# AMERICAN MATHEMATICAL SOCIETY EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES <br> NOVEMBER 17-18, 2000 <br> PROVIDENCE, RHODE ISLAND 

## MINUTES

A joint meeting of the Executive Committee of the Council (EC) and the Board of Trustees (BT) was held Friday and Saturday, November 17-18, 2000, at the AMS Headquarters in Providence, Rhode Island. The following members of the ECBT were present: Roy L. Adler, Hyman Bass, Felix E. Browder, John B. Conway, Robert J. Daverman, John M. Franks, Eric M. Friedlander, Linda Keen, Andy R. Magid, Joel H. Spencer, B. A. Taylor, and Karen Vogtmann. Robert L. Bryant attended the meeting on Friday only. Michael G. Crandall was unable to attend.

Also present were: Donald G. Babbitt (Publisher), Gary G. Brownell (Chief Financial Officer), John H. Ewing (Executive Director), Ellen H. Heiser (Assistant to the Executive Director [and recording secretary]), Jane E. Kister (Executive Editor/Mathematical Reviews), James W. Maxwell (Associate Executive Director/Meetings and Professional Services), Constance W. Pass (Controller), and Samuel M. Rankin (Associate Executive Director/Government Relations and Programs).

Michael Breen (Public Awareness Officer), Roger E. Howe (Chair of the Committee on Education) and Arthur M. Jaffe (Chair of the Committee on Science Policy) were present for the Friday-afternoon session.

Long Range Planning Committee Chair Spencer presided on Friday afternoon. President Browder and Board Chair Magid each presided over portions of the remainder of the meeting.

Items occur in numerical order, which is not necessarily the order in which they were discussed at the meeting.

## 0 CALL TO ORDER AND ANNOUNCEMENTS

### 0.1 Opening of the Meeting and Introductions.

President Browder convened the meeting and everyone introduced themselves.

### 0.2 2000 AMS Election Results.

Secretary Daverman announced the results of the 2000 election as follows. All of these individuals will take office on February 1, 2001, with the exception of the Nominating

Committee members, whose terms begin on January 1, 2001. The complete teller's report will be attached to the January 2001 Council agenda and minutes.

Vice President:
Ingrid Daubechies (Princeton University)
Trustee:
John B. Conway (University of Tennessee, Knoxville)
Members at Large of the Council:
Irene Fonseca (Carnegie Mellon University)
Keith J. Devlin (Saint Mary's College)
Alexander Nagel (University of Wisconsin, Madison)
Louise A. Raphael (Howard University)
Walter L. Craig (Brown University)
Editorial Boards Committee:
Jane P. Gilman (Rutgers University)
Tony F. C. Chan (UCLA)
Nominating Committee:
Irwin Kra (SUNY at Stony Brook)
Cora S. Sadosky (Howard University)
Steven H. Weintraub (Louisiana State University)

### 0.3 Housekeeping Matters.

Executive Director Ewing discussed several housekeeping matters related to the present meeting.

1 EXECUTIVE COMMITTEE ACTION/DISCUSSION ITEMS

### 1.1 Proposal by the Editorial Boards Committee to Modify the Approval Process for Editorial Committee Appointments. Att. \#22.

At its September 9, 2000, meeting, the Committee on Publications (CPub) considered a proposal submitted by the Editorial Boards Committee (EBC) to modify the process for approving appointments to editorial committees. After considerable discussion, CPub endorsed a modified proposal by majority vote and agreed to forward it to the Council. The proposal and rationale submitted by the EBC are included in Att. \#22.

The EC was informed that this proposal will be considered by the January 2001 Council, and the EC considered whether to make a recommendation to the Council. The EC took no action.

## 1I EXECUTIVE COMMITTEE INFORMATION ITEMS

## 1I. 1 Secretariat Business by Mail. Att. \#1.

Minutes of the Secretariat business by mail during the months April 2000 - September 2000 are attached (\#1).

## 2 EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS

### 2.1 Report on Committee on Meetings and Conferences (COMC).

The ECBT received an oral report on recent COMC activities from COMC Chair Karen Vogtmann.

### 2.2 Report on Committee on the Profession (CoProf). Att. \#2.

The ECBT received the attached summary (\#2) of CoProf's September 16, 2000 annual meeting. This summary was supplemented by an oral report from CoProf member Linda Keen on behalf of CoProf Chair Donald McClure, who was unable to attend the ECBT meeting.

See also items 2.13, 2.15, and 2.16 of these minutes.

### 2.3 Report on Committee on Publications (CPub). Att. \#3.

The ECBT received the attached summary (\#3) of CPub's September 9, 2000 annual meeting. This summary was supplemented by an oral report from CPub Chair Robert Bryant.

See also item 1.1 of these minutes.

### 2.4 Report on Mathematical Reviews Editorial Committee (MREC). Att. \#26.

The ECBT received the attached summary (\#26) of MREC's October 16-17, 2000 meeting. This summary was supplemented by an oral report from Associate Executive Editor Jane Kister on behalf of MREC Chair Hugh Montgomery, who was unable to attend the ECBT meeting.

See also item 2E. 4 of the executive session minutes.

### 2.5 Report on Committee on Education (COE). Att. \#27.

The ECBT received the attached summary (\#27) of the October 27-28, 2000 COE meeting. This summary was supplemented by an oral report from COE Chair Roger Howe.

### 2.6 Report on Committee on Science Policy (CSP).

The ECBT received the following report on recent CSP activities. This report was supplemented by an oral report from CSP Chair Arthur Jaffe.

CSP met March 10-11, 2000, and a report on that meeting was submitted to the May 2000 ECBT. The next CSP meeting will be held in conjunction with the spring Council meeting on April 20-21, 2001, in Washington, DC.

Several CSP members came to Washington last April to participate in Congressional Visits Day, making visits to their Members of Congress along with other scientists and engineers. Also in April, Felix Browder testified before the House Appropriations Committee on behalf of NSF's FY 2001 budget request. CSP Chair, Arthur Jaffe, hosted a Science and Technology Town Meeting in Cambridge, Massachusetts, for Congressman Michael Capuano, in April. Throughout the spring and summer CSP members have been kept informed of developments in the FY 2001 budget process, and several responded to calls for action by contacting their Members of Congress to urge support for science and mathematics, specifically to support efforts to double the NSF budget over the next five years, and to meet the President's request for NSF in FY 2001. CSP members Arthur Jaffe and Jane Hawkins came to Washington in September, when NSF funding for FY 2001 was in jeopardy, to join the Science Coalition's day of Congressional visits to urge sufficient support for science during the appropriations process. One result of the spring CSP meeting's inclusion of department chairs was the expansion of the contact group, which also receives regular updates and alerts about legislative actions affecting science and mathematics. Efforts are currently under way to locate a government affairs speaker for the January 2001 Joint Mathematics Meetings.

### 2.7 Long Range Planning Committee.

The Long Range Planning Committee (LRPC) met on November 17, 2000, and LRPC Chair Spencer reported that the sole topic on the agenda was the Council. Concern had been expressed that the Council does not deal with enough substantive matters. The LRPC reviewed some information about past Council meetings and came to the conclusion that, since the creation of the policy committees, the Council has not had as much discussion about policy issues. It was suggested that the informational and educational function of the policy committees should be exploited at Council meetings. For example, at each Council meeting, one or two policy committees could organize a program to inform the Council about a topical issue, which would be followed by a discussion.

The Secretary will work with the appropriate volunteers and staff to implement these and other suggestions in an attempt to make Council meetings more meaningful.

### 2.8 Washington Office Report. Att. \#4.

The ECBT received the attached report (\#4) on recent activities of the Washington Office.

### 2.9 Report from the President. Att. \#18.

The ECBT received the attached report (\#18) from President Browder.

### 2.10 2001 Operating Plan.

The 2001 Operating Plan was mailed to all members of the ECBT on October 17. The plan includes the following sections for each division or department:

I Mission
II Ongoing Activities and Functions
III Trends and Issues
IV Future Projects and Activities
V Financial Implications

Comments or questions on the Plan were invited, but none were offered.
It is noted for the record that after the "annual reports" (Section VI) are added, a complete, official copy of the 2001 Operating Plan will be attached to record copies of the May 2002 ECBT minutes.

### 2.11 Public Awareness Office.

The ECBT was informed that, following discussion at the May 2000 ECBT meeting, the Public Awareness Office has started to operate this fall. The first of two Public Awareness Officers, Michael Breen, began work in early September. Mike holds an appointment at Tennessee Technical University as Associate Professor, works in semigroups, and has some college experience working with the press. The second public awareness officer, Annette Emerson, has been hired and will begin work on December 4. Annette has been Manager of the AMS Promotions Department since 1995.

### 2.12 Changes in Dues Form.

The Executive Director reported that he will recommend to the Council two changes to the list of voluntary contributions that appears on the individual dues form. The list currently includes the following:

AMS Centennial Fellowship Fund (\$25 suggested)
Program Development Fund (amount not suggested)
Travel Grants through IMU (\$5 suggested)
The Executive Director will recommend replacing the Program Development Fund by the Epsilon Fund for Young Scholars, with a suggested contribution of \$30, and changing the suggested contribution for the Centennial Fellowship to $\$ 30$.

The ECBT voted to endorse these recommendations for consideration by the Council, which approves all changes in the dues form.

## $2.13 \quad 2002$ Nominee Membership. Att. \#7.

At its September 16, 2000 meeting, the Committee on the Profession endorsed a proposal from Executive Director Ewing to drop the requirement that graduate students must have completed one year of graduate study to be eligible for nominee membership. Att. \#7 gives the rationale for this change.

The ECBT voted to recommend approval of this proposal to the January 2001 Council.

### 2.14 Trjitzinksy Awards. Att. \#5.

Each year, the Society gives four scholarships of \$3,750 each to undergraduates named by four institutional member departments. These are funded by a bequest of Waldemar J. Trjitzinsky, which was received in 1988. A description of last year's winners is included in Att. \#5. Over the past several years, the Trjitzinsky endowment has grown considerably, and in 1996 the ECBT voted to increase the size of the awards from $\$ 2,500$ to $\$ 3,750$. Since then, the endowment has grown even further, and its value at the end of 1999 was $\$ 581,299$. In addition, there was approximately $\$ 20,000$ in spendable income accumulated in the fund.

The Executive Director recommended that the size of the awards be increased to $\$ 4,000$ each, and that the number of awards be increased to eight per year. This will have the effect of using a portion of the accumulated spendable income, while balancing new income with awards in future years. Increasing the number of awards extends the impact of the scholarships to a broader community.

The ECBT approved the recommendation.

### 2.15 Revision in Eligibility Criteria for the Centennial Fellowship. Att. \#8.

The September 2000 Committee on the Profession (CoProf) considered the goals of the Society's Centennial Fellowship program and the question of whether or not the current eligibility criteria for the Centennial Fellowship were serving these goals. The report to the Council on CoProf's discussions is provided in Att. \#8.

CoProf voted unanimously to recommend the following proposed description of the Centennial Fellowship to the January 2001 Council:

## AMS Centennial Research Fellowship

The primary selection criterion for the Centennial Fellowship is the excellence of the candidate's research. Candidates for the fellowship should submit a cogent plan indicating how they would use the fellowship. The plan should include travel to at least one other institution and should demonstrate that the fellowship will be
used for more than a reduction of teaching at the candidate's home institution. The selection committee will consider the plan in addition to the quality of the candidate's research, and will try to award the fellowship to those for whom the award would make a real difference in the development of their research careers. Work in all areas of mathematics, including interdisciplinary work, is eligible. Preference will be given to candidates who have not had extensive fellowship support in the past.

Recipients may not hold the Centennial Fellowship concurrently with another research fellowship such as a Sloan or NSF Postdoctoral Fellowship. Under normal circumstances, the fellowship cannot be deferred.

A recipient of the fellowship shall have held his or her doctoral degree for at least three years and for not more than twelve years at the inception of the award and shall be a citizen or permanent resident of a country in North America.

CoProf also discussed questions about the stipend level for the fellowship. While the stipend is primarily a matter for the Board of Trustees, the Committee did support the principle that there should be a single stipend level independent of the rank or seniority of the recipient. CoProf felt that, in view of the current ranges of salaries for competitive junior positions and for early mid-career mathematicians, and in view of the different ways that the fellowship might be used at different stages of one's career, it should be possible to define a single stipend level appropriate for the three to twelve year-old Ph.D. age range.

The ECBT voted to join CoProf in recommending the proposed changes to the January 2001 Council.

### 2.16 Changes in AMS Prizes. Att. \#14.

The Committee on the Profession (CoProf) chose to review AMS prizes as part of its annual review of Society activities within its charge. Att. \#14 contains background on the financial status of the prize endowments that was provided to CoProf and a draft of CoProf's report to the Council.

The ECBT voted to recommend approval of the following recommendations from the CoProf report to the January 2001 Council. The ECBT assumed that recommendations 1 and 3 refer to "research prizes" and defined "research prizes" to be as follows: Birkhoff, Bocher, Cole, Satter, Steele, Veblen, and Wiener.

1) Increase the frequency of the research prizes from every five years to every three years. (The ECBT assumed that CoProf did not intend to recommend that the frequency of any of these prizes be decreased and so interpreted this recommendation as applying to the following prizes: Birkhoff, Bocher, Cole, Veblen, and Wiener.)
2) Add an additional prize for the outstanding research paper to appear in an AMS journal over the previous five years, also on a three-year cycle.
3) Raise the standard amount of the [research] prizes to a figure between $\$ 5,000$ and $\$ 7,000$, after review of the effects of these changes on the accumulation of spendable income from the prize endowments.

In anticipation of the Council's approval of these recommendations, the BT voted to raise the standard amount to $\$ 5,000$.

It is noted for the record that, after the ECBT meeting, it was discovered that the current amount of the Satter Prize was misstated in Att. \#14-the current amount of the Satter Prize is $\$ 4,000$.

### 2.17 Motions of the Secretary.

The following motions were approved by acclamation:

The Executive Committee and Board of Trustees of the American Mathematical Society express their gratitude to Felix E. Browder for his leadership as President of the Society and for his contribution to the management of the Society as a member of the Board of Trustees. They note with pleasure that Professor Browder will continue to serve on the Executive Committee and trust that he will continue to be available to the Society as needed.

The Executive Committee and Board of Trustees of the American Mathematical Society record their thanks to John B. Conway for his service to the Society as a member of the Executive Committee during the past four years. They express the hope that Professor Conway will continue to be available to serve the Society in other ways.

The Executive Committee and Board of Trustees of the American Mathematical Society record their thanks to Michael G. Crandall for his service to the Society as a member of the Board during the past five years. The ECBT expresses its gratitude to Professor Crandall for his wisdom in contributing to the management of the Society and hopes to be able to draw upon his talents again.

