2006 Annual Report to the Council from the Committee on the Profession

The Committee on the Profession (CoProf) held its annual meeting on September 16-17, 2006, at the O'Hare Hilton Hotel in Chicago, IL. Highlights of that meeting are provided below. The Council agenda contains four items forwarded to the January 2006 Council by Corof.

Committee on the Profession, Highlights September 16-17, 2006 O'Hare Hilton Hotel, Chicago

CoProf endorsed several motions and statements that are being sent to Council for action in January 2007.

- A subcommittee of CoProf revised and updated the statement on the employment of young mathematicians. The statement was endorsed by the Committee. This statement appears in another attachment.
- The Committee endorsed a revision of the Whiteman Prize to make it consistent with other AMS prizes, and recommends that Council approve the revision. The Whiteman prize would now be a prize of \$5,000, awarded every three years.
- CoProf endorsed a proposal made by Samuel M. Rankin, III, AED, that the AAS-AMS-APS Public Service Award be given in the future by the AMS alone.
- CoProf endorsed a conflict of interest statement for prize selection committees, which appears in another attachment.

In addition, CoProf took action on several issues related to the committee's charge.

- The Committee on the Profession has been making 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 publication rates of mathematicians. The statement appears at the end of this report, and is posted at http://www.ams.org/employment/CultureStatements.html. Next year's topic will be postdoctoral fellows in mathematics.
- In January 2005, Council endorsed CoProf's recommendation 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. The two programs that were chosen this year by a subcommittee

of CoProf and endorsed by the full committee are the Mathematical Theoretical Biology Institute (MTBI) and the Enhancing Diversity in Graduate Education (EDGE) Program. 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 announcement of the recognition will be embargoed until the *Notices* article is published. AMS staff members will work to generate a list of programs, and Bob Daverman will issue a call for nominations by March 1, in order to generate candidates for next year's recognition.

Concerns have been raised about several activities of the Society, and CoProf is supporting further work in these areas.

- The most current awards for the Young Scholar Program from the Epsilon Fund do not conform to the guidelines outlined in the original proposal for this fund. CoProf has once again endorsed the original proposal for the AMS Epsilon Fund and Young Scholars Program. The committee has directed Bob Daverman, AMS secretary, to write to the chair of the Selection Committee to remind them to follow the guidelines laid out in the original proposal when making awards.
- Some advertisements (from institutions outside the United States) that have been submitted for posting on the EIMS web site do not comply with the legal requirements for job ads in the United States. Additionally, most of the ads posted on the EIMS site do not conform to the AMS policy, approved by Council in 1971 and stated in the EIMS booklet and on the web site. CoProf will consider a new AMS policy for job advertisements after the legal issues are clarified. The new policy will be brought to Council in April 2007.

This year, CoProf's annual review was on the topic of the Society's activities related to increased communication and cooperation with other disciplines. The report of the subcommittee charged with this review was quite positive about the many ways that the Society promotes interdisciplinary activities. The subcommittee will draft a statement asserting the Society's support of interdisciplinary mathematics that will be considered by the full committee, and, if endorsed by CoProf, will be taken to Council. The Committee selected the Society's activities for recognitions and awards as the topic of the next year's annual review. This topic was reviewed last in 2000.

During the time period 4:30 – 6:00 pm on Friday, January 5, 2007, at the Joint Mathematics Meetings, CoProf will sponsor a panel entitled **Katrina and Its Aftermath: Institutional Survival in New Orleans since the Storm,** moderated by CoProf chair **Jim E. Hoste**, Pitzer College. The panel, including **Kenneth W. Holladay**, University of New Orleans, **Morris Kalka**, Tulane University, **Vlajko L. Kocic**, Xavier University of Louisiana, and **Katarzyna Saxton**, Loyola University New Orleans, will discuss the impact of the hurricane on New Orleans mathematics departments, describe their current situation, and present plans for the future.

The Committee on the Profession will hold its next meeting on September 8-9, 2007 in Providence.

Ellen Maycock Associate Executive Director October 16, 2005

2006 Statement

The Culture of Research and Scholarship in Mathematics: Rates of Publication

Mathematics is often considered as part of the physical and natural sciences, but its publication practices differ from these other disciplines in several fundamental ways.

Mathematicians tend to publish at rates that are modest compared to some other sciences. The majority of mathematical research is published in refereed research journals rather than conference proceedings or books. The mathematical literature is spread among a wider collection of journals than in most related fields. And, since an article typically represents a mature treatise on a mathematical question, and since mathematics research is not considered time-sensitive, delays in publication are common.

Even some of the best young mathematicians publish relatively few papers. A study of the 40 mathematicians winning Sloan Fellowships in 2005-2006 shows that 70% published an average of two or fewer articles per year in the five years preceding their award. Even more senior mathematicians have modest publication rates. Of the 22 mathematicians receiving Guggenheim Fellowships from 2002-2006, half published an average of two or fewer articles per year in the five years preceding their award. These two groups represent an exceptional group of highly productive mathematicians.

Of the 274 publications by these Guggenheim Fellows, 75% were in refereed journals. Only three publications were books. In fact, of all items covered by Mathematical Reviews in the years 2001-2005, fully 80% were from refereed journals.

When judging the work of most mathematicians, the key measure of value for a research program is the quality of publications rather than rate. The information above about those who have won prestigious awards strongly supports this view.