engineered Size, Shape, and Composition	L. Wang	Chemistry	State University of New York (NSF)	\$20,000
Evaluating Alternatives for Watershed-Scale Design of BMPs	J. Nicklow	Civil Engineering	National Institute of Water Resources (USDI/USGS)	\$46,056
*Biotechnology Support at the Illinois Soybean Center	J. Russin	College of Agricultural Sciences	Illinois Soybean Association	\$20,000
Distributed Computational Monitoring and Steering System	M. Zhu	Computer Science	USDOE/Oak Ridge National Laboratory	\$15,000
Determining Food Resources and Estimating Habitat Carrying Capacity for Wintering and Spring Staging American Black Ducks in Chesapeake Bay, VA	M. Eichholz	Cooperative Wildlife	Ducks Unlimited	\$70,764
Determining Food Resources and Estimating Habitat Carrying Capacity for Wintering and Spring Staging American Black Ducks in Chesapeake Bay, VA (supplement)	M. Eichholz	Cooperative Wildlife	Ducks Unlimited	\$18,855
*The Impact of Predator Reduction on Reproductive Investment and Success of Ground-Nesting Ducks	M. Eichholz	Cooperative Wildlife	Delta Waterfowl and Wetland Foundation	\$14,730
Cooperative Fur-Bearing and Non-Game Mammal Investigations	E. Hellgren C. Nielsen E. Schaubert J. Nawrot	Cooperative Wildlife Cooperative Wildlife Cooperative Wildlife Cooperative Wildlife	IDNR (USDI/USFWS)	\$149,971
*Prototype to Estimate Location of an RF Signal Source	S. Tragoudas W. Osborne F. Harackiewicz	Electrical and Computer Engineering College of Engineering Electrical and Computer Engineering	U.S. Navy/Naval Surface Warfare Center	\$30,000

Title	Investigator(s)	Department(s)	Agency	Award
*Development of a Genetic Management Plan for Captive Reared Broodstock Currently Held at Gavins Point National Fish Hatchery	E. Heist	Fisheries Center	Western Area Power Administration (USDI/USFWS)	\$33,324
*Reducing Unexplained Toxicity to Protect Sediment Quality Associated with Irrigated Agriculture	M. Lydy	Fisheries Center	University of California, Berkeley	\$200,000
*Evaluating Watershed Health Risks Through Integrated Water Quality Analyses, Community Capacity Assessments, and Outreach Appraisals	M. Davenport J. Schoonover K. Williard E. Seekamp	Forestry Forestry Forestry Forestry	USDA/CSREES	\$575,000
McIntire-Stennis: Administration FY 2007	J. Phelps	Forestry	USDA/CSREES	\$568
*Evaluation and Management of Surface Hydrology, Erosion, and Sedimentation Associated with Tracked and Wheeled Vehicle Training at Ft. Knox, KY - Phase 1	K. Williard J. Schoonover J. Groninger J. Zaczek C. Ruffner	Forestry Forestry Forestry Forestry Forestry	ICI Services (USDOD)	\$250,000
Evaluation and Management of Surface Hydrology, Erosion, and Sedimentation Associated with Tracked and Wheeled Vehicle Training at Ft. Knox, KY - Phase 1 (supplement)	K. Williard J. Schoonover J. Groninger J. Zaczek C. Ruffner	Forestry Forestry Forestry Forestry Forestry	ICI Services (USDOD)	\$39,348
*Using Foraminifera to Resolve the Neogene History of Southern McMurdo Sound	S. Ishman	Geology	University of Nebraska (NSF, ANDRILL)	\$49,713
ICCI Coal Research Administration	K. Tucker	Illinois Clean Coal Institute	IDCEO/ICCI	\$645,542
ICCI Coal Research Program	K. Tucker	Illinois Clean Coal Institute	IDCEO/ICCI	\$2,634,069
*Real-Time Monitoring of Crop Canopy Temperatures in a Agricultural Field Using a Wireless Mesh Network of Infrared Thermocouple Sensors	M. Hebel	Information Systems and Applied Technologies	USDA	\$13,000
Insulin Signaling Gene Expression in Long-Lived Mice (FY 2007)	A. Bartke	Medicine	USDHHS/NIH	\$277,040
Insulin Signaling Gene Expression in Long-Lived Mice (FY 2008)	A. Bartke	Medicine	USDHHS/NIH	\$278,038
Interaction of Caloric Restriction with Longevity Genes	A. Bartke	Medicine	USDHHS/NIH/NIA	\$309,332
Interaction of Caloric Restriction - Diversity Supplement	A. Bartke	Medicine	USDHHS/NIH	\$33,355

