



# RESEARCH MATTERS

Editor: Joel Fritzler ♦ Office of Research Development and Administration ♦ [www.siu.edu/orda](http://www.siu.edu/orda)

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## OF SPECIAL NOTE

### NIH Applicants and Grantees: Register with eRA Commons

The National Institutes of Health will be transitioning all of its grant programs from paper to electronic submissions during the next 12 months or so. If you wait until the last minute to register with NIH, it may be too late to submit a proposal that you've spent a month preparing, so **register now**.

Grant applicants do **not** have to register with Grants.gov, which will be the starting point for electronic submissions. However, you **do need to register with eRA Commons**, the NIH electronic research administration system that allows applicants/grantees to electronically receive and transmit application and award information. To register, contact Debbie Fields, Paula Shoemaker, or Wendy Preece at ORDA, 453-4531.

### ORDA Makes Staff Change for College of Education and SouthernTECH

Rex Duncan ([rduncan@siu.edu](mailto:rduncan@siu.edu), 453-4542, Woody Hall C-217) will now be the primary ORDA contact for the College of Education and Human Services. Education faculty and staff planning to submit grant proposals should contact Rex, as should principal investigators from Education who need budget revisions, time extensions, etc., on existing grants.

Joel Fritzler ([jcfriz@siu.edu](mailto:jcfriz@siu.edu), 453-4530, Woody Hall C-215) will now be the primary ORDA contact for the SouthernTECH program through OERD.

### Limited Submissions Page Introduced

ORDA's web site now includes a page where researchers can check to see if the proposal submission limit has already been reached for grant programs that limit institutional submissions. Researchers who plan to apply to a limited-submissions program (check the guidelines!) should submit a Notification of Intent to Apply form to ORDA **no later than 30 days in advance of the agency deadline**.

Why is this advance notification necessary? If more researchers want to apply than the agency will allow, ORDA must set up a review process to select the proposals that will be submitted. Since this involves faculty or administrator review, some lead time is necessary.

The Limited Submissions page, which can be accessed via our Proposal Assistance menu or directly at [www.siu.edu/orda/general/limited.html](http://www.siu.edu/orda/general/limited.html), will list:

- each limited-submissions program for which we have received an Intent to Apply,
- the program's limit for proposals from one institution,
- the 30-day ORDA notification deadline,
- the program deadline, and

- the number of notifications received by ORDA to date.

If the number of notifications received by the 30-day deadline meets or exceeds the agency's limit, submissions will be closed. In cases where the number exceeds the limit, a review process will be set up and researchers will be notified when proposals are due to the review committee.

If the number does **not** exceed the limit by the 30-day deadline, ORDA will take any subsequent Intent to Apply forms on a first-come, first-accepted basis. When the agency limit is reached, no further notifications will be accepted and submissions will be closed. Bottom line: To **guarantee** that your proposal will be considered for submission, meet the 30-day deadline.

### Reminder for IRIS Users: Sign Up with COS

As previously mentioned in *Research Matters*, on July 1 SIUC will discontinue its subscription to the Illinois Researcher Information Service database for funding opportunities. SIUC currently subscribes to both the IRIS and COS (Community of Science) databases. Both offer similar services, but one of the advantages of COS is the ability to access the database from your home computer. If you have any questions about how to use COS ([www.cos.com](http://www.cos.com)), see our COS tutorial at [www.siu.edu/orda/external/cos\\_tutorial.html](http://www.siu.edu/orda/external/cos_tutorial.html), or contact Joel Fritzler at 453-4530 or [jcfritz@siu.edu](mailto:jcfritz@siu.edu).

### Overdue Reports Delay NSF Proposal Submissions

The National Science Foundation may delay your proposal submission if you are delinquent in submitting a progress or final report for a current award. This is not a hypothetical warning; last month ORDA received a notice from NSF that the processing of a proposal would be held up because one of the principal investigators owed NSF a Final Project Report for a prior award. So stay on top of your grant reporting requirements.

## RESEARCH DIGEST

### NIH Seeks to Speed Up Peer Review Process

—by Toni Scarpa, director of the NIH Center for Scientific Review; excerpted from *Science*, Jan. 6, 2006

The National Institutes of Health now has a \$28 billion annual budget, with more than 80% going to support outside training and research, including grants to more than 3,000 universities, medical schools, and other research institutions. These funds are allocated in a competitive process, using peer review by independent scientists to identify proposals with the most scientific merit for possible funding. It is a system revered by many, but it faces clear challenges.

Much has changed since the NIH grants program was established 60 years ago, when we received 800 grant applications. We now get ~80,000 applications a year. The NIH Center for Scientific Review (CSR) reviews and assigns priorities to two-thirds of these applications, recruiting each year more than 15,000 outside scientific experts in various specialized fields. Our regular reviewers volunteer 1 to 3 months a year to read and to assess applications. They then meet three times a year with other members of their review group to discuss and to score applications.

After an application has been assessed by the CSR-managed study section, CSR sends to the NIH institutes and centers a summary statement containing a score (and, in most cases, a percentile ranking), the peer reviewer's comments, and a résumé of review discussions. In the second level of peer review, advisory councils make funding recommendations on the basis of these summaries, taking into consideration the institute or center's scientific goals and public health needs.

Competitive pressures have pushed researchers to submit more conservative applications, and we must find ways to encourage greater risk-taking and innovation and to ensure that our study sections are

more receptive to innovative applications.

CSR has taken two steps to speed its review process. As of October 2005, we are posting summary statements of most reviews within 1 month after the study section meeting instead of 2 to 3 months after the meeting. In February 2006, we will begin a pilot study to cut 1½ months from our review process. Specifically, we will: (1) schedule study section meetings up to a month earlier; (2) provide scientists their study section scores, critiques, and panel discussion summaries within a week after the section meeting; (3) shave days from the internal steps involved in assigning proposals to study sections; and (4) extend resubmission deadlines by 3 weeks.

If the pilot succeeds, we will seek to expand it. One major step needed before expansion should be completed by October 2006, when all R01 applications must be submitted electronically. CSR also plans to test knowledge-management software for speeding the referral of applications to the appropriate NIH institute or center and to study sections. We will also seek to use this software to speed assignment of applications to reviewers. In initial tests, this software appears quite promising.

