

**AMERICAN MATHEMATICAL SOCIETY  
EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES MEETING  
MAY 20-21, 2016  
MINUTES  
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**AMERICAN MATHEMATICAL SOCIETY  
EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES MEETING  
MAY 20-21, 2016**

**MINUTES**

A joint meeting of the Executive Committee of the Council (EC) and the Board of Trustees (BT) was held Friday and Saturday, May 20-21, 2016, at the AMS Headquarters in Providence, Rhode Island.

The following members of the EC were present: Robert L. Bryant, Tara S. Holm, Kenneth A. Ribet, Carla D. Savage, and Jennifer Taback. Alejandro Adem was present only on Friday, May 20. Jesús A. De Loera was present (by WebEx online conference) only on Friday, May 20, from 6:30 PM - 7:00 PM. It is noted for the record that a quorum (four members) was present.

The following members of the BT were present: Robert L. Bryant, Ruth M. Charney, Jane M. Hawkins, Bryna Kra, Robert K. Lazarsfeld, Zbigniew H. Nitecki, and Karen Vogtmann. Joseph H. Silverman was present only on Saturday, May 21. It is noted for the record that a quorum (six members) was present.

Also present were the following AMS staff members: Thomas J. Blythe (Chief Information Officer), Edward G. Dunne (Executive Editor, Mathematical Reviews), Sergei Gelfand (Publisher), Robert M. Harington (Associate Executive Director, Publishing), Ellen H. Heiser (Assistant to the Executive Director [and recording secretary for this meeting]), Robin Marek (Director of Development), Donald E. McClure (Executive Director), Emily D. Riley (Chief Financial Officer), Samuel M. Rankin (Associate Executive Director, Washington Office), and T. Christine Stevens (Associate Executive Director, Meetings and Professional Services). Helen G. Grundman (Director of Education and Diversity) was present on Friday, May 20, only.

President Robert Bryant presided over the EC and ECBT portions of the meeting (items beginning with 0, 1, or 2). Board Chair Karen Vogtmann presided over the BT portion of the meeting (items beginning with 3).

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

<b>0</b>	<b>CALL TO ORDER AND ANNOUNCEMENTS</b>
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**0.1**    **Opening of the Meeting and Introductions.**

President Bryant called the meeting to order and asked those present to introduce themselves.

**0.2**    **Housekeeping Matters.**

Executive Director McClure mentioned some details about the schedule and arrangements for the events that took place during this meeting.

<b>1I</b>	<b>EXECUTIVE COMMITTEE INFORMATION ITEMS</b>
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**1I.1**    **Colloquium Lecturer.**

The Secretary reported that the EC had supported the recommendation of the Colloquium Lecturer Committee to invite Carlos Kenig (University of Chicago) to deliver the Colloquium Lectures at the 2017 Annual Meeting in Atlanta and that Kenig had accepted the invitation.

**1I.2**    **Gibbs Lecturer.**

The Secretary reported that the EC had supported the Gibbs Lecturer Committee in its selection of John Preskill (California Institute of Technology) to deliver the Gibbs Lecture at the 2017 Annual Meeting in Atlanta and that Preskill had accepted the invitation.

**1I.3**    **Secretariat Business by Mail. Att. #1.**

Minutes of Secretariat business by mail during the months December 2015 – April 2016 are attached (**#1**).

<b>2</b>	<b>EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS</b>
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**2.1**    **Report on Committee on Meetings and Conferences (COMC). Att. #2.**

The ECBT received the attached report on the March 12, 2016 COMC meeting (**Att. #2**), which was presented by Associate Executive Director Stevens. Monica Nevins, University of Ottawa, is the 2016 COMC Chair.

**2.2 Report on Committee on Science Policy (CSP). Att. #3.**

The ECBT received the attached report on the April 12-13, 2016 CSP meeting (Att. #3), which was presented by Associate Executive Director Rankin. Jeffrey Hakim, American University, is the 2016 CSP Chair.

**2.3 Report on Committee on Education (COE).**

The ECBT was informed that the next COE meeting will be held October 13-15, 2016 in Washington, DC. Doug Mupasiri, University of Northern Iowa, chairs COE in 2016.

COE sponsored two panels at the Joint Mathematics Meetings in Seattle, Washington:

1. “What is a Mathematics PhD?” The panel discussed a variety of issues related to the training and mentoring of Mathematics PhDs, including best practices for mentoring; expectations and responsibilities for mentors; TA preparation and graduate teaching responsibilities; special challenges for women, minorities and international students; the optimal size of a graduate program; process of administration of admissions; defense and exit exams; and opportunities for professional development. Jesús De Loera, University of California, Davis, moderated, with panelists including Tara Holm, Cornell University; Phil Kutzko, University of Iowa; Richard Lauges, University of Illinois; Richard McGehee, University of Minnesota; and William Velez, University of Arizona.
2. “Work in Mathematics Education in Departments of Mathematical Sciences” (co-sponsored with the Association for Women in Mathematics’ Education Committee). The panel highlighted examples of contributions to mathematics education by educators who contribute in areas such as: teacher education (pre and in-service), instructional materials development in K-16 mathematics, Scholarship of Teaching and Learning, and mathematics education research.

**2.4 Report on Mathematical Reviews Editorial Committee (MREC).**

The ECBT was informed that the 2015 MREC annual meeting was held October 12 at the Mathematical Reviews office in Ann Arbor, Michigan. Reports on that meeting were provided at the November 2015 ECBT and the January 2016 Council meetings. The next MREC meeting is Monday, October 10, 2016, in Ann Arbor.

**2.5 Report on Committee on Publications (CPub).**

The ECBT was informed that CPub last met in Chicago, Illinois, on September 18-19, 2015. Reports on that meeting were provided at the November 2015 ECBT and January 2016 Council meetings. CPub’s 2015 Annual Report was filed in the AMS Committee Report Book as Report Number 151116-009 and is available, along with the 2016 committee roster, on the CPub homepage ([www.ams.org/ams/cpub-home.html](http://www.ams.org/ams/cpub-home.html)).

CPub's recommendation to the January 2016 Council, stating that "The AMS should increase the capacity of its research journals in order to better serve the mathematical community," was considered as part of the larger initiative in the Strategic Plan to "Publish More Mathematics Content" as the discussion topic at the April 2016 Council meeting.

Professor Anatoly Libgober, University of Illinois at Chicago, serves as CPub Chair for the period February 1, 2016 – January 31, 2017. CPub is conducting an evaluation of the AMS Book Program which will be presented at its next meeting on Friday and Saturday, September 16-17, 2016, at the AMS Headquarters in Providence, RI.

## **2.6 Report on Committee on the Profession (CoProf).**

The ECBT was informed that CoProf held its most recent meeting on September 19-20, 2015, at the Hilton Chicago O'Hare Airport Hotel. A report on that meeting is included in the November 2015 ECBT minutes. The 2015 Annual Report of CoProf was delivered to the January 2016 Council and is available here:

[www.ams.org/aboutus/governance/committees/CoProf2015ReportCouncil.pdf](http://www.ams.org/aboutus/governance/committees/CoProf2015ReportCouncil.pdf).

The next CoProf meeting will be September 17-18, 2016, at AMS Headquarters in Providence, Rhode Island. For its annual review in 2016, CoProf chose to study the charge of the Committee on Academic Freedom, Tenure, and Employment Security (CAFTES) and to suggest any additional resources that it might need. The Chair of CoProf for February 1, 2016 – January 31, 2017 is David Savitt of Johns Hopkins University.

## **2.7 Washington Office Report. Att. #4.**

The ECBT received the attached report (#4) on the activities of the Washington Office, which was presented by Associate Executive Director Rankin.

## **2.8 Report on Long Range Planning Committee (LRPC).**

The ECBT was informed that the LRPC met on Friday, May 20, 2016 and discussed the following topics:

1. A statement on Active Learning that is currently being considered by CBMS (Conference Board of the Mathematical Sciences) and whether the AMS President should sign the final version as a supporter.
2. What concrete steps the AMS might take to support the efforts of TPSE Math (Transforming Post-secondary Education in Mathematics).
3. A proposed program (currently being considered by a subcommittee of the Committee on the Profession) under which institutions can request site visits for the purpose of improving the climate for women and minorities.



**2.9 2017 Journal Pages and Prices.**

The ECBT approved the following numbers of pages and prices for 2017 journal subscriptions:

	<b>2017 pages</b>	<b>2017 list prices</b>
<i>Abstracts of Papers Presented to the AMS*</i>	1,100*	\$ 187
<i>Bulletin of the AMS</i>	768	\$ 597
<i>Conformal Geometry and Dynamics</i>	300	\$ 0
<i>Journal of the AMS</i>	1,200	\$ 409
MR Products		
Data Access Fee	NA	\$10,531
MathSciNet	NA	\$ 2,712
<i>Mathematics of Computation</i>	3,000	\$ 749
<i>Memoirs of the AMS</i>	4,600	\$ 960
<i>Notices of the AMS</i>	1,550	\$ 637
<i>Proceedings of the AMS</i>	5,240	\$ 1,603
<i>Proceedings of the AMS, Series B</i>	600	\$ 0
<i>Representation Theory</i>	500	\$ 0
<i>St. Petersburg Mathematical Journal*</i>	1,000*	\$ 2,456
<i>Sugaku Expositions</i>	240	\$ 274
<i>Theory of Probability and Mathematical Statistics*</i>	400*	\$ 938
<i>Transactions of the AMS</i>	8,880	\$ 2,632
<i>Transactions of the AMS, Series B</i>	600	\$ 0
<i>Transactions of the Moscow Mathematical Society*</i>	300*	\$ 665
*the numbers of pages for these journals are not completely within the staff's control, so they are currently the staff's best estimates and were included in the version of the 2017 budget presented at this meeting.		

The ECBT was informed that Publishing Division staff also plans to make the translation journal, *Sugaku Expositions* (SUGA), available in electronic format in 2017. Currently, SUGA is sold in paper format only. Other AMS translation journals (*St. Petersburg Mathematical Journal*, *Theory of Probability and Mathematical Statistics*, and *Transactions of the Moscow Mathematical Society*) are already offered in electronic format. Staff has determined that for a minimal cost, SUGA can be offered in electronic format, potentially increasing revenue and content currently offered in the E-Journal Consortia package.

**2.10 2017 Institutional Member Dues.**

The ECBT approved an average increase of 3% in institutional member dues for 2017.

**2.11 Registration Fees for January 2017 Joint Mathematics Meetings.**

The ECBT reviewed the current budget summary for the January 2017 Joint Mathematics Meetings (JMM) in Atlanta, Georgia, including the exhibits budget and estimates of the net income for the meeting resulting from various levels of registration fees. It was noted that JMM registration fees are set by the AMS-MAA Joint Meetings Committee (JMC).

The ECBT voted to advise the JMC that the member preregistration fee should be increased by no more than 12% for 2017, and this should be the last year of this large an increase. Starting with the 2018 JMM, the ECBT expects to see increases on the order of 4% or less. In addition, it was suggested that registration be enforced more strictly at JMM. [It is noted for the record that the May 2016 JMC set the member pre-registration fee at \$316, which is a 12% increase.]

**2.12 Stipend and Expense Allowance for Centennial Fellowship.**

The ECBT approved awarding one Centennial Fellowship for 2017-2018 in the amount of \$91,000, with an expense allowance of \$9,100.

**2.13 Proposals Submitted to Funding Agencies and Foundations. Att. #28.**

The ECBT reviews proposals that request, or are expected to request, funding of \$100,000 or more from a Federal agency or a private foundation. The attached report on the current status of existing proposals, and plans for the next six months, was received (Att. #28). The ECBT approved planning, preparing, and submitting one new proposal to request support for the MathJax Consortium to continue research on semantic enrichment of math on the web. (The [MathJax Consortium](#) is a joint venture of the AMS and the Society for Industrial and Applied Mathematics to advance mathematical and scientific content on the web.)

**2.14 2017 ABC and ECBT Meetings.**

The ECBT approved the following dates and sites for 2017 ABC and ECBT meetings. It was noted that the members of the ABC in 2017 will be: Hawkins, Lazarsfeld, Nitecki, Ribet, and Savage.