Title	Investigator(s)	Department(s)	Agency	Award
Role of Estrogen on Lipid Internalization in Neurons	X. Cheng	Neurology	IDPH	\$70,000
Neuroprotection in Parkinson Disease: Clinical Center Grant	R. Elble	Neurology	USDHHS/NIH/NINDS	\$101,520
Combinatorial Process Development for the Synthesis of Novel Nano-Textured and Ultra-Hard Films	S. Aouadi P. Kohli	Physics Chemistry	NSF	\$12,000
Value-Added Products from FDG Sulfite-Rich Scrubber Materials	V. Malhotra	Physics	USDOE	\$20,000
*Maternal Consumption of Diets Sweetened with High-Fructose Corn Syrup and Offspring Susceptibility to Diet-Induced Obesity	A. Strader	Physiology	North American Association for the Study of Obesity	\$25,000
*Coastal Transitions at Grand Bay NERR: Effects of Sea Level Rise and Hurricanes	L. Battaglia	Plant Biology	Louisiana State U (USDOC/NOAA)	\$5,008
Application of Biotechnology to SCN: Disease Resistance Genes Team	K. Meksem	Plant, Soil, & Ag Systems	United Soybean Board	\$237,352
*Bridge Support for Soybean Genetics and Breeding at SIUC	J. Russin B. Klubek	Plant, Soil, & Ag Systems Plant, Soil, & Ag Systems	Illinois Soybean Association	\$23,715
*STAPLE-2 Pivotal Study of Aptus Endovascular AAA Repair System	K. Hodgson	Surgery	Aptus Endovascular	\$48,750
*Safety of Roal UT-15C Sustained Release Tablets for Critical Limb Ischemia	C. Johnson	Surgery	United Therapeutics	\$15,000
*TRC Autologous Bone Marrow Cells in Patients with Peripheral Arterial Disease to Treat Critical Limb Ischemia	C. Johnson	Surgery	Aastrom Biosciences	\$80,040
*Think First Injury Prevention Program	M. Reed	Surgery	IDOT	\$282,558
*Collaborative Research: Using Catastrophic Amphibian Declines to Quantify the Ecological Consequences of Extinction	M. Whiles K. Lips	Zoology Zoology	NSF	\$264,901
Training Awards				
IYC - Harrisburg Clinical Psychology Program	S. Dollinger	Psychology	IDOC	\$32,688
Behavioral Consultant Group	M. Dixon	Rehabilitation Institute	Center for Comprehensive Services	\$73,940

Title	Investigator(s)	Department(s)	Agency	Award
Other Awards				
*Honor and Sacrifice: The Illinois Delta Remembers World War II	V. Devenport J. Tichenor	Broadcasting Service Broadcasting Service	WETA	\$3,000
*Ready To Learn Outreach Station Grant	E. Spezia C. Isberner	Broadcasting Service Broadcasting Service	Corporation for Public Broadcasting (USED)	\$160,000
WSIU-TV Community Service Grant	J. Williams R. Dillard	Broadcasting Service Broadcasting Service	Corporation for Public Broadcasting	\$32,500
*WSIU FM PTFP Grant for Standby Generator/HVAC/Electrical at Carbondale Radio Transmitter Site	J. Williams D. Kerstein	Broadcasting Service Broadcasting Service	USDOC/NTIA/Public Telecommunications Facilities Program	\$63,035
Southwestern Illinois Regional Occupant Protection Resource Center FY 2008	R. Walker	Health Education and Recreation	IDOT (USDOT)	\$104,732
Adult Education and Family Literacy and EL/Civics - Federal Basic	K. Humphreys D. Shelton	Rehabilitation Institute Rehabilitation Institute	ICCB (USED/ISBE)	\$75,240
Adult Education and Family Literacy and EL/Civics - State Performance	K. Humphreys D. Shelton	Rehabilitation Institute Rehabilitation Institute	ICCB (USED/ISBE)	\$26,219
Adult Education and Family Literacy and EL/Civics - Public Assistance	K. Humphreys D. Shelton	Rehabilitation Institute Rehabilitation Institute	ICCB (USED/ISBE)	\$32,358
Adult Education and Family Literacy and EL/Civics - State Basic	K. Humphreys D. Shelton	Rehabilitation Institute Rehabilitation Institute	ICCB (USED/ISBE)	\$711,608
EDC Third Party Agreement	D. Shelton	Rehabilitation Institute	IDHS (USED)	\$14,963
*Instructional Services Agreement - Florida Coastal	P. Alexander	School of Law	Florida Coastal School of Law	\$165,825
Illinois Agriculture Mediation Program	M. Rudasill	School of Law	USDA/Farm Services Administration	\$34,000
*Legal Services for Older Persons	M. Rudasill	School of Law	Egyptian Area Agency on Aging (USDHHS)	\$52,016
Integrated Assessment Program	M. Miah	Social Work	IDCFS	\$5,279
*Verizon Foundation Thinkfinity State Rollout Partnership	R. Woodhull D. Potts	Workforce Education Workforce Education	Verizon Foundation	\$58,600

