
Mathematics Opportunities

American Mathematical Society Centennial Fellowships

*Invitation for Applications for Awards
for 2000-01
Deadline December 1, 1999*

The AMS Centennial Research Fellowship Program makes awards annually to outstanding mathematicians to help further their careers in research. Recently, the AMS Council approved changes in the rules for the fellowships. From 1984-96 the fellowship program was aimed at midcareer mathematicians. The changes adopted four years ago redirected the fellowship program toward recent Ph.D.s. The eligibility rules are as follows.

Applicants must: (1) be citizens or permanent residents of a country in North America, (2) have held their doctoral degrees for at least two years at the time of the award, (3) not have permanent tenure, and (4) have held less than two years of research support at the time of the award. (Each year of a full-time teaching appointment with teaching load less than four [respectively, five] courses per year on the semester [respectively, quarter] system will count in this respect as one-half year of research support.) Recipients may not hold the Centennial Fellowship concurrently with other research fellowships (e.g., Sloan Foundation Fellowships or National Science Foundation Postdoctoral Fellowships), they may not use the stipend solely to reduce teaching at the home institution, and they are expected to

spend some of the fellowship period at another institution that has a stimulating research environment suited to their research development.

The stipend for fellowships awarded for 2000-01 is expected to be approximately \$38,000, with an additional expense allowance of about \$1,500. Acceptance of the fellowship cannot be postponed. A fellowship holder may use the stipend as full support for a year or may combine it with half-time teaching and use it as half support over a two-year period.

The number of fellowships to be awarded is small and depends on the amount of money contributed to the program. The trustees have arranged a matching program from general funds in such a way that funds for at least one fellowship are guaranteed. Because of the generosity of the AMS membership, it has been possible to award four to five fellowships a year for the past five years. A list of previous fellowship winners can be found at <http://www.ams.org/secretary/prizes.html>.

Applications should include a short research plan describing both an outline of the research to be pursued and a program for using the fellowship, including institutions at which it will be used and reasons for the choices. The selection committee will base its decision on both the research potential of the applicant, based upon track record and letters of recommendation, and on the quality and feasibility of the research plan.

The deadline for receipt of applications is **December 1, 1999**. Awards will be announced in February 2000 or earlier if possible.

For application forms, write to the Executive Director, American Mathematical Society, P.O. Box 6248, Providence, RI 02940-6248, or send electronic mail to ams@ams.org, or call 401-455-4106. Application forms are also available via the Internet at <http://www.ams.org/employment/>.

Please note that completed application and reference forms should not be sent to the AMS, but to the address given on the forms.

—AMS announcement

NSF Mathematical Sciences Postdoctoral Research Fellowships

The Mathematical Sciences Postdoctoral Research Fellowship program of the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) awards fellowships each year for research in pure mathematics, applied mathematics and operations research, and statistics. The deadline for this year's applications is **October 16, 1999**. Applications must be submitted via FastLane on the World Wide Web. Go to <http://www.fastlane.nsf.gov/>, click on "Postdoctoral Fellowship", then on "Postdoctoral Research Fellowships Application Package", and then on "Prepare New Application Package". Information can be found there for the Mathematical Sciences Postdoctoral Research Fellowships, as well as for other NSF Fellowship opportunities. For more information telephone 703-306-1870 or e-mail: msprf@nsf.gov.

—From an NSF announcement

NSA Grant and Sabbatical Programs

The Mathematical Sciences Program of the National Security Agency (NSA) provides grants and sabbatical opportunities to support research by academic mathematical scientists.

The grant program offers funding in four categories: 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. In addition, it supports research in the design and analysis of cryptographic algorithms. The deadline for submission of all grant proposals is **October 15, 1999**. Awards are generally made in November of the following year. The principal investigators to be supported by the grant must be U.S. citizens or permanent residents, and students and postdoctoral researchers to be supported must be U.S. citizens or permanent residents who intend to become citi-

zens. Grant proposals must arrive at the NSA on the deadline date; allow at least ten days for mailing. Submit proposals to: NSA Mathematical Sciences Program, National Security Agency, ATTN: R51A, Ft. George G. Meade, MD 20755-6000.