Professor Crandall was unable to attend the ECBT meeting and asked BT Chair Magid to convey the following message on his behalf:

Dear Colleagues:
I regret very much not being able to join you at this ECBT. It is the only meeting I have missed associated with my term as a trustee, including related policy committee meetings, agenda and budget committee meetings, etc.

It has been a pleasure and an honor to serve as a trustee these past years. The quality of the people I have been honored to serve with has been outstanding. I
came to have the highest regard for the excellent staff in Providence and it was always a pleasure to participate. I learned an enormous amount and will miss being in the flow of all that information and participating in significant decisions, an experience rather rare for a professor.

On the other hand, both candidates for trustee were so excellent that I need have no qualms about the quality of my successor! The Society is in good hands.

The very best regards, Mike

The ECBT also acknowledged with deep sadness the death of former Treasurer Franklin P. Peterson on September 1, 2000, and passed the following resolution:

The Executive Committee and Board of Trustees of the American Mathematical Society extend their deepest sympathy to Mrs. Franklin P. Peterson. Professor Peterson will be fondly remembered as a distinguished colleague who contributed enormously to the growth of the Society, its financial security, and the achievement of its goals. They gratefully acknowledge the many ways Professor Peterson promoted mathematical research and scholarship throughout his life, especially through his service to the American Mathematical Society.

### 2.18 Discoveries and Breakthroughs (AIP). Att. \#28.

For the past two years the AMS has discussed possible participation in a major new public awareness project of the American Institute of Physics. The project produces a syndicated series of short news inserts about science and mathematics for local television stations. This is professionally produced material of extremely high quality.

Now that the Public Awareness Office is functioning, participation is both possible and a natural activity for the office. Because the goal of the project is to create a self-sustaining program, costs to the participating societies are meant to be short-term. Att. \#28 contains further information.

The ECBT authorized the AMS's participation in this project and the expenditure of $\$ 25,000$ from the Program Development Fund to cover the initial cost in 2001.

## 2C EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES CONSENT ITEMS

## 2C. 1 May 2000 ECBT Meeting.

The ECBT approved the minutes of the meeting of the Executive Committee and Board of Trustees held May 19-20, 2000, in Ann Arbor, Michigan. These minutes include:

- ECBT open minutes prepared by the Secretary of the Society,
- ECBT executive session minutes prepared by the Secretary of the Society,
- BT executive session minutes prepared by the Secretary of the Board.


## 2I EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES INFORMATION ITEMS

## 2I. 1 Report on e-MATH. Att. \#12.

There have been a number of substantial enhancements to e-MATH during the past year. One longstanding project was the electronic journal enhancement that included a new interface, registration of journal data with journal aggregators and other metadata collection efforts, and better navigation. In addition, links have been added from MathSciNet reviews to JSTOR-held journals, ScienceDirect (over 70 journals from Elsevier Science and other publishers), American Math Monthly, American Journal of Math, and a selection of approximately 40 articles from Birkhäuser and Springer-Verlag journals.

MRLookup is a free interactive service that allows users to verify references and add links to MathSciNet.

The most notable development efforts expected to be complete by the end of the year include a revamp of the current e-MATH design, a new version of the AMS Bookstore, and the installation of new hardware for the website.

Att. \#12 contains a more detailed look at projects completed this year, including a chart on the number of HTTP "hits".

## 2I. 2 Grant for St. Petersburg Summer School. Att. \#13.

Each year the European Mathematical Society sponsors two summer schools in mathematics, aimed at graduate students and/or mathematicians at the start of their careers. Sponsorship normally means endorsement rather than money, and the host institution is largely responsible for raising its own support. A summer school in Asymptotic Combinatorics is planned for 2001 in St. Petersburg, Russia. (See announcement at end of Att. \#13.)

As a gesture of cooperation between our mathematical communities, the AMS has applied to the National Science Foundation for a small grant of $\$ 20,400$ to support approximately eight graduate students and two plenary speakers, all from the U.S. (The proposal is included as Att. \#13.) This provides an opportunity for young mathematicians from the U.S. to participate in a high-quality mathematical event and to mix with their colleagues in the European community. It also helps the mathematicians in St. Petersburg to raise the necessary funds for the summer school.

## 2I. 3 Actions of the Agenda and Budget Committee (ABC).

At its October 12, 2000, meeting in Providence, Rhode Island, the ABC took the following action:

The ABC set the schedule for the November 2000 ECBT.

## 3 BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS

### 3.1 Discussion of Fiscal Reports.

The BT received and discussed various fiscal reports, as well as a budget discussion memo and a "Guide to the Green Pages."

The BT voted to approve the 2001 budget, as presented and modified by actions taken at this meeting.

### 3.2 Budgeted Staffing Levels.

The BT approved the 2001 personnel budget as presented.

### 3.3 Capital Expenditures - 2001 Capital Purchase Plan.

The BT approved the 2001 capital purchase plan as presented.

### 3.3.1 Capital Expenditures - Approval of Specific Purchases.

Requests for authorization to make specific large purchases (items costing \$100,000 or more) are included under this item. No such requests were made at this meeting.

### 3.4 Investment Committee Report. Att. \#29.

The BT received a report from Investment Committee Chair John Franks on the Committee's November 17, 2000 meeting. The minutes of that meeting are attached (\#29).

### 3.5 Economic Stabilization Fund Increment.

The BT was informed that the 2000 increment to the Economic Stabilization Fund will be limited to reinvested income, if any, plus $\$ 1,500,000$ added in May. It was also anticipated that $\$ 500,000$ would be available in December for transfer to long-term investments. However, the BT decided to set aside this $\$ 500,000$ for the Epsilon Fund, rather than add it to the Economic Stabilization Fund (see item 2E. 5 of the executive session minutes of this meeting).

### 3.6 Conducting Board Business between Meetings. Att. \#15.

While infrequent, there are occasions when the Board of Trustees must conduct business between meetings. The Bylaws make no mention of this, so at their last meeting, the Trustees agreed that an ad hoc subcommittee of the BT should be appointed to formulate guidelines for consideration at the next BT meeting. The members of the subcommittee are Michael Crandall, Eric Friedlander, and Andy Magid. Their report is attached (\#15).

It was pointed out that some of the principles in the attached report conflict with the Bylaws. It was therefore decided that action on the attached report should not be taken and that the Chair of the Board and the Secretary of the Society should appoint an ad hoc subcommittee of the ECBT to study the issue further and recommend a policy for conducting BT and Council business between meetings to the May 2001 ECBT. If such a policy involves changing the Bylaws, then the proposal should include the steps necessary to do so.

### 3.7 Trustees' Committees, etc. Att. \#16.

The BT reviewed the attached list (\#16), in which boxes indicate where appointments or re-appointments are needed, and advised the Chair of the Board as follows:

- Endowment and Planned Giving Committee: discharge with thanks
- Investment Committee: several people were suggested to fill the vacancy created by the death of Frank Peterson. It was also suggested that the term of this position be changed from two to three years.
- Trustee assignment to COE for 2001: Andy Magid
- Trustee assignment to COMC for 2001: John Conway
- Trustee assignment to CoProf for 2001: Roy Adler
- Trustee assignment to CPub for 2001: Linda Keen
- Trustee assignment to CSP for 2001: Eric Friedlander


## 3C BOARD OF TRUSTEES CONSENT ITEMS

## 3C. 1 Request for Support of Speakers at 2002 American Association for the Advancement of Science Annual Meeting.

The BT authorized \$10,000 to support speakers for the Mathematics Section at the 2002 annual meeting of the American Association for the Advancement of Science (AAAS).

## 3C. 2 Recognition for Length of Service.

The BT approved the following proclamations for the employees noted.

20 years of service:
Alexandra Berland
Thomas J. Blythe
Beverly J. Demchuk-Burke
Patrick D. F. Ion
Donald Proulx
Smilka Zdravkovska
The Board of Trustees takes great pride in recognizing $\qquad$ for twenty years of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer ___ their special thanks and their best wishes.

25 years of service:
Regine Fadiman
Sue Olson
Arlene O'Sean

The Board of Trustees takes great pride in recognizing who has devoted twenty-five years of service to the Society. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer their special thanks and their best wishes to $\qquad$ for being such a loyal employee and wish her well in the future.

30 years of service:
Donna M. George
George M. Ogilvie, Jr.
The Board of Trustees takes great pride in recognizing _______for the outstanding distinction of serving the Society for thirty years. The Board expresses its profound gratitude for this long record of faithful service to the Society. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer their special thanks and their best wishes to this loyal employee.

35 years of service:
Armando Armendariz
Sandra K. Barth
Carol-Ann Blackwood
The Board of Trustees takes great pride in recognizing $\qquad$ for the outstanding distinction of serving the Society for thirty-five years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer their special thanks and their best wishes to for being such a loyal employee and wish her well in the future.

## 3C. 3 Resolutions for Retirees.

The BT approved the following proclamation for the employees noted.
Armando A. Armendariz thirty-five years
Robert C. Blanchette thirty-one years
Janice A. DeCesare
George M. Ogilvie, Jr
thirty-two years
thirty years
twenty-two years
Be it resolved that the Trustees accept the retirement of $\qquad$ with deep appreciation for his/her faithful service over a period of . The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer
their special thanks and heartfelt good wishes for a happy and welldeserved retirement.

## 3I BOARD OF TRUSTEES INFORMATION ITEMS

## 3I. 1 Consolidation of Requests for Program Development Funds.

As a routine practice, all requests for expenditures from the Program Development Fund are consolidated in a single item. Approval for each request was given under a separate item elsewhere in these minutes:

- \$25,000 (2001) for Discoveries and Breakthroughs (item 2.18)
- $\$ 75,000$ for third year (2002) of Young Scholars Program (item 2E.5)


## 3I. 2 Actions of the Executive Director.

The Executive Director is authorized to change registration fees for conferences, short courses, and the employment center, and to make small changes in fringe benefits. No such changes have been made since the last ECBT meeting.


Robert J. Daverman, Secretary
Knoxville, Tennessee
December 11, 2000

ATTACHMENT 1 - SECRETARIAT BUSINESS BY MAIL
note: this attachment is not available electronically, but you can contact ellen heiser (ehh@ams.org) if you need a copy.

## ATTACHMENT 2 - REPORT ON COMMITTEE ON THE PROFESSION (CoProf)

## Committee on the Profession Highlights

September 16, 2000
Chicago O'Hare Hilton

The Committee on the Profession (CoProf) discussed several items related to membership. First, they endorsed staff's proposal to amend the eligibility criteria for Nominee membership, (See item in section 2 of the ECBT Agenda). They also recommended to Council bylaws changes proposed by Secretary Daverman that would enable the implementation of electronic balloting in AMS elections, pending anticipated changes in the laws governing this issue in the District of Columbia.

The committee received a report on Awards and Prizes from the subcommittee composed of Bill Beckner (chair) and Robert Daverman. CoProf's recommendations for changes in the administration of prizes are presented in an item in section 2 of the ECBT Agenda.

The committee received a report on the AMS Centennial Fellowship from the subcommittee composed of Jonathan Rosenberg (chair), Patrica Bauman and Robert Calderbank. CoProf's recommendations for changes in the criteria for eligibility and selection are presented in an item in section 2 of the ECBT Agenda.

As part of the Society's followup to the Task Force on Excellence report, CoProf approved the appointment of a subcommittee which would continue the department chairs' workshop held in recent years at the January meeting. The subcommittee will consist of Sam Rankin, John Conway, Jim Lewis, and Doug Lind, with an additional appointment to be made later. CoProf also agreed to sponsor focus groups at the January meetings, in the spirit of the focus groups sponsored by the Task Force on Excellence. CoProf plans to host a focus group in New Orleans.

CoProf agreed that its upcoming annual review of the Society's activities within its charge would be the area of professional development. A CoProf subcommittee will be formed on this issue, and a final charge to the subcommittee will be drafted by John Ewing and Don McClure. The review should be ready for the CoProf meeting in fall, 2001.

Prepared by Jim Maxwell
October 23, 2000
CoProf Highlights.doc

## ATTACHMENT 3 - REPORT ON COMMITTEE ON PUBLICATIONS (CPub)

Committee on Publications

9 September 2000
Chicago O'Hare Hilton
Meeting Summary

The Committee on Publications (CPub) received a report on the Notices from the subcommittee composed of Theodore Gamelin (chair), Bill Johnson, Irwin Kra and Joel Shapiro. The review of Notices was very positive overall and some suggestions were communicated. CPub endorsed the report and will forward copies to the Council and Notices Editorial Committee for their review.

CPub was asked to endorse a proposal submitted by the Editorial Boards Committee (EBC) to modify the approval process for editorial committee appointments. CPub endorsed the proposal and agreed to forward it to the Council for their consideration. The proposal is presented in Section 1 of the ECBT Agenda.

CPub discussed several items pertaining to the electronic posting of journal articles. First, they endorsed the Society's current policy on making online corrections. They also voted against the policy of electronically posting articles before bibliographic information is available, and encouraged staff to narrow the gap between initial electronic posting and issue/page assignment.
CPub considered whether or not to give preference to papers prepared in LaTeX2e. Instead, they recommended publicizing the natural advantages of using LaTeX2e, which enables easy conversion to PDF and HTML and allows for a broader range of external and internal linking . CPub also recommended the AMS staff create a good set of instructions for preparing a wellstructured LaTeX2e file.

CPub endorsed the Society's efforts to assist smaller publishers in acquiring Digital Object Identifiers (DOI'S) for their electronically available journal articles. The DOI registration system is an important component of the infrastructure used to enable links from citations of the articles in other electronic publications to the electronic version of the article itself.

CPub received a report on the overall status of the Bulletin from the Chief Editor, Don Saari, and a related report on the Book Reviews section from the Book Reviews Editor, Bhama Srinivasan. Generally things have improved and work is continuing to solicit top-level articles of more general interest with a long-term goal of establishing a firm backlog of at least nine months to one year.
CPub received oral reports from Don Babbitt on the Publication Program and Jane Kister on Mathematical Reviews.

CPub agreed that its upcoming annual review of the Society's activities would be on the AMS primary journals Transactions of the AMS, Proceedings of the AMS, Journal of the AMS and Mathematics of Computation. A review committee will be formed and a charge drafted by Robert Bryant in consultation with John Ewing and Don Babbitt.

[^0]October 23, 2000

## ATTACHMENT 4 - WASHINGTON OFFICE REPORT

## Washington Office <br> Report, October 2000

## Samuel M. Rankin, III

The President has signed a VA-HUD-Independent Agencies appropriations bill, giving NSF for FY 2001 the largest dollar increase (both constant and real) in its history. The 14 percent increase over the FY 2000 budget amounted to $\$ 529$ million, raising the NSF budget to approximately $\$ 4.4$ billion. The FY 2001 budget for the Division of Mathematical Sciences should approach $\$ 125$ million.