ABC	April 7, 2017 (Friday)	by WebEx
ECBT	May 19-20, 2017 (Friday-Saturday)	Ann Arbor, Michigan
ABC	October 6, 2017 (Friday)	Providence, Rhode Island (or attend by WebEx)
ECBT	November 17-18, 2017 (Friday-Saturday)	Providence, Rhode Island

**2.15 Motions of the Secretary.**

The following motion was approved by acclamation:

*The Executive Committee and Board of Trustees of the American Mathematical Society offer praise and appreciation to*

***Donald E. McClure***

*on the occasion of his retirement as Executive Director of the AMS. Don has admirably led the Society for the past seven and a half years and now leaves behind a well-functioning, successful, and fiscally sound institution. Don carefully weighed all decisions according to the benefits to mathematics, mathematicians, and the Society. Under Don's capable leadership and guidance, support for young mathematicians has blossomed in the form of travel grants, student chapters, and employment services; open-access journals have been created; a Development Department and a Department of Education and Diversity have been established; and a strategic plan has been put in place to guide the AMS over the next five years.*

*On behalf of all the members of the American Mathematical Society, we express our gratitude to Don McClure for his many valuable contributions and we wish him success in his future endeavors.*

<b>2C EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES CONSENT ITEMS</b>
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**2C.1 Change in Travel Reimbursement Policy for Invited Speakers.**

For many years, it has been the policy of the AMS to reimburse transportation expenses for Invited Speakers, but not lodging or incidental expenses. Recently the policy was discussed by the Secretariat and the Executive Director, who recommended the following updated policy, which was approved by the ECBT:

For each Invited Speaker attending a regular meeting of the Society the following expenses will be reimbursed, if requested: ground transportation (up to \$150) to and from home/airport/hotel; air or other transportation up to the economy round trip air amount; lodging for the night before and night(s) of any scheduled address; reasonable meals for that time period (except that when meals are to be served in a meeting, no other meal will be reimbursed during that part of the day); and reasonable cost of daily internet access in the travel time period.

If special circumstances require a greater level of support than is available from all sources, the speaker may request additional support by providing details in writing to the

Secretary of the Society, in care of the Meetings and Conferences Department in Providence, allowing ample time to refer the request for consideration prior to the meeting. The request will be reviewed and requires the prior approval of the Secretary and Executive Director.

## **2C.2 November 2015 ECBT Meeting.**

The ECBT approved the minutes of the meeting of the Executive Committee and Board of Trustees held November 20-21, 2015, in Providence, Rhode Island, which had been distributed separately. These minutes include:

- ECBT open minutes prepared by the Secretary of the Society  
[www.ams.org/about-us/governance/board/ecbt-minutes-1115.pdf](http://www.ams.org/about-us/governance/board/ecbt-minutes-1115.pdf)
- ECBT executive session minutes prepared by the Secretary of the Society

<b>2I EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES INFORMATION ITEMS</b>
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### **2I.1 State of the AMS.**

As is tradition, the Executive Director's annual report was delivered orally at the April 2016 Council meeting. The written report is then usually delivered to this ECBT meeting, but it was not yet available. It is anticipated that the written report will be published in the September 2016 issue of the [Notices of the AMS](#).

### **2I.2 Report on AAAS Meeting. Att. #8.**

A report on the AMS-supported activities at the 2016 annual meeting of the American Association for the Advancement of Science (AAAS) is attached (#8).

### **2I.3 2016-2017 AMS Centennial Fellowship.**

Upon recommendation of the AMS Centennial Fellowship Committee, Eyal Lubetzky (Courant Institute of Mathematical Sciences) was offered the 2016-2017 Centennial Fellowship. Lubetzky accepted the award. The amount of the Fellowship for 2016-2017 is \$89,000, with an additional expense allowance of \$8,900.

### **2I.4 AAAS-AMS Mass Media Fellowship.**

The AMS will sponsor a Mass Media Fellow again in 2016. Applications will be reviewed and selections will be made soon.

The Mass Media Fellowship program is organized by the American Association for the Advancement of Science (AAAS) and is intended to strengthen the connections between science and the media, to improve public understanding of science, and to sharpen the ability of the fellows to communicate complex scientific issues to non-specialists. It is a ten-week summer

program that places graduate and post-graduate level science, engineering and mathematics students at media organizations nationwide.

An announcement of the selection of AMS Mass Media Fellow for 2016 will be made in the *Notices* and posted on the AMS website.

**2I.5 Congressional Fellow.**

The AMS, in conjunction with the American Association for the Advancement of Science (AAAS), will again sponsor a Congressional Fellow from September 2016 through August 2017. The Fellow will spend a year working on the staff of a Member of Congress or a congressional committee, working as a special legislative assistant in legislative and policy areas requiring scientific and technical input. The fellowship is designed to provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to bring a technical background and external perspective to the decision-making process in the Congress.

Applications invited from individuals in the mathematical sciences are currently being reviewed and a selection will be made shortly. An announcement of the AMS Congressional Fellow for 2016-17 will be made in the *Notices* and posted on the AMS website.

The current AMS Congressional Fellow, Anthony Macula, is working in the office of Representative Jim McDermott (WA-7).

**2I.6 Report on Use of Funds Collected for FIMU on AMS Membership Renewal Form.**  
**Att. #29.**

An opportunity is provided on the AMS membership renewal form to make a contribution to Friends of the International Mathematical Union (FIMU) to “foster mathematics research and scholarship in developing countries.” These contributions become part of the *IMU Developing Country Fund*. The table below summarizes the 2013, 2014 and 2015 receipts.

<b>Year</b>	<b>Fund</b>	<b>Amount</b>
2013	IMU Developing Country Fund	US\$12,134
2014	IMU Developing Country Fund	US\$10,515
2015	IMU Developing Country Fund	US\$ 9,858

IMU support for developing countries is managed by the [IMU Commission for Developing Countries \(CDC\)](#). The most recent published annual report of CDC activities covers 2014; see [Att. #29](#).

**2I.7 Report on Petitions for AMS Student Chapters.** **Att. #9.**

[Att. #9](#) includes a list of the five new [student chapters](#) that were approved by the Secretariat since the November 2015 ECBT meeting. As of March 31, 2016, there were 41 student chapters, and two petitions were pending.

**2I.8 Report on Awards from Epsilon Fund for Young Scholars Programs.**  
**Att. #10.**

The Epsilon Fund was created by the Society in 1999 to provide support for Young Scholars Programs. The [Program](#) awards grants which support student scholarships and program operating costs to selected summer programs for mathematically talented high school students. For 2016, the Young Scholars Awards Committee funded 26 programs. The members of the Committee are Aaron Hill, Tatiana Shubin (Chair), Katherine Stevenson, and William Yslas Vélez. A list of the programs funded for summer 2016 is attached (#10). Because of scheduling problems, one program was allowed to defer the award until 2017.

**2I.9 AMS Presence at Annual SACNAS Meeting.** Att. #11.

The AMS provides \$5,000 in support of the mathematics program at the annual national meeting of the [Society for Advancement of Chicanos/Hispanics and Native Americans in Science \(SACNAS\)](#). Public Awareness Officer Annette Emerson represented the AMS at the meeting on October 29–31, 2015, in National Harbor, Maryland. Some highlights of the meeting are posted on the AMS web page ([www.ams.org/meetings/sacnas2015-mtg](http://www.ams.org/meetings/sacnas2015-mtg)). A report on mathematically-related activities at the SACNAS meeting is attached (#11).

SACNAS has shown itself to be highly effective at nurturing talented undergraduates from within their target communities to successful completion of graduate degrees in science and mathematics. AMS's continuing support for and presence at the SACNAS national meetings has enabled it to build strong ties within this community of scholars committed to excellence.

**2I.10 Changes in Registration Fees for Conferences, Short Courses, and Employment Services.** Att. #12.

The Executive Director is authorized to make changes in the registration fees for conferences, Short Courses held at the Joint Mathematics Meetings, Employment Information in the Mathematical Sciences (EIMS), the Employment Center, MathJobs.org, and MathPrograms.org. Att. #12 reports the changes approved since the last ECBT meeting.

<b>3 BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS</b>
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**3.1 Financial Review.**

**3.1.1 Discussion of Fiscal Reports.**

The BT received and discussed various fiscal reports. As is traditional in the spring of each year, the focus was on the actual results for the year just ended (2015) and the preliminary revenue budget for the upcoming year (2017). It was noted that approval of the entire 2017 budget will be requested at the November 2016 ECBT meeting.

### **3.1.2 Capital Expenditures – 2015 and 2016 Capital Purchase Plans.**

It was reported that capital purchases in 2015 totaled \$373,361, compared to a budgeted amount of \$468,000. The largest capital project was the repair of spalling cement columns under the north wing of the Providence building, which cost \$106,717, and this was not budgeted as a capital item. The capital purchases were under budget primarily because of the delay of heating-ventilation-air conditioning unit replacements and the delay of the Personify upgrade.

The 2016 capital plan totals \$1,880,000.

### **3.1.3 Capital Expenditures - Approval of Specific Purchases.**

Capital expenditures of \$100,000 or more require BT approval.

A proposal to replace the water main for the facility in Ann Arbor was approved. See item 3E.9 of the executive session minutes of this meeting for the details, which are proprietary.

### **3.2 Spendable Income, Operations Support Fund and other Related Items. Att. #13.**

The Society uses its long-term investments for several purposes, and for that reason it divides its investments into various funds. The following five standing items deal with those funds – additions, transfers and spending.

The description of the way in which the AMS uses its long-term investment portfolio is summarized in the diagram in **Att. #13**, which has labels showing how the five parts of Item 3.2 are connected to the process.

#### **3.2.1 Addition to Operations Support Fund (OSF).**

At its November 2015 meeting, the Board approved the staff recommendation that the amount owed to operations<sup>1</sup> from the long-term investment portfolio at December 31, 2015 would remain there and be added to the Operations Support Fund (OSF) unless there were not enough unrestricted, undesignated assets to set aside for this purpose. The amount owed to operations at December 31, 2015 was \$2,448,612.48. These funds were added to the OSF.

At December 31, 2015, the Society's current assets totaled \$21,073,430 and its current liabilities totaled approximately \$16,901,465 resulting in a current ratio<sup>2</sup> of 1.25 to 1. In the past, the Society has targeted a ratio of 1 to 1 for current assets to current liabilities. The current ratio is about the same as 2014.

Each year, the operating portfolio, current ratio, and other factors are evaluated to determine if additions can be made to the OSF. The last addition was \$2,000,000, approved to

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<sup>1</sup> The amount owed to operations arises as a result of spendable income netted against contributions to endowment and Board designated funds.

<sup>2</sup> The current ratio is the Society's current assets from the balance sheet divided by the current liabilities. It is a liquidity ratio that measures the Society's ability to pay short-term obligations. A ratio under 1 generally suggests that an organization would not be able to pay its short-term obligation if they came due at that point in time.

be added to the OSF at the May 2011 ECBT meeting. There is not additional cash from operations available to invest in the long-term portfolio at this time.

### **3.2.2 Rebalancing of Economic Stabilization and Operations Support Funds.**

Under the policy adopted by the May 2006 Board of Trustees, at the end of each fiscal year the allocated values of the Economic Stabilization Fund (ESF) and the Operations Support Fund (OSF) are rebalanced such that the ESF always equals the target balance.

The amount and direction of the rebalancing required at each year end is principally dependent upon the return on the long-term investment portfolio in any year. This return was approximately 0.17% for 2015. However, the amounts needed to fund the ESF per BT policy were much greater than the 2015 return; therefore, \$697,895.96 of OSF funds were transferred to the ESF.

### **3.2.3 Allocation of Operations Support Fund (OSF) Spendable Income.**

The May 2001 Board of Trustees approved the following:

*Income from reserves should be allocated to each year's budget to service and outreach programs of the Society (without specifying exactly which programs). The total amount should be approved by the May ECBT, when revenue projections for the following year are made.*

The spendable income from the OSF for 2016 and 2017 is \$2,500,000 and \$2,831,000, respectively. The 2016 amount had been previously approved at the 4% spending rate.

The BT approved Chief Financial Officer Riley's recommendation that \$2,831,000 be designated as OSF spendable income for 2017 at the spending rate of 4%.

### **3.2.4 Appropriation of Spendable Income from Unrestricted Endowment.** Att. #30.

Following is the current procedure for appropriating spendable income (this was approved by the Board of Trustees in May 2001):

*Each year, the budgeting process will include recommendations for allocating spendable income from the Unrestricted Endowment for specific projects. The allocated income will be treated as revenue for operations, offsetting (part of) the expenses. These recommendations will be brought to the Board for approval at its November meeting in the normal budgeting process. The goal will not be to use all the income from such funds each year, but rather to use some of the income every year for the support of mathematical research and scholarship. Using such income should be a regular part of our operations rather than an exceptional situation.*



In November 2015, the BT decided that this procedure should be revisited, and that appropriations for 2017 should be discussed, at the May 2016 meeting.

