## 2005 Annual Report to the Council from the
## Committee on the Profession

The Committee on the Profession (CoProf) held its annual meeting on September 24-25, 2005, at the O'Hare Hilton Hotel in Chicago, IL.  Highlights of that meeting are provided below.  The Council agenda contains three items forwarded to the January 2006 Council.

## Committee on the Profession, Highlights
## September 24-25, 2005
## O'Hare Hilton Hotel, Chicago

The topic of whether the AMS should have a Fellows Program was on the agenda once again this year for the Committee on the Profession.  Following the January 2005 Council, President Jim Arthur appointed a subcommittee to draft a concrete proposal for the Fellows Program.  The April 2005 Council asked that CoProf discuss the proposal before the Council takes action.   As in earlier years, there was no general agreement among the CoProf members about the merits of establishing the AMS Fellows Program. There were several concerns about the specific proposal.  One was that the number 50, mentioned in item III C of the plan, was too low to adequately address the imbalances that would occur using the lists suggested in the proposal.  There was a suggestion that, in order to remedy these imbalances while developing the initial list, the AMS should go to various mathematics organizations that serve underrepresented groups, such as AWM, NAM, SACNAS, and CAARMS.  In the end, the Committee could not reach any consensus about the proposal of the subcommittee.   The Committee decided to identify individuals, in favor and opposed to a Fellows Program, who would write essays arguing each case.  These essays would be available to Council members to read before the discussion on the AMS Fellows Program at the January 2006 Council.

CoProf endorsed the continuation of the Centennial Fellowships with their current eligibility criteria (3-12 years past the Ph.D.).  The Committee reaffirmed that the Fellowship is valuable and should be continued.  It recognized that, with limited funding, it might be possible to have only one fellowship awarded each year in the future.

MathJobs.org is a private, joint venture between the Department of Mathematics at Duke University and the AMS.  Participation by mathematics departments has increased steadily over the last two years.  In late November 2005, there were 62 colleges, universities and institutes registered as employers, with 167 jobs.  CoProf members agreed that the great benefit of MathJobs is the uniformity of the job application process, for applicants and writers of reference letters.

A subcommittee of CoProf revised and updated the statement on the employment of young mathematicians.  The statement was unanimously endorsed by the Committee and appears in **Attachment Employment**.

The Carnegie Foundation for the Advancement of Teaching chose mathematics as one of six disciplines to be included in the Carnegie Initiative on the Doctorate (CID). Selected departments in these disciplines each sent 2-3 people (faculty and graduate students) as a team to gatherings in the summers of 2003, 2004 and 2005. For the mathematics teams, the main point of these gatherings was to explore the purpose of graduate education in mathematics and identify specific ways that departments could work on the findings. A proposal, which stated that the AMS sponsor a program designed to help departments in the mathematical sciences sustain the work begun by the CID, was brought to CoProf from 3 participants of the CID experience: Peter March (Ohio State University), John Meaken (University of Nebraska at Lincoln) and David Morrision (Duke University). CoProf endorsed the proposal, which will go forward to the Council and be the centerpiece of the Directors of Graduate Study convocation in San Antonio. The proposal is included in **Attachment CID**.

This year, CoProf's review was on the topic of the Society's activities related to increasing participation of underrepresented groups. CoProf endorsed two of the subcommittee's recommendations, which will be implemented by the AMS staff:

  i.    Create a resource web page for minority programs.
  ii.   Sponsor events at AMS meetings to encourage better mentoring of women and minorities;

and requested that the AMS staff explore the following recommendation:

  iii.  Create and administer a travel grants program for underrepresented minorities.

The Committee on the Profession plans to make a series of statements that highlight ways in which the traditions of mathematics differ from those in other disciplines, especially other sciences and engineering. This year, CoProf endorsed a statement that explained why, unlike many other disciplines, most pre-tenured mathematicians direct very few Ph.D. theses. The statement appears below. In its discussion concerning next year's topic, CoProf decided that the issues deserving first consideration are those that address the concerns of mathematicians facing tenure and promotion decisions. Next year, CoProf will make a statement about publication rates of mathematicians and time from submission to publication for selected journals.

### The Culture of Research and Scholarship in Mathematics:
### Directing Ph.D. Theses

In some disciplines, directing dissertations is an integral part of a research program for every scholar, both young and old. In mathematics, however, this is not the case; it is unusual for a young (untenured) mathematician to direct Ph.D. students.

As in other disciplines, a pre-tenured mathematician must focus on establishing a research program, including the publication of his or her research. Helping an advisee mature into an original researcher is labor-intensive and, unlike in the laboratory sciences, does not necessarily further the advisor's own research program. In addition, the advisor provides students with problems which, in many instances, he or she would otherwise solve and publish.

There is no tradition of joint publication of dissertation work, even when the advisor makes a substantial contribution, and this means fewer publications for the advisor -- something that may be a liability when facing a tenure review.

In a recent review of new mathematics Ph.D.'s from mid-2003 to mid-2004, fewer than 10% of the advisors had received their own Ph.D.'s within the past 6 years. More than 90% of the advisors were

tenured. This overwhelming proportion of tenured faculty among thesis advisors is not the case in some other disciplines, where young researchers are expected to attract large numbers of graduate students to demonstrate the vitality of their research program.

Thus, there are subject-specific cultural reasons for mathematics faculty who are facing tenure decisions not to have advised any thesis students. While these facts are well-known to mathematicians, they are often misunderstood by other scholars who carry out research in a different culture.

The Committee unanimously endorsed the proposed Eisenbud Prize, and recommends that Council approve it.  The description of the prize appears in **Attachment Eisenbud**.

CoProf proposed to Council in January 2005 that it wished to recognize two programs each year that :  (1) aim to bring more persons from underrepresented minority backgrounds into some portion of the pipeline beginning at the undergraduate level and leading to an advanced degree in mathematics, or retain them in the pipeline; (2) have achieved documentable success in doing so; and (3) are replicable models.  Council approved CoProf's proposal and two programs were chosen this year by a subcommittee of CoProf.  These are the SIMU (Summer Institute in Mathematics for Undergraduates) REU program conducted at the University of Puerto Rico at Humacao from 1998 to 2002, and the graduate program in the Department of Mathematics at the University of Iowa.  These programs will be featured in an upcoming issue of the *Notices* and will be presented on a web site linked to the AMS home page.  The subcommittee indicated that, because a large number of programs had impressed them, there will be no difficulty in identifying additional programs to highlight.  The time period allotted to CoProf, 4:30 – 6:00 pm on Thursday, January 12, 2006, will be used to recognize the two programs at this Joint Mathematics Meetings.

The Committee selected the Society's activities to increase communication and cooperation with other disciplines as the topic of the coming annual review.  This topic was reviewed last in 1997.

The Committee on the Profession will hold its next meeting on September 16-17, 2006 at the Chicago O'Hare Hilton.

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*December 1, 2005*