This outcome was very gratifying after a hazardous passage through this year's budget process. After an encouraging start with the President's request in February (reported at the March CSP meeting) science funding for FY 2001 hit serious roadblocks in the House, and the Washington Office has been very active during the summer and early fall, sending out alerts to the AMS contact group, CSP, and CoE, asking for contacts to their Members of Congress on behalf of science funding at sensitive times during the appropriations cycle. In conjunction with the Science Coalition, the DC office organized congressional visits in September by Arthur Jaffe, Jane Hawkins, DeWitt Sumners, Sam Rankin, and other scientists to encourage Congress to adequately support science research in this year's appropriations process. Our group of mathematicians, along with other scientists, spent a day meeting with Members of Congress and their staffs. This was the second time that we brought mathematicians to Capitol Hill this year to meet with their Members (see our report to the May ECBT), reinforcing the testimony of AMS President Felix Browder before the appropriations committee in April.
Sam Rankin has continued to work with a subgroup of the "Doubling Coalition" to try to encourage the passing of the Federal Research Investment Act. This bill, sponsored by Senators Frist, Rockefeller, and Lieberman, has been passed in the Senate but has been held up in the House by Congressman Jim Sensenbrenner, chair of the House Committee on Science, who has refused to put the bill before his Committee. Although both are Republicans, Sensenbrenner and Frist are at odds, and it now looks as if the bill may die, in which case it will have to come up in the next Congress and be passed again in the Senate. It has already passed twice in the Senate, in the 105th and 106th Congress.
An AMS Science and Technology Town Meeting was organized in April for Congressman Michael Capuano, in Cambridge, Mass. Hosted by CSP Chair, Arthur Jaffe, this event drew over 60 local mathematicians, scientists, and engineers to meet the Congressman and discuss concerns about science. After two successful Town Meetings in 2000, the Washington Office is working with mathematicians in other areas of the U.S. to organize similar grass roots efforts during the next Congress.

In May, the Coalition of National Science Funding (CNSF) held its annual NSF Exhibition. The AMS and the Ecological Society of America provided the logistical support for this year's exhibition, which was quite successful, drawing several Members of Congress and their staffs. Charles Peskin from the Courant Institute exhibited on behalf of AMS, on "Computer Simulation of Blood Flow in the Heart". On exhibit were 33 scientific and education projects supported by the NSF. The scientists do a good job of interpreting the science for Members and their staffs and there are many conversations between the congressional visitors and the scientists.

A very successful AMS Congressional Lunch Briefing was organized in July. Our speaker was Mary Wheeler, University of Texas at Austin, who gave a talk entitled "What does water know
about mathematics" to an overflow audience of over 90 Congressional staff members, invitees from NSF and other agencies, and representatives from scientific societies. Congressmen Vernon Ehlers, a staunch supporter of science, and Ralph M. Hall, ranking Democrat on the House Science Committee, co-sponsored our briefing.
In the fall, when appropriations battles were at their most heated, four newspaper advertisements were developed and published in the local newspapers of Senators Bond and Mikulski, and Representatives Walsh and Mollahan. These Members are the majority and minority leaders of the VA-HUD-Independent Agencies appropriations subcommittees in the Senate and the House. The ads thanked each Member for their support of NSF and gave information concerning NSF funding to the Member's state. Sam Rankin proposed this project to CNSF and helped develop the advertisements. The AMS Washington Office also contributed to a newspaper ad developed by Research!America concerning support of science research and directed towards Speaker Hastert and Senate Majority Leader, Trent Lott.

This fall Sam Rankin was elected the next chair of CNSF, a coalition of eighty professional societies, universities, and companies (AMS is a member), which advocates for the support of NSF. CNSF has been in existence for ten years, the present chair holding his position for the last six years. Rankin will take over as chair in January 2001, and doubling the NSF budget in the next five years will be a dominating theme of CNSF efforts. Senators Bond and Mikulski have already indicated their support for doubling the NSF budget in five years in a letter to their colleagues this summer. Senator Lott has also indicated that he supports this idea. Rita Colwell, Director of the NSF, has made doubling the NSF budget her priority. She has also been very vocal in her support for increasing the budget for the Division of Mathematical Sciences.

The Director of the Washington Office has been quite active recently in the formation of an advocacy organization, led by Dr. Mary Good, a former under secretary for technology at the Commerce Department and current president of AAAS. The organization will be a 501 c 3 (with perhaps a c4 component) and have the goal of promoting and advocating for mathematics, the physical sciences, and engineering, to the Congress, Administration, and the general public. This organization will advocate through opinion polls, and materials illustrating how these disciplines impact new technologies, and contribute to the economy. The new group uses the model of Research!America, which has lobbied successfully for doubling the NIH budget.
The DC office has recently monitored the progress of the H-1B visa bill, which was recently signed into law and exempts universities from the caps on the number of $\mathrm{H}-1 \mathrm{~B}$ visas for hightechnology workers. Other activities include administering NSF grants: Preparing Future Faculty (PFF) subcontract to AMS and MAA, and the Professional Master's Degree
The Washington Office is currently involved in organizing the October Committee on Education meeting here in Washington. As was done for the spring CSP meeting, chairs of doctoraldepartments were invited to the meeting and seventeen accepted. The meeting is quite full, with about 50 attendees on the first day. This is also the time of year when staff is organizing the annual Department Chairs workshop on the Tuesday before the Joint Meetings next January, and focus groups on the recently-announced NSF mathematical sciences initiative.
It is very important for the mathematics community to support the NSF mathematical sciences initiative for the FY 2002 NSF budget request, because this will be a means of substantially increasing the DMS budget. At her October presentation on this initiative to the National Science Board, NSF Director Rita Colwell remarked that the DMS budget should double in two years, and reach $\$ 500$ million in five years.

## ATTACHMENT 5 - TRJITZINSKY AWARDS

## Trjitzinsky Memorial Awards Presented

## (From December 1999 NOTICES.)

The AMS has made awards to three undergraduate mathematics majors through the Waldemar J. Trjitzinsky Memorial Fund. The fund is made possible by a bequest from the estate of Waldemar J., Barbara G., and Juliette Trjitzinsky. The will of Barbara Trjitzinsky stipulates that the income from the bequest should be used to establish a fund in honor of the memory of her husband to assist needy students in mathematics.

Each year the AMS selects four geographically distributed schools to which it makes one-time awards of approximately $\$ 3,750$ each. The mathematics departments of those schools then choose students to receive the funds to assist them in their pursuit of careers in mathematics. The schools are selected in a random drawing from the pool of AMS institutional members. This year the four institutions receiving the award funds were City University of New York (CUNY), Reed College, the University of Texas at San Antonio, and Western Kentucky University.

CUNY selected HULYA CEBECIOUGLU, a student from Turkey, to receive the award. She studied English at the University of Texas and obtained her master's degree in mathematics from Brooklyn Polytechnic Institute. She has been in the Ph.D. program at CUNY since January 1997. Cebeciouglu plans to do her dissertation research on partial differential equations.

Reed College has chosen JEREMY COPELAND as its recipient of the award. Copeland was born in Frankfort, Kentucky. He attended Western Hills High School in Frankfort, graduating in May 1997. He plans to graduate from Reed in December 2000. He intends to go to graduate school, and his future plans include teaching.

Western Kentucky University presented the award to MARCIA JEAN MERCER of New Britain, Connecticut. Although she left high school after the ninth grade, she later completed the GED in Bowling Green, Kentucky, and was named the Kentucky GED student of the year. She still serves as a volunteer mathematics tutor at the GED center. Mercer began her studies at Western Kentucky in August of 1996 and this year was named the outstanding junior in mathematics. She plans to pursue a Ph.D. in mathematics and become a college professor.

For more information about the Trjitzinsky Fund, contact the development officer, AMS, P. O. Box 6248, Providence, RI 02940-6248; e-mail: ams @ams.org.
-Elaine Kehoe

## ATTACHMENT 7-2002 NOMINEE MEMBERSHIP

## Nominee Members

Several years ago, the Society made some changes in the dues structure in an effort to expand membership, especially for young mathematicians. Most of those changes (an entry level rate for five years and a higher cut-off between dues levels) decreased dues revenue, at least temporarily. In order to compensate (at least that was part of the reason) the Society changed the criterion for nominee membership, decreasing the number of eligible graduate students and therefore saving the marginal cost of their membership. It may be time to reconsider that decision and its consequences, some of which were unforeseen.

## The rationale for the change

Previously, all full-time graduate students of institutional members were eligible for nominee membership. Under the new rules, only those beyond their first year of study are eligible. The description of nominee membership now reads as follows:
"Nominees are individuals appointed by the department of mathematics of member institutions and are considered ordinary individual members of the Society who do not pay dues during the period they are nominees. For institutions with a graduate program in mathematics, all regularly enrolled graduate students who have completed at least one full year of graduate study in mathematics may be nominated for individual membership. This includes those new graduate students at the institution who have completed a year of graduate study in mathematics at another institution."

There were two reasons for the change. First, the marginal cost of a nominee member is approximately $\$ 18$ and we estimated that there were about 1200 first year graduate students holding nominee status. Changing the criteria saved the Society about $\$ 21,600$ each year, partially recovering the lost revenue from the other changes in dues. Second, a number of people observed that first-year students often were unaware that they were members of the AMS. Piles of unread Notices gathered in departmental mailrooms; Bulletins piled on top of those. By restricting nominee membership to more senior students, the membership itself might appear more valuable.

## The effect of the change

Of course, the change in nominee membership rules was made during a time of dramatic decline in the graduate student population. Since 1995 the number of full-time graduate students in mathematics has dropped about $21 \%$, from 12,920 to 10,162 . That had a major effect the number of nominee members, which during the same period of time fell
about $31 \%$, from 10,190 to 6,994 . We recognize therefore that only a portion of the decline came from a change in membership criteria.


The clearest way to understand the effect of the change in rules is to consider the fraction of full-time students who hold nominee membership. In 1995, approximately $79 \%$ of all such students were nominee members; in 2000, about $69 \%$ were. It seems plausible that this fraction changed only because of the change in criteria. Had we made no change, there most likely would be about 8,000 nominee members today.

## Unanticipated consequences

Changing dues structure in any way almost invariably has unanticipated consequences, and this was no exception. There are two main problems.

- Complicating the nominating process. Most mathematics departments are understaffed, and providing the names of all nominee members is one more chore among many for the secretarial staff. We try to make the process easy by sending a list of the previous year's nominees and ask that the department cross out those who are no longer eligible and add names of new people. When the target list consists merely of full-time graduate students, this process can be done by almost any of the staff. When the target list consists of students who are "beyond the first year" (including students who have transferred to the department), the process requires someone who knows how to make decisions. Any complication makes it harder to complete the nominating process.
- Master's degree departments. Most institutional members are not Ph.D.-granting departments, which is easy to forget. For departments that give only a Master's degree, disqualifying all first-year graduate students means disqualifying about
half of their graduate students. Understandably, they view the new rules as discriminatory.

We have responded to both of the above problems above by viewing the first-year restriction in a relaxed way. We make no attempt to verify departmental lists of nominee members (and we let departments who inquire know this fact). But applying rules unevenly has its own drawbacks, and there is some concern about a backlash.

## Possible reversion

We made the change in nominee membership at a time when there was great concern about a substantial decrease in dues revenue. Those concerns have proved partially unfounded (although there has been a loss of revenue). Moreover, because the number of mathematics graduate students has decreased dramatically in the past few years, the savings from the changes in nominee members is slightly less than predicted. In view of the unanticipated problems and the changes in demographics, it may be time to reconsider the change.

If estimates are correct, reverting to the previous rules (all full-time students) will add approximately 1000 nominee members at a marginal cost of no more than $\$ 18,000$. While this is a substantial amount of money, one might argue that increasing graduate student membership at a time of dramatically decreasing numbers of graduate students is worth the cost. Moreover, cultivating Master's degree departments may become increasingly important in the future. This may be one way to start that cultivation.

John Ewing

# ATTACHMENT 8 - REVISION IN ELIGIBILITY CRITERIA FOR THE CENTENNIAL FELLOWSHIP 

Review of the AMS Centennial Research Fellowship<br>Committee on the Profession<br>September 16, 2000

## Background

Over the last few months and with support of AMS staff, the Committee on the Profession (CoProf) has reviewed the Centennial Fellowship, its current eligibility and selection criteria, and recent results. This review was anticipated in 1994-1995 when the current fellowship criteria were implemented through actions of CoProf, the Council and Trustees. CoProf then decided that the new criteria being recommended should be reassessed after they had been in place for a few years. The major change that was made in 1995 for fellowships awarded since 1996 was to redirect the Centennial Fellowship to recent Ph.D.s instead of early mid-career mathematicians.
The fellowship was started in 1975 as the "AMS Research Fellowship" and until 1983 it was awarded to candidates who were no more than four years past the Ph.D. The eligibility criteria were changed in 1984 and again in 1985 and 1990, each time increasing the professional maturity required, as gauged by years past Ph.D. In 1984, the eligibility requirement was 4-10 years past Ph.D., in 1985-89 the requirement was $5-10$ years past Ph.D., and in 1990-95 the requirement was $7-12$ years past the Ph .D. The criteria have always required that a recipient be a citizen or a permanent resident of a country in North America.
Over the period 1984 through 1995, increasing emphasis was placed on preference for candidates who had not had extensive postdoctoral fellowship support. In 1984, this was simply stated as a requirement that the candidate shall have had some post-Ph.D. non-fellowship work experience. In 1990-95, the criteria required at least three years of post-Ph.D. teaching or industrial experience and further stipulated that the selection committee would give preference to applicants who had not had extensive postdoctoral fellowship support.
In 1994, because of the severe imbalance between numbers of recent Ph.D.s and numbers of available positions in the U.S., it was widely felt that the AMS should consider redirecting the fellowship to younger mathematicians. CoProf established a Subcommittee to Reexamine the AMS Centennial Fellowship Program. The subcommittee recommended changes for the fellowship, which were adopted with modifications by CoProf, ECBT and the Council in spring and summer 1995. Under these current criteria, recipients must have held the Ph.D. for at least two years and must not have tenure; other restrictions place bounds on prior research support. The current criteria are included in Exhibit 1, as approved by the Council in August 1995. A summary showing the evolution of the criteria since 1975 is included in Exhibit 2.

## Subcommittee Report

In August 2000, a subcommittee of CoProf was appointed to review statistics and other information prepared by AMS staff concerning experience over the years with the Centennial Fellowship eligibility and selection criteria. The subcommittee was asked to prepare and coordinate discussion at the September CoProf meeting and to propose suggestions, if any, for modifications of the current fellowship criteria. The subcommittee membership was Jonathan Rosenberg (chair; member of CoProf and the Council), Patricia Baumann (member of CoProf and the Council; former recipient of the Centennial Fellowship), and Robert Calderbank (chair of the Centennial Fellowship selection committee for the fellowship years 1996-99). The subcommittee also consulted with Nancy Stanton who chaired the selection committee for 2000-01.