The BT reviewed the attached draft of the appropriations currently being considered for 2017 (Att. #30) and discussed whether the current procedure should be changed. It was the consensus that the current procedure should be changed to include a review in May and final approval in November. Staff was asked to reword the policy accordingly and present the revised policy for approval at the November 2016 ECBT meeting.

### **3.2.5 Report on Changes in Appropriated Spendable Income and Use of EISF Funds.**

The Executive Director has the authority to transfer spendable income that will not be used on an approved project to another approved project, in case additional support is needed. The following transfers were reported:

- \$10,000 left over from the Young Scholars Camp appropriation from 2011 will be used to fund camps in 2016.
- Unspent funds budgeted in 2012 for the development of a new MR electronic product will be redirected to the contribution for travel support for the 2017 Mathematical Congress of the Americas (MCA2017) (this contribution was approved by the November 2015 ECBT).

The Endowment Income Stabilization Fund (EISF) to be used to supplement the spendable income from endowment funds when the spendable income is not enough to support a prize or award. In 2015, the follow amounts were allocated:

- \$1,961 to the Cole Algebra Award
- \$1,389 to the Satter Award
- \$1,585 to the Trjitzinsky Award
- \$1,015 to the Menger Award
- \$608 to the Exemplary Department Award
- \$122 to the Art Exhibit Prize

### **3.3 Audit Committee Report. Att. #36.**

Audit Committee Chair Jane Hawkins reported that the Committee met on May 20, 2016 with representatives from the auditing firm of Mayer Hoffman McCann P.C. to hear a report on the recently-completed audit and to review the draft audited financial statements for the years ended December 31, 2015 and 2014 (these documents had been provided separately prior to the meeting to all members of the BT). Several other BT and staff members attended the meeting, and the Audit Committee also met with the auditors without staff present.

The BT approved the Audit Committee's recommendation to accept the draft audited financial statements for the years ended December 31, 2015 and 2014 and to delegate to management final resolution of minor edits and issuance of the final statements. The final statements are attached (#36).

### **3.4 Investment Committee Report.**

The BT received the following report on the April 15, 2016 Investment Committee meeting:

The investment performance was reviewed and no action was taken to change or rebalance the investments.

The Endowment Income Stabilization Fund (EISF) was reviewed. The EISF was created by the BT in 2012 to be used to supplement the spendable income from endowment funds when the spendable income is not enough to support a prize or award. The EISF was invested in the intermediate-term portfolio, because it was expected that the fund would be used within five years, so it seemed appropriate to invest it in shorter term investments. The usage of the EISF has been less than expected due to excellent investment returns from 2012 through 2014, and due to fundraising efforts to supplement the funds. The following shows the use of the funds from its inception:

	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>EISF usage</b>	\$31,112	\$6,173	\$6,680

The Investment Committee discussed the fact that if these funds were invested in the Operations Support Fund (OSF) in the long-term portfolio, the spendable income generated from it would be greater than the current shortfalls from the restricted endowment funds.

The Investment Committee recommended to the BT that the EISF be eliminated and the funds, amounting to \$482,844 at the end of 2015, be returned to the OSF in the long-term portfolio. Any endowment funds that fall short of desired funding will continue to be reported to the Board of Trustees, and those shortages will be covered by operating funds.

The BT approved the Investment Committee's recommendation.

### **3.5 Cash Management and Operating Portfolio. Att. #14.**

The BT received the attached report (#14) summarizing the Society's cash management policies and short-term investment performance during 2015.

### **3.6 Change in Staff Policy on Conflict of Interest. Att. #37.**

The Board of Trustees originally adopted the *Staff Policy on Conflict of Interest* in 1983. Reviews of the policy are done from time to time. The current policy contains the following paragraph:

**Political Action:** The Society's stationery may not be used in correspondence or soliciting of funds for a political candidate or party. It is the policy of the Society not to make political contributions. This policy, however, is not intended to discourage any individual from making political contributions from his or her own funds.

The paragraph addresses the IRS's restriction on political campaign intervention by section 501(c)(3) tax-exempt organizations; however, the paragraph is outdated in that it does not discuss other means of correspondence, such as email, and it does not include other activities that might jeopardize the Society's tax exempt status.

The BT approved the Chief Financial Officer's recommendation that the above paragraph be replaced with the following:

**Political Activity:** An AMS employee may not participate in political activity while on duty; or use the authority of his or her position, AMS funds, services, supplies, equipment, information technology resources, vehicles, or other AMS property, to endorse, campaign for, secure support for or oppose any candidate, political party, partisan political group, referendum, or issue in an election. "Political activity" means actions directed toward the success or failure of a candidate for public office, political party, or partisan political group including, but not limited to, campaigning, political management, and soliciting financial contributions for political purposes. However, this policy is not intended to discourage employees from engaging in political activity as private citizens using their own resources.

More information on the IRS restrictions on a tax-exempt organization's political activities can be found here: [www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/The-Restriction-of-Political-Campaign-Intervention-by-Section-501%28c%29%283%29-Tax-Exempt-Organizations](http://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/The-Restriction-of-Political-Campaign-Intervention-by-Section-501%28c%29%283%29-Tax-Exempt-Organizations).

The complete Staff Policy on Conflict of Interest, including the above revision, is attached (#37).

### **3.7 Meeting of the Mathematical Reviews Corporation.**

In 1983, when the building that currently houses Mathematical Reviews was purchased, a Michigan non-profit corporation was formed in order to obtain exemption from local property taxes in Ann Arbor and from sales and use taxes in Michigan. In order to maintain these exemptions, the corporation ("Mathematical Reviews") must be maintained by holding an annual meeting at which the Officers and Directors of the corporation are elected.

The AMS Board of Trustees meeting was therefore temporarily adjourned, and the AMS Trustees convened as the Board of Directors of the Mathematical Reviews Corporation.

The Board of Directors of the Mathematical Reviews Corporation elected the following officers:

President of the Corporation:	Karen Vogtmann
Treasurer of the Corporation:	Jane M. Hawkins
Secretary of the Corporation:	Zbigniew Nitecki

Directors of the Corporation: Robert L. Bryant  
Ruth M. Charney  
Bryna Kra  
Robert K. Lazarsfeld  
Joseph H. Silverman

The meeting of the Board of Directors of the Mathematical Reviews Corporation then adjourned and the meeting of the AMS Board of Trustees reconvened.

<b>3C BOARD OF TRUSTEES CONSENT ITEMS</b>
---

**3C.1 Guidelines for Appeals for Discounted Subscriptions.**

The BT approved the following guidelines for 2017, which staff will follow in responding to appeals for discounted subscriptions:

- Minimum price for MR Data Access Fee (DAF) of \$200 applicable to institutions in countries found in the two poorest World Bank country listing. Staff can provide this level of discount even if the country does not have a national DAF.
- The discounted price for MR DAF for domestic institutions would not be lower than the greater of 40% of a list price DAF or 40% of the institution's mathematical sciences serials budget, not to exceed regular list price for a DAF.
- The discounted price for MR DAF for non-domestic institutions not included in the first category above would not be lower than 40% of a DAF. To the extent possible, information about serials budgets would also be collected, and, if desired, staff would provide information on publishing activity at the institution.
- Allowable prices for MathSciNet (MSN) can be no less than the lowest published price.
- For other AMS journals, the lowest allowable price would be marginal cost, applicable to the most desperate cases.
- Participation is restricted to academic institutions.

**3C.2 2017 Individual Member Dues.**

The process for setting individual dues for year x starts in November of year x-2 when the ECBT makes a recommendation to the Council. The Council then acts on that recommendation and sends it back to the BT for final ratification (because Article IX, Section 2 of the Bylaws states that these dues "...shall be established by the Council with the approval of the Trustees").

The BT ratified the January 2016 Council's decision that there be a \$4 increase in the dues rate for Regular members whose annual professional income is \$85,000 or more; this puts this rate at \$192 for 2017.

**3C.3 Resolutions for Retirees.**

The BT approved the following proclamations for employees who will retire shortly:

*Be it resolved that the Trustees accept the retirement of **Maryse A. Brouwers** with deep appreciation for her faithful service over a period of 37 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 Maryse their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

*Be it resolved that the Trustees accept the retirement of **Luann I. Cole** with deep appreciation for her faithful service over a period of 29 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 Luann their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

*Be it resolved that the Trustees accept the retirement of **Tadeusz Jozefiak** with deep appreciation for his faithful service over a period of 24 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 Tadeusz their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

**3C.4 Change in Retirement Plan Investment Committee Membership. Att. #17.**

In an effort to provide greater continuity and maximum efficiency, the Chief Financial Officer recommended that the membership of the Retirement Plan Investment Committee be changed as follows: Instead of the fifth-year elected member of the BT, it should be a member of the BT who, at the time of the appointment, has at least two years remaining in their term as Trustee. The BT approved the recommendation; the revised committee charge is attached (#17).

<b>3I BOARD OF TRUSTEES INFORMATION ITEMS</b>
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**3I.1 Change in Fringe Benefits.**

The November 1996 BT authorized the Executive Director to approve changes in benefit plans (except for those changes which would significantly enhance or degrade the Society's financial health or relations with its employees) and asked that these changes be reported to the BT when appropriate.

Effective 3/1/2016 copay amounts for office visits under the Section 105 Health Reimbursement Arrangement increased. Primary care visits increased from \$15 to \$25, Specialist and Urgent Care visits increased from \$25 to \$40, and Emergency Room visits (if not admitted) increased from \$100 to \$200. There were no other changes to the benefits or coverage provided under any of the Society's benefit plans.

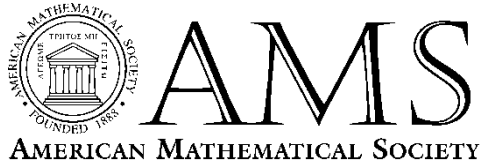
*Respectfully submitted,*

A handwritten signature in black ink that reads "Carla D. Savage". The signature is written in a cursive style with a large initial "C".

*Carla D. Savage, Secretary*

*Raleigh, North Carolina*

*July 14, 2016*



Department of Computer Science, 3320 Engineering Building II  
North Carolina State University, 890 Oval Drive  
Raleigh, NC 27606 USA  
Phone: 919-515-7863 Fax: 919-515-7896  
[www.ams.org](http://www.ams.org)

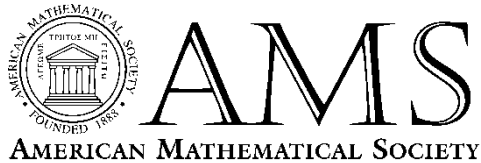
**Carla D. Savage, Secretary**

**SECRETARIAT  
BUSINESS BY MAIL  
MINUTES  
DECEMBER 1, 2015  
(from the Ballot dated November 3, 2015)**

Votes were cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub. The following actions were taken:

1. Approved electing to membership the individuals named on the list dated 20 October 2015.
2. Approved the student chapter petition from University of New Orleans.
3. Approved the Minutes of the Secretariat Business by Mail from the ballot dated October 6, 2015.

Carla D. Savage



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Raleigh, NC 27606 USA  
Phone: 919-515-7863 Fax: 919-515-7896  
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**Carla D. Savage, Secretary**

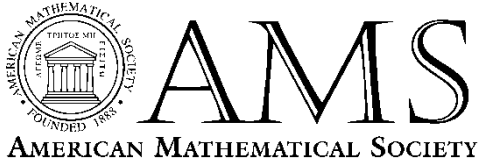
**SECRETARIAT  
BUSINESS BY MAIL  
MINUTES  
JANUARY 1, 2016  
(from the Ballot dated December 1, 2015)**

Votes were cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub. The following actions were taken:

1. Approved electing to membership the individuals named on the list dated 20 November 2015.
2. Approved the student chapter petition from University of Miami.
3. Approved the student chapter petition from Sam Houston State University.
4. Approved the Minutes of the Secretariat Business by Mail from the ballot dated November 3, 2015.