Change can be difficult when so much is at stake, but it is urgently needed. For NIH to meet its mission and for science to advance, we must work together. I encourage anyone with a good idea or suggestion to contact me at [scarpata@csr.nih.gov](mailto:scarpata@csr.nih.gov).

### Congress Joins NIH Paper Chase

—excerpted from *Science*, Jan. 6, 2006

Lawmakers are expected this year to consider whether the National Institutes of Health should require researchers to send their accepted manuscripts to a free full-text archive.

The voluntary policy, in effect since May 2005, is meant to make freely available the results of NIH-funded studies and guide NIH management. But most NIH grantees aren't cooperating, and proposed legislation could force them to. An NIH advisory panel recently recommended that NIH make submission mandatory and post

papers 6 months after publication in journals. The current guideline is 12 months. Many nonprofit publishers prefer that NIH link to the published paper online and warn that a shorter delay could doom journals and bankrupt some scientific societies.

### NIH Investigators Brace for Cuts

—excerpted from *Science*, Jan. 13, 2006

The 0.1% cut to the budget of the National Institutes of Health will soon hit investigators' bottom lines. In January, NIH decided to trim the 2006 payout for continuing grants by 2.35%, the first cut in recent memory. New grants will be funded at equivalent 2005 levels, with student and postdoc stipends mostly level.

### Accounting for Grants Amounts to More Than a Hill of Beans

—excerpted from *Science*, Jan. 13, 2006

Stalking a kidney gene defect could make Lisa Guay-Woodford a lawbreaker. Like scientists everywhere, the pediatric nephrologist at the University of Alabama knows that she can improve her chances of winning a grant from the NIH by including preliminary data in her application. But gathering those kidney data poses a dilemma. Simply put, it's against the law to apply resources from an existing grant toward a new project. And Guay-Woodford knows that the government isn't playing games. Last spring, her university paid \$3.4 million to settle allegations that it overstated how much time and effort its scientists had devoted to certain federal grants.

These and other administrative rules about how universities spend government money are intended to guard against the misuse of taxpayer dollars, and they are being enforced more firmly than ever. In the past 3 years, for example, Harvard, the Mayo Clinic, Northwestern, Cornell, and Johns Hopkins University have paid the Justice Department more than \$21 million to settle cases similar to UAB's.



“Next time could you keep a straight face when we ask for a million dollars?”

Reprinted from *The Chronicle of Philanthropy* by permission of the artist, Mark Litzler.

“There’s a dynamic tension” between accountability and intellectual freedom, says Guay-Woodford, who has \$1.5 million in NIH grants this year and runs a seven-person lab. But she worries about the future of U.S. research if the bean counters prevail.

The federal government didn’t always press scientists to follow its rules to the letter. The 1958 regulation under which time and effort reporting falls, known as circular A-21, allows for some flexibility. But federal attitudes appear to have stiffened in recent years. The process began in 2003, when Northwestern agreed to settle government claims that its scientists had spent less time than promised on federally funded research.

Federal agencies such as NIH and the NSF, which dispense billions of dollars each year in academic research grants, require applicants to estimate how much time they will spend on a particular project and, if successful, to notify the funder if their workload changes during the course of the project. In other words, a 25% commitment means 10 hours in a 40-hour workweek, or 20 hours in a scientist’s more typical 80-hour week. Because weekly schedules fluctuate, with commitments added and

dropped, schools tend to ask for records only once a quarter or even less often.

Government officials say that the accounting practices, although burdensome, are crucial. “We want to be sure that we’re getting what we’re paying for,” says Karen Tiplady, chief of the cost-analysis and audit-resolution branch at NSF. The estimates guide funding decisions by determining whether an experiment’s goals are achievable and whether a project is appealing.

For auditors, a scientist’s productivity isn’t what matters. One of the most common problems in a federal audit is a university’s failure to properly document faculty time and effort. “Compliance officer positions are probably the biggest growth industry in terms of administrative positions at major research universities,” says Tony DeCrappeo, president of the Council on Governmental Relations, which helps schools address compliance issues. Most schools, he says, “are in the process of reassessing their compliance structures.” Two common stumbling blocks are trying to separate time spent on patient care from that spent on a clinical trial and assigning to existing federal grants effort devoted to gathering preliminary data for an unfunded project.

Although some rules are bent because researchers feel they have no choice, other violations appear to be unintentional. One frequent misstep is in the denominator used to calculate time and effort. Many scientists mistakenly believe that NIH, which funds the majority of U.S. scientific research, bases its measurements on a 40-hour work-week. That assumption is not correct and making it can get universities into trouble. While some wish to de-emphasize time, the government seems to be heading in the opposite direction. The November HHS guidance appears to stress “timekeeping” more heavily than does A-21, the existing regulation. Although the guidance would be voluntary, universities are dubious that auditors will see it that way.

### **Americans Understand That STEM Education Equals Competitiveness**

—*excerpted from SSTI Weekly Digest, Jan. 16, 2006*

Americans increasingly recognize the nation’s status as the world’s economic superpower is threatened, based on research findings released by the Business Roundtable. After four months of focus groups, interviews with opinion leaders, and three national voter polls, the roundtable concluded there is widespread public recognition of the growing competitiveness crisis in this country and strong national support for policies designed to strengthen America’s capabilities in mathematics and science.

“It’s clear that we have to broaden our partnerships to move this work forward,” said Arthur Ryan, CEO of Prudential Financial, Inc., and chairman of the Roundtable’s Education & the Workforce Task Force. “It’s not sufficient for business people and educators to collaborate—we need the support of all stakeholders, including the Administration and Congress.”

The roundtable, comprised of CEOs of roughly 160 U.S. corporations, places considerable emphasis in its policy recommendations on encouraging today’s young people to pursue careers drawing on math and science skills—areas in which the

U.S. is seen to be slipping internationally. The findings also encourage increased federal support for science and technology, specifically basic research, but to a lesser degree.

