
Mathematics Opportunities

NSF Postdoctoral Research Fellowships

The National Science Foundation (NSF) awards Mathematical Sciences Postdoctoral Research Fellowships (MSPRF) for appropriate research in areas of the mathematical sciences, including applications to other disciplines. A revised program announcement is available from the website <http://www.nsf.gov/pubs/2007/nsf07573/nsf07573.htm>. The deadline for proposals is **October 17, 2007**.

—From an NSF announcement

AMS Epsilon Fund

The AMS Epsilon Fund awards grants to summer mathematics programs that support and nurture mathematically talented high school students in the United States. The deadline for application for funding for summer 2008 programs is **December 15, 2007**. Application materials are available at <http://www.ams.org/outreach/epsilon.html> or by mail: Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294; telephone 800-321-4267, ext. 4170; email: prof-serv@ams.org.

—AMS announcement

AMS-AAAS Mass Media Summer Fellowships

The American Association for the Advancement of Science (AAAS) sponsors the Mass Media Science and Engineering Summer Fellows Program, through which graduate students work during the summer in major media outlets. The AMS provides support each year for one or two graduate students in the mathematical sciences to participate in the program. In past years the AMS-sponsored fellows have held positions at *Scientific American*, *Business Week*,

Voice of America, Discovery Channel Online, National Geographic Television, *Popular Science*, *The Chicago Tribune*, and *Time* magazine.

Fellows receive a weekly stipend of US\$450, plus travel expenses, to work for ten weeks during the summer as reporters, researchers, and production assistants in media organizations. They observe and participate in the process by which events and ideas become news, improve their ability to communicate about complex technical subjects in a manner understandable to the public, and increase their understanding of editorial decision making and of how information is effectively disseminated. Each fellow attends an orientation and evaluation session in Washington, D.C., and begins the internship in mid-June. Fellows submit interim and final reports to the AAAS. A wrap-up session is held at the end of the summer.

Mathematical sciences faculty are urged to make their graduate students aware of this program. The deadline to apply for fellowships for the summer of 2008 is **January 15, 2008**. Further information about the fellowship program and application procedures is available online at <http://www.aaas.org/programs/education/MassMedia/>; or applicants may contact Stacey Pasco, Director, Mass Media Program, AAAS Mass Media Science and Engineering Fellows Program, 1200 New York Avenue, NW, Washington, DC 20005; telephone 202-326-6645; fax 202-371-9849; email: spasco@aaas.org.

Further information is also available at <http://www.ams.org/government/massmediaann.html> and through the AMS Washington Office, 1527 Eighteenth Street, NW, Washington, DC 20036; telephone 202-588-1100; fax 202-588-1853; email: amsdc@ams.org.

—Elaine Kehoe

Enhancing the Mathematical Sciences Workforce in the Twenty-First Century

The long-range goal of the Enhancing the Mathematical Sciences Workforce in the Twenty-First Century (EMSW21)

program of the National Science Foundation (NSF) is to increase the number of well-prepared U.S. citizens, nationals, and permanent residents who pursue careers in the mathematical sciences and in other NSF-supported disciplines. This program builds on the Vertical Integration of Research and Education (VIGRE) program and includes a broadened VIGRE activity, an additional component for Research Training Groups (RTG), and another for Mentoring through Critical Transition Points (MCTP) in the Mathematical Sciences.

The VIGRE program supports projects that involve entire departments in the training process, from the start of the undergraduate career through the completion of a postdoctoral fellowship. The RTG program involves a group of researchers based in a subarea of the mathematical sciences or linked by a multidisciplinary theme and supports training at educational levels from undergraduate to postdoctoral within that focus. The MCTP program supports projects, either departmentally based or conducted by a large group of faculty members, that are aimed at critical transition points in the educational careers of students and junior researchers.

The DMS expects to make between nine and fifteen awards under this program in 2008. The deadline for proposals is **June 10, 2008**. For more information about the program and all of its components, see the website http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05595.

—From an NSF announcement

Joint DMS/NIGMS Initiative in Mathematical Biology

The Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) and the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health (NIH) have announced an Initiative to Support Research in the Area of Mathematical Biology. This competition is designed to support research on mathematical problems related to biological problems in areas supported by NSF/DMS and NIH/NIGMS. A direct relationship between a biological application and the mathematics is expected. Proposals from research teams that include scientists from both the life sciences community and the mathematical sciences community are encouraged. Both new and existing collaborations will be supported. Proposals from individual investigators will need to make the case that the individual has expertise in both areas.