Carla D. Savage





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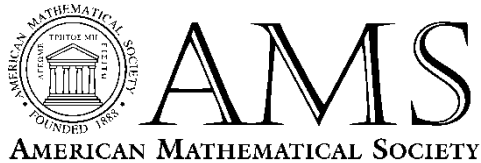
**Carla D. Savage, Secretary**

**SECRETARIAT  
BUSINESS BY MAIL  
MINUTES  
FEBRUARY 1, 2016  
(from the Ballot dated January 4, 2016)**

Votes were cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub. The following actions were taken:

1. Approved electing to membership the individuals named on the list dated December 20, 2015.
2. Approved a spring 2018 Meeting of the AMS Western Section at Portland State University, April 14-15, 2018.
3. Approved the Minutes of the Secretariat Business by Mail from the ballot dated December 1, 2015.

Carla D. Savage



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North Carolina State University, 890 Oval Drive  
Raleigh, NC 27606 USA  
Phone: 919-515-7863 Fax: 919-515-7896  
[www.ams.org](http://www.ams.org)

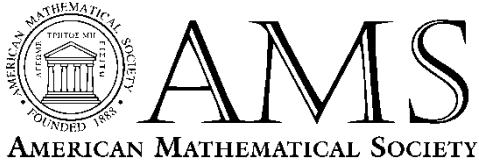
**Carla D. Savage, Secretary**

**SECRETARIAT  
BUSINESS BY MAIL  
MINUTES  
MARCH 1, 2016  
(from the Ballot dated February 1, 2016)**

Votes were cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub. The following actions were taken:

1. Approved electing to membership the individuals named on the list dated January 20, 2016.
2. Approved the 2017 AMS Council meeting on Saturday, April 29, 2017 at a facility near O'Hare airport in Chicago, IL.
3. Approved the 2018 AMS Council meeting on Saturday, April 28, 2018 at a facility near O'Hare airport in Chicago, IL.
4. Approved the Minutes of the Secretariat Business by Mail from the ballot dated January 4, 2016.

Carla D. Savage



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North Carolina State University, 890 Oval Drive  
Raleigh, NC 27606 USA  
Phone: 919-515-7863 Fax: 919-515-7896  
[www.ams.org](http://www.ams.org)

**Carla D. Savage, Secretary**

**SECRETARIAT  
BUSINESS BY MAIL  
APRIL 1, 2016  
MINUTES  
(from the Ballot dated March 1, 2016)**

Votes were cast by Georgia Benkart, Brian Boe, Michel Lapidus, Carla Savage, and Steven Weintraub. The following actions were taken:

1. Approved electing to membership the individuals named on the list dated February 20, 2016.
2. Approved the Student Chapter Petition for Washington State University, Pullman, WA.
3. Approved the Minutes of the Secretariat Business by Mail from the ballot dated February 1, 2016.

Carla D. Savage



## AMS Committee on Meetings and Conferences

### Highlights of 2016 Meeting

The Committee on Meetings and Conferences (COMC) held its annual meeting on March 12, 2016, at the Hilton Chicago O'Hare Airport Hotel. Monica Nevins, chair, presided.

*Actions* taken by COMC include the following:

**Meetings and conferences in cooperation with the AMS:** As explained on the AMS website, “the AMS occasionally cooperates with meetings and[/]or conferences of other societies and other groups for specific scientific/engineering purposes. In cooperation, the AMS provides publicity for the events in its publications and on its website.” At the COMC meeting in 2015, the Secretary had described some of the issues that such meetings can raise, particularly if they are held in countries where there are policies that violate human rights, and she expressed the Secretariat’s desire for guidance in determining which meetings to approve. In response, COMC had chosen this program as the subject of its annual review. The members of the annual review subcommittee were Pierre Albin (chair), Monica Nevins and Illya Hicks. They recommended that the program be discontinued, since it lacked a clear benefit to the AMS. COMC agreed with this recommendation but also passed a resolution stating that, in truly exceptional circumstances, the Secretariat may recommend to the Executive Committee that AMS participate in some form. Both of these recommendations will be forwarded to the Council.

**AMS-NZMS Maclaurin Lecture Series:** In 2010 the American Mathematical Society (AMS) established a new lectureship exchange program with the New Zealand Mathematical Society (NZMS), called the AMS-NZMS Maclaurin Lectureship. Under the terms of the bilateral agreement, in alternate years a New Zealand based mathematician will visit the US and then a US-based mathematician will visit New Zealand. In April 2010 the Council approved this program for an initial period of 6 years, allowing three AMS lecturers to go to New Zealand, and three NZMS lecturers to travel in the US. The third AMS lecturer will visit New Zealand in 2017, which will be the last year of the program, unless the agreement is extended. COMC was asked to consider whether the AMS should continue this program. Although it deemed the program a success, COMC felt that the program should not be continued beyond the initial six-year period. This recommendation will be forwarded to the Council.

**Prize venues:** An agreement between the AMS and the Mathematical Association of America limits the number of prizes that may be given at the Joint Prize Session at the Joint Mathematics Meetings (JMM). Since the AMS is in the process of creating new prizes, it may become necessary to award some prizes in venues other than the Joint Prize Session. In 2014 a subcommittee of the Committee on the Profession (CoProf) was charged with identifying additional venues in which AMS prizes and awards could be presented. Acting on a recommendation from that subcommittee, CoProf approved in 2015 a resolution stating that that one of the five AMS Invited Address slots at the JMM should be devoted to a lecture by the recipient of the Steele Prize for Lifetime Achievement, or a designee, and that the Prize be awarded at the start of the Invited Address, rather than at the Joint Prize Session.

Acknowledging there were many details to be worked out, CoProf suggested that this recommendation be considered by COMC before being sent to the Council. COMC did not approve the recommendation and instead proposed creating a joint subcommittee of CoProf and COMC to deliberate further about the issue of prize venues. The members of that subcommittee are Richard Durrett and Christina Sormani from COMC and Alicia Dickenstein and Bryna Kra (Chair) from CoProf.

**2017 Annual Review:** For its next Annual Review, COMC chose the topic of conferences, institutes, and short courses.

### ***Reports***

COMC received and discussed several reports, including ones on JMM 2016, JMM Child Care grants, the Mathematics Research Communities program, the Summer Research Institute on Algebraic Geometry, and AMS Activity Groups. The JMM 2016 went well, and the child care grants were deemed a success, with 58 grants of \$250 each being made. COMC discussed the idea of establishing a reduced JMM registration fee for new Ph.D.s, and there was some interest in making renewed efforts to activate the Activity Groups. It was noted that the Summer Research Institute, a three-week conference that drew about 750 mathematicians from 32 countries, was a great mathematical success, but also a significant drain on AMS staffing resources.

**2017 COMC Meeting.** The next meeting of COMC will be held on March 18, 2017, at the Hilton Chicago O'Hare Airport Hotel.

*T. Christine Stevens  
Associate Executive Director  
April 27, 2016*

**American Mathematical Society  
Committee on Science Policy Meeting  
April 12-13, 2016  
Washington, DC**

**Summary Report**

The Committee on Science Policy (CSP) met over two days with a focus on Capitol Hill meetings between Congressional representatives and meeting attendees to promote mathematics and to urge increased federal funding for the National Science Foundation, specifically an \$8 billion budget level for FY2017. In total, the group met with 26 offices. The first day of the meeting was devoted to preparation for Hill meetings. Wednesday was spent making Hill visits.

***Michael Vogelius***

***Director, Division of Mathematical Sciences (DMS)***

***Directorate of Mathematical & Physical Sciences (MPS), National Science Foundation (NSF)***

Michael Vogelius began his presentation with a look at trends in federal R&D funding by agency, as well as a history of NSF/MPS divisional budgets and MPS-DMS funding rates. He observed the difficulty of recouping losses experienced from sequestration in FY2013, but felt that DMS funding rates were now relatively steady with incremental increases each of the last few years since sequestration.

Vogelius reported that NSF has been working with NIH on its *Big Data to Knowledge (BD2K)* initiative, which launched in 2012. He reported that NIH reached out to NSF/MPS-DMS and NSF/CISE to ask for the involvement of mathematicians, computer scientists and statisticians in their efforts on data science. This NSF – NIH collaboration led to an innovation lab held last summer from which ten \$100K planning grants were jointly awarded. In follow up, there will be another workshop to be held June 15-19, 2016 in Lake Arrowhead, CA to further efforts in biomedical big data and mobile health. NSF is also working in other areas of big data, including privacy and security and is also working on the National Strategic Computing Initiative (NSCI).

Vogelius mentioned that the NSF made a change in how the allocations were determined for Graduate Research Fellowships (GRF). Prior to this year, the number of proposals submitted was the determining factor in how many GRFs were awarded in given disciplines, but although proposal pressure is still part of the formula and encouraging proposals in the mathematical sciences is still important, it does not carry as much weight any longer. This change in the formula has actually increased the number of GRFs awarded in the mathematical sciences by about 30% this year or about 15 fellowships.

***Mark Mozena***

***Policy Advisor, Office of Rep. Mike Honda (CA-17)***

Mozena began his presentation by talking about his background and how he came to work on Capitol Hill. He explained a little about how Congress works and about the differences between the House of Representatives and the Senate. The appropriations process was explained and attendees were encouraged to make the case in their meetings tomorrow for an increased, sustained level of federal support for basic scientific research as it's an opportune time to affect the FY2017 budget process.

Mozena also encouraged attendees to establish relationships with their Representatives' offices and to offer to be a resource for them. He suggested that their Representatives be invited to events at their universities to foster such relationships.

#### ***Public Service Award Discussion***

Sam Rankin, Director of the AMS Washington Office, gave some background about the AMS Public Policy Award that was established in 2007. The award was to be given annually to a public figure in recognition of sustained and exceptional contributions to public policies that foster support for research, education, and innovation. However, other than Speaker of the House Nancy Pelosi, there have been no candidates who met the criteria of the award. Due to time and scheduling complications, the initial award was never given to Speaker Pelosi, therefore, the award has been dormant.

The AMS Agenda and Budget Committee asked that the Committee on Science Policy discuss the award and make a recommendation as to whether the award should be discontinued or reshaped into something different.

The committee reviewed the award description as established by the AMS Council and recommends that the AMS continue the award but with the word "annually" removed from the "Other Information" portion of the description. Also, the committee recommends that the Office of the AMS Secretary be consulted to determine how best to conduct a Call for Nominations for the award.

#### ***Presentation on Conducting Meetings with Members of Congress***

Sam Rankin, Director of the AMS Washington Office, and Tony Macula, Office of Rep. Jim McDermott and AMS 2015-16 Congressional Fellow, presented an orientation for Congressional meetings developed by the AMS Washington Office. Basic information about how to conduct congressional office meetings, the federal budget process, the structure of a Congressional office and insights into Members of Congress and their staffs were presented.

The AMS Washington Office developed the "Ask," which is a statement of the request of the Member of Congress that was left at each visit, along with other materials. The FY2017 "Ask" was for an \$8 billion budget for the National Science Foundation (NSF).

#### ***Constituent Meetings***

On Wednesday, April 13 the group went to Capitol Hill to hold meetings in congressional offices. The AMS Washington Office scheduled meetings for all participants with their respective Congressional representatives. These constituent meetings were conducted in four 2-3 person teams.

#### ***Date of Next Meeting***

The 2017 Committee on Science Policy meeting is scheduled for Tuesday, April 4 and Wednesday, April 5, 2017 in Washington, DC.

*Submitted by Anita Benjamin  
American Mathematical Society  
Submitted May 3, 2016*



## Washington Office Report

April 21, 2016

### **Federal Budget**

The Consolidated Appropriations Act of FY 2016 was signed into law (P.L. 1114-113) on December 18, 2015. The act provides the National Science Foundation (NSF) with a FY 2016 budget of \$7.463 billion, which is \$119 million, or 1.6 percent, above the FY 2015 appropriated level of \$7.344 billion and is \$260 million less than the FY 2016 Budget Request of \$7.723 billion.

The Research and Related Activities account is to receive \$6.033 billion, which is \$100 million, or 1.7 percent above the FY 2015 appropriated level of \$5.933 billion. Language contained in the House version of the bill designating directorate spending levels has been removed from the Act, however language is included that limits the Social, Behavioral, and Economic Sciences directorate to its FY 2015 budget level.