More Americans believe China will be the world’s greatest economic power in 20-30 years—when children born today are beginning their professional careers. Only 26 percent of the surveyed opinion leaders and 32 percent of voters thought the U.S. would still hold this distinction. Those opinion leaders and voters selecting China for the answer numbered 39 percent and 45 percent, respectively.

Nearly two-thirds of voters believed secondary education was failing to prepare graduates for the demands of college and the working world, and 86 percent agreed that the country must increase the number of workers with a background in science and math, or else America’s ability to compete in the world economy will be severely diminished.

The project’s findings are available at [www.businessroundtable.org](http://www.businessroundtable.org).

### **Commerce Drops Plan to Limit Researchers**

—*excerpted from The Chronicle of Higher Education, Jan. 27, 2006*

To the relief of college researchers, the U.S. Commerce Department has abandoned a plan that would have restricted foreign students’ and scholars’ access to sensitive technology based on their countries of birth rather than their countries of citizenship or permanent residency.

That plan, which appeared in early versions of a proposed rule that the department is expected to issue in the coming months, could have required American colleges and universities to obtain export-control licenses for thousands more of their foreign students and researchers. The plan would have affected, for example, a Chinese-born researcher who had attained Canadian citizenship.

Export-control licenses are designed to prevent spies and terrorists from exporting sensitive technologies and equipment, or information about those technologies, to

certain “countries of concern,” like China or Iran.

Peter Lichtenbaum, assistant secretary of commerce for export administration, said the department had decided to drop the proposal to link access and birth countries after hearing from dozens of researchers in industry and academe and concluding that there was little evidence that it would significantly improve national security.

### **Congress Adopts Austere Budget for Research and Student Aid**

—*excerpted from The Chronicle of Higher Education, Jan. 6, 2006*

In a flurry of last-minute activity before its annual holiday break last December, Congress completed work on two major appropriations bills that determine how much the federal government will spend on university research and student aid. If signed into law by President Bush they will have the effect of either freezing or slightly reducing the federal government’s spending on most of its research and student-aid programs.

About the only good news for higher education contained in the bills was an appropriation of about \$200 million in relief for Louisiana and Mississippi colleges affected by last year’s hurricanes. But even that amount was about \$300 million less than what the colleges had sought.

The first of the two appropriations measures adopted, a \$602 billion spending bill for education and health programs, would have frozen spending on most federal student-aid programs and provided a small increase for NIH in the federal government’s FY06, which began October 1.

But the second measure, a defense-spending bill with various provisions unrelated to the military, called for an across-the-board cut of 1 percent to all Pentagon programs—including those that support academic research—and to all other federal programs that rely on discretionary spending, meaning that the size of their budgets is not automatically set by law. As a result of the defense-spending bill, most of the research programs covered

by the other measure would see cuts for the first time since 1982, the last time Congress did such serious belt-tightening.

Despite their strong opposition to the health-and-education appropriations bill, Senate Democrats agreed to allow it to pass on a voice vote after being convinced that the programs they favored would suffer even more under the alternative, a yearlong continuing resolution that, at best, would maintain spending on the programs at 2005 levels. The House of Representatives had already approved the bill last month by a razor-thin margin, 215 to 213.

Under the education-and-health bill, the budget for NIH, the largest source of funds for university research, would rise by only about 0.5 percent, or a net increase of \$150 million, to \$28.62 billion. That was in line with the earlier proposals by the House and Mr. Bush, but the Senate had supported an increase of \$1 billion.

However, the 1 percent cut would more than exceed the approved increase, and that had researchers worried. It would be the first reduction in the agency's appropriations since 1964. The agency is expecting to finance at least 500 fewer new grants and competitively awarded renewals in 2006 than the 10,020 given in the 2004 fiscal year.

Among other provisions, all subject to the 1 percent across-the-board cut, the health-and-education bill:

- Provides no money for NIH grants to colleges and other institutions to build research facilities. President Bush had sought \$30 million in 2006 for construction of "biocontainment" laboratories to study dangerous infectious diseases.

- Cuts by 69 percent support for the Health Professions Program, which trains students from minority groups and disadvantaged backgrounds to be physicians, dentists, and other health professionals.

- Sustains the 2005 level of funds for several other higher-education programs, including \$836.5 million for the TRIO programs for disadvantaged students; \$306.5 million for Gear Up, which helps low-income elementary and secondary students prepare for and attend college; and \$990.3 million for federal work-study.

- Spends \$184 million, an increase of

\$5.4 million, or 3 percent, on the Education Department's Math and Science Partnerships. That program provides money to math and science faculty members at colleges to train school teachers to improve their instruction and knowledge in those fields.

The defense-appropriations bill calls for overall Pentagon spending on both regular, merit-reviewed basic research projects and for Congressional earmarks for basic research to dip to \$1.5 billion in 2006, a cut of 1.4 percent from 2005. Basic research involves fundamental studies in science and engineering, and about 60% of the military's basic-research money goes to universities. The Defense Dept is the third-largest source of funds for academic research, behind the National Institutes of Health and the National Science Foundation. The Pentagon also provides money for applied research and technology development, but only a small portion of that money goes to colleges; the rest is for corporations and government labs. That spending, combined with the basic-research category, would total \$13.41 billion in 2006, 0.7 percent above 2005. Basic-research spending would amount to 11 percent of that total in 2006.

Ten million dollars in the bill would go to the U.S. Dept of Education to be distributed to colleges that accepted students displaced by the hurricane and did not charge them tuition.

### Engineered Numbers?

—excerpted from *Science*, Jan. 6, 2006

A new study suggests that data used to bolster claims that the U.S. is losing its technological edge over other countries are off the mark. It has been widely quoted that the U.S. awards only 70,000 B.S. engineering degrees each year, whereas India churns out 350,000 and China 650,000. The National Research Council cited the numbers in a recent report on the U.S. need to beef up its scientific talent pool, and senators flogged them last month in introducing a bill to increase U.S. support for science. But a group at Duke University group led by sociologist

Gary Gereffi and high tech entrepreneur Vivek Wadhwa suggests that any degree disparity may actually favor the U.S.