Successful proposals will identify innovative mathematics or statistics needed to solve an important biological problem. Research that would apply standard mathematics or statistics to solving biological problems is not appropriate for this competition and should be submitted directly to NIH. Similarly, proposals with research in mathematics or statistics that is not tied to a specific biological problem should be submitted to the appropriate DMS program at NSF. Proposals designed to create new

software tools based on existing models and methods will not be accepted in this competition.

The deadline for full proposals is **October 1, 2007**. See the website http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5300 for more information.

—From an NSF announcement

News from PIMS

The Pacific Institute for the Mathematical Sciences (PIMS) invites nominations of outstanding young researchers in the mathematical sciences for Postdoctoral Fellowships for the year 2008–2009. Candidates must be nominated by one or more scientists affiliated with PIMS or by a department (or departments) affiliated with PIMS. The fellowships are intended to supplement support made available through such a sponsor. PIMS expects to support up to 20 fellowships tenable at any of its Canadian member universities: Simon Fraser University, the University of Alberta, the University of British Columbia, the University of Calgary, and the University of Victoria, as well as its affiliated universities, the University of Lethbridge and the University of Regina.

For the 2008–2009 competition, the amount of the award is CA\$20,000, and the sponsor(s) is (are) required to provide additional funds to finance a minimum stipend of CA\$40,000 (including benefits).

Award decisions are made by the PIMS PDF Review Panel based on excellence of the candidate, potential for participation in PIMS programs, and potential for involvement with PIMS partners. PIMS Postdoctoral Fellows will be expected to participate in all PIMS activities related to the fellow's area of expertise and will be encouraged to spend time at other sites. To ensure that PIMS Postdoctoral Fellows are able to participate fully in institute activities, they may not teach more than two single-term courses per year.

Nominees must have a Ph.D. or equivalent (or expect to receive a Ph.D. by December 31, 2008) and be within three years of the Ph.D. at the time of the nomination (i.e., the candidate must have received her or his Ph.D. on or after January 1, 2005). The fellowship may be taken up at any time between April 1, 2008, and January 1, 2009. The fellowship is for one year and is renewable for at most one additional year.

Nominations must include: 1) curriculum vitae, 2) statement of research interests, 3) three letters of reference (including one from a sponsoring professor), and 4) statement of anticipated support from the sponsor.

Nominations must be received by **December 15, 2007**. Complete information on Postdoctoral Fellowship nominations, including contact information and submission guidelines, is available at <http://www.pims.math.ca/fellowships>.

—PIMS announcement

Teach For America Accepting Applications for the 2008 Corps

The United States needs to provide students with a high-quality mathematics education in order to build a robust and diverse pipeline of future mathematicians, engineers, and other technical professionals. Nowhere is this need more pressing than in our low-income communities and among students of color.

By the time they enter eighth grade, students in low-income communities are on average three grade levels behind their peers in high-income communities in mathematics and are three times less likely than their high-income peers to perform at or above a proficient level in mathematics (as defined by the National Assessment of Educational Progress). In twelfth grade, African American students are nearly five times less likely and Hispanic students nearly four times less likely than white students to be at or above proficient level in mathematics. Teach For America is seeking mathematics majors to use their content knowledge to help us address this academic achievement gap.

Teach For America is the national corps of outstanding recent college graduates of all academic majors who commit two years to teach in urban and rural public schools, working to lead students to the kinds of academic gains that change life trajectories. Alumni then use the insights and experience gained from their corps experience to develop ways to work subsequently as educators, mathematicians, analysts, consultants, and leaders in other fields to address the underlying problems affecting education in low-income areas.

Edward F. Burger, chair of the Department of Mathematics and Statistics at Williams College, said: "Every mathematics major I've known who has participated in the Teach For America program came away from the experience with a renewed appreciation for mathematics, education, and the world around them. It is a challenging but exciting opportunity that can change lives."

Notices readers are encouraged to make their undergraduate students aware of Teach For America. To hear about the experiences of our corps members and alumni, to learn how one can join the network of emerging leaders to make a difference, and to read about our relationships with graduate programs and employers, visit our website, <http://www.teachforamerica.org>.

—Teach For America announcement

Call for Nominations for ICMI Awards

The Executive Committee of the International Commission on Mathematical Instruction (ICMI) some time ago created two awards in mathematics education research: the Hans Freudenthal Award, for a major program of

research on mathematics education; and the Felix Klein Award, for lifelong achievement in mathematics education research. Previous recipients of the Freudenthal Award are Celia Hoyles (2003) and Paul Cobb (2005), and previous recipients of the Klein Award are Guy Brousseau (2003) and Ubiratan D'Ambrosio (2005).