From their report to CoProf, the subcommittee's conclusions are summarized in the following four points:

1. The Centennial Fellowship program has been successful over the years in boosting the careers of many deserving young or early mid-career mathematicians. Some of the winners probably would have gone on to do great things with or without the fellowship; others might not have. But CoProf needs to think hard about what group it really wants to target with this program, and what the purpose of the program should be. Is it to promote the very best research? If so, should the program be similar to, say, the Sloan Fellowships, only on a smaller scale? Or is it to make a difference in the careers of some mathematicians who might not otherwise have gotten fellowship support? Is the target group the young faculty of the top 20 math departments in North America, or a larger segment of the AMS membership?
2. The present eligibility rules are phrased largely in negatives. Candidates may not have tenure; they may not have had 2 years of research support (with a year of a 2 -and-1 teaching load counting as a $1 / 2$ year of support); and they may not use the fellowship solely to reduce teaching at their home institution. The result has been a relatively small applicant pool; last year there were only 19 candidates for 4 positions. In addition, phrasing eligibility rules in terms of negatives can have unintended consequences; just as an example, someone arriving from overseas with a substantial track record who got the PhD degree rather late (due to differences in systems) and who didn't yet have official tenure might well rise to the top of the stack, even though that person might not be part of the group that the AMS meant to target with the fellowship.
3. We therefore suggest that the eligibility rules be relaxed, to broaden the class of those who might apply, and that many of the negatives in the rules be replaced by positives. In particular, we think the advertisement for the fellowships should include statements like: "Candidates for the Centennial Fellowship should submit a cogent plan, including some travel to at least one other institution, of how they would use the fellowship. The selection committee will take these plans into account, and will try to award the fellowship to those for whom the award would make a real difference in the development of their research careers. Work in all areas of mathematics, including interdisciplinary work, is eligible. Preference will be given to candidates who have not had extensive fellowship support in the past."
4. We would suggest a target population that includes junior associate professors and not just those untenured, and would aim the program at those who have not had extensive fellowship support. We suggest not automatically excluding those who have had reduced teaching loads, though history of teaching loads might be a valid item for the selection committee to look at.

## Analysis by CoProf

CoProf discussed the history of the fellowship and the subcommittee's review and recommendations, highlighting the following points:

- The current low number of applications is a serious concern. Only 15 of the applicants for 2000-01 were eligible, whereas in the five-year period preceding the last change in criteria, the average number of applicants was 35.
- The employment situation that motivated the revision of fellowship criteria in 1995 has changed.
- The number of postdoctoral fellowship opportunities for recent Ph.D.s, including prestigious instructorships, has increased substantially. The number of fellowship opportunities for early mid-career mathematicians is far less than the number available for recent Ph.D.s.
- The Centennial Fellowship is supported by contributions, and any change in criteria is likely to have some effect on donor interest.
- It would be preferable to define the target population with more positive language than is used in the current statement of criteria, which tends to list exclusionary rules.
- The guidelines should articulate the real purpose of the award. In this regard, CoProf supported (i) research excellence as the principal selection criterion and (ii) the importance of awarding the fellowship to a candidate for whom the support would make a real difference in the development of his or her research career.
- The former criteria for the award filled an important need. (The committee reviewed details about recipients of the fellowship since its inception.)
- With a broader Ph.D.-age range, the fellowship could serve both its current and former target groups, and at the same time do a better job of meeting its main objectives of research excellence and career impact.


## Recommendation

By unanimous vote, CoProf approved and recommends to the Council the following description of the Centennial Fellowship:

AMS Centennial Research Fellowship
The primary selection criterion for the Centennial Fellowship is the excellence of the candidate's research. Candidates for the fellowship should submit a cogent plan indicating how they would use the fellowship. The plan should include travel to at least one other institution and should demonstrate that the fellowship will be used for more than a reduction of teaching at the candidate's home institution. The selection committee will consider the plan in addition to the quality of the candidate's research, and will try to award the fellowship to those for whom the award would make a real difference in the development of their research careers. Work in all areas of mathematics, including interdisciplinary work, is eligible. Preference will be given to candidates who have not had extensive fellowship support in the past.
Recipients may not hold the Centennial Fellowship concurrently with another research fellowship such as a Sloan or NSF Postdoctoral Fellowship. Under normal circumstances, the fellowship cannot be deferred.
A recipient of the fellowship shall have held his or her doctoral degree for at least three years and for not more than twelve years at the inception of the award and shall be a citizen or permanent resident of a country in North America.
CoProf also discussed questions about the stipend level for the fellowship. While the stipend is primarily a matter for the Board of Trustees, the committee did support the principle that there should be a single stipend level independent of the rank or seniority of the recipient. CoProf felt that, in view of the current ranges of salaries for competitive junior positions and for early midcareer mathematicians and in view of the different ways that the fellowship might be used at different stages of one's career, it should be possible to define a single stipend level appropriate for the three to twelve year-old Ph.D. age range.

## Exhibit 1

## Centennial Fellowship Criteria, 1996 to Present

The Council at its meeting on August 5, 1995 approved the following guidelines for the Centennial Fellowship. These criteria for eligibility and selection have been in effect for fellowships awarded since 1996-97.

## AMS Centennial Research Fellowships

The AMS Centennial Research Fellowships will be awarded to applicants who are citizens or permanent residents of a country in North America, who will have held their doctoral degrees for at least two years at the time of the award, who do not have permanent tenure, and who will have held less than two years of research support at the time of the award. (Each year of a full time teaching appointment with teaching load less than 4 (resp., 5) courses per year on the semester (resp., quarter) system should count in this respect as one half year of research support.) Recipients may not hold the Centennial Fellowship concurrently with other research fellowships (e.g., Sloan or NSF Postdocs), they may not use the stipend solely to reduce teaching at the home institution, and they are expected to spend some of the fellowship period at another institution which has a stimulating research environment suited to the candidates research development.

The Fellowship provides one year of support which shall equal the median nine month starting salary for teaching or teaching and research of new recipients of doctoral degrees as reported in the most recent AMS-IMS-MAA Annual Survey. There will be a travel allowance equal to $4 \%$ of the stipend. Acceptance of the Fellowship cannot be postponed. Fellowship holders may use their stipend as full support for a year, or may combine it with half-time teaching and use it as half support over a two-year period. Applications shall include a short research plan describing both an outline of the research to be pursued and a program for using the fellowship, including institutions at which it will be used and reasons for the choices. The selection committee will base its decision on both the research potential of the applicant based upon track record and letters of recommendation and the quality and feasibility of the research plan.

## Exhibit 2

## Centennial Fellowship Requirements

Award Years

## Eligibility Criteria

| 1974-1983 | "AMS Research Fellowship" for individuals who have recently received the Ph.D. (This was ordinarily interpreted by the judging panel as meaning no more than 4 years past the Ph.D. degree.) Recipients must be a citizen or permanent resident of a country in North America. |
| :---: | :---: |
| 1984 | In April 1983 the ECBT approved the new terms of the fellowship (AMS Research Fellowship) defining early midcareer as 4-10 years past the Ph. D. (or equivalent) regardless of age but below the academic rank of professor. Moreover, the vita must include some post-Ph.D. work experience, i.e. non-fellowship years. |
| 1985-1989 | The eligibility changed to $5-10$ years past the Ph.D. Moreover, the vita must include the equivalent of at least 3 full years (rather than 2 years) post-Ph.D. teaching or industrial experience, i.e. non-fellowship years. The name of the fellowship was changed to "AMS Centennial Research Fellowship" during this period |
| 1990-1995 | The eligibility was changed to 7-12 years from the Ph.D. (or equivalent degree and open to any rank). It is expected that applicants will have had a minimum of 3 years of full-time teaching or comparable industrial experience. In addition, the selection committee will give preference to applicants who have not had extensive post-Ph.D. research support. |
| 1996 - present | The Fellowship will be awarded to applicants who will have held their doctoral degrees for at least 2 years at the time of the award, who do not have permanent tenure, and who will have held less than 2 years of research support at the time of the award. (Each year of a full time teaching appointment with teaching load less than 4 (resp. 5) courses per year on the semester (resp. quarter) system should count in this respect as $1 / 2$ year of research support.) Recipients may not hold the Centennial Fellowship concurrently with other research fellowships (e.g., Sloan or NSF Postdocs), they may not use the stipend solely to reduce teaching at the home institution, and they are expected to spend some of the fellowship period at another institution which has a stimulating research environment suited to the candidates' research development. |

NOTE: The agenda item serves as the executive summary.

## American Mathematical Society <br> Memorandum

To: Don Babbitt
From: Karen Ferreira
Date: September 11, 2000
Subj: e-MATH Status Report (for period September 1999 - September 2000)
e-MATH Usage
The following chart illustrates the number of HTTP "hits" (i.e. HTML pages served or scripts run) since January 1996:


## New/Revised e-MATH Products and Services

The following e-MATH offerings were either released or revised in the September 1999 through September 2000 timeframe:

September 1999 MathSciNet version 5
Significant enhancements include: three new browsing tools to access current MathSciNet data, reviews posted 6-10 weeks sooner, expanded access to original articles, new simplified search added, from an issue number get a list of the items from that issue reviewed in MathSciNet, and other enhancements.

September 1999 Document Delivery
With the release of MathSciNet, a new document delivery system was introduced, Canada Institute for Scientific and Technical Information (CISTI), replacing the former MathDoc document delivery system supported by Mathematical Reviews.

September 1999 Links to Original Articles
Links from MathSciNet reviews to original articles from the following journal collections: JSTOR - 10 historical mathematics journals, and ScienceDirect - over 70 journals from Elsevier Science and other publishers. In addition, ScienceDirect created links from references within their articles to MathSciNet reviews.

October $1999 \quad$ Bulletin 1992-1995 Articles
The Bulletin 1992-1995 articles became available in additional formats including: DVI, PostScript, and PDF.

November 1999 "Towards Excellence"
The publication "Towards Excellence: Leading a Mathematics Department in the 21st Century" created by the AMS Task Force on Excellence is posted on e-MATH.

November 1999 e-MATH enhancements
Very minor design changes made to the home page and secondary pages of e-MATH. Many underlying changes made to make the pages more efficient and therefore load faster.

November 1999 MSC 2000

The Math Subject Classification (1991) is migrated to the MSC 2000 scheme. In following weeks, applications such as the e-CMP notification service are migrated to the MSC 2000 scheme.

December 1999 AMS Preprint server
The AMS Preprint server is officially retired. In its place is a directory of preprint servers.

January 2000 e-MATH Survey
A survey to obtain information from e-MATH users is posted online and administered onsite at the AMS annual meeting.

January $2000 \quad$ Electronic Journals Enhanced
A major revision of the online journal system includes: new interface, better identification of data elements, registration of journals data with journal aggregators and other metadata collection efforts, and better navigation.

January 2000 Links to Original Articles
Additional links are added from MathSciNet reviews to JSTOR-held journals including links to articles from Transactions of the AMS (1900-1994), MAA's American Math Monthly, and American Journal of Math from Johns Hopkins University Press.

March 2000 MR Lookup - interactive
This freely available lookup service allows users to verify references and to add links to MathSciNet. Each query returns at most 3 hits.

March 2000 Links to Original Articles
Links from MathSciNet reviews to articles from a selection of approximately 40 Birkhauser and Springer-Verlag journals.

April 2000 Links to Original Articles
Links from MathSciNet reviews to an additional 18 JSTOR-held journals added. At this point, the total number of links to original articles is well over 100,000.

April 2000 CML Enhanced
This service now allows users to update their personal data online.
May 2000
Electronic Submission of Reviews

A system enabling reviewers to submit their reviews online has been made available on e-MATH.

June 2000
MathScinet Relay Station
Users without a MathSciNet subscription are able to follow an electronic path from a reference with an MR number to MathSciNet without receiving an error indicating that asubscription is required. Instead, a link to the article's original article (if available online) is displayed.

June 2000
Links from IOPP Articles

Using interactive MR Lookup, IOPP created links from references within their articles to MathSciNet reviews.

July 2000
Links from SIAM Articles
Using interactive MR Lookup, SIAM created links from references within their articles to MathSciNet reviews.

August 2000 Infrastructure Enhanced
The Netscape server on e-MATH was retired. The Apache server is now in use.
September $2000 \quad$ Books Online
Six AMS titles have been made freely available in PDF format.
September 2000 Meeting Registration
The infrastructure of this system was significantly altered. Little change has been made for the user.

September $2000 \quad$ MathSciNet version 6
Significant enhancements include: clipboard feature, new navigation, list of journals to which MSN provides links to original articles, author field and classification fields split for more focused searches, and other enhancements.

September $2000 \quad$ CoverSheet Service

This service provides storage for applicants' coversheet data as well as three additional documents. Potential employers are invited to obtain applicant information from this service.
e-MATH Products and Services Currently being Developed
The most notable development efforts expected to be completed by the end of the year include: revamp of the current e-MATH design, new version of the AMS Bookstore, and the installation of new hardware for the website.

## ATTACHMENT 13 - GRANT FOR ST. PETERSBURG SUMMER SCHOOL

## Grant Proposal to National Science Foundation

Submitted September 2000

## Project Summary

The American Mathematical Society proposes to administer the program for selecting and supporting approximately eight U.S. mathematics graduate students and two senior U.S. mathematicians to attend the European Summer School at the Euler International Mathematical Institute in St. Petersburg, Russia. The theme of this summer school is asymptotic combinatorics, with applications to mathematical physics. The summer school will take place July, 2001, and is sponsored by the European Mathematical Society. The Society requests a grant from the National Science Foundation in the amount of $\$ 20,520$, to be used for travel and subsistence for the selected individuals. This is an opportunity for substantial cooperation between the American and European mathematics communities.

## Project description

The program will be devoted to asymptotic combinatorics and its applications in the theory of integrable systems, random matrices, free probability, and quantum field theory. Attention will also be given to other related topics including low-dimensional topology, new approaches in Riemann-Hilbert problems, asymptotics of orthogonal polynomials, symmetric functions, representation theory and random Young diagrams.

In recent years there has been considerable progress in asymptotic combinatorics related to many areas of mathematics, establishing useful links and raising important new problems. In particular, some old problems were recently solved regarding fluctuation of random Young diagrams and fluctuation of the maximal eigenvalues of the random hermitian matrix. In addition, new approaches to the Riemann-Hilbert problem and integrable systems were developed by Deift-Baik-Johansson, based on the Korepin-Izergin-Its approach, along with papers by Tracy-Widom and others. The alternative methods came from asymptotic theory of representations and, in particular, from studying the Plancherel measure. These ideas allow one to calculate the correlation functions of the corresponding point processes (Ol'shansky-Borodin and previous results by KerovVershik) and also to apply the boson-fermion correspondence (Okoun'kov). This is all important, ground-breaking work in areas of intense current research interest.

