
Mathematics Opportunities

American Mathematical Society Centennial Fellowships

*Invitation for Applications for Awards
for 2004–2005
Deadline December 1, 2003*

The AMS Centennial Research Fellowship Program makes awards annually to outstanding mathematicians to help further their careers in research. From 1997–2001 the fellowship program was aimed at recent Ph.D.'s. The AMS Council has since approved changes in the rules for the fellowships. The eligibility rules are as follows.

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 National Science Foundation 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, 1992, and September 1, 2001). 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.

The stipend for fellowships awarded for 2004–2005 is expected to be approximately \$60,000, with an additional

expense allowance of about \$1,700. 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 AMS trustees have arranged a matching program from general funds. At most two fellowships will be awarded for the 2004–2005 academic year. A list of previous fellowship winners can be found at <http://www.ams.org/prizes/centennial-fellowship.html>.

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.

The deadline for receipt of applications is **December 1, 2003**. Awards will be announced in February 2004 or earlier if possible.

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

—AMS announcement

Enhancing the Mathematical Sciences Workforce in the 21st Century

The National Science Foundation (NSF) has launched a new program called Enhancing the Mathematical Sciences Workforce in the 21st Century (EMSW21). The long-range goal of the program is to increase the number of U.S. citizens, nationals, and permanent residents who are well-prepared in the mathematical sciences and who pursue careers in the mathematical sciences and in other NSF-supported disciplines. EMSW21 builds on the VIGRE (Vertical Integration of Research and Education in the Mathematical Sciences) program and now includes a broadened VIGRE activity, an additional component for Research Training Groups (RTG) in the Mathematical Sciences, and an additional component for Mentoring through Critical Transition Points (MCTP) in the Mathematical Sciences.

The program solicitation is available at <http://www.nsf.gov/pubs/ods/getpub.cfm?nsf03575>. This program solicitation replaces NSF 02-120 (VIGRE). The proposal deadline is **September 16** each year.

—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 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, statistics, and cryptology. The NSA also accepts proposals for small grants for conferences, workshops, and special academic endeavors. 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, 2003**. 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. 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/programs/msp/grants.html>. The telephone number is 301-688-0400, the email address is msp@math.umbc.edu, and the postal address

is: Mathematical Sciences Program, National Security Agency, ATTN:R51A, Suite 6557, Ft. George G. Meade, MD 20755-6557.

—From an NSA 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 17, 2003**. Applications must be submitted via FastLane on the World Wide Web at http://www.fastlane.nsf.gov/jsp/homepage/postdoc_fel.jsp. For more information, telephone the DMS at 703-306-1870 or send email to msprf@nsf.gov.

—From an NSF announcement

NSF 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 8, 2003**. 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. The program announcement is available at <http://www.nsf.gov/pubs/2001/nsf01154/nsf01154.txt>.

—From an NSF announcement

NSF International Research Fellow Awards

The International Research Fellow Awards Program of the National Science Foundation (NSF) provides support for postdoctoral and junior investigators to do research in basic science and engineering for three 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 six years before the date of application or who expect to receive their degrees by the date of the award.

The deadline for applying is **November 1, 2003**. 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. More information and applications for the 2004 competition will be available early in August 2003 at <http://www.orau.org/nsf/nsffe1.htm>. Further information may be obtained by calling toll-free 866-353-0905 or by sending email to nsfgrfp@orau.gov.

—From an NSF announcement

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 2003 is **October 1, 2003**; the deadlines for 2004 are **February 1, 2004**; **May 1, 2004**; and **October 1, 2004**. For the Mentoring Travel Grants program the deadline is **February 1, 2004**. For further information and details on applying, see the AWM website, <http://www.awm-math.org/travelgrants.html>; or telephone 301-405-7892; or send email to awm@math.umd.edu. The postal address is: Association for Women in Mathematics, 4114 Computer and Space Sciences Building, University of Maryland, College Park, MD 20742-2461.

—From an AWM announcement

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 included in proposals for new or renewal NSF grants or cooperative agreements or as supplements to ongoing NSF-funded projects. 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 multidisciplinary research opportunities with a strong intellectual focus. Proposals with an international dimension are welcomed. 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 15, 2003**. 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/pubsys/ods/getpub.cfm?nsf02136>.

—From an NSF announcement

Call for Submissions for Sunyer i Balaguer Prize

Ferran Sunyer i Balaguer (1912–1967) was a self-taught Catalan mathematician who, despite a serious physical disability, was very active in research in classical analysis, an area in which he acquired international recognition. Each year, in honor of the memory of Ferran Sunyer i Balaguer, the Institut d'Estudis Catalans awards an international research prize bearing his name.

The prize is awarded for a mathematical monograph of an expository nature presenting the latest developments in an active area of research in mathematics in which the author has made important contributions. The monograph should be written in English and should be at least 150 pages.

The prize, amounting to 10,000 euros (about U.S.\$8,600), is provided by the Ferran Sunyer i Balaguer Foundation. The winning monograph will be published in Birkhäuser-Verlag's series Progress in Mathematics, subject to the usual regulations concerning copyright and author's rights.

Submissions should be sent before **December 1, 2003**, to: Centre de Recerca Matemàtica, Fundació Ferran Sunyer i Balaguer, Apartat 50, E-08193 Bellaterra, Spain. For further information, visit the website <http://www.crm.es/home.htm> or send email to crm@crm.es.

—From an Institut d'Estudis Catalans announcement

Call for Nominations for Information-Based Complexity Young Researcher Award

Nominations are being sought for the Information-Based Complexity Young Researcher Award. This new annual award will be given for significant contributions to information-based complexity by a young researcher. The prize will consist of \$1,000 and a plaque.

Any researcher who has not reached his or her thirty-fifth birthday by September 30 of the year of the award is eligible. The award may be given for work done in a single year or over a number of years. The work may have been published in any journal or number of journals or as monographs. A person does not have to be nominated to win the award.

The deadline for nominations is **September 30, 2003**. Nominations should be sent to Joseph F. Traub, email: traub@cs.columbia.edu.

—Joseph F. Traub, Columbia University

News from MSRI

The Mathematical Sciences Research Institute in Berkeley, California, announces two workshops in support of its academic program in Discrete and Computational Geometry (fall semester, August 18–December 19, 2003) for the 2003–04 year. Registration for these workshops is available online at <http://www.msri.org/applications/applying/>.

Mathematical Foundations of Geometric Algorithms

October 13, 2003, to October 17, 2003

Organized by: Pankaj Agarwal, Herbert Edelsbrunner, Micha Sharir, and Emo Welzl

The workshop will focus on the design and analysis of geometric algorithms, and on the mathematical and

algorithmic techniques needed to make these algorithms efficient. The emphasis will be on research topics that are currently active. These topics will be presented by key researchers who will survey the current state of the art in these areas, report on new research results, and facilitate discussions and collaboration among the participants.

Combinatorial and Discrete Geometry

November 17, 2003, to November 21, 2003

Organized by: Jesús A. De Loera, Jacob E. Goodman, János Pach and Günter M. Ziegler

The focus of this workshop will be on discrete geometric objects (e.g. polyhedra, geometric graphs, sphere packings, tilings, lattices, etc.) and their combinatorial structure, stressing the connections between discrete geometry and algebra, combinatorics, and topology.

For more information, send email to workshops@msri.org.

—MSRI announcement

News from AIM

The American Institute of Mathematics (AIM) Research Conference Center seeks proposals for focused workshops in all areas of the mathematical sciences. Applications are due **November 1, 2003**. For details visit <http://www.aimath.org/ARCC>.

—AIM announcement