After much legwork, the researchers obtained degree data from India's National Association of Software and Service Companies, China's Ministry of Education, and individual universities in both countries. The numbers, it turned out, include information technology and computer science degrees, as well as graduates of 2- and 3-year programs. When the researchers broadened the U.S. definition of engineering degrees accordingly, the U.S. total grew threefold, to 221,000 degrees ([memp.pratt.duke.edu/outourcing](http://memp.pratt.duke.edu/outourcing)). The group also found that India's figures double-counted many students and were based on estimated enrollments, suggesting that 215,000 would be more accurate.

A revised per capita comparison gives the U.S. a considerable lead over both countries. Gereffi says that the data don't change the fact that the U.S. should be concerned about its competitiveness. "I'm not saying we don't have a problem," he says. "All we wanted to do is set the record straight."

### System for Transcontinental Research Could Be Prototype

—excerpted from *The Chronicle of Higher Education*, Jan. 27, 2006

Researchers in California and Maryland announced last week that they planned to build a state-of-the-art computerized system for transcontinental collaborations by scientists studying microbes in the ocean. Scientists involved in the project said it may serve as a prototype for online collaborations in many scientific disciplines. The Gordon and Betty Moore Foundation has awarded \$24.5 million over five years to create the system, called the Community Cyberinfrastructure for Advanced Marine Microbial Ecology Research and Analysis, or CAMERA.

CAMERA will use fiber-optic circuits and supercomputing techniques to link the J. Craig Venter Institute, in Rockville, Md., with the Scripps Institution of Oceanography at the University of California at San

Diego. Researchers at the Venter Institute, who specialize in genetic research, will be able to analyze vast databases on marine life held at Scripps as quickly and easily as if the Maryland researchers worked on the San Diego campus, said Larry Smarr, director of the California Institute for Telecommunications and Information Technology, a joint venture of the University of California's campuses in Irvine and San Diego. He is one of the leaders of the project.

Generally, researchers who try to perform such long-distance work are hampered by the limited speed of Internet connections, Mr. Smarr said. Although campus computers and online research instruments have become quite sophisticated, the limited capability of connections between campuses often stymies online research, he said. "Our scientists are increasingly isolated from each other and research instruments and databases," he said. By relying on the National LambdaRail academic fiber-optic network and other fiber-optic lines, CAMERA will offer links as much as 100 times as fast as those on the conventional Internet, Mr. Smarr said.

With CAMERA, the researchers will be able to compare the genetic codes of hundreds or thousands of marine microbes, a task that is not feasible with ordinary computing systems, said J. Craig Venter, president of the Venter Institute. Moreover, the researchers will be able to take into consideration the ocean conditions—such as water temperature, salinity, and acidity—at the location where each microbe lives, in order to better understand ocean ecology, he said. Those measurements were made around the world by Venter Institute scientists, in a project to conduct the first large-scale genetic study of ocean microbes.

CAMERA will also include high-quality video for researchers to use in online conferencing. The goal, Mr. Smarr and Mr. Venter said, is for researchers at the Venter Institute and in San Diego to collaborate as if they were in the same room. "The key challenge in science is good communication," said Mr. Venter. "When you're 3,000 miles apart, telephone conferencing doesn't work very well."

## FUNDING OPPORTUNITIES

*For more information about these programs, contact Joel Fritzler, ORDA information specialist, at 3-4530 or jcfritz@siu.edu.*

### Robert Wood Johnson: Interdisciplinary Research in Health Policy

The Robert Wood Johnson Foundation's Investigator Awards in Health Policy Research program supports a diverse mix of investigators—from those early in their careers to distinguished senior scholars—to undertake studies that explore the underlying values, historical evolution, and interplay among the social, economic, and political forces that shape health, health care, and health policy in the United States; apply new perspectives from a variety of disciplines to analyze the organization, delivery, and financing of health care services, workforce issues, and public health challenges; develop innovative ideas that hold promise for contributing to better policymaking; and synthesize existing work in ways that expose its policy significance and advance the understanding of key issues.

Applications are welcomed from investigators in fields such as anthropology, business, demography, economics, engineering, ethics, genetics, health and social policy, history, journalism, law, medicine, nursing, political science, public health, psychology, science policy, social work, and sociology. The program seeks a diverse group of applicants, including minorities and individuals in non-academic settings.

The program will provide 24- to 36-month grants of up to \$275,000 to up to 10 highly qualified individuals. For more information about this program, see [www.rwjf.org/applications/program/cfp.jsp?ID=19304](http://www.rwjf.org/applications/program/cfp.jsp?ID=19304) or contact Lynn Rogut (732-932-3817, [depdir@ifh.rutgers.edu](mailto:depdir@ifh.rutgers.edu)).

**DEADLINE:** March 29

### NSF: Mathematical Social and Behavioral Sciences

For its program "Mathematical Social and Behavioral Sciences: Facilitating Research Interactions Between the Mathematical and Statistical Sciences and the Social, Behavioral, and Economic Sciences," the National Science Foundation is soliciting research proposals for projects to advance the mathematical or statistical foundations of research in the social, behavioral, or economic sciences.

The resulting research is expected both to further understanding of social and/or behavioral science phenomena and to address a topic of interest to the mathematical sciences. Proposals for workshops or symposia that foster the interaction of social, behavioral, and/or economic scientists with mathematicians and/or statisticians also are welcome.

It is estimated that 9 to 18 awards will be made from an anticipated funding amount of \$4.5 million. For more information about this program, see [www.nsf.gov/pubs/2006/nsf06531/nsf06531.htm](http://www.nsf.gov/pubs/2006/nsf06531/nsf06531.htm) or contact Giles Auchmuty (703-292-8584, [gauchmut@nsf.gov](mailto:gauchmut@nsf.gov)) or Cheryl Eavey (703-292-7269, [ceavey@nsf.gov](mailto:ceavey@nsf.gov)).

