
Mathematics Opportunities

American Mathematical Society Centennial Fellowships

*Invitation for Applications for Awards for
2005–2006
Deadline December 1, 2004*

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.

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, 1993, and September 1, 2002). 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 2005–2006 is expected to be approximately \$62,000, with an additional expense allowance of about \$3,000. 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 2005–2006 academic year. A list of previous fellowship winners can be found at <http://www.ams.org/prizes-awards>.

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 demon-

strate 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, 2004**. Awards will be announced in February 2005 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 Membership and Programs 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

ICM 2006 Travel Grants

The International Mathematical Union (IMU) and the Organizing Committee of ICM 2006 will award a limited number of grants for travel to the International Congress of Mathematicians (ICM 2006) in Madrid, Spain, August 22–30, 2006. The grants will be awarded to active young research mathematicians (less than thirty-five years old at the time of the congress) and to senior mathematicians from developing and economically disadvantaged countries.

The travel grants, provided by the IMU Special Development Fund, will support travel costs and living expenses for the duration of the congress. The Organizing Committee will also provide partial support for a limited number of senior mathematicians from Latin America and from developing Mediterranean countries, as well as for young Spanish mathematicians (less than thirty-two years old at the time of the congress).

Deadline for grant applications is **January 1, 2006**. For more information, see <http://www.icm2006.org> or email: grants@icm2006.org.

—From an ICM announcement

Research Opportunities for U.S. Graduate Students in Asia

The National Science Foundation (NSF) and the National Institutes of Health (NIH) are cosponsoring a summer research program in Japan, Korea, and Taiwan for U.S. graduate students during the summer of 2005. The East Asia and Pacific Summer Institutes (EAPSI) provide U.S. graduate students in science and engineering firsthand research experience in Australia, China, Japan, Korea, or Taiwan; an introduction to the science and science policy infrastructure of the respective location; and orientation to the culture and language. The primary goals of EAPSI are to introduce students to East Asia and Pacific science and engineering in the context of a research laboratory and to initiate personal relationships that will better enable them to collaborate with foreign counterparts in the future. The institutes last approximately eight weeks, from June to August, and are administered in the United States by the NSF. The NIH cosponsors the summer institute in Japan.

Applicants must be U.S. citizens or permanent residents. They must be enrolled at U.S. institutions in science or engineering Ph.D. programs, in M.D. programs with an interest in biomedical research, or in master's degree programs with at least one full academic year completed by the end of the calendar year of application. They must be pursuing studies in fields of science or engineering that are supported by the NSF or the NIH (for Japan) and that also are represented among the potential host institutions. International travel will be provided, and each awardee will receive an allowance of \$3,000.

The deadline for application materials to be postmarked is **December 10, 2004**. Proposers are required to prepare and submit all proposals for this announcement/solicitation through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: <http://www.nsf.gov/pubs/2003/nsf03608/nsf03608>.

—From an NSF announcement

AAUW Educational Foundation Fellowships and Grants

The American Association of University Women (AAUW) awards Selected Professions Fellowships to women who intend to pursue a full-time course of study at accredited institutions during the fellowship year in a designated degree program in which women's participation has traditionally been low. All women who are candidates for the

master of science (M.S.) degree in mathematics or statistics are eligible to apply.

Applications are now available for Master's and First Professional Awards, which carry cash awards of between \$5,000 and \$12,000. The deadline for applications to be postmarked is **January 10, 2005**. The fellowship year runs from July 1, 2005, to June 30, 2006. For more information see the AAUW's website at http://www.aauw.org/fga/fellowships_grants/selected.cfm, or contact the AAUW Educational Foundation, 1111 Sixteenth St., N.W., Washington, DC 20036; telephone 800-326-2289 (AAUW); fax 202-872-1425; email: info@aauw.org.

—From an AAUW announcement

Call for Nominations for Third World Academy of Sciences Prizes

The Third World Academy of Sciences (TWAS) Prizes will be awarded to individual scientists in developing countries in recognition of outstanding contributions to knowledge in eight fields of science.

This new prize was formed by merging the TWAS Awards in Basic Sciences and the Third World Network of Scientific Organizations (TWNISO) Prizes in Applied Science. Eight awards are given each year in the fields of mathematics, basic medical sciences, biology, chemistry, physics, agricultural sciences, earth sciences, and engineering sciences. Each award consists of a prize of US\$10,000 and a plaque. Candidates for the awards must be nationals of developing countries and, as a rule, must be living and working in those countries.