The progress described above has helped to initiate activity in many closely related topics, including the growth of polymers and random walks on groups and semigroups. Perspectives on these problems and applications of the recent results will be discussed during the summer school in seminars and round table discussions.

The Scientific Committee for the Summer School will consist of:

1. A. Vershik, St. Petersburg (chair)
2. O. Bohigas, Paris
3. R. Stanley, Cambridge, Mass

The core of the program will be a series of lectures at the pre-doctoral level held Monday through Saturday in the mornings for the duration of the summer school. These lectures would be presented by four individuals [E. Brezin (Paris), P. Deift (Philadelphia), M. Kontsevich (Paris), A. Okoun'kov (Berkeley)] who would give three lectures per week for a total of 36 lectures. The afternoons would be used for a limited number of talks and informal problem sessions.

This committee will oversee the selection of the presenters for the morning series of lectures, and establish an active program of presentations and discussions in the afternoon.

Speakers would be drawn from the following list of individuals:
Biane, P. ENS, Paris, France
Brezin, E. ENS, Paris, France
Deift, P. Univ. of Penn, USA
Johansson, K. KTH, Stockholm, Sweden
Kazakov, V. ENS, Paris, France
Kenyon, R. Univ. of Paris-11, Orsay, France
Kontsevich, M. IHES, France
Lascouix, A. Univ. Marne-la-Valiee, France
Okoun'kov, A. UC Berkeley, USA
Ol'shansky, G. IPPI, Moscow, Russia
Pastur, L. Univ. of Paris-7, France
Speicher, R. Univ. of Heidelberg, Germany
Stanley, R. MIT, USA
Tracy, C. UC Davis, USA
Widom, H. UC Santa Cruz, USA

## Administration of Travel Grant Awards.

The Society proposes to follow procedures developed for the administration of other NSF-funded travel grants. The AMS administered awards for the International Congress of Mathematicians $(1990,1994,1998)$ as well as the AMS's recent international meeting at UCLA. The standard award would be intended to cover local expenses for the entire conference and discounted airfare to St. Petersburg.

After widely advertising the opportunity to mathematics doctoral programs in the U.S., the Society will prepare and circulate (in both printed and electronic form) application forms on which U.S. graduate students can supply relevant information. The draft of the application form is provided as a Supplementary Document. "U.S. graduate students" are those students affiliated with a U.S. institution. The applications will be rank ordered by a small panel of U.S. mathematicians with expertise in the areas of the summer school.

The panelists will use their judgment both in evaluating professional qualifications and in seeking diverse representation from the U.S. community of graduate students. The panelists would be recruited from among the following list of individuals.

| Adler, Mark | Brandeis |
| :--- | :--- |
| Baik, Jinho | Princeton |
| Bleher, Paval | Indiana Univ - Purdue Univ |
|  | Indianapolis |
| Diaconis, Percy | Stanford |
| Its, Alexander | Indiana Univ - Purdue Univ |
|  | Indianapolis |
| Newman, Charles | NYU Courant |
| Odlyzko, Andrew | AT\&T Labs |
| Spencer, Thomas | IAS |
| Tracy, Craig | UC Davis |
| van Moerbeke, P. | Brandeis |
| Widom, Harold | UC Santa Cruz |

Given both the focused nature of the topics to be addressed at the Summer School and the small number of awards to be made, it is anticipated that all applications will be reviewed by the full panel, subject to the avoidance of conflicts of interest. The applications will be evaluated based on the panelists' judgment of the professional qualifications of the applicant and the likelihood that attendance at the summer school will serve to advance the research career of the applicant. Each panelist will assign a score to each application and applications will then be rank ordered based on the combined scores assigned. On a second pass, the top twenty applications will be reviewed again by the panel, and the initial ranks may be adjusted to insure a reasonable diversity of institutional affiliations and gender. Awards will be made until all funds have been allocated.

The two senior mathematicians to be supported will be selected by the panel from among the list of principal speakers from the USA included above.

## Education and human resources statement

As Interaction between the world's mathematicians becomes more and more important, it is vitally important for young American mathematicians to communicate with their counterparts in the European mathematical community. Efforts will be made to insure that women and underrepresented minorities receive full consideration for support of their attendance. We have also worked to establish close cooperative ties between the American and European mathematical societies. Administering this grant and providing support of other kinds for the summer school will help to reinforce that cooperation.

## General

- NSF support will be acknowledged in announcements of the travel grants program.
- John H. Ewing, Executive Director of the Society, is authorized to administer grant funds and to make fiscal reports.
- In preparing the budget, the travel reimbursement amount has been based on the
estimated room and board rates for a twenty-one-day stay plus current best estimates of average discounted airfares to St. Petersburg for June 2001 by U.S. flag carrier.
- The Society will forgo all administrative and overhead reimbursements normally allowable under NSF travel grant awards.


# Asymptotic combinatorics with application to mathematical physics. <br> European SUMMER SCHOOL <br> Euler International Mathematical Institute, St.-Petersburg, Russia. <br> 9 July - 22 July 2001 

The SUMMER SCHOOL aims to observe the recent progress in the asymptotic theory of Young tableaux and random matrices from the point of view of combinatorics, representation theory and theory of integrable systems. This subject belongs simultaneously to mathematics and theoretical physics. The systematic courses on the subjects and current investigations will be presented. Tentative participants of the SUMMER SCHOOL are mathematicians as well as physicists.

## Main Speakers

Biane P. ENS, Paris, France
Brezin E. ENS, Paris, France
Deift P. UPenn, USA
Johansson K. KTH, Stockholm, Sweden
Kazakov V. ENS, Paris, France
Kenyon R. University Paris-11, Orsay, France
Kontsevich M. IHES, France
Lascouix A. University Marne-la-Valiee, France
Okoun'kov A. UCB, USA
Ol'shansky G. IPPI, Moscow, Russia
Pastur L. University Paris-7, France
Speicher R. University of Heidelberg, Germany
Stanley R. MIT, USA
Tracy C. UCD, USA
Widom H. UCSCruse, USA
The lectures will be devoted to the asymptotic combinatorics and its applications in the theory of integrable systems, random matrices, free probability, quantum field theory etc. Also these topics concerned with lowdimensional topology, QFT, new approach in Riemann-Hilbert problem, asymptotics of the orthogonal polynomials, symmetric functions, representation theory and random Young diagrams. During the last years it was done a great progress in this direction, new links and new problems has appeared.

The following old problems were solved recently: fluctuation of the random Young diagrams and fluctuation of the maximal eigenvalues of the random hermitian matrix. New approach to Riemann-Hilbert problem and integrable systems were developed by Deift-Baik-Johansson (based on Korepin-Izergin-Its approach, papers by Tracy-Widom and others). The alternative methods came from asymptotic theory of representations and in particular from the studying of the Plancherel measure. These ideas allow to calculate the correlation functions of the corresponding point processes (Ol'shansky-Borodin and previous results by Kerov-Vershik) and also to apply boson-fermion correspondence (Okoun'kov). The explicit distribution of the fluctuations of the characteristics of the diagrams were one of the main results as well as precise distribution of the fluctuations of the eigenvalues of the random matrices.

This progress has initiated a great activity in many closed topics, namely - the growth of the polymers, ASEP, the random walks on the groups and semigroups. Many perspective problems and applications of the results will be discussed during the SUMMER SCHOOL in seminars and round table discussions.

## Scientific Committee

Brezin E., Bohigos O., Deift P., Faddeev L., Malyshev V., Vershik A. (chairman).

## Local Organizing Committee

Vershik A., Neretin Ju., Kokhas K., Novikova E.

## Organization

The SUMMER SCHOOL will take place 9-22 July, 2001, at the International Euler Institute, St.Petersburg, Russia.
Summer school already has financial support from EMS, RFBR. Additional information about SUMMER SCHOOL can be found at http://www.pdmi.ras.ru/EIMI/2001/emschool/index.html. E-mail: emschool@pdmi.ras.ru.

## AMERICAN MATHEMATICAL SOCIETY

To: Jim Maxwell<br>From: Gary Brownell<br>Subject: Prize Fund Projections<br>Date: August 31, 2000

The purpose of the memo is to discuss the amount of endowment income available for funding prizes over the next ten years, recommend that action be taken to allow for the use of this income, and to suggest some alternatives (from a purely financial point of view). The attached spreadsheets show the current balance of unspent prize fund income, the amounts and frequency of awards, and projections of these figures for the next 10 years. Each of the three spreadsheets presents these projections under a different assumption of earnings rate of the endowment. Key information from the spreadsheets is included in the body of this memo.

## Background

The Society currently has about $\$ 900,000$ of endowments whose income is restricted to be used for prizes. Most of this, about $\$ 725,000$, is in the Steele fund. The rest are smaller, as indicated in the table.

This memo does not address the Morgan or Whiteman prizes, although some of its conclusion may also be valid for these prizes.

The remaining prizes, Steele through Satter in the table, are currently generating spendable income of about $\$ 43,000$ per year, using a $5 \%$ spending rate.

| Endowment Funds: | $\mathbf{1 2 / 3 1 / 9 9}$ |
| :--- | ---: |
| Prize Funds |  |
| Steele | $\$ 723,427$ |
| Birkhoff | 43,764 |
| Veblen | 14,780 |
| Wiener | 14,780 |
| Bocher | 10,749 |
| Conant | 48,246 |
| Cole | 23,831 |
| Satter | 38,424 |
| Morgan | 52,504 |
| Albert Whiteman | 29,305 |

In 1992, a committee was appointed to review prizes and make recommendations. Part of that review included an analysis of the size of prizes. A long-range projection of prize fund income was done. The projection included an assumption of average stock market returns, with a conclusion that a $\$ 4000$ prize level would use up what had been a high level of unspent income and eventually keep a close match between income available for prizes and the amount of prizes and related expenses. The Board approved the $\$ 4000$ prize level. As luck would have it, the stock market did not cooperate. Market returns over the past several years have been much higher than average, and therefore, spendable prize fund income has grown much faster than expected.

## The Current Situation

Currently, the prize funds we are considering generate about $\$ 43,000$ per year of income, while the prizes and related expenses amount to about $\$ 29,000$ per year, on average. At the end of 2000, we expect to have about $\$ 68,000$ of unspent prize fund income. If no changes are made, we can expect this balance to grow considerably over the next 10 years. Just how much, depends on our overall investment returns. The chart below shows growth of unspent prize fund income under three return assumptions $-4 \%, 8.5 \%$, and $12 \%$.


Even with a modest 4\% average return, unspent income grows pretty quickly.

Of the current prize funds, only Steele, Birkhoff, and Conant produce enough income to support the prizes in their names. Satter comes close. In effect, Steele makes up for the shortfall in the other prizes and produces most of the unspent prize fund income.

## What to do?

There are probably many ways that could be found to use the unspent prize fund income and to keep a balance between the award amounts and the annual income available for awards. Most of the unspent income was generated by the Steele Fund, so any use of this income should meet the restrictions of the Steele bequest.

Among the possible methods to accomplish these goals are:

Super prizes. The Society could periodically offer very large prizes, relative to other AMS prizes. If other prize amounts are not changed, it is possible that a prize in the range of $\$ 50,000$ to $\$ 100,000$ could be
awarded. The frequency and amount could vary according to the amount of unspent income that is generated.

Increase standard prize levels. Currently most prizes are $\$ 4,000$. Raising the standard to $\$ 7,000$ would make average annual prize awards and expenses about equal to annual prize fund income, under conservative estimates of stock market performance. It would not use up the current balance of unspent income.

Increase the amount and/or number of Steele prizes. Nearly all of the non-Steele prizes require some Steele income to fund their awards. It might make sense to keep the prizes whose funds are too small to support a $\$ 4,000$ prize at $\$ 4,000$, and increase the amount and/or number of the Steele prizes. Increasing the annual total Steele awards from $\$ 12,000$ to $\$ 27,000$ would make average annual prize awards and expenses about equal to annual prize fund income, under conservative estimates of stock market performance. It would not use up the current balance of unspent income.

Combination of approaches. A combination of the above approaches could be used.

## Observing Restrictions.

Each fund came with the purposes the donor felt to be appropriate at the time. Over the years, the Society has found that the restrictions that came with the Steele fund could be met by using the Steele Fund income to supplement the income in the other prizes awarded for research. Should the Society decide that it would be appropriate to use the funds from the Steele endowment for a prize that they believed did not meet the terms of the Steele bequest, certain steps could be taken.

Review and Appraisal of Society Activities in the Area of Prizes
Committee on the Profession
September 16, 2000

Pursuant to its charge, the Committee on the Profession has conducted a review and appraisal of AMS activities in the area of Recognition and Awards. Prior to the September 16 meeting, a very careful and informative analysis of spendable income and expenditure from prize fund endowment was prepared by Gary Brownell's office. In addition, the Secretary's web page provided comprehensive information about all AMS prizes and awards. William Beckner and Robert Daverman worked together in advance of the CoProf meeting to prepare and coordinate discussion at the meeting.
This report summarizes the information presented at the meeting and discussed by CoProf.
One issue that currently needs to be addressed is the imbalance between endowment income available for funding prizes and the rate of expenditure. At the end of 2000, the AMS is projected to have about $\$ 68,000$ of unspent prize fund income. The balance is expected to grow, even with modest rates of return, unless some steps are taken to use the unspent income. Thus there is an opportunity for the AMS to be doing more than it currently is in the awarding of prizes. CoProf concentrated on discussion of a number of alternatives.