**DEADLINE:** April 20

### American Legacy Foundation: Reducing Tobacco Use

Established as part of a settlement agreement between 46 states and a group of tobacco companies, the American Legacy Foundation ([www.americanlegacy.org](http://www.americanlegacy.org)) seeks to reduce tobacco usage in the United States. The organization's two goals are arming all young people with the knowledge and tools to reject tobacco, and eliminating disparities in access to tobacco prevention and cessation services.

Through its Small Innovative Grants Program, the foundation supports projects that advance creative, promising solutions based on sound principles of tobacco control to remedy the harm caused by tobacco use. The program is designed to seed new projects or enable an organization to pilot a new idea or approach.

The foundation issues renewable grants of up to \$100,000 for the first year of funding. Upon invitation, grantees may apply for a second year of funding for up to 50% of the amount awarded in the first year. Grantees must provide a 1:1 cash match for second-year funding.

For more information about this program, see [www.americanlegacy.org/americanlegacy\\_file\\_persistence/SIGletterofintentguidelines.doc](http://www.americanlegacy.org/americanlegacy_file_persistence/SIGletterofintentguidelines.doc) or contact Karen Martin (202-454-5555, [Grantsinfo@americanlegacy.org](mailto:Grantsinfo@americanlegacy.org)).

**DEADLINE:** Feb. 15

### NIH: Interdisciplinary Research Consortiums

The National Institutes of Health is inviting preapplications for its Interdisciplinary Research Consortium program, whose goal is to support approaches to solving significant and complex biomedical problems, particularly those that have been resistant to traditional approaches. Proposed consortiums must hold the promise of leading to new research approaches to improving human health, including not only new methodological or technical approaches, but new intellectual frameworks.

Biomedical research often involves participation by other scientific disciplines, including the behavioral, quantitative, social, computational/information, engineering, and physical sciences. Distinct disciplinary perspectives represent significant sources of strength to the overall research enterprise because each discipline has its own intellectual history, experimental and analytic approaches, and theoretical context that produce a unique way of thinking about a problem. NIH has developed many initiatives, mechanisms, and programs to support either disciplinary or multidisciplinary research (where multidisciplinary research is defined as bringing together different disciplines to focus on a circumscribed problem, but keeping the disciplines distinct).

As part of the NIH Roadmap, a program to support exploratory centers for interdisciplinary research was initiated in FY2004.

This announcement is the beginning of the program for creating full interdisciplinary research consortiums. Rather than limit participation in this second program to the funded exploratory centers, any research team will be allowed to apply for an interdisciplinary consortium.

A technical assistance workshop to present information about the program will be held at noon CST on Friday, Feb. 10. Potential applicants will be able to view the workshop online at [videocast.nih.gov](http://videocast.nih.gov).

The remaining timeline for the program is:

- Apr. 18: Pre-applications due
- October: Invitations for full applications issued
- Dec. 19: Full applications due
- Sept. 2007: Awards announced

For more information about this program, see [grants.nih.gov/grants/guide/pa-files/PAR-06-122.html](http://grants.nih.gov/grants/guide/pa-files/PAR-06-122.html) or contact Greg Farber (301-435-0778, [farberg@mail.nih.gov](mailto:farberg@mail.nih.gov)).

**DEADLINE:** April 18

### DOE: Hydrogen Fuel Cell Technology

The U.S. Department of Energy is seeking to develop a durable, direct hydrogen fuel cell power system that reaches a peak efficiency of 60% and has a power density of 650 W/L, a specific power of 650 W/kg, and a cost of \$45/kW by 2010 (\$30/kW by 2015). Additional technical performance and cost targets have been developed for components and sub-systems that comprise a complete fuel cell system. The research and development sought through this funding announcement will be focused on advancing fuel cell technology towards the 2010 technical performance and cost targets developed through the FreedomCAR and Fuel Partnership and detailed in the DOE Hydrogen, Fuel Cells, and Infrastructure Technologies Program Multi-Year RD&D Plan (MYPP). The technologies must be scalable to be suitable across the spectrum of vehicle platforms.

It is estimated that 15 awards will be made from an anticipated funding amount of up to \$100 million. For more

information about this program, see [www.eere.energy.gov/hydrogenandfuelcells/program\\_solicitations.html#fcrd](http://www.eere.energy.gov/hydrogenandfuelcells/program_solicitations.html#fcrd) or contact Tammie Lawler at [fuelcells@go.doe.gov](mailto:fuelcells@go.doe.gov).

**DEADLINES:** Letters of Intent—Feb. 28; Full Applications—April 5

### APS: Interdisciplinary Field Research

The American Philosophical Society's Lewis and Clark Fund for Exploration and Field Research Fund supports exploratory field studies leading to the collection of specimens and data, and providing the imaginative stimulus that accompanies direct observation. Applications are invited from disciplines with a large dependence on field studies, such as archaeology, anthropology, astrobiology and space science, biology, ecology, geography, geology, and paleontology, but grants will not be restricted to these fields.

Grants will be available to graduate students, postdoctoral students, junior and senior scientists, and social scientists who wish to participate in field studies for their theses or for other purposes.

For more information about this program, see [www.amphilsoc.org/grants/lewisandclark.htm](http://www.amphilsoc.org/grants/lewisandclark.htm) or contact Linda Musumeci (215-440-3429, [LMusumeci@amphilsoc.org](mailto:LMusumeci@amphilsoc.org)).

**DEADLINE:** March 15

### Illinois EPA: Nonpoint Source Pollution Control

Grants are available to local units of government and other organizations to protect water quality in Illinois. Projects must address water quality issues relating directly to nonpoint source pollution. Funds can be used for the implementation of watershed management plans, including the development of information/education programs, and for the installation of best management practices.

Illinois EPA receives these funds through Section 319 of the Clean Water Act and administers the program within

Illinois. The maximum federal funding available is 60 percent. The program period is two years unless otherwise approved.

For more information about this program, see [www.epa.state.il.us/water/watershed/forms/nonpoint-financial-assistance.pdf](http://www.epa.state.il.us/water/watershed/forms/nonpoint-financial-assistance.pdf) or call 217-782-3362.

