
Mathematics Opportunities

NSF Computing Equipment and Instrumentation Programs

The Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) plans a limited number of awards for the support of computing environments for research in the mathematical sciences. SCREMS (Scientific Computing Research Environments for the Mathematical Sciences) supports computing environments dedicated to research in the mathematical sciences. Proposals may request support for the purchase of computing equipment and limited support for professional systems administrators or programmer personnel for research computing needs. These grants are intended to support research projects of high quality that require access to advanced computing resources. Requests for routine upgrades of standard desk-environment workstations or laptop computers are not appropriate for this program. Awards are made to provide support for specific research projects rather than to provide general computing capacity. Proposers are encouraged to include projects involving symbolic and algebraic computations, numerical computations and simulations, and graphical representations (visualization) in aid of the research.

Please see http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5616 for details. The deadline for proposals is **January 24, 2008**.

—From an NSF announcement

NRC-Ford Foundation Diversity Fellowships

The National Research Council (NRC) administers the Ford Foundation Diversity Fellowships program. The program seeks to promote the diversity of the nation's college and university faculties by increasing their ethnic and racial diversity, to maximize the educational benefits of diversity, and to increase the number of professors who can and will use diversity as a resource for enriching the education of all students. Predoctoral fellowships support study toward a Ph.D. or Sc.D., dissertation fellowships offer support in the final year of writing the Ph.D. or Sc.D. thesis, postdoctoral fellowships offer one-year awards for Ph.D. recipients. Applicants must be U.S. citizens or

nationals in research-based fields of study and members of one of the following groups: Alaska Native (Eskimo or Aleut), Black/African American, Mexican American/Chicana/Chicano, Native American Indian, Native Pacific Islander (Polynesian/Micronesian), or Puerto Rican.

Approximately sixty predoctoral fellowships will be awarded for 2008. The awards provide three years of support and are made to individuals who, in the judgment of the review panels, have demonstrated superior academic achievement, are committed to a career in teaching and research at the college or university level, show promise of future achievement as scholars and teachers, and are well prepared to use diversity as a resource for enriching the education of all students. The annual stipend is US\$20,000, with an institutional allowance of US\$2,000. The deadline for applying online is **November 15, 2007**.

Approximately thirty-five dissertation fellowships will be awarded for 2008 and will provide one year of support for study leading to a Ph.D. or D.Sc. degree. The stipend for one year is US\$21,000. The deadline for applying online is **November 29, 2007**.

The postdoctoral fellowship program offers one year of postdoctoral support for individuals who have received their Ph.D.'s no earlier than November 30, 2000, and no later than November 29, 2007. The stipend is US\$40,000, with an employing institution allowance of US\$1,500. Approximately twenty postdoctoral fellowships will be awarded for 2008. The deadline for applying online is **November 29, 2007**.

More detailed information and applications are available at the website <http://www7.nationalacademies.org/fordfellowships/>. The postal address is: Fellowships Office, Keck 576, National Research Council, 550 Fifth Street, NW, Washington, DC 20001. The telephone number is 202-334-2872. The email address is infofell@nas.edu.

—From an NRC announcement

NDSEG Fellowships

As a means of increasing the number of U.S. citizens trained in disciplines of military importance in science and engineering, the Department of Defense (DoD) awards National Defense Science and Engineering Graduate (NDSEG) Fellowships each year to individuals who have demonstrated ability and special aptitude for advanced training

in science and engineering. The fellowships are awarded for a period of three years for study and research leading to doctoral degrees in mathematical, physical, biological, ocean, and engineering sciences. Approximately 200 fellowships will be awarded in 2008.