The NSA also accepts proposals for small grants for conferences, workshops, and special academic endeavors. Proposals for these may be submitted at any time and will be reviewed as they are received at NSA. Allow at least eight months for review, negotiation, and processing.

The sabbatical opportunities offered by the NSA provide support for academic mathematical scientists to visit the NSA for periods ranging from 9 to 24 months. The sabbaticals primarily involve cryptanalysis but may also involve algebra, probability, statistics, number theory, and discrete mathematics. NSA provides visiting mathematicians with funds to supplement their university's stipends to at least equal their 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 and must participate in a thorough, extensive screening process. Further information may be obtained from the NSA's Web site, <http://www.nsa.gov:8080/programs/msp/>.

—From an NSA announcement

AWM Travel Grants for Women

The National Science Foundation (NSF) and the Association for Women in Mathematics (AWM) sponsor a travel grant program to 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. The grants provide full or partial support for travel and subsistence for a meeting or conference in the applicant's field of specialization. Maximum grants of \$1,000 for domestic travel and \$2,000 for foreign travel are available. For foreign travel, U.S. carriers must be used whenever possible.

These travel funds are provided by the Division of Mathematical Sciences (DMS) of the NSF, and the research conference attended must be in an area supported by DMS. For example, this includes certain areas of statistics but excludes most mathematics education and history of mathematics. An applicant must be a woman holding a doctorate (or equivalent experience) and with a work address in the United States (or home address, in the case of unemployed mathematicians). Anyone who has been awarded an AWM-NSF travel grant in the past two years or who has other sources of external funding, such as any type of NSF grant, is ineligible. Partial support from the applicant's institution or from a nongovernmental agency does not, however, make the applicant ineligible.

The final deadline for the 1999 program is **October 1, 1999**. The deadlines for the 2000 programs are: **February 1, 2000**; **May 1, 2000**; and **October 1, 2000**. (Please note

that these deadlines are slightly changed from those for 1999.) Application materials should be sent to the Travel Grant Selection Committee, Association for Women in Mathematics, 4114 Computer and Space Sciences Building, University of Maryland, College Park, MD 20742-2461. For further information and details on applying, see the AWM Web site, <http://www.awm-math.org/travelgrants.html>, or telephone 301-405-7892, or send e-mail to awm@math.umd.edu. Applications via e-mail or fax are not acceptable.

—From an AWM announcement

NSF Announces Midcareer Methodological Opportunities

The Division of Mathematical Sciences and the Division of Social, Behavioral, and Economic Research of the National Science Foundation (NSF) have announced a joint competition for a limited number of midcareer research fellowships in the social, behavioral, economic, and statistical sciences. The purpose of these fellowships is to facilitate interactions among statisticians and social, behavioral, and economic scientists.

The NSF anticipates supporting no more than four to eight awards per year, depending on the number of applications and availability of funds. Awards will be made for up to a 12-month period. The maximum stipend available for the duration of the award, paid directly to the Fellow, is \$50,000.

Proposals must concretely demonstrate how the proposed fellowship activities will further the development of new methods for increased understanding of complex, substantive problems in the social and behavioral sciences. Applicants must be employed at U.S. institutions and must have earned a Ph.D. or equivalent degree in the social, behavioral, economic, or statistical sciences. Although applications may be submitted by researchers at any level beyond the Ph.D., the NSF especially encourages the submission of proposals from senior (posttenure) researchers.

The deadline for submission of proposals is **September 15, 1999**. Further information on the fellowships and details about application procedures can be found at the NSF Web site, <http://www.nsf.gov/>.