**DEADLINE:** Applications will be accepted June 1 through Aug. 1

### U.S. Institute of Peace: Conflict Resolution

The United States Institute of Peace, which promotes the prevention, management, and peaceful resolution of international conflicts, is accepting applications for grants. Grants of up to \$45,000 will be awarded to projects in the following two categories: (1) electoral politics and Islamist political parties and groups in Muslim-majority countries; and (2) the promotion of private-sector development in countries that have experienced violent conflict.

For additional information about this program, see [www.usip.org/grants](http://www.usip.org/grants) or contact the USIP (202-429-3842, [grants@usip.org](mailto:grants@usip.org)).

**DEADLINE:** March 1

### Canon: National Parks Science Scholars Program

The Canon National Parks Science Scholars Program will award eight \$80,000 scholarships in 2006 to Ph.D. students to conduct research critical to conserving the national parks of the region. Projects in the biological, physical, social and cultural sciences are eligible, as well as projects in a new category: technology innovation in support of conservation science.

The program is a collaboration among Canon U.S.A. Inc., the American Association for the Advancement of Science, and the U.S. National Park Service. For more information, see [www.nature.nps.gov/canonscholarships](http://www.nature.nps.gov/canonscholarships) or contact Gary Machlis ([gmachlis@uidaho.edu](mailto:gmachlis@uidaho.edu), 208-885-7054).

**DEADLINE:** May 3

## GRANT DEADLINES

*March and April 2006*

*Information on many of the following programs is available from the Community of Science grants database at [www.cos.com](http://www.cos.com). For web links to programs, contact Joel Fritzler at [jcfritz@siu.edu](mailto:jcfritz@siu.edu) or see the "External Funding" pages on ORDA's web site. **Note:** Proposals with signatures should be submitted to ORDA at least two working days before they must be mailed to the agency.*

### March 2006

#### Federal

##### Agriculture

- Mar 01 Suborganismal Biology and Genomics of Arthropods and Nematodes
- Mar 02 Microbial Genome Sequencing
- Mar 13 Emerging Markets Program
- Mar 20 Conservation Innovation

##### Defense

- Mar 01 DARPA: Learning Locomotion
- Mar 09 ESTCP: Environmental Security Technology
- Mar 14 DARPA: Transfer Learning
- Mar 16 DARPA: Global Autonomous Language Exploitation
- Mar 16 SERDP: Ecosystem Risk and Recovery Assessment for Contaminated Sediments
- Mar 16 SERDP: Improved Understanding of Remediation Performance in Fractured Geological Settings
- Mar 16 SERDP: Identification of Biomarkers to Assess Groundwater Contaminant Degradative Potential of a Microbial Population
- Mar 16 SERDP: Improved Sampling Techniques for Efficient Use of Molecular Biological Tools to Assess Groundwater Remediation
- Mar 16 SERDP: Assessing Human Annoyance Due to Military Noise

#### Energy

- Mar 01 Research in High Energy Density Physics Using the ATLAS Pulsed Power Facility

#### EPA

- Mar 03 Strategic Agricultural Initiative/Food Quality Protection Act—Region 9

#### Health and Human Services

- Mar 01 HRSA: Research on Emergency Medical Services for Children
- Mar 01 NIH: Mentored Quantitative Research
- Mar 01 NCI: Established Investigator Awards in Cancer Prevention and Control
- Mar 10 NHLBI: Cardiovascular Cell Therapy Research Network
- Mar 10 NHLBI: Exploratory Program in Systems Biology
- Mar 15 NEI: Nanomedicine Development Centers
- Mar 16 NIH: Obese and Diabetic Intrauterine Environment: Long-Term Metabolic or Cardio Consequences in Offspring
- Mar 19 CDC: Using Technology to Augment the Effectiveness of Parenting Programs in the Prevention of Child Maltreatment
- Mar 20 NCI: Small Grants Program for Cancer Epidemiology
- Mar 22 NCI: Cancer Prevention Research Small Grant Program
- Mar 22 NCR: Shared Instrumentation
- Mar 28 NIMH: Interdisciplinary Development Science Centers for Mental Health

#### Justice

- Mar 07 Evaluation of Technologies

#### Library of Congress

- Mar 01 American Folklife Center: Blanton Owen Fund for Fieldwork

#### National Archives and Records Administration

- Mar 01 Herbert Hoover Travel Grant
- Mar 15 O'Donnell Grant (George Bush Library)

**National Archives cont.**

- Mar 15 Research Travel (Gerald Ford Library)  
 Mar 15 Various Awards (John F. Kennedy Library)

**National Endowment for the Arts**

- Mar 01 Fellowships for Creative Writers

**National Science Foundation**

- Mar 01 ENG: Fluid and Particle Processes; Thermal Systems; Chemical Reaction Processes  
 Mar 01 Chemistry Research Instrumentation and Facilities: Cyberinfrastructure  
 Mar 02 BIO: Microbial Genome Sequencing  
 Mar 02 CISE: Networking Technology and Systems  
 Mar 06 CISE: Cyber Trust  
 Mar 13 EHR: Instructional Materials Development  
 Mar 15 GEO: Carbon and Water in the Earth System  
 Mar 24 Ethics Education in Science and Engineering  
 Mar 27 Assembling the Tree of Life  
 Mar 29 Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences

**Smithsonian Institution**

- Mar 01 Baird Society (History—Architecture, Art, Business, Science and Technology)  
 Mar 01 Dibner Library of the History of Science and Technology

**United States Institute of Peace**

- Mar 01 Private Sector Economic Recovery in Countries Emerging from Violent Conflict  
 Mar 01 Electoral Politics and Islamist Political Parties and Groups in Muslim Majority Countries

**Other****American Alpine Club**

- Mar 01 Research Grants

**American Educational Research Association**

- Mar 01 Research Grants

**American Foundation for AIDS Research**

- Mar 07 Exploring the Potential for HIV Eradication

**American Health Information Management Association**

- Mar 24 Research Grants-in-Aid

**American Historical Association**

- Mar 01 Fellowship in Aerospace History

**American Library Association**

- Mar 31 Ingenta Research

**American Parkinson Disease Association**

- Mar 01 Research Grants

**American Philosophical Society**

- Mar 01 Various Research Grants

**American Psychological Association**

- Mar 01 Various Grants

**American Society of Nephrology**

- Mar 10 Junior Development Grant in Geriatric Nephrology  
 Mar 10 Various Research Grants  
 Mar 15 Scherbenske Research Grant

