For Your Information

Nominations Sought for the Fields Medal and Nevanlinna Prize

The Executive Committee of the International Mathematical Union has appointed a Fields Medals Committee and a Nevanlinna Prize Committee to select the awardees. The names of the members of these committees will not be announced publicly. An individual can contribute to the selection process by contacting the national mathematical committee of his or her country. For U.S. mathematicians, the relevant body is the U.S. National Committee, which is organized through the Board on Mathematical Sciences of the National Research Council. (The national mathematical committees of other countries may be found by looking up the list of IMU member countries in the IMU server, `http://elib.zib-berlin.de/IMU/`.) The National Committees can, if they wish, suggest candidates for the Fields Medal and Rolf Nevanlinna Prizes to be awarded at the Opening Ceremony of the Congress.

—from ICM-98 Announcement

"Virtual Mentors" Needed for Online Career Planning Site

The National Research Council (NRC) has developed a World Wide Web service called the Career Planning Center for Beginning Scientists and Engineers (`http://www2.nas.edu/cpc/`). The Center provides information and guidance to students who are trying to get jobs, planning their careers, or making educational choices. Through the Center, users can ask questions, post jobs, provide advice, review the latest employment trends, and request to be linked to an online mentor.

The Center has been very successful, attracting over 6,000 registrants since its startup in February 1996. It has been so popular that the Center now needs more scientists and engineers who are willing to serve as "virtual mentors" to the undergraduate and graduate students and postdocs who use the Center. All of the correspondence is by e-mail, so the burden is not onerous, yet the benefits are many.

Mentors form personal relationships with young scientists or engineers and have the opportunity to discuss many issues, from ethics to how to write a good résumé. Few pleasures are greater than that of inspiring and guiding enthusiastic young scientists and engineers as they prepare to launch their own careers.

Mathematics is one of the areas in which mentors are especially needed. In addition, those who can provide general career guidance (especially women or couples in dual science and engineering careers) and those who have nonacademic experience would be especially helpful. For more information, or to sign up as a mentor, access the mentor form at `http://www2.nas.edu/cpcadv.mentor.html`, or send an e-mail message to `ewojtasz@nas.edu`, with the subject line "Mentor Volunteer".

—from NRC Announcement

New NSF Report on Undergraduate Education

Introductory college science and math courses serve largely as a filter, screening out all but the most promising students and leaving the majority of college graduates—including most prospective teachers—with little understanding of how science works, according to a new study conducted for the National Science Foundation.

As a result, "despite the observation that America's basic research in science, mathematics, and engineering is world-class, its education is still not," according to the independent team of reviewers. "America has produced a significant share of the world's great scientists while most of its population is virtually illiterate in science," the study concludes.

Because few teachers, particularly those at the elementary level, experience any collegiate science teaching that stresses the skills of inquiry and investigation, they simply never learn to use those methods in their teaching, the report states.

The findings in the report, called *Shaping the Future: New Expectations for Undergraduate Education in Science, Mathematics, Engineering, and Technology*, were made public at a conference held in the summer in Washington, D.C. The nation's goal for undergraduate education, it states, should be that all students have access to supportive, excellent undergraduate education in science, mathematics, engineering, and technology and that all students learn these subjects by direct experience with the method and processes of inquiry.

Some institutions, including those that sent representatives to the conference, already are making the changes needed to help them meet that goal, officials noted, but most are not. This latest review of undergraduate programs continues NSF's efforts to improve the quality of collegiate science, math, engineering, and technology programs that began a decade ago with a study that became known as the Neal Report.

The new report's findings were compiled over the course of a year by a nine-member committee of officials of two-year and four-year institutions, led by Melvin D. George, president emeritus of St. Olaf College. The committee's main recommendation is that college science and math programs should be refocused in order to better educate the 80% of students who do not major in the scientific disciplines.

Shaping the Future is available on the World Wide Web at `http://www.ehr.nsf.gov/EHR/DUE/EHRAC/start.htm`.

—from NSF News Release