Mathematics Opportunities

American Mathematical Society Centennial Fellowships

Invitation for Applications for Awards for 2006–2007
Deadline December 1, 2005

The AMS Centennial Research Fellowship Program makes awards annually to outstanding mathematicians to help further their careers in research. The eligibility rules are as follows.

Eligibility: The primary selection criterion for the Centennial Fellowship is the excellence of the candidate's research. Preference will be given to candidates who have not had extensive fellowship support in the past. Recipients may not hold the Centennial Fellowship concurrently with another research fellowship, such as a Sloan or NSF Postdoctoral Fellowship. Under normal circumstances, the fellowship cannot be deferred. A recipient of the fellowship shall have held his or her doctoral degree for at least three years and not more than twelve years at the inception of the award (that is, received between September 1, 1994, and September 1, 2003). Applications will be accepted from those currently holding a tenured, tenure-track, postdoctoral, or comparable (at the discretion of the selection committee) position at an institution in North America.

Grant amount: The stipend for fellowships awarded for 2006–2007 is expected to be $64,000, with an additional expense allowance of about $3,250. Acceptance of the fellowship cannot be postponed. The number of fellowships to be awarded is small and depends on the amount of money contributed to the program. The Society supplements contributions as needed. At most, two fellowships will be awarded for the 2006–2007 academic year. A list of previous fellowship winners may be found at `http://www.ams.org/prizes-awards`.

Deadline: The deadline for receipt of applications is **December 1, 2005**. Awards will be announced in February 2006 or earlier if possible.

Application information: Applications should include a cogent plan indicating how the fellowship will be used. The plan should include travel to at least one other institution and should demonstrate that the fellowship will be used for more than reduction of teaching at the candidate's home institution. The selection committee will consider the plan in addition to the quality of the candidate's research and will try to award the fellowship to those for whom the award would make a real difference in the development of their research careers. Work in all areas of mathematics, including interdisciplinary work, is eligible.

Application forms are available via the Internet at `http://www.ams.org/employment/centflyer.html`. For paper copies of the form, write to the Membership and Programs Department, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294 USA; or send electronic mail to `prof-serv@ams.org`; or call 401-455-4107.

—AMS announcement

NSA Grant and Sabbatical Programs

The Mathematical Sciences Program (MSP) of the National Security Agency (NSA) provides grants and sabbatical opportunities to support research by academic mathematical scientists. The MSP program offers four types of grants: the Young Investigators Grant; the Standard Grant; the Senior Investigators Grant; and the Conferences, Workshops, and Special Situations Grant.

The NSA makes grants to universities and nonprofit institutions to support self-directed research in the following areas of mathematics (including possible computational aspects): algebra, number theory, discrete mathematics, probability, and statistics. Research grants are designed principally to provide summer salaries for professors and limited support for their graduate students. The deadline for submission of all grant proposals is **October 15, 2005**. Grants begin in the fall of the following year.

The sabbatical opportunities offered by the NSA provide support for academic mathematical scientists to visit the NSA for periods ranging from nine to twenty-four months. The sabbaticals primarily involve cryptanalysis, though sabbatical work may also involve algebra, probability, statistics, number theory, and discrete mathematics.

Visitors' sabbatical stipends will be supplemented with funds to equal their regular monthly salaries. A choice is offered between an allowance for moving expenses or a housing supplement. Applicants and their immediate family members must be U.S. citizens. Because a complete background investigation is required, applications should be submitted well in advance of the requested starting date.

Further information may be obtained from the NSA's website: `http://www.nsa.gov/msp/index.cfm`. The telephone number is 301-688-0400, and the postal address is: Michelle D. Wagner, Director, NSA Mathematical Sciences Program, National Security Agency, ATTN: R1, Suite 6557, Ft. George G. Meade, MD 20755-6557.