**American Statistical Association**

- Mar 03 ASA/NSF-SRS Research

**Borchard Foundation Center on Law and Aging**

- Mar 01 Research Grants

**Brain Tumor Society**

- Mar 16 Basic Science Brain Tumor Research

**Breast Cancer Campaign**

- Mar 29 Small Pilot Grants

**Center for the Business of Government**

- Mar 01 Research Stipends

**Creative Capital Fund**

- Mar 14 Visual and Media Arts

**Ellison Medical Foundation**

- Mar 02 New Scholar in Aging Program  
 Mar 09 Senior Scholar in Aging Program

**Eye Bank Association of America**

- Mar 06 Eye Banking/Corneal Transplantation Research

**Fats and Proteins Research Foundation**

- Mar 15 Fats and Proteins Projects

**Foundation Fighting Blindness**

- Mar 15 Grants

**Glaucoma Foundation**

- Mar 01 Grants

**Robert Wood Johnson Foundation**

- Mar 07 Healthy Eating Research: Building Evidence to Prevent Childhood Obesity  
 Mar 29 Health Policy Research

**Juvenile Diabetes Research**

- Mar 17 Innovative Grants

**Leukemia & Lymphoma Society**

- Mar 01 Translational Research

**Milheim Foundation for Cancer Research**

- Mar 15 Grants

**NASDAQ Educational Foundation**

- Mar 01 Grants

**National Brain Tumor Foundation**

- Mar 04 Various Research Grants

**National Council for the Social Studies**

- Mar 21 Grants for the Enhancement of Geographic Literacy

**National EpiFellows**

- Mar 21 Research Grants (Epilepsy)

**National Parkinson Foundation**

- Mar 14 Research Grants

**Nevada Humanities Committee**

- Mar 10 Research Grants

**Pfizer, Inc.**

Mar 17 Atorvastatin Research Awards

**Princess Grace Foundation**

Mar 31 Playwriting and Theater Grants

**Sage Foundation**

(Social Sciences)

Mar 10 Research Grants

**Sinfonia Foundation**

(American Music)

Mar 01 Research Grants

**Sontag Foundation**

(Brain Cancer Research)

Mar 21 Distinguished Scientist Award

**United States Golf Association**

Mar 17 Turfgrass and Environmental Research

**United States Poultry and Egg Association**

Mar 31 Poultry Protein and Fat

**Voice Foundation**

Mar 14 New Investigator Research

**White House Historical Association**

Mar 01 Research Grants

**Woodrow Wilson International Center for Scholars**Mar 01 Short-Term Grants  
(East European Studies)**April 2006****Federal****Agriculture**

Apr 30 Grazing Lands Conservation Initiative

**Defense**

Apr 06 DARPA: Brood of Spectrum Supremacy (BOSS) Program

**Health and Human Services**

Apr 09 NCI: Quick-Trials of Novel Cancer Therapies—Exploratory

**HHS cont.**

Apr 10 AHRQ: Grants for Health Services Dissertation Research

Apr 11 NIH: Countermeasures Against Chemical Threats

Apr 12 NIH: Toward Imaging the Pancreatic Beta Cell in People

Apr 12 NIH: Biomarkers of Autoimmunity in Type 1 Diabetes

Apr 18 CDC: Prevention of Airborne Infections in Occupational Settings

Apr 18 CDC: Workplace Violence Prevention

Apr 20 NCI: Small Grants for Behavioral Research in Cancer Control

**National Archives and Records Admin.**

Apr 01 Research (Harry S. Truman Library)

**National Science Foundation**

Apr 20 Mathematical, Social, and Behavioral Sciences

**United States Agency for International Development**

Apr 20 Program to Strengthen Parliamentary Processes in Ghana

**Other****Alternatives Research and Development Foundation**

(Non-Animal Methods in Biomedical Research, Product Testing, and Education)

Apr 30 Research Grants

**American Cancer Society**

Apr 01 Various Grants

**American College of Chest Physicians**

Apr 28 Various Grants

**American Foundation for Suicide Prevention**

Apr 15 Pilot Grants

**American Institute of Physics**

Apr 01 Chretien International Research Award

**American Society of Primatologists**

Apr 30 Small Grants

**Association for International Cancer Research**

Apr 28 Grants

**Case Cancer Fund**

Apr 01 Grants

**Childhood Brain Tumor Foundation**

Apr 15 Grants

**DEBRA International**

Apr 01 Epidermolysis Bullosa Research

**Foundation for the Future**

(Quality of Human Life, Physical and Social Sciences)

Apr 30 Research Grants

**International Association for the Study of Pain**

Apr 30 Collaborative Research

**International Center for Jefferson Studies at Monticello**

Apr 01 Travel Grants

**International Dyslexia Association**

Apr 01 Research Grants

**Laerdal Foundation for Acute Medicine**

Apr 01 Research &amp; Development in Acute Medicine

**McKnight Fund**

Apr 15 Neuroscience of Brain Disorders

**National Marfan Foundation**

(Marfan Syndrome)

Apr 01 Traditional Grants

**Parseghian Medical Research Foundation**

(Niemann-Pick Type C Disease)

Apr 01 Grants

**Roche Organ Transplantation Research Foundation**

Apr 01 Grants

**Whitehall Foundation**

(Life Sciences)