The appropriations agreement modifies House language regarding transparency and accountability by encouraging NSF to continue efforts to implement transparency processes, which includes requiring that public award abstracts articulate how the project serves the national interest, and provide periodic updates to the Committees on these activities. The agreement modifies House language regarding replicability of scientific research to direct that NSF provide periodic updates on its framework for ongoing and future improvements

The FY 2017 Budget Request was introduced in February and provides NSF with a budget of \$7,964.02 million of which \$7,564.02 million is discretionary funding and \$400 million is new one-time mandatory funding. Research and Related Activities receives \$391.79 million over the FY 2016 estimate of which \$346.01 million is new mandatory. Education and Human Resources receives \$72.86 million over the FY 2016 estimate of which \$53.99 million is mandatory.

The FY 2017 Mathematical and Physical Sciences directorate (MPS) Request is \$1,436.45 million of which \$81.39 million is mandatory funding and \$1,355.06 million is discretionary. The FY 2016 budget estimate for MPS is \$1,349.15 million. For the Division of Mathematical Sciences (DMS), the FY 2017 Budget Request is \$249.17 million, of which \$14.12 million is mandatory and \$235.05 million is discretionary. The FY 2016 budget estimate for DMS is \$234.05 million. It is hard to imagine that Congress will approve the mandatory funding.

The Department of Energy (DOE) Office of Science (SC) FY 2017 Budget Request is \$5.572 billion, an increase of \$222 million or 4.1 percent over the FY 2016 Enacted level. In addition, SC is requesting from Congress \$100 million of mandatory funding for University Grants (Mandatory) making the total FY 2017 Request \$5.672 billion. SC will make the funds available through a competitive, merit-based review of proposals solicited from and provided by the university community.

The Advanced Scientific Computing Research (ASCR) program FY 2017 Request is \$663.2 million, an increase of \$42.2 million or 6.8 percent over the FY 2016 Enacted level. The FY 2017 Request for the ASCR Applied Mathematics program is reduced by \$10 million to \$39.229 million, relative to the FY 2016 Enacted level of \$49.229 million.

Representatives Butterfield (D-NC) and McKinley (R-WV) wrote their colleagues in the House asking them to sign onto a letter written to the Commerce, Justice, Science and Related Agencies Appropriations Subcommittee (CJS) Chair John Culberson and Ranking Member Mike Honda requesting that CJS allocate to NSF a FY 2017 budget of \$8 billion dollars. One hundred and forty-three Members of Congress, 136 Democrats and 7 Republicans, signed the letter.

Another letter, also sent to CJS Chair Culberson and Ranking Member Honda, was organized by Representatives David Price (D-NC) and Richard Hanna (R-NY). This letter emphasized the importance of not including arbitrary funding levels for NSF research directorates and urged that the NSF appropriation follow current practice of appropriating funds only to the Research and Related Activities account. This letter was signed by 34 Members of Congress, 27 Democrats and 7 Republicans.

In the Senate, Senators Ed Markey (D-MA) and Richard Durbin (D-IL) initiated a letter signed by 25 Democratic Senators and addressed to Senate CJS Chair Richard Shelby and Ranking Member Barbara Mikulski, asking for at least \$7.564 billion for the FY 2017 NSF budget. This level of funding is the discretionary funding that the President asked for NSF in his FY 2017 Budget Request.

### **Education**

President Obama has made improving science, technology, engineering, and mathematics (STEM) education a priority. The FY 2017 Budget Request asks for an investment of \$3.0 billion across 14 federal agencies for dedicated STEM education programs. The Administration wants to broaden access, success, and diversity in STEM education using an array of evidence-based teaching strategies and methods that inspire and support students. Education research has helped understanding of why students, especially women and ethnic minorities, abandon study and careers in STEM fields. Drawing on research-based insights, the FY 2017 Budget Request prioritizes three major areas for investment to support STEM education for all students: (1) improving STEM teaching and supporting active learning; (2) expanding access to rigorous STEM courses; and (3) addressing bias and expanding opportunities for underrepresented students in STEM.

The FY 2017 Request also includes a Computer Science for All plan that builds on the momentum at the state and local level to give every PreK-12 student the opportunity to learn computer science. The Budget Request invests \$4 billion in mandatory funding at Department of Education, available over three years, to support the ability of all 50 states to expand access for all students to hands-on computer science instruction and programs of study.

### **Open Access**

Even though most agencies have responded to Public Law 111-358 and the OSTP memo, legislation regarding open access to articles based on federally-supported research is still being introduced. This legislation is usually a reaction to constituent pressure and is most often directed at the length of the post-publication embargo period before making an article freely available, a troublesome issue for publishers. These bills usually want embargo periods of 6 to 12 months. The Government Affairs Task Force (GATF), a group of for-profit and non-profit publishers, continues to work at convincing policy makers that one embargo period does not work well for all disciplines and that there should be a process to change an embargo period for a discipline when a current embargo negatively impacts publishers. Recently, GATF has been working with staff of the Senate Committee on Homeland Security and Government Affairs (HSGA) concerning proposed legislation (S. 779) on open access. This legislation

has a maximum embargo of twelve months, no process to change the embargo period for a specific field, does not allow third party repositories, and the reuse policy may infringe on copyright. The HSGA Committee has made some concessions, however, has not gone far enough and GATF continues to advocate its position.

### **Coalitions**

The Washington Office continues to work with coalitions and ad hoc groups including the Coalition for National Science Funding (CNSF); the Government Affairs Task Force (GATF); the Task Force on American Innovation; NDD UNITED; and, small groups representing several professional societies and organizations. Issues of focus by one or more of these coalitions include federal funding for basic research; open access to publications based on federally funded research; caps on defense and non-defense discretionary spending; attacks on the Social, Behavioral and Economic Sciences directorate of NSF; and continuing education of new Members of Congress on the importance of federal support for STEM research and education.

Sam Rankin has been participating in meetings in the House and Senate regarding authorization and appropriations for NSF, as well as meetings regarding a major cut to the NSF Directorate of Social, Behavioral, and Economic Sciences. He has also participated in Hill meetings organized by GATF regarding open access. The GATF meetings are for the purpose of keeping the agency open access process initiated by the Office of Science and Technology, per Public Law 111-358, going and to argue for flexible embargo periods, based on disciplinary journal usage statistics.

### **Other Activities**

The Washington Office hosted the annual AMS Congressional Lunch Briefing on Capitol Hill for Members of Congress and their staffs. In December, 2015, Kenneth A. Ribet, University of California, Berkeley, gave the briefing entitled "From Right Triangles to Modern Cryptography." Robert Bryant, president of AMS served as master of ceremonies and Congressman Jerry McNerney gave a few remarks.

The Washington Office had a part in organizing several sessions at the January 2016 Joint Mathematics Meetings in Seattle, WA. These sessions included: a NSF-EHR Grant Proposal Writing Workshop; the Annual Department Chairs Workshop; and, the AMS Congressional Fellowship Session. The Office provided logistical support for the Committee on Science Policy and Committee on Education panels at the meeting.

Anita Benjamin is helping to organize the 22<sup>nd</sup> annual CNSF Exhibition, which will take place on April 26, 2016.

*Samuel M. Rankin  
Associate Executive Director, Washington Office  
April 21, 2016*



**Mathematics at the 2016 AAAS Meeting  
Washington, DC  
February 11- 15, 2016**

**Symposia:**

Section A sponsored three symposia this year, featuring outstanding expository talks by prominent mathematicians and scientists. The three symposia sponsored by Section A this year were:

**“Mathematics Making a Difference in Africa”**

Applied mathematics is at a promising juncture in the developing world. Developing countries in Africa have recognized the very favorable cost-benefit ratio of mathematics as part of the effort to cope with pressing economic and humanitarian issues, including climate and environmental threats, the spread of disease, and urbanization. Applied mathematics has become a regional priority for research and education, and the last few years have seen the creation of several mathematical research centers in Africa, funded by the World Bank and international organizations and promoted by the Next Einstein Initiative. These innovative centers are now actively engaged in training a cadre of mathematical scientists and partnering with Western institutions of higher education. Speakers in this symposium will discuss recent progress in applied mathematics in Africa, how universities can be effective partners in modeling projects to promote development, and how educational resources and research tools can be shared.

**“Mathematics and Music”**

Mathematics may be the most abstract of the sciences, and music the most abstract of the arts. Mathematics deals with conceptual and logical truth and appreciates intrinsic beauty. Music can involve a similar appreciation of abstract relationships, though it also evokes mood and emotion through tones and rhythm. Thinkers from Pythagoras to Vincenzo Galilei and Euler have noted the intersections between the disciplines. This symposium considers how mathematics and music overlap: the tuning of chords and how this relates to overtones; the geometry arising from a new framework for the varied array of chord progressions in Western music; and the structural coherence needed to make a piece of music rhetorically viable.

**“Massively-Collaborative Global Research in Mathematics and Science”**

In recent years, dozens of research projects have emerged that make novel use of computing and communication technologies, dramatically expanding the types of problems that can be considered and leading to breakthroughs in many areas of science. Distributed computing projects can address the design of molecules, improve climate prediction models, analyze astronomical data from radio telescopes, identify prime numbers and elliptic curve factorizations, and develop sustainable water use models, to name a few uses. In addition, contests such as those hosted by InnoCentive or Challenge.gov call for people to work individually or collectively to solve problems posed by industry or government. These projects use the Internet to collaborate across national boundaries, pulling together diverse expertise and “citizen scientists” to implement extensive computer calculations (e.g., running simulations

from high-energy physics or checking mathematical proofs), or to take advantage of “human computing” (e.g., digitizing old texts or studying images from the Hubble Space Telescope by dividing work into micro-tasks or games). This session describes specific projects – protein folding leading to drug development, and the identification of prime numbers with implications for cryptography – accompanied by an overarching discussion of the field of massively-collaborative global research.

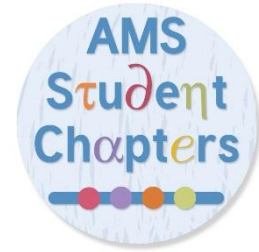
### **Fellows**

Section A elected three mathematicians to AAAS fellowship this year. Recognized at the 2016 meeting were

Daniel Goroff, Reinhold Laubenbacher, and Peter Kuchment.

*Submitted by Andy Magid  
Secretary, Section A (Mathematics), AAAS  
April 2016*

## AMS Graduate Student Chapters



### New chapters

Chapters that have been approved since the November 2015 ECBT Meeting:

- Kansas State University
- Sam Houston State University
- University of Miami
- University of New Orleans
- Williams College

Chapters pending approval:

- University of Colorado at Boulder
- Washington State University

### 2016 JMM in Seattle, WA

AED Chris Stevens and the membership staff planned a Meet and Greet Luncheon for the chapter leadership at JMM. This was a very successful event with a 100% turnout rate. Faculty advisors and student members had the opportunity to meet, mingle, and share their experience about past chapter activities, as well as get ideas from other chapters for future events. Because of the positive feedback, the membership department will plan a similar event for JMM 2017.

*Diane Boumenot  
Director of Membership & Programs  
March 31, 2016*





**Epsilon Awards to Young Scholars Programs -- 2016**

**All Girls/All Math**, *University of Nebraska*, \$2500

**Baa Hozho Mathematics Camp**, *Kansas State University*, \$10000

**Bridge to Enter Advanced Mathematics (BEAM)**, *Art of Problem Solving Foundation*, \$10000

**Camp Euclid**, *Euclid Lab*, \$5000

**Canada/USA Mathcamp**, *Colby College, Waterville Maine*, \$5000

**Florida Tech Math Circle**, *Florida Institute of Technology*, \$7000

**GirlsGetMath@ICERM**, *Brown University*, \$5000

**Governor's Institute on Mathematical Sciences**, *Governor's Institutes of Vermont*, \$2500

**Hampshire College Summer Studies in Mathematics**, *Hampshire College*, \$2500

**Joseph Baldwin Academy for Eminent Young Scholars (JBA)**, *Truman State University*, \$2500

**MathIly**, *Bryn Mawr College*, \$5000

**MathILy-Er**, *University of Washington*, \$8500

**MathPath**, *Swarthmore College*, \$5000

**Mathworks Honors Summer Math Camp**, *Texas State University*, \$5000

**New York Math Circle High School Summer Program**, *Courant Institute of New York University*, \$5000

**PROMYS (Program in Mathematics for Young Scientists)**, *Boston University*, \$2500

**PROTaSM**, *University of Puerto Rico, Mayaguez Campus*, \$5000

**Research Science Institute**, *Center for Excellence in Education*, \$2500

**Ross Mathematics Program**, *Ohio State University*, \$2500

**SigmaCamp**, *Stony Brook University*, \$7000

**SMaRT (Summer Mathematics Research Training Camp)**, *Texas A&M University*, \$4000

**STEM for Scholars**, *University of South Florida*, \$2500

**Summer Institute for Mathematics at UW**, *University of Washington*, \$5000

**Summer Mathematics Program for High School Students**, *University of Utah*, \$2500

**Williams College Math Camp**, *Williams College*, \$8500

**Young Scholars Program**, *University of Chicago*, \$2500

*Diane Boumenot  
Director of Membership & Programs  
April 28, 2016*



**Report to the AMS on the Mathematics activities at the 2015 SACNAS conference**

Prepared by Dr. Antonia Franco, SACNAS Executive Director

Mathematics has always been a part of SACNAS and together with our partnering and sponsoring agencies and organizations such as the National Security Agency (NSA), National Geospatial Intelligence Agency (NGA), National Mathematics Societies (AMS, MAA, SIAM), and 8 NSF-funded Mathematics Institutes we continue to sponsor a coordinated effort to both increase and sustain the pipeline of underrepresented mathematicians through a strong presence at the SACNAS conference.