The NDSEG Fellowship Program is open only to applicants who are citizens or nationals of the United States. NDSEG Fellowships are intended for students at or near the beginning of their graduate studies in science or engineering. Applicants must have received or be on track to receive their bachelor's degrees by fall of 2008. Fellows selected in spring 2008 must begin their fellowship tenure in fall 2008. Fellowships are tenable only at U.S. institutions of higher education offering doctoral degrees in the scientific and engineering disciplines specified above. Fellows will receive full tuition and a stipend for 12-month tenures. Applications are encouraged from women, persons with disabilities, and minorities, including members of ethnic minority groups such as African American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, Hispanic, or Latino.

Complete applications must be submitted electronically or postmarked by **January 7, 2008**. Application materials are available from, and completed applications should be returned to, the American Society for Engineering Education (ASEE) at NDSEG Fellowship Program, c/o American Society for Engineering Education, 1818 N Street, N.W., Suite 600, Washington, DC 20036; telephone: 202-331-3516; email: ndseg@asee.org. For further information, see the website <http://www.asee.org/ndseg/preface.cfm>.

—From an NDSEG announcement

National Academies Graduate Fellowship Program

The Christine Mirzayan Science and Technology Policy Graduate Fellowship Program of the National Academies is designed to engage graduate science, engineering, medical, veterinary, business, and law students in the analysis and creation of science and technology policy and to familiarize them with the interactions of science, technology, and government. As a result, students develop essential skills different from those attained in academia and make the transition from graduate student to professional.

In 2008, programs will be held in the summer from June 2 through August 8, and in the fall from September 8 through November 14.

Applications for the fellowships are invited from scholars from graduate through postdoctoral levels in any physical, biological, or social science field or any field of engineering, medicine and health, or veterinary medicine, as well as business, law, education, and other graduate and professional programs. Postdoctoral scholars should have received their Ph.D.'s within the past five years.

The stipend for each 10-week program is US\$5,300. The fellowship stipend is intended to cover all living expenses for the period.

Deadlines for receipt of materials for the summer program is **March 1, 2008**, and for the fall program, **June 1, 2008**. More information and application forms and instructions can be found on the website <http://www7.nationalacademies.org/policyfellows> or by contacting The National Academies Christine Mirzayan Science and Technology Policy Graduate Fellowship Program, 500 Fifth Street, NW, Room 508, Washington, DC 20001; telephone: 202-334-2455; fax: 202-334-1667; email: policyfellows@nas.edu.

—From a National Academies announcement

Call for Nominations for Waterman Award

Congress established the Alan T. Waterman Award in August 1975 to mark the twenty-fifth anniversary of the National Science Foundation (NSF) and to honor its first director. The annual award recognizes an outstanding young researcher in any field of science or engineering supported by the NSF. In addition to a medal, the awardee receives a grant of US\$500,000 over a three-year period for scientific research or advanced study in the mathematical, physical, medical, biological, engineering, social, or other sciences at the institution of the recipient's choice.

Candidates must be U.S. citizens or permanent residents and must be thirty-five years of age or younger or not more than seven years beyond receipt of the Ph.D. degree by December 31 of the year in which they are nominated. Candidates should have demonstrated exceptional individual achievements in scientific or engineering research of sufficient quality to place them at the forefront of their peers. Criteria include originality, innovation, and significant impact on the field.

The deadline for nominations and all supporting material for the award is **December 7, 2007**. For more information, see the website <http://www.nsf.gov/od/waterman/waterman.jsp>.

—From an NSF announcement

MfA Fellowship Program

The Math for America Foundation (MfA) sponsors the MfA Fellowship Program, which trains mathematically talented individuals to become high school mathematics teachers in New York City. The fellowship provides an aggregate stipend of US\$90,000 over five years, a full-tuition scholarship for a master's-level teaching program at one of MfA's partner universities, and ongoing support mechanisms, including mentoring and professional development.

Candidates should hold a bachelor's degree with substantial coursework in mathematics and should be able to demonstrate a strong interest in teaching. Applicants must be willing to commit to a five-year fellowship term in New York City. Individuals who are currently teaching, who are certified to teach, or who have completed an education

degree program are not eligible. Candidates must be U.S. citizens or permanent residents of the United States. The deadline for applications is **February 1, 2008**. For more detailed information, see the website at <http://www.mathforamerica.org/>.

