
Mathematics Opportunities

ONR Young Investigator Program

The Office of Naval Research (ONR) sponsors a Young Investigator Program to support academic scientists and engineers who have recently received Ph.D. or equivalent degrees and who show exceptional promise for doing creative research.

Awards of up to \$100,000 per year for three years are made, and additional funds may be provided based on need. The program is open to United States citizens, nationals (native residents of a U.S. possession), and permanent residents who hold tenure-track or permanent faculty positions at U.S. universities and who received their graduate degrees on or after November 1, 1997.

Proposals in mathematical, computer, and information sciences should be sent to: Office of Naval Research, Andre M. Van Tilborg, Director, Mathematical, Computer, and Information Sciences Division, Attn. FY03-YIP, 800 N. Quincy Street, Arlington, VA 22217-5660; telephone 703-696-4312; email: Andre_VanTilborg@onr.navy.mil. Proposals must be received by 4:00 p.m. on **November 1, 2002**. For further information and instructions for proposal preparation, see the ONR website, http://www.onr.navy.mil/sci_tech/industrial/yip_announce.htm.

—From an ONR announcement

NSF Distinguished International Postdoctoral Research Fellowships

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 this fellowship 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 proposals is **October 9, 2002**. For technical and scientific information, contact Lynne Walling, Program Director, Division of Mathematical Sciences, Room 1025, National Science Foundation, 4201 Wilson Blvd., 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 IGERT Program

The Integrative Graduate Education and Research Training (IGERT) program was initiated by the National Science Foundation (NSF) to meet the challenges of educating Ph.D. scientists and engineers with the interdisciplinary backgrounds and the technical, professional, and personal skills needed for the career demands of the future. The program is intended to catalyze a cultural change in graduate education for students, faculty, and universities by establishing innovative models for graduate education in a fertile environment for collaborative research that transcends traditional disciplinary boundaries. It is also intended to facilitate greater diversity in student participation and to contribute to the development of a diverse, globally aware science and engineering work force. Supported projects must be based on a multidisciplinary research theme and administered by a diverse group of investigators from U.S. Ph.D.-granting institutions with appropriate research and teaching interests and expertise.

For the 2002 competition, the preproposal deadline is **October 2, 2002**, and the deadline for full proposals is **April 18, 2003**. Further information may be found at the Web page <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf02145>.

—*From an NSF announcement*

Humboldt Foundation Offers Fellowships

The Alexander von Humboldt Foundation awards annual fellowships to foreign scholars holding doctorates to support research projects of their own choosing in Germany. The fellowships are offered for research visits of between six and twelve months.

Applicants from all countries and in all academic disciplines may apply. The fellowships are awarded to scholars under forty years of age. Approximately 500 research fellowships are available each year. Decisions are based primarily on the quality and feasibility of the proposed research projects and on the applicants' international publications.

For more information on application requirements and procedures, consult the Foundation's website at http://www.avh.de/en/programme/stip_aus/index.htm.

—*From a Humboldt Foundation announcement*

Call for Applications for 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 2003 programs is **December 16, 2002**. Application materials are available on the Web at <http://www.ams.org/careers-edu/epsilon.html> or by mail: Professional Services Department, AMS, 201 Charles Street, Providence, RI 02904; telephone 800-321-4267, ext. 4105; email: prof-serv@ams.org.

—*Diane M. Boumenot, AMS Professional Services Department*

Call for Nominations for Waterman Award

Congress established the Alan T. Waterman Award in August 1975 to mark the twenty-fifth anniversary of the National Science Foundation (NSF) and to honor its first director. The annual award recognizes an outstanding young researcher in any field of science or engineering

supported by the NSF. In addition to a medal, the awardee receives a grant of \$500,000 over a three-year period for scientific research or advanced study in the mathematical, physical, medical, biological, engineering, social, or other sciences at the institution of the recipient's choice.

Candidates must be U.S. citizens or permanent residents and must be thirty-five years of age or younger or not more than seven years beyond receipt of the Ph.D. degree by December 31 of the year in which they are nominated. Candidates should have demonstrated exceptional individual achievements in scientific or engineering research of sufficient quality to place them at the forefront of their peers. Criteria include originality, innovation, and significant impact on the field.