Nomination forms should be sent to: Helen Grant, TWAS Prizes, Third World Academy of Sciences (TWAS), c/o The Abdus Salam International Centre for Theoretical Physics (ICTP), 34014 Trieste, Italy; fax: (39) 040-224559. Further information is available on the World Wide Web at http://www.ictp.trieste.it/~twas/twas_prizes.html.

—From a TWAS announcement

Twentieth Reunion of Budapest Semesters Program

The Budapest Semesters in Mathematics (BSM) Program will celebrate its twentieth year with a gala reunion to be held in Budapest, June 15–23, 2005.

Initiated by Paul Erdős, László Lovász, and Vera T. Sós, the Budapest Semesters in Mathematics program draws on Hungary's long tradition of excellence in mathematics education to provide a unique opportunity for North American undergraduates. Through this program, mathematics and computer science majors in their junior/senior years spend one or two semesters in Budapest and study under

the tutelage of eminent Hungarian scholar-teachers. The BSM instructors are members of Eötvös University and the Mathematical Institute of the Hungarian Academy of Sciences, the two institutions known for having educated more than half of Hungary's highly acclaimed mathematicians.

The BSM has had more than 1,300 participants in its twenty years of existence. The reunion will feature keynote addresses by Ronald Graham of the University of California, San Diego, and László Babai of the University of Chicago, as well as distinguished BSM alumni. There will be a gathering of faculty and former students, talks on the history of the program, and a three-day high-level survey-research conference with six plenary speakers. The reunion will also feature excursions and day trips, including a film festival, folk dance lessons, music from the Festival Orchestra and the Liszt Academy, an evening dinner cruise to the Danube Bend, and a picnic on Margaret Island.

For further information on BSM and to register for the reunion, visit the website <http://www.stolaf.edu/depts/math/budapest/>.

—Paul Humke

St. Olaf College, BSM North American Director

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 the second Tuesday in October each year. For further information contact the program officer, Susan Parris, 703-292-7225, email: sparris@nsf.gov; or visit the website <http://www.nsf.gov/cgi-bin/getpub?nsf02149>.

—From an NSF announcement

NSA Funding Opportunity in Quantum Computing Algorithms

The National Security Agency (NSA) solicits proposals for one-year research grants in the area of quantum computing algorithms.

Grants are for one year only, but it is quite possible that innovative research will receive additional funding in subsequent years. Proposals of up to \$100,000 will be considered. In some cases, exceptional proposals may qualify for more funding. The agency is not interested in funding work such as quantum error correction, but more interested in algorithms related to number theory, algebra, and combinatorics than in topics such as physical modeling and database analysis.

Deadline for proposals is **Monday, December 20, 2004**. Please see the NSA website www.nsa.gov/msp/msp00002.cfm for more details on what to include with the proposal. Send six hard copies of proposals to: Mathematical Sciences Program, ATTN: Quantum Computing Algorithm Grants, NSA, Suite 6557, Fort Meade, MD, 20755-6557. In addition, email PDF copy of proposal to: mdwagn4@nsa.gov. Direct questions to: Mel Currie, 301-688-0298, mrcurri@orion.ncsc.mil.

—From an NSA 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 gives 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. Due to a recent policy change, research in cryptology is no longer being supported. 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** each year. Grants begin in the fall of the following year. For more information on the application process, see <http://www.nsa.gov/msp/msp00002.cfm>.

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 NSA pays half of a sabbatical visitor's salary and benefits during academic months and 100 percent of salary and benefits during any summer months of the sabbatical detail. 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. To apply, send a cover letter and curriculum vitae with list of publications. The cover letter should contain a description of research interests, how the applicant could contribute to NSA's mission, and how doing a sabbatical at NSA would affect teaching and research upon returning to academia.

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For more information see <http://www.nsa.gov/msp/msp00003.cfm>.

More information on these programs may be obtained from the NSA's website: <http://www.nsa.gov/msp>. Michelle D. Wagner (mdwagn4@nsa.gov) is the new director, and Rosalie (Jackie) Smith (rjsmit2@nsa.gov) is the program administrator of the Mathematical Sciences Program. The phone number is 301-688-0400, and the fax number is 301-688-0697. Grant and sabbatical applications should be mailed to Dr. Michelle D. Wagner, NSA Mathematical Sciences Program, National Security Agency, ATTN: R1, Suite 6557, Fort Meade, MD 20755-6557.

—From an NSA announcement