Mathematics Opportunities

NSF CAREER Program Guidelines Available

The guidelines for the Faculty Early Career Development (CAREER) Program of the National Science Foundation (NSF) are now available on the World Wide Web. The program solicitation number is NSF 02-111. Information is available at `http://www.nsf.gov/pubs/2002/nsf02111/nsf02111.htm`. Proposals must be submitted electronically. The deadline for proposals in the mathematical and physical sciences is **July 22, 2004**.

—From an NSF announcement

Joint Initiative in Mathematical Biology

The Division of Mathematical Sciences and the Directorate for Biological Sciences of the National Science Foundation (NSF) and the National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health have announced a collaborative initiative to support research in mathematics and statistics related to mathematical biology research.

The competition is designed to support research on mathematical problems related to biological problems in areas supported by the NSF and the NIGMS. A direct relationship between a biological application and mathematics is expected. Research teams that include scientists from both the life sciences community and the mathematical sciences community are encouraged. Both new and existing collaborations will be supported. Award sizes are expected to range from $100,000 to $400,000 per year with durations of 4–5 years.

The deadline for full proposals is **June 30, 2004**. For further information see the NSF website at `http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf04572`, or contact the program director for the Division of Mathematical Sciences, Michael H. Steuerwalt, email: `msteuerw@nsf.gov`.

—From an NSF announcement

Clay Senior Scholars Program

The Clay Mathematics Institute (CMI) has announced a Senior Scholars Program to foster mathematical research and the exchange of ideas by providing support for senior mathematicians who will play a central role in a topical program at an institute or university. Senior scholars will be appointed for residences of from one to three months, although terms of up to six months are possible.

Nomination materials include a letter of nomination, a curriculum vitae and publication list, and letters of reference. The deadline date for nominations is **August 1, 2004**. Materials should be sent to the attention of Maria McLaughlin, email: `nominations@claymath.org`, or to the Clay Mathematics Institute, One Bow Street, Cambridge, MA 02138. For further information, see the CMI website: `http://www.claymath.org/senior_scholars`, or call 617-995-2600.

—From a CMI announcement

Call for Nominations for Sloan Fellowships

Nominations for candidates for Sloan Research Fellowships, sponsored by the Alfred P. Sloan Foundation, are due by **September 15, 2004**. A candidate must be a member of the regular faculty at a college or university in the United States or Canada and must be at an early stage in his or her research career. For information, write to: Sloan Research Fellowships, Alfred P. Sloan Foundation, 630 Fifth Avenue, Suite 2550, New York, NY 10111, or

consult the foundation's Web page: `http://www.sloan.org/programs/fellowship_brochure.shtml`.

—From a Sloan Foundation announcement

Call for Nominations for AWM Hay and Schafer Awards

The Executive Committee of the Association for Women in Mathematics (AWM) is calling for nominations for the Louise Hay Award for Contributions to Mathematics Education and the Alice T. Schafer Mathematics Prize.

The Louise Hay Award is intended to recognize outstanding achievements in any area of mathematics education, interpreted in the broadest possible sense. The award is presented annually to highlight the importance of mathematics education and to evoke the memory of all that Hay exemplified as a teacher, scholar, administrator, and human being. The nomination document(s) should include: (1) a one- to three-page letter of nomination highlighting the exceptional contributions of the candidate; (2) a curriculum vitae of the candidate, not exceeding three pages; and (3) three letters supporting the nomination. It is strongly recommended that the letters represent a range of constituents affected by the nominee's work.

The Alice T. Schafer Prize is awarded to an undergraduate woman for excellence in mathematics. The nominee may be at any level in her undergraduate career but must either be a U.S. citizen or have a U.S. school address. A letter of nomination for the Schafer Prize should include, but not be limited to, an evaluation of the nominee on the following criteria: (1) quality of performance in advanced mathematics courses and special programs, (2) demonstration of real interest in mathematics, (3) ability to do independent work in mathematics, and (4) performance in mathematical competitions at the local or national level, if any. A copy of transcripts and an indication of the candidate's undergraduate level should be included with a letter of nomination. Supporting materials (e.g., reports from summer work using mathematics, copies of talks given in student chapters, recommendations, etc.), if applicable, should be enclosed with the nomination.

Five complete copies of nomination material for these awards should be sent to either: The Hay Award Selection Committee or The Alice T. Schafer Award Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461. For further information call the AWM at 301-405-7892 or send email to `awm@math.umd.edu`. The AWM's Web address is `http://www.awm-math.org`.

Please note that nominations via email or fax are not acceptable. The deadline for nominations for both awards to be received at the AWM office is **October 1, 2004.**

—AWM announcement

News from the IMA

The Institute for Mathematics and its Applications (IMA) at the University of Minnesota has announced a thematic program on "Mathematics of Materials and Macromolecules: Multiple Scales, Disorder, and Singularities", to be held from September 2004 through June 2005.

The program is aimed at synthesizing the problems at the interface between mathematics, materials science, condensed matter physics, and biology. The program will particularly focus on phenomena that require modeling that integrates the atomic to the continuum scales.

A variety of tutorials and workshops will be offered. Activities for the fall quarter include: *September 20-24, 2004:* Tutorial on Mathematics of Materials. *September 27-October 1, 2004:* Workshop on Modeling of Soft Matter. *October 25-29, 2004:* Workshop on Singularities in Materials. *November 5-6, 2004:* Symposium on Prospects for Mathematics and Mechanics upon the 80th Birthday of Jerry Ericksen. *November 18-20, 2004:* Workshop on Future Challenges in Multiscale Modeling and Simulation.

Several focus groups will meet throughout the year on topics such as Multiscale Modeling and Computing, Soft Matter, and Singularities. The organizing committee for the year consists of Maria Carme T. Calderer, University of Minnesota; Richard D. James, University of Minnesota; Robert V. Kohn, New York University; Mitchell Luskin, University of Minnesota; John H. Maddocks, Swiss Federal Institute of Technology; Rob Phillips, California Institute of Technology; James P. Sethna, Cornell University; and Chris Wolverton, Ford Research Laboratory. For further information and application forms, see `http://www.ima.umn.edu/matter`.

—IMA announcement

News from BIRS

The Banff International Research Station for Mathematical Innovation and Discovery (BIRS) is a collaborative Canada-United States venture that provides an environment for creative interaction and the exchange of ideas, knowledge, and methods within the mathematical sciences and with related sciences and industry.

The principal activity sponsored by BIRS is five-day workshops, but two-day collaborations are also possible for industry and academic researchers to work together in teams or focused research groups for periods of two to four weeks. BIRS also hosts summer schools and graduate training camps.

Nassif Ghoussoub of the University of British Columbia was recently appointed scientific director for a period of three years, starting January 1, 2004. Ghoussoub is the founding director of the Pacific Institute for the Mathematical Sciences (PIMS) and a cofounder of BIRS.

For more information and a calendar of events for 2005, see `http://www.pims.math.ca/birs/`.

—From a BIRS announcement