The current prizes, the frequency with which they are offered, and their scope are summarized in the following table ${ }^{1}$ :

| Prize | Frequency/Amount | Area | Notes |
| :--- | :--- | :--- | :--- |
| Birkhoff | 1 every 5 years, $\$ 4000$ | Applied <br> Mathematics | Joint with SIAM |
| B cher | 1 every 5 years, $\$ 4000$ | Analysis: awarded <br> for notable <br> research memoir in <br> analysis in a North <br> American Journal |  |
| Cole Prize in Algebra | 1 every 5 years, $\$ 4000$ | Algebra |  |
| Cole Prize in Number <br> Theory | 1 every 5 years, $\$ 4000$ | Number Theory |  |
| Satter | 1 every 2 years, $\$ 1200$ <br> $\$ 4000$ | Unrestricted | For outstanding <br> contribution to math <br> research by a woman |
| Steele (1) | Annual, \$4000 | Unrestricted | Lifetime Achievement |
| Steele (2) | Annual, \$4000 | Unrestricted | Mathematical <br> Exposition |
| Steele (3) | Annual, \$4000 | Unrestricted | Seminal Contribution |
| Veblen | 1 every 5 years, \$4000 | Geometry or <br> Topology |  |
| Wiener | Applied <br> Mathematics | Joint with SIAM |  |

[^1]| Fulkerson | Extinct (funds <br> exhausted) | Discrete <br> Mathematics | Joint with <br> Mathematical <br> Programming Society |
| :--- | :--- | :--- | :--- |
| Conant | Annual, \$1000 |  | For best expository <br> paper in Notices or <br> Bulletin |
| Morgan | Annual, \$1000 | Undergraduate <br> research |  |
| Public Service Award | 1 every 2 years, \$4000 |  | For research <br> mathematician in <br> recognition of <br> distinguished public <br> service |
| Public Service <br> Citation | 1 to 3 citations my be <br> awarded annually, \$500 | For notable <br> contributions to the <br> mathematics <br> profession |  |
| AAS-AMS-APS Public <br> Service Award | Annual, \$0 | For a public figure in <br> recognition of <br> sustained and <br> exceptional <br> contributions to public <br> policies; Joint with <br> AAS and APS |  |
| Whiteman | 1 every 4 years, \$4000 | History of <br> Mathematics |  |

A variety of ideas for more fully utilizing the available resources were discussed including a new Super prize, increasing the dollar amount of prizes, increasing the number of Steele prizes, increasing the number of recipients, new prizes, and, when a prize is awarded to multiple recipients, giving the full award amount to each recipient.
The suggestion for a Super prize was not generally supported in CoProf's discussion; most of the opinions expressed were negative. It was pointed out, however, that big prizes do serve a useful role in terms of heightening public attention and awareness. The example of the Clay Fund challenges was mentioned.

The committee considered voids that might not be covered by the current prizes. For example, are there broad areas of mathematics where new prizes should be established? CoProf did discuss at some length the suggestion to propose a prize for an outstanding paper in one of the AMS primary research journals, including electronic journals, in the past five years. Concern was weighed in the discussion that such a prize might appear to be rather self-serving. Is the AMS recognizing the distinguished work of the prize recipient or promoting its own journals? The general consensus of the discussion was that there is a vast amount of research in the journals in a five-year period and that the promotional issue was a relatively insignificant one.

There was not broad support for increasing the number of recipients of awards in a given year. However a very positive effect might be achieved by offering the awards for research more frequently than every five years. This would increase the number of recipients overall, not detract from the luster of a prize in a given year, and is a worthy mechanism for using some of the unspent income.

CoProf further supported the suggestion to increase the dollar amount of the prizes. The current prevailing level of $\$ 4,000$ was set in 1992. At that time, a review of prizes had actually recommended a standard level of $\$ 5,000$. While it was not CoProf's proper role to be carrying out the financial analysis or approving and recommending the precise level of awards, the committee did support setting a new higher level somewhere between $\$ 4,000$ and $\$ 7,000$. The decision will require financial analysis and action by the Trustees.
CoProf approved three points to be recommended to the Council and ECBT for action:

- Award the research prizes ${ }^{2}$ once every three years, instead of once every five years;
- Increase the amount of the research prizes to a level greater than $\$ 4,000$ and not exceeding \$7,000; and
- Propose a new prize for an outstanding research paper having appeared in one of the AMS primary research journals, including electronic journals, during the previous five years. (The process for generating such a proposal will include articulation of all details of the award.)
In other discussion, Robert Daverman reported that current procedures for awarding prizes work quite well.
CoProf supported the general practice of assuring that there be a regular rotation of the membership on the various prize committees. In this regard, the mechanism for appointing new members to the selection committee for the Bergman prize has been complicated because it requires coordination with a bank trust officer. The membership of the committee has not changed for some time and should be renewed.
Robert Daverman also reported that it is difficult to provide clear instructions for the AMS Award for Distinguished Public Service and for the AMS Citation for Public Service. Since both of these were established at the behest of the Committee on Science Policy, it would seem appropriate for CSP and the Council to clarify the award criteria with the Secretary.

Donald McClure

[^2]
## ATTACHMENT 15 - CONDUCTING BOARD BUSINESS BETWEEN MEETINGS

## Subcommittee Report <br> Board of Trustees Procedures for Meetings by Technical Means <br> Draft 9/19/00

Meetings by Technical Means (MTM) is any meeting, synchronous or asynchronous, of the Board in which some or all attend by telecommunication from remote sites. Examples (2000 technology) would be meetings by e-mail, by conference call, by ICQ or AIM, by mail, or by CUSeeMe.

## Disclaimer:

The Board has and will continue to use technical means to share information, informally consult with each other, and otherwise interact outside of meetings, including MTM, and nothing in the following is designed to preclude or inhibit any such interaction.

## Principles:

1. Any matter which may be referred to a regularly scheduled Board meeting should be so referred.
2. Subject to Principle 1., The Board may decide at any regularly scheduled Board meeting to initiate, continue, or complete any business at a MTM.
3. For matters of major importance and urgency to the Society requiring Board action which can not be referred to a regularly scheduled Board meeting, the Board may be called into a special meeting at Society facilities or any other convenient site. The decision to call such a meeting can be made by the Board at a MTM or by the unanimous consent of the President, the Board Chair, and the Treasurer.
4. For matters requiring Board action which are not covered by Principle 1. or Principle 2., the Board Chair, or the majority of the Board, may call a MTM.

## Rules for Meetings by Technical Means:

1. The call to a MTM must include an agenda, and only business on the agenda may be considered.
2. The call to a MTM must include a date and time for the meeting to commence and a date and time for the meeting to conclude.
3. Every Board member must be notified of the call, and a majority of the Board must consent to the MTM.

## ATTACHMENT 15 - CONDUCTING BOARD BUSINESS BETWEEN MEETINGS

## Subcommittee Report <br> Board of Trustees Procedures for Meetings by Technical Means

Draft 9/19/00
4. A Board member may consent to a call to a MTM whether or not the member intends to participate.
5. The Board Chair will chair the MTM. If the Board Chair is not participating, the first item of business of the MTM will be to elect a chair for the meeting. The Board Secretary will act as secretary for the MTM. If the Secretary is not participating, the next item of business of the MTM will be to elect a secretary for the meeting.
6. For a synchronous MTM, the usual Board Rules of Order will apply. For an asynchronous MTM, the chair will apply the usual Board Rules of Order to the extent possible. If and when conventional Rules of Order for asynchronous MTMs are established, the Board will consider adopting those.
7. A MTM may include an executive session if so specified in the agenda. When the meeting is not in executive session, the usual guests who attend Board meetings may be invited to participate in the meeting or parts thereof. It is the responsibility of the chair to invite guests.
8. Action taken by the Board at a MTM will be binding only if a majority of the Board members (including those not participating in the MTM) have approved it in the MTM.
9. Any action taken by the Board in an MTM shall be included in the minutes to be considered at the next regularly scheduled Board meeting. Approval of those minutes will be considered to include approval of the action taken at an MTM. Any Board member may request that the Board reconsider an action taken at an MTM at the next regularly scheduled Board meeting.

# BOARD OF TRUSTEES <br> STANDING COMMITTEES 

AGENDA AND BUDGET COMMITTEE<br>(as of February 1, 2001)<br>Roy Adler (ex officio - Chair of BT)<br>Hyman Bass (ex officio - President)<br>Robert Daverman (ex officio - Secretary)<br>John Franks (ex officio - Treasurer)<br>Joel Spencer (ex officio - Senior Member of EC)<br>Al Taylor (ex officio - Associate Treasurer)

## AUDIT COMMITTEE

(as of February 1, 2001)
Roy Adler (ex officio - Chair of BT)
John Franks (ex officio - Treasurer)

## ENDOWMENT AND PLANNED GIVING COMMITTEE

Roy Adler (2000)
Arthur Jaffe (2000)
Roy Adler, Chair (ex officio - Chair of BT) (as of February 1, 2001)
Cathleen S. Morawetz (2000)

## INVESTMENT COMMITTEE

(as of February 1, 2001)
Roy Adler (ex officio - Trustee)
John Franks, Chair (ex officio - Treasurer)
Franklin Peterson (2002)
Al Taylor (ex officio - Associate Treasurer)

## LIAISON COMMITTEE

(NOT REALLY A BT COMMITTEE, BUT LISTED HERE FOR CONVENIENCE)
(as of February 1, 2001)
Roy Adler (ex officio - Chair of BT)
Hyman Bass, Chair (ex officio - President)
Robert Daverman (ex officio - Secretary)
John Franks (ex officio - Treasurer)

## COMMITTEE ON SALARIES

(as of February 1, 2001)
Roy Adler, (ex officio - Chair of BT)
John Franks, Chair (ex officio - Treasurer)
Linda Keen (ex officio - third-year Trustee)
Al Taylor (ex officio - Associate Treasurer)

## COMMITTEE ON STAFF AND SERVICES

(as of February 1, 2001)
Roy L. Adler (ex officio - Trustee)
John Franks (ex officio - Treasurer)
Al Taylor, Chair (ex officio - Associate Treasurer)

# EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES STANDING COMMITTEES 

## LONG RANGE PLANNING COMMITTEE

(as of February 1, 2001)
Roy Adler (ex officio - Chair of BT)
Hyman Bass (ex officio - President)
Robert Bryant (ex officio - second-year member of EC)
Robert Daverman (ex officio - Secretary)
John Ewing (ex officio - Executive Director)
John Franks (ex officio - Treasurer)
Karen Vogtmann, Chair (ex officio - third-year member of EC)

## ECBT NOMINATING COMMITTEE

(as of February 1, 2001)
Robert Bryant (ex officio - second-year member of EC)
Eric Friedlander (ex officio - second-year member of BT)
Linda Keen, Chair (ex officio - third-year member of BT)
Marc Rieffel (ex officio - Chair of Council Nominating Committee)
Joel Spencer (ex officio - fourth-year member of EC)
NOTE: When the position of Secretary is under consideration, the Treasurer is a member of this Committee. When the position of Treasurer is under consideration, the Secretary is a member of this Committee.

# TRUSTEE ASSIGNMENTS TO POLICY COMMITTEES 

COMMITTEE ON EDUCATION

Andy Magid (2000)

COMMITTEE ON MEETINGS AND CONFERENCES

Michael Crandall (2000)

## COMMITTEE ON THE PROFESSION

Linda Keen (2000)

## COMMITTEE ON PUBLICATIONS

Roy Adler (2000)

COMMITTEE ON SCIENCE POLICY

Eric Friedlander (2000)

## TRUSTEE LIAISON ASSIGNMENTS TO DIVISIONS

## EXECUTIVE DIRECTOR: Felix Browder

FINANCE AND ADMINISTRATION: John Franks, Andy Magid, Al Taylor
Facilities and Purchasing
Fiscal
Human Resources
Management Information Systems
Systems and Operations

## MATHEMATICAL REVIEWS: AI Taylor

Administration
Bibliographic Services
Copy Editors
Editorial
Production
Reviewer Services
Slavic Languages
Systems Support
MEETINGS AND PROFESSIONAL SERVICES: Linda Keen, Andy Magid
Meetings and Conferences
Professional Services

## PUBLICATIONS: Roy Adler, Eric Friedlander, Linda Keen

Acquisitions
Electronic Products Development
Marketing and Sales
Distribution
Membership and Customer Services
Promotions
Printing
Production
GOVERNMENT RELATIONS AND PROGRAMS (WASHINGTON OFFICE):
Michael Crandall, Eric Friedlander
P.O. Box 6248, Providence, RI 02940-6248 USA 201 Charles Street, Providence, RI 02904-2294

Phone: 401-455-4000, Fax: 401-331-3842
www.ams.org
Felix E. Browder, President
Email: browder@ams.org

## Report of the President to the ECBT

## November 2000

My activities as President during the past year have centered on three major areas:

- The UCLA meeting on "Mathematical Challenges of the 21 st Century"
- Attempts to influence the funding process for mathematics in Washington
- Relations between the AMS and mathematical societies in other countries.

The "Mathematical Challenges of the 21st Century" was successful beyond everyone's expectations. Our goal was to set forth some of the fundamental challenges facing mathematics in this century. Together with the celebration of the World Mathematical Year 2000, we commemorated the hundredth anniversary of David Hilbert's historic lecture, delivered in 1900 at the International Congress of Mathematicians in Paris, where Hilbert presented his 23 problems. These outstanding problems had an important impact on mathematical research of the $20^{\text {th }}$ century. Our aim in the UCLA meeting was to look at some of the now classical problems and to set general directions that emphasize the connection between mathematics and other sciences in a world undergoing extraordinary change. We are now engaged in obtaining manuscripts from the
plenary speakers and organizing a Proceedings volume, which will be published by the AMS.(see Appendix 1)

Our activities in Washington, often in collaboration with other societies, such as the American Chemical Society (ACS), Federation of American Societies for Experimental Biology (FASEB), and American Physical Society (APS), have led to two very positive results. First, we have seen the increase in the National Science Foundation (NSF) budget of $13.6 \%$ more than FY2000 (down from the President's request of $17.6 \%$ ). Second, and even more important, we have just seen the National Science Board's (NSB) approval of the Mathematical Sciences Initiative put forward by Rita Colwell, the NSF Director. If implemented, this would mean the budget for the Division of Mathematical Sciences would double in two years and might reach $\$ 500$ million in five years, according to Dr. Colwell. (see Browder - Appendix 2)

In the international area, we adopted the exchange agreement with the European Mathematical Society, at the third European Congress of Mathematics meeting, in Barcelona in July. The first AMS-Scandinavian international mathematics meeting took place this year in June in Odense, Denmark. Another first, will be the joint international meeting between the AMS and the Hong Kong Mathematical Society. This meeting will be held in Hong Kong, People's Republic of China in December.

I have also taken part in various activities outside the AMS context where AMS participation might serve to raise the profile of mathematics. These included the 2000 AAAS Annual Meeting and Science Innovation Exposition held in Washington, D.C., highlighting "Science in an Uncertain Millennium". I took part in several interdisciplinary committees, such as National Research Council Mathematics Learning Study, the American Association of

Universities Commission on Scholarly Publishing, and the National Science Foundation SEEING

Conference on Research Priorities. I participated and organized the Paris meetings on Poincaré at the Institute Henri Poincaré. I also participated in the Clay Mathematics Institute second meeting in Paris, where they announced their contemporary version of the Hilbert Problems.


Browder report - Apendix 1.
http://www.ams.org/notices/200010/comm-ucla.pdf

## Browder report - Appendix 2

## Mathematical Sciences Initiative

Yesterday the NSF presented the Mathematical Sciences Initiative to the National Science Board. This is an initiative planned by the Division of Mathematical Sciences (DMS) for gaining a significant increase in the DMS FY 2002 budget. Presentation to the National Science Board (NSB) is the first formal step in the development of the NSF FY 2002 NSF budget.
The NSB reacted very favorably to the NSF presentation and clearly supported the initiative. Rita Colwell, NSF Director, made the comment that the budget for the Division of Mathematical Sciences should double in two years and should reach $\$ 500$ million in five years. The FY 2001 budget has the DMS budget at approximately $\$ 125$ million so Colwell's remark implies a budget of $\$ 250$ million in FY 2003 and $\$ 500$ million in FY 2006. Because of Colwell's support, $\$ 250$ million for FY 2003 may be reachable, $\$ 500$ million for FY 2006, five years is a long time in Washington.