—From an NSF announcement

AWM Mentoring Travel Grants for Women

The Association for Women in Mathematics (AWM), with the support of the National Science Foundation (NSF), offers a Mentoring Travel Grant Program for Women. The objective of this program is to help junior women to develop long-term working and mentoring relationships with senior

mathematicians. This relationship should help the junior mathematician to establish her research program and eventually receive tenure. In 2000, AWM expects to award up to five or six grants in amounts of up to \$4,000 each. Each grant would fund travel, subsistence, and other required expenses for an untenured woman mathematician to travel to an institute or a department to do research with a specified individual for one month. Any unexpended funds could be used for further travel to work with the same individual during the following year. (Applicants for mentoring travel grants may in exceptional cases receive up to three such grants throughout their careers, possibly in successive years; each such grant would require a new proposal and would go through the usual competition.)

An applicant must be a woman having a doctorate or equivalent experience and with a work address in the United States (or a home address if unemployed). The applicant's research may be in any field that is funded by the Division of Mathematical Sciences of the NSF.

An application consists of the following: a cover letter; a curriculum vitae; a research proposal approximately five pages in length that specifies why the proposed travel would be particularly beneficial; a supporting letter from the proposed mentor (who must promise to be available at the time of the proposed travel and may be either a man or a woman), together with the curriculum vitae of the proposed mentor; an approximate budget; and information about other sources of funding available to the applicant. A final report will be required from each awardee. All awards will be determined on a competitive basis by a selection panel consisting of distinguished mathematicians appointed by the AWM.

Send FIVE complete copies of the application materials (including the cover letter) to: Mentoring Travel Grant Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461. Applications via e-mail or fax are not acceptable. The deadline for applications is **February 1, 2000**.

Further information may be obtained by telephone at 301-405-7892 or by e-mail at awm@math.umd.edu.

—From an AWM announcement

Applications for Travel Grants to ICME-9 Are Available

The Ninth International Congress on Mathematical Education (ICME-9) will be held July 30 to August 6, 2000, in Makuhari, Japan. To help make it possible for U.S. mathematics educators to attend, the National Council of Teachers of Mathematics (NCTM) has applied to the National Science Foundation (NSF) for travel funds. If granted, the funds can be used by mathematics teachers, mathematicians, and mathematics educators to supplement travel expenses to ICME-9.

The funds may be used to support air transportation (on U.S. carriers only), hotel accommodations, meal costs, and

conference registration. It is important to note that travel grant awardees under this program may not use other NSF funds to supplement international travel, that is, airfare to Japan or subsistence at ICME-9.

In addition to applying for an ICME-9 travel grant, individuals may apply for participation in an eight-day Post-ICME-9 Seminar Tour to visit with counterparts in Chiba and Yamagata. For this seminar tour, the NSF will fund per diem travel, lodging, and subsistence expenses. A Post-ICME-9 Seminar Tour awardee who does not also receive an NCTM ICME-9 travel grant may use other NSF funds to support travel to ICME-9. Some of the Post-ICME-9 Seminar Tour awardees will be invited and funded to make presentations at the Presidential Awardee Event in Washington, DC, in June 2001.

A selection committee comprised of individuals representing the NCTM, the Mathematical Association of America, the American Mathematical Association of Two-Year Colleges, the Mathematical Sciences Education Board, and the U.S. National Commission on Mathematics Instruction will review the applications and award the grants both for the ICME-9 Travel and the Post-ICME-9 Seminar Tour. Elementary, middle, and high school teachers are strongly encouraged to apply.

The travel grant application and selection criteria are available from the NCTM, Department E, 1906 Association Drive, Reston, VA 20191-1593 (tel. 703-620-9840, ext. 2112); or from the NCTM Web page at <http://www.nctm.org/icme9>. They are also available from the NCTM Fax-on-demand at 800-220-8483: Follow the voice prompts, select option 2, enter document 525, and when prompted enter the receiving fax number; the system calls your fax machine and delivers your document. The application deadline is **November 1, 1999**. Notifications will be made by December 15, 1999.

—*Frances R. Curcio*
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