Nominations for the award and supporting references must be postmarked by **December 31, 2002**. For more detailed information concerning the nomination procedures or to receive a nomination form, contact Susan E. Fannoney, telephone: 703-292-8096, or email: sfannone@nsf.gov.

—*From an NSF 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 must be living and working in those countries.

Nominations for the 2003 awards are due on **March 1, 2003**. Completed 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*

News from IPAM

The Institute for Pure and Applied Mathematics (IPAM) at the University of California, Los Angeles, announces the following schedule of programs.

Semester-Long Programs, 2002–2003

Mathematics in Nanoscale Science and Engineering, September–December 2002: Organizing Committee: Russel Caflisch (UCLA), James Heath (UCLA), Mitchell Luskin (University of Minnesota), Antonio Redondo (Los Alamos National Laboratory), Peter Shor (AT&T Laboratories). Tutorials will be held September 17–20, 2002, and workshops will be held throughout the semester.

Symplectic Geometry and Physics, March–June, 2003: Organizing Committee: Valentin Afraimovich (Mexico), Denis Auroux (École Polytechnique), Fedor Bogomolov (Courant Institute), Simon Donaldson (Imperial College), Ludmil Katzarkov (UC Irvine), Maxim Kontsevich (IHÉS), Gang Liu (UCLA), Tony Pantev (University of Pennsylvania), George Zaslavsky (New York University). Tutorials will be held March 18–21, 2003, and workshops will be held throughout the semester.

Short Programs, 2002–2003

PECS-IV International Workshop on Photonic and Electromagnetic Crystal Structures, October 28–November 1, 2002: Organizing Committee: Tony Chan (UCLA), Eilish Hathaway (IPAM).

Multiscale Geometric Analysis: Theory, Tools, and Applications, January 13–17, 2003: Organizing Committee: Emmanuel Candes (Caltech), David Donoho (Stanford), Peter Jones (Yale), Jean-Luc Starck (Saclay).

Emerging Applications of the Nonlinear Schrödinger Equation, February 3–7, 2003: Organizing Committee: Gadi Fibich (Tel Aviv), Shi Jin (University of Wisconsin-Madison), George Papanicolaou (Stanford).

Cells and Materials: At the Tissue Engineering Interface, February 18–21, 2003: Organizing Committee: James Dunn (UCLA), Ichiro Nishimura (UCLA), Michael Longaker (Stanford), Stanley Osher (UCLA), Bill Tawil (Baxter BioSciences), Howard Winet (UCLA), Ben Wu (UCLA).

Geometry of Lagrangian Submanifolds, April 14–18, 2003: Organizing Committee: M. Gross (UCSD), K. Liu (UCLA), R. Schoen (Stanford), J. Wolfson (Michigan State), E. Zaslow (Northwestern).

Applied Inverse Problems, May 18–23, 2003: Organizing Committee: Joyce McLaughlin (Rensselaer Polytechnic Institute), Bill Rundell (Texas A&M), Heinz Engl (Johannes-Kepler), Daniela Calvetti (Case Western).

Undergraduate Program, Summer 2003

Research in Industrial Projects for Students (RIPS) is a summer program based on the National Science Foundation’s Research Experiences for Undergraduates program with industry-sponsored projects.

For more information and application forms, visit the IPAM website at <http://www.ipam.ucla.edu/programs/>.

—From an IPAM announcement

and statisticians in academic, industrial, and government careers. The 2002 contest is sponsored by the Simulation Enabled Product Realization Program at Sandia National Laboratories.

The contest is open to students in the following categories: 6th–8th grade, 9th–12th grade, undergraduate, and graduate. At least one winning entry 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 entry published in the *AWM Newsletter* as well. The deadline for entries is **November 1, 2002**.

In addition to student entries, organizers are currently seeking women mathematicians to volunteer as the subjects of these essays.

For more information, go to <http://www.awm-math.org/biographies/contest.html> or contact Victoria Howle, the contest organizer, by email at vehowle@sandia.gov.

—Victoria Howle, Sandia National Laboratories

AWM Essay Contest

To increase awareness of women’s ongoing contributions to the mathematical sciences, the Association for Women in Mathematics (AWM) is offering an essay contest for biographies of contemporary women mathematicians