Below I have outlined the DMS Mathematical Sciences Initiative. The information is taken from transparencies provided by the DMS.

The case made by NSF to the National Science Board contained the following arguments.
Mathematics in the U.S. is in a position of fragile world leadership.
The U.S. has relied on foreign talent for its world leadership and this reliance may not be possible in the future.

Not enough U.S. students are attracted to a career in mathematics.
Between 1992 and 1999, the number of full-time graduate students in mathematics dropped by $21 \%$ and the number of U.S. citizen graduate students dropped by $27 \%$.
In 1997, only $12 \%$ of full-time mathematics graduate students were supported by research assistantships. This is much different from the physical sciences.
Between 1992 and 1999, upper division mathematics majors dropped by $23 \%$,
In 1997 NSF provided 66\% of federal academic research support in mathematics. This growth is not a product of budgetary increases but from decreases in the budgets of the Department of Defense and the Department of Energy.

Small grant size has a negative impact (median around $\$ 33,000$ per year). Grant size for mathematicians is much smaller than for researchers in other parts of the theoretical physical sciences.

The Mathematical Sciences Initiative will be three pronged, including emphasis on:

## Fundamental mathematical and statistical sciences

 Connections to other sciences and engineering Mathematical sciences education
## Fundamental mathematical sciences includes

- Dynamical systems
- and their role in modeling geological, oceanic, or atmospheric systems
- Advanced statistical methodologies
- and their application to prediction and risk in the economic and social sciences
- Geometry and topology
- and their connections to physical, biological , and engineering systems


## Connections to other sciences and engineering initially will include

- Managing and analyzing large data sets
- Managing and modeling uncertainty
- Modeling complex interacting nonlinear systems


## Mathematical sciences education includes

- Embedding collaborative training in research activities
- Emphasis on:
- Teacher preparation and professional development
- New curricula, technologies, and materials
- Research on learning mathematics


## Implementation of Mathematical Sciences Initiative will take place via

- Increased grant size and duration
- Increased support for graduate students and post-docs
- Collaborative research groups
- New mathematical sciences institutes
- Interdisciplinary centers
- Cross-disciplinary training
- Educational enhancements to research efforts

Samuel M. Rankin, III, Ph.D.
Associate Executive Director
Director, Washington Office
American Mathematical Society
1527 Eighteenth Street, NW
Washington, DC 20036
Phone: 202-588-1100
Fax: 202-588-1853
E-Mail: smr@ams.org

## ATTACHMENT 22 - PROPOSAL BY THE EDITORIAL BOARDS COMMITTEE TO MODIFY THE APPROVAL PROCESS FOR EDITORIAL COMMITTEE APPOINTMENTS

Note: The item serves as the Executive Summary.

TO: $\quad$ AMS Council and Executive Committee
FROM: Committee on Publications
DATE: October 24, 2000
RE: Editorial Boards Committee (EBC) Proposal to Modify Approval Process for Editorial Committee Appointments

## Proposal to Modify Approval Process for Editorial Committee Appointments

CPub recommends to the AMS Council the following proposal involving a change in the editorial boards appointment process.

Proposal:
The Editorial Boards Committee (EBC) approves members for all AMS editorial committees, subject to final approval by the President, except for the Chief Editor of the Bulletin, the editor of the Notices and the Managing Editors of the Journal of the AMS, Transactions/Memoirs of the AMS, Proceedings of the AMS and Mathematics of Computation, which would require approval by the Council.

This is a modification of a proposal that the EBC brought to CPub at its September 2000 meeting.

## Rationale/Justification Submitted by the EBC:

Presently the Editorial Boards Committee (EBC) makes recommendations to the Council or to the President of the AMS concerning the appointments to the Editorial Boards of the AMS journals and Book series. Editorial appointments to the Bulletin of the AMS, Colloquium Series, Journal of the AMS, Mathematical Reviews, Mathematics of Computation, Mathematical Surveys and Monographs, Notices, Proceedings of the AMS, and Transactions/Memoirs of the AMS are also subject to approval by the AMS Council. Thus these appointment undergo two approval processes by two separate committees whose members are elected by the AMS membership. The EBC has the legitimacy of an elected committee, so it should have the authority to approve appointments.

It is proposed that the EBC is granted the authority to make final recommendations to the President of the AMS concerning the appointments to the AMS editorial boards with the exceptions listed below. This proposal would keep the requirement of Council approval for the Chief Editor of the Bulletin, the Editor of the Notices, and the Managing Editors of the Journal, Proceedings, Transactions/Memoirs, and Mathematics of Computation. The Abstracts Editorial Committee has special status and is outside the purview of the EBC.

The EBC would continue to make recommendations in consultation with the Managing or Chief Editors. The new procedure would significantly streamline the appointment process. In particular,
it would allow Managing or Chief Editors to replace or reappoint associate editors (or equivalent) without unnecessary delays, since these appointments would not have to wait for Council meetings for approval.

## ATTACHMENT 26 - REPORT ON MATHEMATICAL REVIEWS EDITORIAL COMMITTEE (MREC)

## MATHEMATICAL REVIEWS EDITORIAL COMMITTEE (MREC) OCTOBER 16-17, 2000

The Mathematical Reviews Editorial Committee (MREC) examined various collections of statistics related to the Mathematical Reviews Database (MRDB). In particular, it was noted that the number of new items added to the MRDB for the 2000 CMP issue year was expected to be over 71,000 , an increase of over $8 \%$ over the 1999 total, and that the number of reviews added to the MRDB for the 2000 MR issue year was 54,385 (the 1999 total was 53,205 ). In each case, increases were spread throughout the pure and applied sections of the Mathematics Subject Classification (MSC). The percentage of CMP items that will not be reviewed increased in 2000 to $22 \%$. Also, the number of items for which the editor or reviewer selected a review by author summary increased. It was noted that in some areas a prompt summary review was preferable to a delayed signed review. Data on the Chinese journals covered in the MRDB showed that over the last ten years the number of items in Chinese added to the MRDB annually has increased three-fold. MREC recommended that advice be sought from Chinese mathematicians on the appropriate coverage for such items.

MREC considered two proposals for expanding the MRDB. The first proposal was that, for papers in a selected list of journals, reference lists, annotated with MR numbers, be added to the MRDB (and thence to MathSciNet). These reference lists would provide added value to the MR data on the paper itself and also enable forward citations in MathSciNet (much as references in reviews currently do). The proposal was enthusiastically supported. (See also Item 2E. 4 in this ECBT agenda.) The second proposal was to expand the MRDB by adding items in a collection of statistics journals, in response to requests from both the library community and researchers. All items in the selected statistics journals will be added to the MRDB, with full bibliographic data but without a review or MSC classifications. MREC also approved this second proposal.

MREC considered and endorsed policies concerning (i) complaints from authors about reviews of their work; (ii) corrections to online versions of reviews after the initial posting; and (iii) individual requests to add to the MRDB items that have already been judged to be out of scope, that are "old" (were published more than five years ago) or that MR has been unable to obtain.

MREC received reports on Version 6 of MathSciNet (which was released in late October) and MR-related subscriber statistics. There were also reports on the following special projects: the MR/ MathSciNet Guidebook (the second edition is expected to be available at the end of the year); the second Featured Reviews volume, published in the Spring of 2000; the creation, in the Spring of 2000, of a Web form for review submission; plans to send reviewers details of their reviewer credits by e-mail in 2000 and then later to set up a "frequent-flyer" type system for reviewer credits; and plans for streamlining the internal processing of reviews.

Jane Kister
November 2000

## ATTACHMENT 27 - REPORT ON COMMITTEE ON EDUCATION

# AMS Committee on Education <br> Meeting held October 27-28, 2000 <br> Washington DC 

Summary Report
The CoE meeting was larger than usual, with seventeen chairs of doctorate-granting mathematics departments also attending. This expansion was first tried at the spring CSP meeting and, as a result of positive feedback from chairs, it is hoped to make it a feature of future meetings.

A theme of this meeting was the involvement of research mathematicians (including some CoE members) in the many current attempts by a variety of government and non-government groups to improve various components of K-12 mathematics education - standards and assessment, textbooks, teacher training and professional development, and teacher certification. In addition, representatives from the National Science Foundation discussed several initiatives that will affect departments of mathematics, including the VIGRE program, and the just announced Mathematical Sciences Initiative.

Some highlights:

## Council on Competitiveness

This industry group has developed an animated and interactive Internet Learning Network, where students, teachers and parents can work on mathematics problems from TIMSS. The URL is http://www.getsmarter.org

## Achieve, Inc.

This organization was created after a 1996 national education summit of state governors and business leaders; it works with states to pool resources to raise standards and try to align assessment with curriculum. Focusing initially on middle school grades, Achieve is working with a few "partner states" (Illinois, Indiana, Maryland, Massachusetts, Michigan, New Hampshire, North Carolina, Ohio, Vermont, Washington, and Wisconsin), in a Mathematics Achievement Partnership (MAP). CoE looked at a draft set of mathematics expectations of what all students should know by the end of 8th grade. Also part of this ambitious project is the development of guides for states on curriculum and teacher professional development to help students reach the expectations, and an internationally benchmarked 8th grade mathematics assessment so that results can be compared across states. The aim is to have the materials ready for use in the fall of 2001; an invitation to join MAP will be extended to all states during the 2000-2001 school year; 8th grade assessment will be conducted in spring 2002.

## Brown Center on Education Policy, Brookings Institution

A September 2000 report, "How well are American students learning? Focus on Math Achievement", found that a clear picture of national achievement in mathematics is complicated by a divergence of the two national NAEP tests - the trend test, which emphasizes arithmetic,
and the newer main test, which is governed by a framework reflecting the NCTM standards and is weighted towards geometry and problem-solving. The report found that achievement in
mathematics has risen since the 1970s, but only at a snail's pace, with younger students ( 9 and 13) making greater progress than 17 year olds. Some recommendations: Studies of the divergence of the two NAEP tests are needed, as is specific reporting of skill areas to make results useful; calculators should not be permitted on the 4th grade test, and should be confined to problem-solving on the 8th grade test; the report also looked at schools designated as exemplary by federal and state awards programs ("Blue Ribbon schools") and recommended that high achievement should be the distinguishing characteristic of schools that receive these awards, and that awards for other accomplishments should be labeled for whatever quality is being honored.

## AAAS/Project 2061

A recent evaluation of 12 algebra textbooks had not found any outstanding material, and had reported those texts considered to have the potential for helping students learn algebra (7), and those with little or no potential (5).

## Education Trust

This organization looked at state licensing of teachers of mathematics and the tests given. The report, "Not Good Enough" outlined the disturbing findings. For elementary and middle school teachers, at least two-thirds of the test questions were middle school level; none exceeded high school level. For secondary mathematics teachers, most of the test content differed little from a high school test. Teachers were not expected to know much more than their students would be expected to know. The issue of the passing scores expected by states was also a concern.

## National Science Foundation

Philippe Tondeur, DMS Director, outlined the new Mathematical Sciences Initiative, a 5-year plan of increased funding for mathematics, beginning with the FY 2002 budget, in three key areas: fundamental mathematics research, interdisciplinary science and engineering collaborations, and mathematics education. In presenting this initiative to the National Science Board, Rita Colwell, NSF Director, said the agency needs to triple its commitment to mathematics over the coming years to reverse years of decline. NSF's budget for mathematics would increase from $\$ 106$ million in FY 2000 to over $\$ 400$ million by 2007. Grant size and duration would be increased, along with support for graduate students and postdoctorates. CoE members discussed the opportunities for mathematicians offered by this new initiative. CoE also discussed the impact of VIGRE grants (for vertical integration of research and education in the mathematical sciences) on departments. Also discussed were details of the recently approved FY 2001 NSF budget, in which EHR came out well, with an increase of about 8 percent. Tondeur encouraged mathematicians to apply for program director positions at NSF. A search is currently being conducted for an assistant director of EHR and CoE members were encouraged to submit nominations.

## Congressman Vernon Ehlers' Education Bills

During 2000, Rep. Ehlers had introduced three education bills, and CoE members had been invited to comment on them. Staff from Ehlers office broke the bad news at the meeting that the House had the previous day voted down the bill thought to have the best chance of passage, given its uncontroversial nature and bipartisan support. Ehlers will reintroduce the bills in the next Congress and CoE members were encouraged to send suggestions for improving them
before their reintroduction. Ehlers led the House study of mathematics and science education a few years ago, which led to the creation of the Glenn Commission (several CoE members participated in hearings). The Commission's report was recently released, and will undoubtedly generate more education bills next year.

## Teacher Preparation and Development

CoE member Jim Lewis was a member of two committees that examined different aspects of the mathematical preparation of teachers, and professional development. He discussed draft/prepublication reports from the CBMS Mathematics Education of Teachers Project, and the National Research Council's Committee on Science and Mathematics Teacher Preparation. The CBMS report is aimed at faculty in mathematics departments, and recommends serious focus on the mathematics that teachers will need. The NRC report argues that teacher education should be seen as a seamless experience, with ongoing teacher development, using the medical school model.

Mathematics Education Research: A Guide for the Research Mathematician
CoE member Andy Magid discussed this recent publication, which he co-wrote with Curtis McKnight (CoE member), Teri J. Murphy, and Michelynn McKnight.

## Massachusetts Mathematics Framework

Roger Howe, CoE Chair, invited two mathematicians who had been involved in the recent contentious process of adoption of mathematics education standards in Massachusetts. Maurice Gilmore and Wilfried Schmid discussed the chronology of events that took place.

Other presentations at the meeting: U.S. Department of Education, Mathematical Sciences Education Board; the AMS-MER Master's Programs Workshops; a report was submitted from D. Bressoud, AMS representative to the MAA Committee on the Undergraduate Program in Mathematics, on the preparation of a new Curriculum Report for release in 2002.

CoE Panel at Joint Mathematics Meetings, New Orleans, January 2001
CoE will host a discussion panel, Saturday, January 13, on the National Research Council's Mathematics Learning Study and its implications for teacher preparation.

Submitted by Monica Foulkes, AMS Washington Office
November 7, 2000

## ATTACHMENT 28 - DISCOVERIES AND BREAKTHROUGHS (AIP)

## Discoveries \& Breakthroughs Inside Science

For nearly 10 years the American Institute of Physics produced and distributed for free a biweekly science TV news insert for local television news stations. These were effective but costly, and several years ago AIP decided to create a product that might be sold to stations and, over time, become self-supporting.

They have therefore launched a new syndicated science TV news program, Discoveries and Breakthroughs Inside Science. The series consists of 12 segments per month and is sold to TV stations (one per market-there are 211) throughout the country at rates that vary according to the size of market. The goal is to reach at least $70 \%$ (150) of all markets.