—From an NSA announcement

Distinguished International Postdoctoral Research Fellowships

The Distinguished International Postdoctoral Research Fellowships Program of the Mathematical and Physical Sciences (MPS) Directorate of the National Science Foundation (NSF) provides opportunities for postdoctoral investigators to conduct research projects abroad as MPS Distinguished International Postdoctoral Research Fellows (MPS-DRF).

The objective of the program is to provide talented recent doctoral recipients in the mathematical and physical sciences an effective means of establishing international collaborations in the early stages of their careers.

Applicants must be citizens or permanent residents of the United States who have fulfilled the requirements for the doctoral degree between June 1 of the year of submission and September 30 of the year following submission. NSF expects to fund up to twenty awards that will provide up to $100,000 per year for up to twenty-four months.

The deadline for full proposals is **October 12, 2005**. For technical and scientific information, contact Lynne Walling, Program Director, Division of Mathematical Sciences, Room 1025, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230; telephone 703-292-8104; email: `lwalling@nsf.gov`. For more detailed information, see the program announcement at `http://www.nsf.gov/pubs/2001/nsf01154/nsf01154.txt`.

—From an NSF announcement

NSF International Research Fellow Awards

The objective of the International Research Fellowship Program (IRFP) of the National Science Foundation (NSF) is to introduce scientists and engineers in the early stages of their careers to research opportunities abroad. The program provides support for postdoctoral and junior investigators to do research in basic science and engineering for nine to twenty-four months in any country in the world. The goal of the program is to establish productive, long-term relationships between U.S. and foreign science and engineering communities. Applicants must be U.S. citizens or permanent residents who have earned their doctoral degrees within three years prior to the date of application or who expect to receive their degrees by the date of the award.

The deadline for applying is **October 11, 2005**. For further information contact the program officer, Susan Parris, 703-292-8711, `sparris@nsf.gov`; or visit the website `http://www.nsf.gov/sbe/int/fellows/start.htm`.

—From an NSF announcement

NSF Graduate Fellowships

The National Science Foundation (NSF) awards Graduate Research Fellowships to graduating seniors and first-year graduate students. These are three-year fellowships awarded to U.S. students for full-time graduate study at the institutions of their choice. The fellowships include a stipend, tuition coverage, and possible international travel allowances. Awards are made based on the candidates' intellectual merit and potential for research achievement. The deadline for applications had not been set at the time of this writing, but will likely occur during the **first week of November 2005**. More information and applications for the upcoming competition will be available at `http://www.nsf.gov/grfpd`.

—Elaine Kehoe

Travel Grants for ICM 2006, Madrid

The AMS has applied to the National Science Foundation (NSF) for funds to permit partial travel support for U.S. mathematicians attending the 2006 International Congress of Mathematicians (ICM 06) August 22–30, 2006, in Madrid, Spain. Subject to the award decision by the NSF, the Society is preparing to administer the selection process, which would be similar to previous programs funded in 1990, 1994, 1998, and 2002.

Applications for support are printed in this issue of the *Notices(pp. 971–973)*, and forms will be available on the AMS website (at `http://www.ams.org/careers-edu/icmapp.html`) beginning August 1, 2005. All completed application forms must be mailed to the AMS by **October 31, 2005**. This travel grants program, if funded, will be administered by the Membership and Programs Department, AMS, 201 Charles Street, Providence, RI 02904-2294. You may contact us at `ICM06@ams.org`; 800-321-4267, ext. 4058; or 401-455-4058.

This program is open to U.S. mathematicians (those who are currently affiliated with a U.S. institution). Early career mathematicians (those within six years of their doctorate), women, and members of U.S. groups underrepresented in mathematics are especially encouraged to apply. ICM 06 Invited Speakers from U.S. institutions should submit applications if funding is desired.

Applications will be evaluated by a panel of mathematical scientists under the terms of a proposal submitted to the NSF by the Society.

