

#### **4b.9 Contributions to internationalization** June 24, 2008

**Contributions to internationalizing the campus population:** We have no reliable data on the number of international students among our undergraduate mathematics majors. In our COR program in a typical year, 10-20% of our students are from overseas, and this contributes to internationalization at the College. A similar comment applies to the department's faculty: in fall 2008, of our 20 tenured and tenure-eligible faculty, four came from Russian-speaking areas and five from China, one has dual U.S.-Swiss citizenship and one was born in Calcutta.

Because many of our department members are frequent speakers at international research meetings, many foreign visitors are attracted to the department. In 2007-08, two of our four visiting assistant professors were foreign nationals, and in 2008-09 our one visiting assistant professor is Korean. In addition, we also have visiting scholars who come to William and Mary for research only, and many of these visitors are foreign.

#### **Internationalizing the faculty, and the new International Faculty Hiring Tax**

Starting in the 2007-08 academic year, the Provost imposed an **International Faculty Hiring Tax** (IFHT): every time an Arts and Sciences department hires a foreign faculty member into a tenure-track position, the department must pay an IFHT of \$1,250 from its operating funds account. That amount is matched by the Dean of Arts and Sciences and used to pay for the new faculty member's work permit certification. We know that federal law requires the College to pay this \$2,500 total, but the Provost's IFHT imposes the costs on the units least able to pay, and that is no way for the central administration to foster internationalization of the faculty.

#### **International programs for students that involve mathematics**

The College has a long history of running a summer program at Cambridge University for William and Mary students. In summer 2007, one of our faculty members was the director of that program and offered a course in mathematical codes as part of the Cambridge experience for our students. This was a general education course, rather than a course designed for mathematics majors, but some of our majors did attend. Student evaluations of the course were unusually high.

Mathematics majors have two really unique opportunities for foreign study. One is the "Budapest Seminars Program," and the other is "Mathematics in Moscow." Both are mathematics-immersion-programs in which students study essentially nothing but mathematics, often esoteric mathematics that most U.S. universities do not offer for undergraduates, for a semester while living in Budapest or Moscow. Typically one or two of our majors have gone to the Budapest program each year. Participation by our majors in the Moscow semester is rarer, but it has happened. We consult carefully with the students going to either program, helping them choose courses that will result in credit toward their William and Mary mathematics major. This often requires making liberal use of our Math 410 (Special Topics) course.

A larger number of mathematics majors – perhaps three or four per year – participate in more traditional study-abroad programs in which they might take one or two mathematics courses plus a mixture of other subjects. We facilitate study abroad for our majors by finding ways to transfer foreign mathematics courses into the William and Mary system in such a way that the students makes progress toward their mathematics major requirements.

Even more unusual is the department's ability to send groups of its majors to international mathematics conferences where they report on their undergraduate research work and participate in other conference activities. In summer 2007, a biomathematics faculty member took a group of five REU students to London for a conference, and in summer 2008, we are trying to organize trips for students to conferences in Asia. These travel activities are paid for by our NSF-UBM and NSF-CSUMS grants.