**CONFERENCE ATTENDANCE**

The total attendance at the 2015 SACNAS conference was approximately 3,630. The overall attendance of mathematics students and professionals in the last several years is shown in Table 1. The table shows the number of conference participants that identified themselves in the area of mathematics. The totals include student participants, postdocs, faculty, teachers and professionals and illustrate our strong commitment not only to maintaining a strong mathematics presence at the SACNAS conference, but also to increase our mathematics attendance at future conferences.

Table 1: Mathematics Representation at SACNAS Conferences

Year	Number of Total Math Students	Total Math Attendance	Location
2002	109	147	Anaheim, CA
2003	129	234	Albuquerque, NM
2004	124	249	Austin, TX
2005	164	312	Denver, CO
2006	169	276	Tampa, FL
2007	152	271	Kansas City, MO
2008	150	269	Salt Lake City, UT
2009	146	235	Dallas, TX
2010	170	293	Anaheim, CA
2011	212	326	San Jose, CA
2012	196	312	Seattle, WA
2013	160	276	San Antonio, TX
2014	127	256	Los Angeles, CA
2015	113	255	Washington, DC

Overall, the 2015 SACNAS national conference provided a broad range of highly effective educational, mentoring and networking activities that supported and served the minority scientific community at all levels of the higher education pipeline. These activities, which benefited all conference attendees and certainly impacted mathematics students equally, included opportunities to:

- Engage via Scientific Symposia and Keynote Addresses with nationally recognized scientific and mathematical role models and mentors.

- Gain professional skills essential for advancement in the sciences and mathematics, including professional development workshops that focused on communication of scientific and mathematical research methods and findings.
- Receive feedback from faculty judging poster and oral presentations and in the process make meaningful connections with prospective mentors.
- Make informed decisions about their professional future and to establish lasting connections with university, government agency, industry, and research organization representatives.
- Engage in structured mentoring activities such as the Conversations with Scientists and the Mathematics Institutes Reception, where professional scientists, mathematicians and administrators provided essential information to students at all stages of the higher education pipeline, and assisted them to develop an academic and career roadmap that will guide effectively as they navigate their way to professional success in the science and mathematics world.

### **CONFERENCE ACTIVITIES**

In 2015, SACNAS implemented a broad range of educational, and professional and leadership development activities for undergraduate, graduate, post-doctoral and young professionals. These provided critically important opportunities for mathematics students and professionals to establish and maintain contact with a strong network who, as mentors and role models, will support them throughout their college and university years and their professional lives. Students' oral or poster presentations, attendance at mathematics focused symposia and mini-courses addressed current research in mathematics.

The 2015 SACNAS national conference offered the following activities and events:

### **SCIENTIFIC SYMPOSIA**

The conference provided opportunities to be exposed to cutting edge research and engage with role models through scientific symposia, including 8 symposia on mathematics topics. Students attending these symposia had the opportunity to be inspired by the research being produced by people from their own communities. These activities also served to strengthen personal and professional networks.

Mathematics symposia included:

#### **Algebra: Much More than Arithmetic!**

The general population has a misconception of what an algebraist does. Algebraists are interested in the study of mathematical structures using a variety of mathematical methods. This session will provide general talks on a wide range of topics in algebra such as representation theory, combinatorics, graph theory, and number theory.

Talks:

*Between Nonnegativity and Positivity*

Mohamed Omar, PhD. Assistant Professor, Harvey Mudd College

*A Game on Graphs: A Tipsy Cop and a Drunken Robber*

Alicia Prieto-Langarica, PhD. Assistant Professor, Youngstown State University

*Applications of Exponential Sums to Coding and Cryptography*

Ivelisse Rubio, PhD. Math Alliance Mentor, University of Puerto Rico

*The Khovanov Homology of the Jumping Jack*

Dido Salazar-Torres, PhD. University of Iowa

Abstract Algebra Research Topics for Undergraduates

Did you take abstract algebra? Are you wondering what you can do with what you learned? Presenters will focus on research topics in abstract algebra that are accessible to undergraduates. Topics such as these will provide you with ideas on research you may undertake as capstone projects or undergraduate theses.

Talks:

*Zero-Sum Sequences and Davenport Constants*

Helen Grundman, PhD. Professor, Bryn Mawr College

*Benford's Law: Why the IRS Cares about Algebra and Number Theory (and Why You Should Too!)*

Steven J. Miller, PhD. Associate Professor, Williams College

*Permutation Polynomials over Finite Fields*

Adriana Salerno, PhD. Associate Professor of Mathematics, Bates College

*Using Abstract Algebra to Efficiently Dominate Grid Graphs*

Erik Insko, PhD. Assistant Professor, Florida Gulf Coast University

Chicanos and Native Americans in the Mathematical Sciences

This session will showcase Chicanos and Native Americans in the mathematical sciences, from new PhDs to respected members of the mathematical community. The speakers will discuss their most recent work in the areas of analysis, methods, and models.

Talks:

*A Method for Exact Solutions to Integrable Evolution Equations in  $2 + 1$  Dimensions*

Alicia Machuca, PhD. Visiting Assistant Professor, University of St. Thomas

*Weyl Asymptotics for the Fractional Laplacian*

Rodrigo Bañuelos, PhD. Professor of Mathematics, Purdue University

*Numerical Methods for Interface Problems*

Johnny Guzman, PhD. Associate Professor of Applied Mathematics, Brown University

*Statistical Analysis of Tangential Velocity Estimation in Vortex Models*

Lynn Greenleaf, PhD. Assistant Professor, Stephen F. Austin State University

Computational Topology and Topological Data Analysis

Topological data analysis provides tools to study the shape of noisy data. Features such as holes and voids are meaningful, as is the persistence of such topological features. In this session we will provide an introduction to topological data analysis and several examples of concrete high-impact applications. All are welcome!

Talks:

*The Shape of Data*

Jose Perea, PhD. Associate Professor, Duke University

*Applying Topological Data Analysis*

Isabel Darcy, PhD. Assistant Professor, University of Iowa

*Complicated Triangulations and Breast Cancer Research*

Mimi Tsuruga, PhD. Postdoctoral Researcher, University of California, Davis

*Informational Robustness of the Hippocampal Spatial Map*

Facundo Memoli, PhD. Assistant Professor, Ohio State University

Mathematicians Rock!

Have you ever wondered how mathematics is applied to real world problems? For example, mathematics can be used to determine if global warming is causing malaria rates to increase. We can also use mathematics to model your sleep patterns. Mathematics is even used to develop new apps for your smartphones. Mathematics is a tool that can be used to solve complex problems and provide clear and concise answers to everyday situations. These problems and more will be discussed in this session. We will focus on how the language of mathematics is translated into scientific knowledge.

Talks:

*Modelling the Effects of Weather and Climate on Malaria Distributions in West Africa*

Monica Jackson, PhD. Associate Professor, American University

*Exponential Domination in Grids*

Michael Young, PhD. Assistant Professor, Iowa State University

*An Interdisciplinary Approach to Developmental Psychology: A Discussion of Statistical Techniques for Analyzing the Interaction between Sleep and Motor Development*  
Calandra Moore, PhD. Assistant Professor, College of Staten Island

*Modeling the Effects of Temperature on Human Sleep Patterns*  
Shelby Wilson, PhD. Assistant Professor, Morehouse College

*Modeling Unobservable Queues for Smartphone App Technology*  
Jamol Pender, PhD. Assistant Professor, Cornell University

Measuring Mathematical Knowledge and Instruction: A Sampling of Assessment Frameworks, Tools, Methods, and Results

The problem of assessing mathematical knowledge meaningfully and reliably has attracted attention since standardized tests became widespread performance measures. Today, scholars also measure the impact of instruction in acquiring discipline-specific STEM knowledge. Our group will share work in assessing knowledge and instructional practices focusing on calculus and mathematical knowledge for teaching.

Talks:

*Item-Bias as a Proxy for the Impact of Instruction on Learning: Student Performance on Concept Inventories and the Teaching of Calculus*  
Guadalupe Lozano, PhD. Director of Development and Evaluation, School of Mathematical Sciences, University of Arizona

*Calculus I Teaching: What Can We Learn from Snapshots of Lessons Taken at 18 Successful Institutions?*  
Vilma Mesa, PhD. Associate Professor, University of Michigan

*Measuring Pre-Service Teacher Learning When Mathematics Is Learned through Technology, Collaboration, and Inquiry*  
Alfinio Flores, PhD. Professor of Mathematics Education, University of Delaware

Minority Women in Mathematical Biology

Four minority women mathematicians will discuss their research on mathematical problems with applications to the biological and medical sciences. Each speaker is an active mathematician doing cutting edge work in the field of mathematical biology.

Talks:

*Using Delayed Feedback to Avoid Abnormal Neural Synchrony in Parkinson's Disease*  
Shelby Wilson, PhD. Assistant Professor, Morehouse College

*Modeling the Effects of Thermoregulation on Human Sleep Patterns*

Selenne Bañuelos, PhD. Assistant Professor of Mathematics, California State University, Channel Islands

*Modeling Reproductive Hormone Dynamics, Regulation, and Dysfunction*

Erica Graham, PhD. Postdoctoral Research Scholar in Mathematics, North Carolina State University

*Statistical Approaches to Detect Adaptive Introgression - Gifts from Archaic Humans*

Emilia Huerta-Sanchez, PhD. Assistant Professor, University of California, Merced

Statistics in Action: A Showcase of Interdisciplinary Research and Innovation in the Era of Data Deluge

This session will address the integral role of interdisciplinary collaboration in the statistical sciences. The speakers will discuss their interdisciplinary work in imaging, basic sciences, atmospheric sciences, psychology, and genetics. They will discuss state of the art statistical methodology they have developed to solve high-impact scientific problems.

A Statistician's Journey: Atmospheric Sciences to Zoology

Sujit Ghosh, PhD. Professor and Deputy Director, North Carolina State University and SAMSI

Statistics and Genetics in Medicine

Alison Motsinger-Reif, PhD. Associate Professor and Assistant Department Head, North Carolina State University

Statistical Quantitative Magnetic Resonance Imaging

Russell (Taki) Shinohara, PhD. Assistant Professor, Perelman School of Medicine, University of Pennsylvania

Using Statistics to Examine the Risk-Taking Propensity of Psychopaths

Monica Jackson, PhD. Associate Professor, American University

## **PROFESSIONAL DEVELOPMENT SESSIONS**

Professional Development has always been a hallmark of the SACNAS Conferences. At SACNAS we have continued to develop this program in order to provide our attendees with the tools they need to reach the next steps in their career, and insights on how to address the specific challenges facing URM students and scientists. With that in mind the SACNAS offers professional development sessions organized into specific tracks for undergraduates, graduates, postdoctoral scholars, and professionals so that participants at each level could obtain the targeted assistance they need to advance in their career paths. While the majority of these sessions are applicable to mathematics attendees, there was one professional development session focused on math careers.



Let's do the Math! Science of Mathematics, sponsored by the National Security Agency

Description: You may not know this, but the National Security Agency (NSA) is one of the largest U.S. employers of mathematicians. Why? The NSA needs mathematicians with diverse training to address the complex problems associated with carrying out our intelligence missions. Once, NSA mathematicians were primarily "code makers" or "codebreakers," but not anymore! Now, in addition to the traditional cryptography and cryptology, mathematicians at the NSA work on problems in signals analysis, speech processing, coding theory, data compression, data mining, communication networks analysis, and computer security. The NSA offers the unique opportunity to work in diverse areas of both pure and applied mathematics, ranging over number theory, finite field theory, Fourier analysis, probability, statistics, and more. However, solving problems at the NSA requires an essential ingredient beyond just mathematical knowledge: the mathematician's keen analytic ability. In service of our National Security, NSA mathematicians practice the Science of Mathematics and apply their analytic abilities. Please attend this panel discussion with NSA Math Community representatives who will discuss how mathematicians contribute to the NSA and what it takes to join them in NSA's mission.