Should the proposal to the NSF be funded, the following conditions will apply: mathematicians accepting grants for partial support of travel to ICM 06 may not supplement them with any other NSF funds. Currently, it is the intention of the NSF's Division of Mathematical Sciences to provide no additional funds on its other regular research grants for travel to ICM in 2006. However, an individual mathematician who does not receive a travel grant may use

regular NSF grant funds, subject to the usual restrictions and prior approval requirements.

All information currently available about the ICM 06 program, organization, and registration procedure is located on the ICM 06 website, `http://www.icm2006.org`.

AWM Travel Grants for Women

The National Science Foundation (NSF) and the Association for Women in Mathematics (AWM) sponsor two travel grant programs for women mathematicians.

AWM Travel Grants enable women to attend research conferences in their fields, thereby providing scholars valuable opportunities to advance their research activities and their visibility in the research community. A travel grant provides full or partial support for travel and subsistence for a meeting or conference in the grantee's field of specialization.

AWM Mentoring Travel Grants are designed to help junior women develop long-term working and mentoring relationships with senior mathematicians. A mentoring travel grant funds travel, subsistence, and other expenses for an untenured woman mathematician to travel to an institute or a department to do research with a specified individual for one month.

The final deadline for the Travel Grants program for 2005 is **October 1, 2005**; the deadlines for 2006 are **February 1, 2006; May 1, 2006;** and **October 1, 2006**. For the Mentoring Travel Grants program the deadline is **February 1, 2006**. For further information and details on applying, see the AWM website, `http://www.awm-math.org/travelgrants.html`, or telephone 703-934-0163 or email: `awm@math.umd.edu`. The postal address is: Association for Women in Mathematics, 11240 Waples Mill Road, Suite 200, Fairfax, VA 22030.

Research Experiences for Undergraduates

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation (NSF). Student research may be supported in two forms: REU supplements and REU sites.

REU supplements may be requested for ongoing NSF-funded research projects or may be included in proposals for new or renewable NSF grants or cooperative agreements.

REU sites are based on independent proposals to initiate and conduct undergraduate research participation projects for a number of students. REU site projects may be based in a single discipline or academic department or on interdisciplinary or multidepartment research oppor-

tunities with a strong intellectual focus. Proposals with an international dimension are welcomed. A partnership with the Department of Defense supports REU sites in research areas relevant to defense. Undergraduate student participants supported with NSF funds in either supplements or sites must be citizens or permanent residents of the United States or its possessions.

The deadline for full proposals for REU sites is **September 7, 2005**. Deadline dates for REU supplements vary with the research program; contact the program director for more information. The full program announcement can be found at the website `http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05592`.

DMS Special Meetings Competition

In the spring of 2005 the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) held its first Special Meetings competition. Due to the relatively small number of proposals that were submitted, an additional competition has been scheduled for this fall. The deadline for this next competition is **October 18, 2005**.

These Special Meetings comprise longer-term or larger-scale activities that more widely engage and connect the mathematical sciences community, such as special research years or semesters, multi-institutional regional meetings, and "summer schools". Details for the Special Meetings competition and general information about DMS funding of conferences can be found on the Web at `http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05540`.

The Special Meetings proposals will be reviewed by a panel. In addition to the usual review criteria of intrinsic intellectual merit and broader impacts, proposals are assessed on the following criteria:

1. diversity and breadth of participation by individuals and by institutions,

2. involvement of participants from underrepresented groups and of students and junior investigators,

3. connections to frontiers of the mathematical sciences and between the mathematical sciences and other science and engineering disciplines,

4. overall impact on the U.S. mathematical sciences community.

If you have any questions, please feel free to contact either the program officers of the DMS disciplinary program closest to the research area or one of these program officers: Joanna Kania-Bartoszynska, `jkaniaba@nsf.gov`; Wing Suet Li, `wli@nsf.gov`; Tie Luo, `tluo@nsf.gov`; Mike Steuerwalt, `msteuerw@nsf.gov`.