Apr 15 Research Grants

## AWARDS PROCESSED

*Externally funded grants and contracts processed during January 2006*

<b>Title</b>	<b>Investigator(s)</b>	<b>Department(s)</b>	<b>Agency</b>	<b>Award</b>
<b>Research Awards</b>				
*Eli Lilly Analytical Chemistry Award	M. McCarroll	Chemistry	Eli Lilly	\$1,000
John Dewey Correspondence	L. Hickman	Dewey Studies	NEH	\$50,000
*Low-Power Terahertz Optical A/D Converter	M. Sayeh	Electrical and Computer Engineering	USN/ONR	\$36,708
Quad Cities Fisheries Investigations 2006	R. Heidinger D. Bergerhouse	Fisheries Center Fisheries Center	Exelon Generation Co.	\$219,000
Microsatellite Tools for Genetic Identification of Scaphirhynchus	E. Heist R. Heidinger	Fisheries Center Fisheries Center	USDI/USFWS	\$9,000
International ECBM/Sequestration Consortium Task 2: Laboratory Core-Flood Experiments	S. Harpalani	Mining and Mineral Resources Engineering	Advanced Resources International (USDOE)	\$37,500
*Role of GPR54 and KISS1/Metastin in Synaptic and Neuronal Function	A. Arai	Pharmacology	Excellence in Academic Medicine	\$50,000
*Estrogenic Super-Induction by Soy Phytoestrogens	S. Adler	Physiology	United Soybean Board	\$10,000
Effects of Loss of Sympathetic Innervation on Choroidal Neovascularization	J. Steinle	Physiology	American Heart Association	\$71,500
Marine Biotoxins Research	D. Tindall	Plant Biology	EMD Biosciences	\$17,000
Application of Biotechnology to the Control of Soybean Sudden Death Syndrome (SDS)	D. Lightfoot	Plant, Soil, & Ag Systems	Iowa State U (USB)	\$70,400
Application of Biotechnology to the Control of Soybean Sudden Death Syndrome (SDS)	K. Meksem	Plant, Soil, & Ag Systems	Iowa State U (USB)	\$70,400
C-FAR Research Program	J. Russin	Plant, Soil, & Ag Systems	IDA	\$315,894
Viticulture Program at SIUC Part A	B. Taylor A. Walters B. Young	Plant, Soil, & Ag Systems Plant, Soil, & Ag Systems Plant, Soil, & Ag Systems	IDA	\$37,650

<b>Title</b>	<b>Investigator(s)</b>	<b>Department(s)</b>	<b>Agency</b>	<b>Award</b>
Viticulture Program at SIUC Part B	B. Taylor A. Walters B. Young	Plant, Soil, & Ag Systems Plant, Soil, & Ag Systems Plant, Soil, & Ag Systems	IDA	\$35,150
*Attitudes of Spouses Toward Job Satisfaction and Family Responsibilities of Teachers in the High School Agricultural Education Profession	D. Wakefield	Plant, Soil, & Ag Systems	ISBE/FCAE	\$2,500
VNS and Stroke	D. Smith R. Jensen	Psychology Psychology	Cyberonics, Inc.	\$61,595
IBHE State Matching Grant Program	S. Schwartz	Research Development and Administration	IBHE	\$137,802
<b>Training Awards</b>				
Louis Stokes Alliance for Minority Participation, Bridge to the Doctorate (ILSAMP)	K. Renzaglia P. McNeil	Plant Biology Graduate School	Chicago State U (NSF)	\$979,000
MPA Internships	J. Hammon K. Surprenant	Political Science Political Science	Illinois Law Enforcement Alarm System	\$23,610
<b>Other Awards</b>				
One-Time Supplement for Program Improvement Grant 2004-2005	C. Reed S. Bryson	Affirmative Action Affirmative Action	USDHHS/OHDS/ACF	\$50,460
*"Let's Wing It!" - A Novel Approach to Recruiting and Retaining Females in Aviation Education	B. Shelton L. Ruiz	Applied Sciences and Arts Aviation Management and Flight	ISU/ICSPS	\$5,000
Bridges School to Home Literacy & Technology Initiative	E. Spezia	Broadcasting Service	South Carolina Educational Communications	\$4,000
Autism Center for Excellence	A. Cuvo	Rehabilitation Institute	The Hope School (IDHS)	\$445,999
In-Home Behavioral Services for a Child with Autism	B. Greene	Rehabilitation Institute	Dr. and Mrs. Abdul Majid	\$4,200
Domestic Violence Clinic Program	M. Rudasill	School of Law	City of Carbondale, Illinois (USDJ/OJP)	\$265,757
Employer Training Investment Program (ETIP)	L. Lindberg	Small Business Development Center	IDCEO (USDOL)	\$80,000
Illinois Small Business Development Center Overlay Grant	R. Russell	Small Business Development Center	IDCEO	\$61,500

Title	Investigator(s)	Department(s)	Agency	Award
Integrated Assessment Program	M. Miah	Social Work	IDCFS	\$4,408,165
*Support for Artist Presentation at Masks of Transformation Conference and Community Celebration	R. Naversen	Theater	IAC/STAR Program	\$445
*Spectrum Wilderness FY06	G. Schropp	Touch of Nature	IDCFS	\$55,335
SouthernTECH	J. Koropchak P. Rice R. Lenzi K. Harfst J. Myers	Vice Chancellor for Research Research Development and Administration Economic Development Economic Development Research Development and Administration	IDCEO	\$57,922
Expanding Healthcare and Transportation, Distribution and Logistics Career Development Programs in Illinois	J. Washburn R. Woodhull	Workforce Education Workforce Education	IDCEO (USDL)	\$140,000

\*indicates new award

Awards Processed During January 2006 (35) \$7,814,492

## Summary of Fiscal Year 2006 Awards Received to Date

*excludes Financial Aid Office awards*

	Fiscal Year 2006 Awards as of January 2006		Fiscal Year 2005 Awards as of January 2005	
Research	(188)	\$17,256,827	(201)	\$15,529,192
Training	(35)	\$3,445,736	(45)	\$5,173,361
Other	(108)	\$23,341,274	(100)	\$21,379,527
Federal	(74)	\$14,571,707	(69)	\$11,915,532
State	(110)	\$18,692,742	(112)	\$15,907,326
Industry	(31)	\$1,402,100	(51)	\$2,607,068
Foundation	(20)	\$1,261,620	(24)	\$1,176,197
Other	(96)	\$8,115,668	(90)	\$10,475,956
<b>TOTAL</b>	<b>(331)</b>	<b>\$44,043,836</b>	<b>(346)</b>	<b>\$42,082,079</b>