Speakers:

Bruce T Myers, PhD. Director of Hiring for Mathematics, Statistics and for Summer Internships, NSA

Candice Gerstner. Applied Research Mathematician, NSA

Jesus Rodriguez, PhD. Applied Research Mathematician, NSA

Valerie Nielson, PhD. Applied Research Mathematician, NSA

Joseph McCloskey, PhD. Applied Research Mathematician, NSA

**MENTORING SESSIONS**

**Math Institutes Reception (Wednesday 6:00-8:00pm)**

*Sponsored by the Mathematical Sciences Institutes in North America and the National Science Foundation.* Reception for all attendees of the Modern Mathematics Workshop and concurrent Undergraduate mini-courses in Mathematics. (See below)

**Conversations with Scientists**

Representing the spectrum of science disciplines, SACNAS professionals renowned for their scientific and mentorship activities gather with student attendees to engage in informal roundtable discussions about careers in the sciences. Conversations are intended to break down the barriers that often exist between students and professionals. Through Conversations with Scientists interactions, mentors share their personal experiences and insights offering students guidance and inspiration regarding educational and career choices. The personal connections made during Conversations with Scientists set the stage for ongoing mentorship and support throughout the conference. There were two different rooms of roundtables for Mathematics and Statistics.

### **Mathematics Student Presentations**

At the 2014 SACNAS National Convention there were a total of 897 undergraduate and graduate research presenters, including 727 undergraduates and 170 graduate students. Of these, 55 presented in the mathematical sciences, including 43 undergraduates and 12 graduate students. SACNAS considers this opportunity to be an important feature of the conference. All student presentations are judged by at least two professionals and the judges give students helpful supportive feedback about their work and presentation style. This is an important way in which students are initiated into the world of scholarship, preparing them to present at professional conferences within their discipline in the future.

### **Mathematics & Statistics Graduate Oral Winners**

- **Mario Banuelos** (University of California, Merced) *Modeling Size Distribution of Transposable Elements with Fragmentation Equations*
- **Michael Santana** (University of Illinois at Urbana Champaign) *A Spectrum of Edge-Coloring Subcubic, Planar Graphs*

### **Mathematics & Statistics Undergraduate Poster Winners**

- **Valerie Carrasquillo** (Universidad Metropolitana, Puerto Rico) *Stochastic Delay Differential Equations for Coral Reef Dynamics*
- **Erika Estrada** (University of California, Davis) *Correlation of Adolescent Caffeine Intake with Blood Pressure in Adulthood*
- **Meghan Malachi** (Providence College) *Substitutions and Rauzy Fractals*

### **PRECONFERENCE ACTIVITIES**

In addition to the activities put on during the conference, SACNAS partners with other organizations and groups interested in serving URM Scientists and Mathematicians to put on pre-conference events that take place on the day immediately preceding the conference. As has become tradition in the last several years, in 2015 the nine National Science Foundation institutes jointly presented cutting-edge mathematics activities for mathematics attendees.

### **Math Institutes Modern Mathematics Workshop (Wednesday and Thursday):**

*Sponsored by the Math Institutes*

The workshop features presentations from speakers on behalf of each institute, a keynote lecture, and informational panels describing upcoming programs, how to participate in them, and career opportunities.

**Schedule:**

<b>OCT 28, 2015 WEDNESDAY</b>	12:00 PM - 01:00 PM	Registration
	01:00 PM - 04:00 PM	Presentations by Math Institutes, part I
	01:00 PM - 05:00 PM	Mini-course for Undergraduates: Harshad Numbers and Sage Programming Alejandra Alvarado (Eastern Illinois University), Helen Grundman (Bryn Mawr College), Pamela Harris (United States Military Academy)
	01:00 PM - 05:00 PM	Mini-course for Undergraduates: An Introduction to the Theory of Sandpiles Luis Garcia-Puente (Sam Houston State University)
	04:00 PM - 05:00 PM	Poster Session (for Graduate Students and Early Career Researchers)
	05:00 PM - 07:00 PM	Reception
<b>OCT 29, 2015 THURSDAY</b>	09:00 AM - 10:25 AM	Presentations by Math Institutes, part II
	10:25 AM - 11:00 AM	Break
	11:00 AM - 12:00 PM	Plenary Lecture: Rethinking the Culture of STEM Education in America: Promoting Student Success and Minority Achievement Freeman Hrabowski (University of Maryland, Baltimore County)

**Undergraduate Mini-courses in Mathematics**

These sessions ran in parallel with the Modern Mathematics Workshop (MMW) organized by the Mathematics Institutes. While the MMW highlights programs for graduate students, postdocs and professionals, the institutes are also interested in reaching undergraduate students by organizing two mini courses in different mathematics topics and combining the audiences of the MMW with the undergraduates during a keynote speech.

- Harshad Numbers and Sage Programming:** A Harshad number is a positive integer that is divisible by the sum of its digits. The word “Harshad” comes from the Sanskrit harsa (joy) + da (give), meaning joy-giver, which was defined by the Indian mathematician D.R. Kaprekar. All one digit numbers are Harshad numbers and it is fairly simple to determine which two digit numbers are Harshad. In 1994, H. Grundman generalized the concept to b-Harshad (or b-Niven) numbers. Simply put, for  $b > 1$ , a b-Harshad number is a positive integer that is divisible by the sum of the digits of its base b expansion. The mini-course will provide undergraduate students with an opportunity to learn about Harshad numbers and how to compute some of their properties using the freely available mathematical program Sage. No prior programming experience is required.

- **An Introduction to the Theory of Sandpiles** The sandpile model developed by Bak, Tang, and Wiesenfeld in 1987 is a mathematical model first used to exemplify the concept of self-organized criticality (SOC). SOC is a property of certain dynamical systems that naturally evolve toward critical states and it is considered to be one of the mechanisms by which complexity arises in nature. The abelian sandpile model introduced by Dhar in 1990 is a special class of sandpile model defined on a combinatorial graph whose dynamic structure is encoded in a finite abelian group known as the sandpile group. This algebraic structure has played a central role in the study of diverse properties of the abelian sandpile model. Moreover, the sandpile group has also been an important object of study in several distinct areas of mathematics, including algebraic combinatorics, algebraic, tropical and arithmetic geometry, the theory of computation, and the study of pattern formation. In this mini-course, we will give an introduction to the theory of sandpiles. In particular, we will study the interactions between the combinatorics of the graph, the algebraic information of the sandpile group and the dynamics of the abelian sandpile model.

## FISCAL REPORT

The AMS sponsorship of \$5,000 provided partial registrations for eight participants listed below.

Helen Grundman
Erik Insko
Steven Miller
Mohamed Omar
Jose Perea
Ivelisse Rubio
Dido Salazar
Adriana Salerno

*The following fees for the Employment Center, EIMS, MathJobs.org, MathPrograms.org, and the AMS Short Course have been approved by the Executive Director.*

***Fees for the Employment Center***

The employer fees listed in the chart below are have been approved for the 2017 Employment Center in Atlanta, Georgia. Applicants pay no fees but are required to have a meeting badge. Use of this service by employers rose slightly in 2016.

Costs of running this program include space and equipment fees, onsite electricity and internet, computer rental fees, and staff time and travel. Also, a significant fee is paid annually to Duke University Math Department for the customized registration system attached to MathJobs.org. As of last year, all tables offer electrical outlets, which has added a significant expense but is thought to be essential.

Our current pricing strategy is have the “second” tables carry more of their real costs, since most expenses are for the physical setup. To contain costs, all registrations after the normal JMM deadline in late December are for One Day Tables. A Skype booth, available to paid employers, has proved to be somewhat popular and helps small groups of employers complete their interviewing schedule.

<b>Employment Center</b>	<i>Summary of recent and planned fees</i>					
	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<b>2017</b>
<i>Quiet Area table (1-2 interviewers)</i>	285	310	315	320	340	<b>350</b>
<i>Second Quiet Area table</i>	110	125	130	130	175	<b>195</b>
<i>Committee table (3-6 interviewers)</i>	365	385	390	400	430	<b>440</b>
<i>Second Committee table</i>	110	135	140	145	190	<b>215</b>
<i>Electricity, per table</i>		50	75	85	FREE	<b>FREE</b>
<i>One Day table, available on site, seats 3 interviewers</i>				190	195	<b>195</b>

***Fees for Employment Information in the Mathematical Sciences (EIMS)***

The following fees have been approved for 2016-2017 for *Employment Information in the Mathematical Sciences*.

This system electronic job ad system, utilizing software and web hosting provided by Boxwood Technology, is aimed at a general mathematical audience as well as the PhD market. It has the appearance of being housed on the AMS website. The “Featured Job” functionality allows employers to have their job featured more prominently in

search results.

As more and more job ads are migrating to Mathjobs.org, we are attempting to maintain EIMS as a simpler, lower cost alternative.

<b>EIMS</b> <i>Summary of recent and planned fees</i>						
	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>	<i>2015/16</i>	<b>2016/17</b>
<i>60 day listing, unlimited size</i>	215	220	225	230	235	<b>240</b>
<i>120 day listing, unlimited size</i>	290	300	305	310	315	<b>320</b>
<i>180 day listing, unlimited size</i>	365	375	380	390	395	<b>400</b>
<i>"Featured Job" add-on</i>	75	80	80	85	90	<b>90</b>

***Fees for Mathjobs.org***

The following fees have been approved for 2016-2017 MathJobs.org employer registrations (from July 1, 2016 through June 30, 2017). The service is free to applicants. Full application accounts have now been available worldwide since July 1, 2014. This expansion has been fairly quiet and manageable. There are currently 679 employer accounts on MathJobs.org, and use of MathJobs increases steadily.

**Planned employer fees 2016/17**

Regular account (for up to 7 ads), 12 months from date of sign up	<b>\$615</b>
Regular account (for one ad only), 12 months of usage from date of sign-up	<b>\$420</b>
Upgrade from single-ad account to 7 ad account	<b>\$295</b>
Advertising-only account (for up to 7 ads), 12 months from date of sign up	<b>\$500</b>
Advertising-only account (for one ad), 12 months from date of sign up	<b>\$310</b>

<b>MathJobs.org</b>		<i>Previous fees</i>					
		<i>2010/11</i>	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>	<i>2015/16</i>
<i>Regular Account</i>	<i>Up to 7 ads</i>	\$525	\$550	\$585	\$595	\$600	\$610
	<i>1 ad</i>		\$385	\$395	\$405	\$410	\$415
<i>Upgrade from 1 to 7 ads</i>					\$290	\$290	\$295
<i>Ad-only account</i>	<i>Up to 7 ads</i>		\$440	\$475	\$485	\$490	\$495
	<i>1 ad</i>	\$260	\$275	\$285	\$295	\$300	\$305

***Fees for Mathprograms.Org***

The following fees have been approved for 2016-2017 MathPrograms.org registrations. This clone of MathJobs.org is a setting for program, grant, admissions and fellowship applications. The site also has a mechanism for turning any program into a nomination procedure (instead of applications).

There are 42 accounts currently in the system, mostly aimed at undergraduate and graduate students, in addition to various AMS programs. REU programs, graduate admissions, and a few institute programs account for the majority of the listings.

The fees will be in effect from July 1, 2016 through June 30, 2017. Fees were raised in the previous cycle to bring them more in line with MathJobs.org. A one-program fee is in place to support small programs. The service is free to applicants.

<b>MathPrograms.org</b>		<i>Summary of recent and planned fees</i>				
	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>	<i>2015/16</i>	<b>2016/17</b>
<i>Regular account, up to 7 programs, 12 months from date of sign up</i>	\$500	\$525	\$535	\$540	\$575	<b>\$580</b>
<i>Regular account, 1 program, 12 months from date of signup</i>	\$250	\$260	\$270	\$275	\$300	<b>\$305</b>

***Short Course Fees***

The following chart indicates the history of fees for the Short Course since 2006 and the fees that have been set for 2017.