An ICMI Awards Committee, chaired by Mogens Niss of Roskilde University in Denmark, has been appointed for selecting the awardees. The committee is now entering a third cycle of selecting awardees for 2007. The result of this process will be known by the end of 2007. The 2007 awards, together with the 2005 awards, will be presented to the recipients at the 11th International Congress on Mathematical Education in Monterrey, Mexico, in July 2008.

As was the case for the first two cycles, the ICMI Awards Committee welcomes suggestions coming from the mathematics education community. Nominations of candidates for the Felix Klein or the Hans Freudenthal Awards have to be accompanied by summaries presenting the persons nominated and the reasons for the nomination. Moreover, nominations also have to include the names and coordinates of two or three persons whom the committee may contact for further information.

All proposals must be sent by email to Mogens Niss, mn@ruc.dk, no later than **November 15, 2007**.

—ICMI Awards Committee

Clay Research Fellow Nominations

The Clay Mathematics Institute (CMI) is currently accepting nominations for the position of Clay Research Fellow. Fellows are employed for a period of two to five years and may conduct their research at whatever location or combination of locations best suits their research. In addition to a generous salary, the fellow receives support for travel and research expenses, as well as provisions for collaboration.

The primary selection criteria are the exceptional quality of the candidate's research and the candidate's promise to become a mathematical leader. At the time of their selection, most recent appointees were graduating Ph.D. students. However, mathematicians under age thirty have sometimes been appointed. Selection decisions are made by CMI's Scientific Advisory Board.

To nominate a candidate, please send the following items by **October 30, 2007**: (1) letter of nomination, (2) names and contact information of two other references, (3) curriculum vitae, and (4) publication list for the nominee. Nominations should be sent to: Clay Mathematics Institute, One Bow Street, Cambridge, MA 02138. Electronic submissions are also accepted at nominations@claymath.org. Address nominations to the attention of Christa Carter.

Information about Clay Research Fellows is also available on the CMI website at http://www.claymath.org/fas/research_fellows/. Additional information

may be obtained by calling 617-995-2600 or by email: nominations@claymath.org.

—From a CMI announcement

Call for Nominations for André Aisenstadt Mathematics Prize

The Centre de Recherches Mathématiques (CRM) solicits nominations for the André Aisenstadt Mathematics Prize. The prize recognizes outstanding research achievement by a young Canadian mathematician in pure or applied mathematics.

Candidates must be Canadian citizens or permanent residents of Canada and must have received the Ph.D. within the preceding seven years. The recipient is invited to deliver a lecture at CRM and to write a brief article on his or her work for publication in the CRM's *Bulletin*.

Nominations must be submitted by at least two sponsors and include the following information: a curriculum vitae, a list of publications, a cover letter explaining the basis of the nomination, up to four reprints, and a maximum of four letters of support. The deadline for nominations is **October 1, 2007**. Nominations must be submitted to the director of the CRM, Université de Montréal, C.P. 6128, Succursale Centre-ville, Montréal, QC H3C 3J7 Canada; fax: 514-343-2254; email: directeur@crm.umontreal.ca.

—From a CRM announcement

AWM Essay Contest

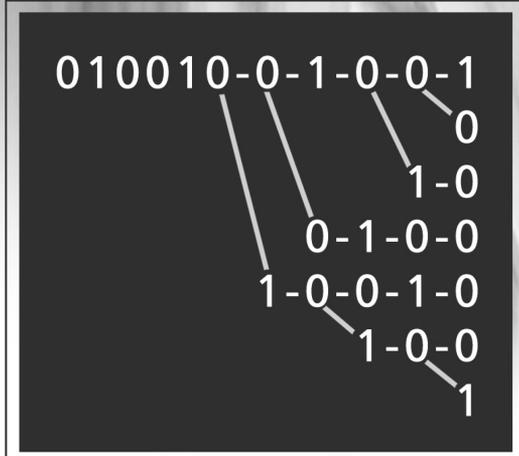
To increase awareness of women's ongoing contributions to the mathematical sciences, the Association for Women in Mathematics (AWM) is holding an essay contest for biographies of contemporary women mathematicians and statisticians in academic, industrial, and government careers.

The essays will be based primarily on interviews with women who are currently working in mathematical sciences careers. The contest is open to students in the following categories: 6th–8th grades, 9th–12th grades, and college undergraduates. At least one winning submission will be chosen from each category. Winners will receive a prize, and their essays will be published online at the AWM website. A grand prize winner will have his or her submission published in the *AWM Newsletter* as well. The deadline for entries is **November 2, 2007**.

In addition to student entries, organizers are currently seeking women mathematicians to volunteer as the subjects of these essays. For more information, see <http://www.awm-math.org/biographies/contest.html>.

—From an AWM announcement

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