*indicates new award

Awards Processed During October 2007 (55) \$8,772,302

Summary of Fiscal Year 2008 Awards Received to Date

excludes Financial Aid Office awards

	Fiscal Year 2008 Awards as of October 2007		Fiscal Year 2007 Awards as of October 2006	
Research	(121)	\$14,625,965	(111)	\$11,499,456
Training	(16)	\$720,277	(22)	\$2,294,396
Other	(56)	\$12,992,421	(54)	\$13,803,447
Federal	(62)	\$11,733,155	(46)	\$8,693,384
State	(58)	\$9,358,218	(82)	\$12,014,288
Industry	(14)	\$722,955	(13)	\$462,353
Foundation	(22)	\$950,631	(15)	\$668,533
Other	(37)	\$5,573,705	(31)	\$5,758,741
TOTAL	(193)	\$28,338,664	(187)	\$27,597,299

ORDA DIRECTORY of ASSISTANCE

www.siu.edu/orda • Woody Hall C-206 • phone: 453-4540 • fax: 453-8038 • mailcode: 4709 • orda@siu.edu
Prudence M. Rice, Director, 453-4531, pmrice@siu.edu

FUNDING OPPORTUNITIES & RESEARCH MATTERS

- Joel Fritzler, 453-4530, jcfritz@siu.edu

ORDA PUBLICATIONS & WEB SITE

• Marilyn Davis, 453-4540, mdavis@siu.edu
See www.siu.edu/orda/reports for a list of print and electronic publications. A comprehensive Sponsored Project Guide is online at www.siu.edu/orda/guide.

PROPOSAL SUBMISSION & GRANT MANAGEMENT

(workshops, consultation on proposal writing and budget preparation, proposal review and submission, grant award negotiation, account set-up, time extensions, rebudgeting, etc.)

- **Affirmative Action, Ctr. for Rural Health, Liberal Arts, Library Affairs, Mass Communication and Media Arts:** Meg Martin, 453-4538, mzmartin@siu.edu
- **Agriculture, Incubator, Graduate School, Law, Medicine, Student Affairs:** Joel Fritzler, 453-4530, jcfritz@siu.edu
- **Applied Sciences, Business, Continuing Education, Education, Fisheries, Science, Wildlife:** TBA
- **Engineering:** Steve Banker, 453-4540, sbanker@siu.edu

CONTRACTS & SUBCONTRACTS, AUDITS

- Sonjie Schwartz, 453-4541, sonjie@siu.edu

INTERNAL FUNDING PROGRAMS

See www.siu.edu/orda/internal for info about the Faculty Seed Grant Program, Interdisciplinary Research Seed Grant Program, Matching Funds Program, and Travel Support Program.

RESEARCH COMPLIANCES

Projects that will involve human subjects, human stem cells, vertebrate animals, or hazardous materials require prior review and approval before they can begin.

- **Human Subjects Committee:** see www.siu.edu/orda/human, or contact the committee secretary at 453-4533.
- **Institutional Animal Care and Use Committee:** see www.siu.edu/~iacuc or contact the committee secretary at 453-4533.
- **Stem Cell Research Oversight Committee:** contact the committee secretary at 453-4533.
- **Institutional Biosafety Committee:** contact Douglas Fix, Biological Safety Officer, 453-7180, dfix@cehs.siu.edu.
- **Radiological Control Committee:** contact Matt Barnstable, Radiation Safety Officer, 536-2015, mbarnstable@cehs.siu.edu.
- **Hazardous Chemical Oversight:** contact Paul Restivo, Director, Center for Environmental Health and Safety, 453-7180, restivo@cehs.siu.edu.

REACH (UNDERGRADUATE RESEARCH PROGRAM)

- Meg Martin, 453-4538, mzmartin@siu.edu, www.siu.edu/~reach

TECHNOLOGY TRANSFER (PATENTS/COPYRIGHTS)

- Jeff Myers, 453-4556, jmyers@siu.edu, www.siu.edu/~techtransfer

RESEARCH SUPPORT FACILITIES

The facilities provide services ranging from micro-imaging to equipment fabrication. See www.siu.edu/~ovcr/support.html.

Address changes or requests for electronic subscriptions: Joel Fritzler, MC 4709, 453-4530 or jcfritz@siu.edu.
Research Matters is on ORDA's web site at www.siu.edu/orda/rm.



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