Each show is a package of video clips, taped dialogue, and script. The local news show most often has a local newscaster read the dialogue while the video clips play, giving the appearance that the station has produced a substantial ( 90 second!) piece on science. Syndication such as this is a common way to deliver material to news organizations.

The entire project is professional, using experienced producers, and scientifically sound, with an elaborate review process. Producing high-quality programs like this is expensive, of course, with an annual budget of over one million dollars. Partly for this reason, AIP is seeking partners from other scientific societies. They are also seeking partners in order to provide fresh ideas and help in the reviewing process. Mathematics is key for them in this last regard. (For example, there is considerable interest in weather segments, for the local weatherman to read, in which mathematics often plays a key role.)

When AIP first approached the AMS a year ago, it was clear that we could not provide much help without a designated liaison who could interact directly with the editorial and production staff at AIP. The fact that we were unable to participate in such projects was part of the impetus for creating a public awareness office.

In the meantime, AIP has proceeded with the project, beginning full operations in January of 2000. They are already in 58 of the 211 markets across the country, and have recently signed agreements with network affiliates to improve their presence in certain key markets. They have several society partners - the American Physical Society, American Geological Society, American Geological Institute, and the American Statistical Association. They are still looking for partners and recently met with representatives from AMS to discuss participation, to provide ideas as well as financial resources.

The Society has budgeted a $\$ 25,000$ commitment for the second year of the project (2001) with a possible further commitment in subsequent years, but only after review. This is not meant to be an indefinite commitment but rather temporary startup funds. Should the project eventually show
a profit, AIP has pledged to share the profit in proportion to these initial contributions (which won't be much).

This is an ideal project for the new Public Awareness Office, providing an opportunity for us to give mathematics more visibility in the country's most common news outlets as well as an opportunity to make connections with key people in the Washington area. It leverages a relatively small investment to become a part of large, highly-visible project. It extends the Society's working philosophy that we gain most by working with all of science.

This is a new project to be carried out by a new office. For that reason, it seems natural to use the Program Development Fund to pay the cost in 2001 (and perhaps 2002).

John Ewing

## DBIS PRODUCTION PROCEDURES TO ASSURE ACCURACY AND QUALITY CONTROL

## (Excerpts from AIP material)

## GENERATING STORY IDEAS:

Currently, our sources are usually journal articles, numerous university press releases, scientific societies' websites; and papers presented at Society meetings.

Story ideas are circulated prior to our weekly editorial meetings by producers, Member Society scientists and science editor (currently Ben Stein and we are hiring another Science Editor shortly.)

Science editors comment on whether they believe the science is sound and significant;
TV experts will comment on whether the story makes a good TV piece. If both concur, the story is pre-approved and assigned to the science editor to find an outside source and expert to confirm that the research is sound and worthwhile. (ALL DBIS stories are checked by an outside source...in fact almost all the stories have the outside science expert commenting in the final piece.)

If the outside sources give the story a "green light," the story is approved ( All approvals are sent via electronic mail) and the story is assigned to one of our producers.

## GENERATING THE SCRIPT :

Guidelines for the science content are:

1. At least one of the sections of the story should describe a science process or a physical principle.
2. The "how" and/or the "why" of this process or principle should be included;
3. There should be an animation visually depicting the how and/or the why;
4. When appropriate, a phrase on the historical context should be included;
5. When appropriate the type of science and/or scientists involved should be stated;
6. Clear connection between the science and application;
7. Focus on only one application.

The initial draft of the script is circulated to the scientists whose research is being reported on and the outside expert to assure we are portraying the information accurately. In addition, NewProNet's Executive and Managing producers review it.

The Science Editor at AlP must then review, edit and sign off on the script. Final approval is given by the PI Manager.

A few days before the release of our 12 reports, AlP receives a preview copy of the 12 reports to review graphics and visualizations. Both the Science Editor and the PI Manager review these and give the final approval.

STORY MIX: Decisions about the mix of stories are made when stories are in the "approval phase." The goal is to have about 1-3 medical physics or medical; 1-3 earth science or weather related; 1-3 on consumer physics, applied physics or engineering.

ADVISORY COMMITTEE: Once we have the DBIS Advisory Committee in place, scripts will be submitted for comments to the members of the partner Societies on the Committee, when the reports cover issues that pertain to their areas of specialization. We also plan to have the Advisory Committee help generate story leads.

Station List (as of November 2000)

Station Market Channel \#
1 KRQE ALBUQUERQUE,NM 13
2 WSB A TLANT A, GA 2
3 WMAR BAL TIMORE, MD 2
4 WVTM BIRMINGHAM, AL 13
5 WLVI BOSTON, MA 56
6 WCYB BRISTOL, VA 5
7 KGBT BROWNSVILLEI HARLINGEN, TX 4
8 WVIR CHARLOTTSVILLE, VA 29
9 WMAQ CHICAGO, IL 51
0 KHSL CHICO, CA 12
11 WCPO CINCINNATI, OH 9
12 WEWS CLEVELAND, OH 5
13 WIS COLUMBIA, SC 10
14 WCMH COLUMBUS, OH 4
15 KXAS DALLAS,TX 5
16 WHIO DAYTON, OH 7
17 WXYZ DETROIT, MI 7
18 WPRI EAST PROVIDENCE, RI 12
19 KTSM EL PASO, TX 9
20 KFSN FRESNO,CA 30
21 WBBH FT. MYERS, FL 20
22 KREX GRAND JUNCTION, CO 5
23 WTIC HARTFORD, CT 61
24 KABC HOLL YWOOD, CA 7
25 WTHR INDIANAPOLIS, IN 13
52 KQTV ST. JOSEPH, MO 2
53 WFTS TAMPA, FL 28
54 WPBN TRAVERSE CITY, MI 7
55 KOLD TUCSON,AZ 13
56 KJRH TULSA, OK 2
57 WRC WASHINGTON, DC 4
58 WPTV WEST PALM BEACH, FL 5

26 WLBT JACKSON, MS 3
27 WAWS JACKSONVILLE, FL 30
28 WVL T KNOXVILLE, TN 8
29 WSYM LANSING, MI 47
30 KVBC LAS VEGAS, NV 3
31 WKYT LEXINGTON, KY 27
32 WLKY LOUISVILLE, KY 32
33 KJTV LUBBOCK, TX 34
34 WMC MEMPHIS, TN 5
35 WTVJ MIAMI, FL 6
36 WCCO MINNEAPOLIS, MN 4
37 WTVF NASHVILLE, TN 5
38 KNTS NATCHITOCHES, LA 17
39 WABC NEWYORK, NY 7
40 WCTI NEW BERN, NC 12
41 WCAU PHILADELPHIA, PA 10
42 KNXV PHOENIX, AZ 15
43 WPXI PITTSBURGH, PA 11
44 KOIN PORTLAND, OR 6
45 WNCN RALEIGH, NC 17
46 KOVR SACRAMENTO,CA 13
47 KTVX SAL T LAKE CITY, UT 4
48 KENS SAN ANTONIO, TX 5
49 KNSD SAN DIEGO, CA 39
50 KNTV SAN JOSE, CA 11
51 KIRO SEATTLE, WA 7

## ATTACHMENT 29 - INVESTMENT COMMITTEE REPORT

## AMERICAN MATHEMATICAL SOCIETY

To: Investment Committee
From: Gary Brownell
Subject: Nov 17, 2000 Meeting Minutes
Date: November 17, 2000
Cc: Connie Pass, Carol Couto, and John Ewing

The Committee met from 9:00 to 12:00 on Friday, Nov 17. Attendees included Committee members John Franks, Al Taylor, and Roy Adler, plus staff members John Ewing, Connie Pass, and Gary Brownell. Steve Knightly from Frontier Capital Management attended at 9:00.

1. Performance review. The following are the current portfolio returns (AMS calculated, net) vs. benchmarks for year-to-date 1997, 1998, 1999, and September 2000. The red entries are those whose returns have trailed their benchmark by more than . $5 \%$. Additional details are in the I section of the green pages.

|  | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | Sept 2000 |
| :--- | ---: | ---: | ---: | ---: |
| Frontier | $21.4 \%$ vs. $33.4 \%$ | $34.6 \%$ vs. $28.6 \%$ | $48.1 \%$ vs. $21.0 \%$ | $16.8 \%$ vs. (1.4)\% |
| Moody Aldrich | $19.8 \%$ vs. $33.4 \%$ | $(4.8) \%$ vs. $28.6 \%$ | $(10.6) \%$ vs. $21.0 \%$ |  |
| Vanguard 500 | $33.2 \%$ vs. $33.4 \%$ | $28.6 \%$ vs. $28.6 \%$ | $21.1 \%$ vs. $21.0 \%$ | $(1.4) \%$ vs. (1.4)\% |
| Vanguard Total |  |  | $24.4 \%$ vs. $23.6 \%$ | $(0.5) \%$ vs. $(1.2) \%$ |
| Vanguard REIT | $18.8 \%$ vs. $18.6 \%$ | $(16.3) \%$ vs. $(16.9) \%$ | $(4.0) \%$ vs. $(4.5) \%$ | $21.8 \%$ vs. $22.2 \%$ |
| Cohen \& Steers | $21.2 \%$ vs. $20.3 \%$ | $(18.1) \%$ vs. $(17.5) \%$ | $2.7 \%$ vs. $(5.4) \%$ | $21.6 \%$ vs. $21.8 \%$ |
| Fidelity Intl Ind |  |  |  | $(11.1) \%$ vs. $(11.6) \%$ |
| GAM | $21.7 \%$ vs. $2.1 \%$ | $16.3 \%$ vs. $20.3 \%$ | $20.9 \%$ vs. $27.3 \%$ |  |
| Templeton EM | $(23.2) \%$ vs. $(20.9) \%$ | $(18.0) \%$ vs. $(25.3) \%$ | $56.6 \%$ vs. $63.4 \%$ | $(26.6) \%$ vs. $(21.1) \%$ |
| PIMCO | $10.2 \%$ vs. $9.7 \%$ | $9.8 \%$ vs. $8.7 \%$ | $(0.2) \%$ vs. $(0.8) \%$ | $7.0 \%$ vs. $7.1 \%$ |
| Total Portfolio | $\mathbf{1 8 . 7 \%}$ (net) | $\mathbf{1 3 . 5 \%}($ net $)$ | $\mathbf{1 8 . 9 \%}$ (net) | $\mathbf{3 . 7 \%}$ (net) |

Action item - Consideration of Templeton Emerging Markets is in a separate item. The Committee considered whether any other changes should be studied for future consideration. No action was taken.
2. Asset allocation. The Committee considered whether any adjustment should be made to the current asset allocation. Below is a spreadsheet showing the allocation percentages as of September 30, 2000. The current allocation policy is:

Equity investments (including foreign equities) $70 \%-85 \%$ of total.
Foreign equities
Up to $10 \%$ of total.
Fixed income
$15 \%-30 \%$ of total.

| ASSET ALLOCATION |  | Sept 30 Balance | \% of Total | Policy |
| :---: | :---: | :---: | :---: | :---: |
| Equities |  |  |  |  |
| US Equities | Frontier Capital Management | \$11,726,000 | 68.6\% |  |
|  | Vanguard S\&P 500 Fund | 5,195,000 |  |  |
|  | Vanguard Total Mkt Fund <br> Total domestic stock accounts | 16,118,000 |  |  |
|  |  | 33,039,000 |  |  |
|  | Vanguard REIT Fund | 637,000 |  |  |
|  | Cohen \& Steers REIT Fund | 701,000 |  |  |
|  | Total REIT accounts | 1,338,000 | 2.8\% |  |
|  | Total US Equities | 34,377,000 | 71.3\% |  |
| Foreign Equities | Fidelity International Index Templeton Emerging Markets | $\begin{array}{r} 3,874,000 \\ 723,000 \end{array}$ |  |  |
|  | Total foreign equity accounts | 4,597,000 | 9.5\% | Up to 10\% |
| Total Equities |  | 38,974,000 | 80.9\% | 70\%-85\% |
| Fixed Income | PIMCO Total Return | 9,210,000 | 19.1\% | 15\%-30\% |
| TOTAL 3/31/00 |  | \$48,184,000 | 100.0\% |  |

Action item - As of September 30, the portfolio conforms reasonably well to the current allocation policy. Apart from the next two items, no action was taken with respect to asset allocation.
3. Templeton Emerging Markets Fund. The Templeton Emerging Markets Fund was picked up in order to increase the portfolio's diversification. (An interesting article about diversification and foreign markets was attached to the agenda.) To date, this fund has not added to the portfolio's growth. Instead it has lost money. It has not performed well relative to its index. And it has not added much diversification. (In four years, it has moved opposite of US stocks twice, with US stocks once, and this year it lost money while US stocks stood still.) It seems prudent to move the approximately $\$ 723,000$ in this fund to another vehicle. The choices are another emerging markets fund, the Fidelity International Index Fund, one of the Vanguard US index funds, Frontier Capital Management, or the PIMCO bond fund. The CFO recommended moving this money to the Vanguard Total Stock Market Index Fund.

The Committee also considered the following options - Move the money into the EAFE index fund, thus maintaining the same overall commitment to foreign stocks; move the money to a different emerging markets fund. Two lists of emerging markets funds were attached to the agenda. One list included funds designed for institutional investors. The second list included funds designed for all investors. The CFO recommended that consideration be given to the Vanguard Emerging Markets Stock Index Fund, the Oppenheimer Developing Markets Fund, and the Dreyfus Emerging Market Fund. Returns, expenses, and other issues were discussed.

Action item - The Committee decided to liquidate the Templeton Emerging Markets Fund, and invest the proceeds (about $\$ 700,000$ ) in the Vanguard Total Stock Market Index Fund.
4. Additional investment. There is approximately $\$ 500,000$ that can be moved from operating accounts to long-term investments at this time. The Committee considered where the money should be invested. The CFO recommended that these funds be allocated to Frontier Capital Management.

Action item - The Committee decided to allocate the new funds to Frontier Capital Management.
5. Additional Committee member. Over the past several years, the Committee has included a member who was not currently serving on the BT - Benny Rushing, followed by Frank Peterson. The Committee discussed whether to invite an additional member, either from the BT or from outside.

It was noted that the Chair of the BT, Andy Magid, had solicited suggestions. John Franks will discuss this with Andy.


[^0]:    Prepared by Don Babbitt

[^1]:    ${ }^{1}$ The first 11 prizes in this table (Birkhoff through Fulkerson) are similar in that they can be funded from a common pool of endowment income, the largest part of which is generated by the Steele fund. The last 6 prizes and awards are not funded from this general pool.

[^2]:    ${ }^{2}$ The term "research prizes" recurred in CoProf's discussion. The prizes encompassed by this general description need to be specified.

