Mathematics Opportunities

NSF Integrative Graduate Education and Research Training

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 workforce. 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.


—From an NSF announcement

AP Calculus Readers Sought

The Educational Testing Service and the College Board invite interested college faculty to apply to be Readers for the Advanced Placement Calculus Exam. In June, AP high school and college faculty members from around the world gather in the United States for the annual AP Reading. There they evaluate and score the free-response sections of the AP Exams. AP Exam Readers are led by a Chief Reader, a college professor who has the responsibility of ensuring that students receive grades that accurately reflect college-level achievement. Readers find the experience an intensive collegial exchange in which they can receive professional support and training.

To learn more about this opportunity or to apply for a position as a Reader, see the website http://apcentral.collegeboard.com/apc/public/teachers/opportunities/4137.html; email: apreader@ets.org; telephone: 609-467-3384.

—Caren L. Diefenderfer, Hollins University

Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences

The National Science Foundation’s (NSF) Division of Mathematical and Physical Sciences (MPS) and directorates for Education and Human Resources (EHR) and Biological Sciences (BIO) invite proposals for the Undergraduate Biology and Mathematics (UBM) project. This project aims to enhance interdisciplinary training for undergraduates in biological and mathematical sciences and to better prepare undergraduate biology or mathematics students to pursue graduate study and careers in fields that integrate the mathematical and biological sciences.

The project provides long-term research experiences for interdisciplinary balanced teams of at least two undergraduates. Projects should focus on research that integrates the mathematical and biological sciences and that provides students with exposure to contemporary mathematics and biology, addressed with modern research tools and methods. Projects must involve students from both areas in collaborative research experiences and include joint mentorship by faculty in both fields.


—From an NSF announcement
Center for Women in Mathematics at Smith College

The Center for Women in Mathematics is a place for women to get intensive training in mathematics at the advanced undergraduate level. Participants take courses, work on research projects, and enjoy a rich mathematical environment in the supportive, dynamic company of other women serious about mathematics. The center features two programs for visiting students.

The Junior Year for Women at Smith College is for undergraduate women mathematics majors. Financial aid is available to U.S. citizens and permanent residents. Applicants should be majoring, or intending to major, in mathematics.

The Post-Baccalaureate Program is for women with bachelor's degrees who did not major in mathematics or whose mathematics major did not sufficiently prepare them for graduate school. The program is designed to improve a student's preparation and motivation to help them determine if they want to continue to graduate school in the mathematical sciences. This program is open to all women who have graduated college with some coursework in mathematics above the level of calculus and an interest in pursuing it further. Full tuition and a living stipend is available to U.S. citizens and permanent residents who are admitted to the program.

Applications are reviewed on a rolling basis. The preferred deadline for January entrance is October 15, but applications are accepted through December 15. For September entrance, the preferred deadline is March 15, but applications are accepted through July 1. Students applying for financial aid are encouraged to apply by the preferred deadlines, as funds are limited.

For more information or to request application materials, please visit the website [http://www.math.smith.edu/center](http://www.math.smith.edu/center), or contact: Ruth Haas, Chair, Department of Mathematics and Statistics, Smith College, Northampton, MA 01063; email mathchair@email.smith.edu; telephone 413-585-3872. The center is supported by the National Science Foundation and Smith College.

News from BIRS

In the past two years, the Banff International Research Station (BIRS) in Banff, Alberta, Canada, has received substantial continued funding for its operations. In 2005, BIRS received an award of 3.3 million Canadian dollars (about US$2.8 million) from the Alberta Ministry of Innovation and Science, as well as a five-year grant of US$2.6 million from the U.S. National Science Foundation. In 2006 BIRS also received a five-year grant of 2.9 million Canadian dollars from the National Science and Engineering Research Council of Canada. BIRS also has a pledge of support from the National Council for Science and Technology (CONACYT) of Mexico.

BIRS is a joint Canada-U.S.-Mexico initiative to provide an environment for creative interaction and the exchange of ideas, knowledge, and methods within the mathematical sciences and with related sciences and industry. In 2007 BIRS is running a 48-week program of activities, including five-day workshops, two-day workshops, focused research group activities, research in teams, and summer schools. For further information, including information on submitting a proposal to organize an activity at BIRS, visit the website [http://www.pims.math.ca/birs](http://www.pims.math.ca/birs).

—from BIRS announcements

MSRI-UP

The Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP) is a comprehensive program for undergraduates that aims at increasing the number of students from underrepresented groups in mathematics graduate programs. MSRI-UP includes summer research opportunities, mentoring, workshops on the graduate school application process, and follow-up support.

For further information, visit the webpage at [http://www.msri.org/up/description](http://www.msri.org/up/description). Review of applications will begin on March 2, 2007.

—from an MSRI announcement