—From an MfA announcement

CMI Liftoff Program for Summer 2008

The Clay Mathematics Institute (CMI) is currently accepting nominations for the 2008 Liftoff program. Through this program, CMI will employ recent Ph.D. recipients as Liftoff Fellows to carry out mathematics research for one month during the summer of 2008. This program provides a transition for young mathematicians from student to faculty member or to a postdoctoral position. Funds for travel to conferences or to visit collaborators are also available to Liftoff Fellows.

Nominations should be made by university mathematics departments; candidates may not apply directly. Criteria for selection are the quality and significance of mathematical research already achieved by the candidate and the potential of the candidate to become a leader in mathematical research.

Nomination packets should include: (1) a cover letter signed by the department chair; (2) two letters of recommendation, including one from the thesis supervisor (existing letters of recommendation already written for job applications can be used); (3) a CV from the nominee, including name, address, telephone, email, date of birth, citizenship, education, thesis title, honors, previous employment, reference to published work or submitted articles, and proposed research; and (4) a one-sentence signed statement from a mathematician agreeing to supervise the nominee on behalf of CMI with the proposed dates of employment.

Nominations can be sent electronically to the attention of Chelsea Chapko at liftoff@claymath.org or by post to Clay Mathematics Institute, One Bow Street, Cambridge, MA 02138. The deadline for nominations to be received is **February 15, 2008**. For more information, see the website http://claymath.org/fas/liftoff_fellows/; telephone: 617-995-2600; email: nominations@claymath.org.

—From a CMI announcement

Call for Applications for Kovalevskaja Award

The Alexander von Humboldt Foundation is seeking applications for the Sonja Kovalevskaja Award for 2008. The award is open to junior scientists and scholars from outside Germany who have received the Ph.D. within the past six years and have a record of publication in international

journals or through scholarly presses. The foundation particularly welcomes applications from qualified women. The award provides funding of up to 1.65 million euros (approximately US\$2.32 million) over a five-year period. The funding enables recipients to conduct independent research and finance a research team at a university or research institute of their choice in Germany.

Up to eight awards will be made for 2008. The deadline for applications is **January 4, 2008**. For more information see the website <http://www.humboldt-foundation.de/en/programme/preise/kova.htm>.

—From a Humboldt Foundation announcement

Virtual Exhibit at the Smithsonian

October 4, 2007, marked the 50th anniversary of the launch of the Sputnik satellite. The National Museum of American History, which houses the Smithsonian Institution's collection of mathematical artifacts, has prepared a virtual exhibit to mark the occasion (the museum is currently under renovation). The exhibit, "Mobilizing Minds: Teaching Math and Science in the Age of Sputnik", examines the reforms in American mathematics and science education launched at that time. Included are discussions about changes in curricula and teaching methods and about the use of technology for teaching. The exhibit may be found at <http://americanhistory.si.edu/mobilizing>.

—Allyn Jackson

ETS Visiting Scholars Program

The Educational Testing Service (ETS) established the ETS Visiting Scholar Program to further its commitment to creating a corporate environment that reflects the culture of its test takers. Each summer visiting scholars from underrepresented groups come to ETS to study fairness and other issues of test design and development while learning to write and review test questions and other related materials for a variety of testing programs. They may also work on educational measurement and policy issues related to equity.

Each visiting scholar will be in residence at ETS June 2–27, 2008. Applicants should be teachers at universities or community colleges, should be members of underrepresented groups, and should have at least three years of teaching experience in U.S. schools. The teaching experience can be in one of nine academic areas, including mathematics and statistics. Visiting scholars receive a US\$3,500 honorarium plus transportation and accommodation.

Further information on is available at <http://www.ets.org/visitingsscholars>. The deadline to apply is **December 3, 2007**.

—From an ETS announcement