<b>Year</b>	<b>Name of Course</b>	<b>Preregister-member/non</b>	<b>On-site-member/non</b>	<b>S/U/E-prereg*</b>	<b>S/U/E-onsite*</b>
2006	Modeling and Simulation of Biological Networks	\$87/\$115	\$118/\$148	\$38	\$57
2007	Aspects of Statistical Learning	\$90/\$120	\$120/\$151	\$40	\$60
2008	Applications of Knot theory	\$94/\$125	\$125/\$155	\$42	\$63
2009	Quantum Computation and Quantum Information	\$96/\$130	\$130/\$160	\$44	\$65
2010	Markov Chains and Mixing Times	\$98/\$135	\$132/\$165	\$46	\$67
2011	Computational Topology	\$100/\$140	\$134/\$170	\$48	\$69
	Evolutionary Game Dynamics	\$100/\$140	\$134/\$170	\$48	\$69
2012	Random Fields and Random Geometry	\$102/\$145	\$136/\$175	\$50	\$71
	Computing with Elliptic Curves using Sage	\$102/\$145	\$136/\$175	\$50	\$71
2013	Random Matrices	\$104/\$150	\$138/\$180	\$52	\$73
2014	Geometry and Topology in Statistical Inference	\$106/\$155	\$140/\$185	\$54	\$75
2015	Finite Frame Theory: A Complete Introduction to Overcompleteness	\$108/\$160	\$142/\$190	\$56	\$77
2016	Rigorous Numerics in Dynamics	\$110/165	\$144/\$195	\$58	\$79
2017	Random Growth Models	\$112/\$170	\$146/\$200	\$60	\$81

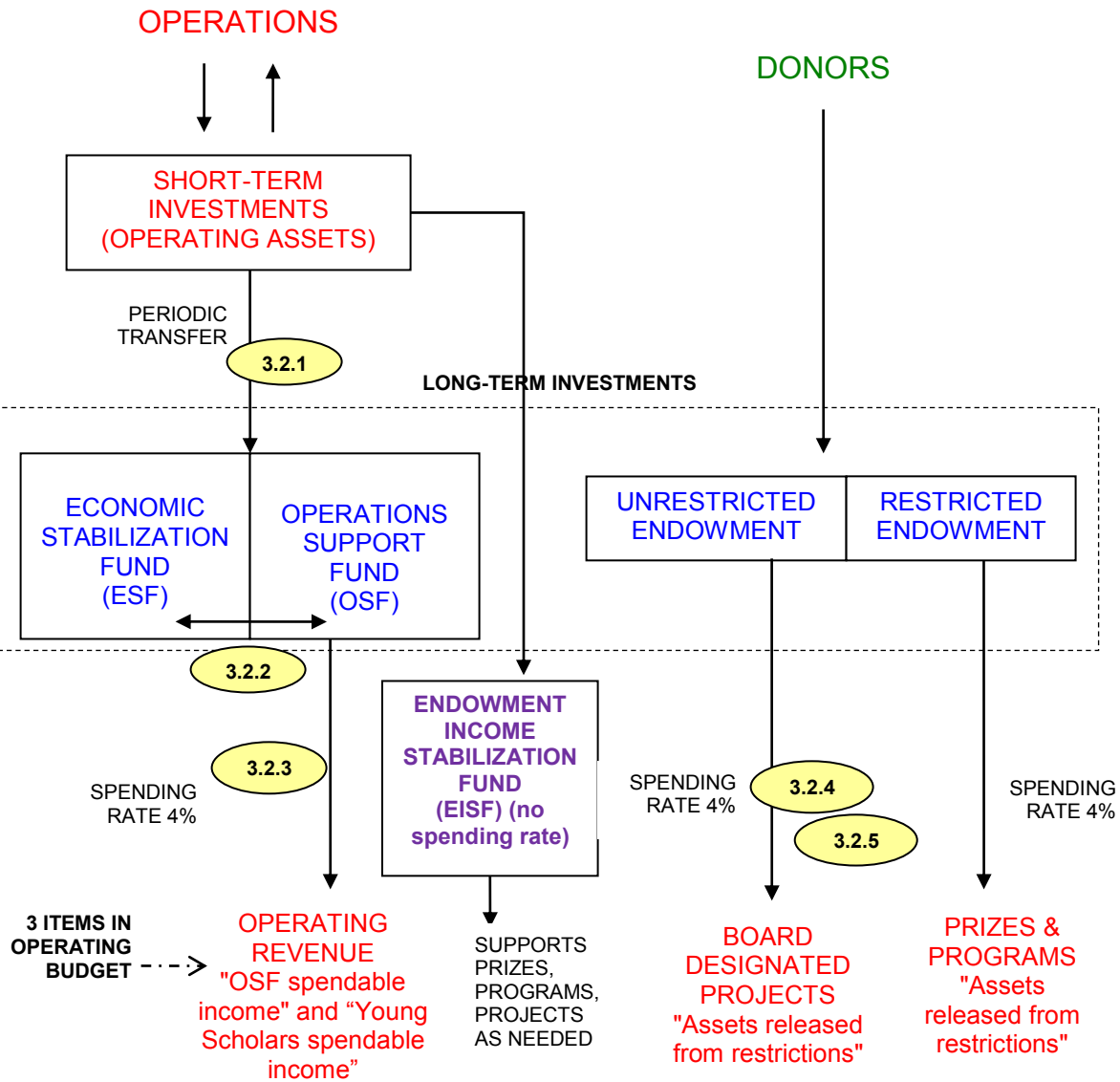
\*S/U/E: Student/Unemployed/Emeritus

*T. Christine Stevens  
 Associate Executive Director  
 April 25, 2016*



# AMS Long-term Investments Cliffs Notes

(For details, see section D of Fiscal Reports)



**ESF** = 75% annual operating expenses + unfunded medical liability (APBO) + Flood self-Insurance (\$1,700,000 in 2014)

**OSF** = remainder of quasi-endowment (spending on 3-yr rolling average)  
 Rebalanced annually, December 31

**EISF** = Created 12/31/12 from amounts the Long Term Portfolio owed to Operations. The fund supplements prizes, programs, board designated projects when endowment funds from 4% spending rate are not adequate. Invested in an intermediate term investment.

**Note:** Spendable income from true endowment funds held in Temp Restricted net assets and 'released' to operations as related expenses are incurred.

Values as of:	12/31/15	12/31/14
ESF	\$ 29.4 M	\$30.1 M
OSF	78.4 M	78.3 M
EISF	.5 M	.5 M
Unrestricted	7.9 M	7.7 M
Restricted	6.8 M	6.8 M



**AMERICAN MATHEMATICAL SOCIETY**

**To:** Board of Trustees **Date:** April 22, 2016  
**From:** Emily Riley, CFO and Associate Executive Director of Finance and Administration  
**Subject:** Operating Fund Portfolio Management Report

**SUMMARY RETURNS**

The purpose of this memorandum is to summarize the Society's cash management policies and report on the operating portfolio's investment income performance during 2015. Investment earnings results and other pertinent portfolio information for 2015 and the preceding six years are as follows:

	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Money Market Funds	0.01%	0.01%	0.01%	0.04%	0.05%	0.16%	1.0%
Vanguard Fixed Income Mutual Funds:							
Short Term Corporate Bond Fund	1.13%	1.86%	1.05%	4.63%	2%	5.3%	14.2%
GNMA Fund	1.43%	6.76%	(2.13%)	2.45%	7.8%	7.1%	5.4%
Long Term US Treasury Fund	(1.44%)	25.37%	(12.94%)	3.56%	29.4%	9.1%	(11.9%)
Fidelity Floating Rate Fund (12/04)	(1.17%)	2.47%	3.92%	6.81%	1.7%	7.8%	28.9%
Vanguard Convertible Securities	(1.42%)	2.38%	19.46%	14.47%	(6.8%)	19.2%	40.8%
TIPs (April 2005)							7.4%
Certificates of Deposit (CD)	0.92%	0.84%	0.76%	1%	1%	1.3%	2.7%
Common Stock	1.9%	5.0%	14.6%	11.5%	12%	3.0%	23.3%
Annual total portfolio return	0%	3.35%	2.5%	3.33%	2.2%	4.5%	7.1%
AMS benchmark – Avg 6 month CD rate per Federal Reserve Bank (Discontinued)	N/A	N/A	0.27%	0.44%	0.42%	0.44%	0.8%
NEW AMS benchmark –Barclays US 1-5 Year Gov/Cr Bond Index	0.97%	1.43%	1.32%	2.23%	3.37%		
AMS returns versus CD benchmark	N/A	N/A	2.23%	2.89%	1.78%	3.86%	6.3%
AMS returns versus – Barclays US 1-5 Year Gov/Cr Bond Index	(0.97%)	1.92%	1.18%	1.1%	(1.17%)		
Wkly Average Operating Portfolio (in 000's)	\$13,805	\$13,637	\$12,708	\$12,977	\$13,245	\$13,866	\$13,858
Annual Investment Income (in 000's)	\$0.064	\$381	\$263	\$460	\$270	\$626	\$984

At December 31, 2015 operating fund investments equaled \$15,006,996 which is an increase of approximately \$250,000 from the previous year.

The return for 2015 was about 0% or a total of a mere \$64 for the operating investments as a whole. In the past, the operating portfolio was benchmarked against the average six month Certificate of Deposit (CD) rate per the Federal Reserve Bank. The Federal Reserve is no longer tracking this benchmark. However, the comparison to the average CD rate was not a good benchmark due to the number of mutual fund investments in the operating portfolio. The portfolio is now being benchmarked against the Barclays US 1-5 Year Government/Credit Bond Index. This new benchmark better reflects the make-up of our portfolio. The returns of the operating portfolio as a whole trailed this benchmark by 0.97% in 2015. This poor performance

was due primarily to negative returns in the Long Term US Treasury Fund, the Fidelity Floating Rate Fund, and the Vanguard Convertible Securities Fund.

The mix of funds in this operating portfolio continues to be an excellent choice due to its diversity. The intermediate or mutual fund portion of the portfolio has experienced a 4.75% return over the past 6 years, which is offset by lower returns from money markets and CD's.

The weekly average balance in the operating portfolio increased in 2015 from \$13,637,000 in 2014 to \$13,805,000. Some cash donations that the AMS received during the year that helped to increase the average balances.

### **History of Authorized Investment Vehicles and Limits.**

At the May 1996 ECBT meeting it was agreed that the Society should have as a goal an accumulation of current assets such that they exceed current liabilities. To help achieve this objective, at the May 1997 ECBT meeting a plan for the creation of an intermediate term investment portfolio was adopted. Increased limits of \$1,000,000 (to \$4,000,000) in our money market funds, \$1,000,000 (to \$2,000,000) in our Vanguard fixed income funds, and \$500,000 (to \$1,500,000) in Treasury Notes were approved. In addition, a \$1,500,000 combined limit for other mutual funds, consisting of high yield and convertible bond funds, was established at this time.

In May 2000, the limits for money market funds, fixed income funds and the high yield/convertible funds were each increased by \$500,000. At the May 2002 ECBT meeting, the limit on the money market fund was increased to \$5,500,000, primarily to accommodate the larger investment balance carried in the operating portfolio. In May 2004, The Board of Trustees added floating rate bond funds to the authorized investments, with an investment limit of \$2,000,000. In May 2005, the Board changed the limit on money market investments to be 50% of the operating portfolio balance at any point in time, again to accommodate the larger portfolio balance and liquidity needs of the Society.

In December 2013, the Board of Trustees authorized the inclusion of the Endowment Income Stabilization Fund (EISF) in the intermediate-term portion of the operating portfolio. This added approximately \$500,000 to the portfolio. In May 2014, the maximum investment limit for the convertible securities fund investment was raised to 30% of the intermediate-term portion of the operating portfolio.

### **Recent Portfolio Adjustments.**

At the end of 2014, the Society was invested in about \$1.6 million in Certificates of Deposits (CD's). By the end of 2015, the balance invested in CD's had declined to about \$710,000, because operations needed the cash in the fall of 2015. As of the end of the first quarter of 2016, we are now at a balance of \$910,000, and we expect to build up a balance in CD's due to slightly increasing interest rates. Money market interest remains about as low as it can get at 0.01%.

### **Cash Management at the AMS.**

The following rules govern AMS's management of cash:

1. **Availability and Liquidity.** The placement of investments in the operating portfolio is coordinated with the Society's immediate and estimated future cash requirements, which are based on actual and projected revenue and disbursement streams. Cash needs to be available at the appropriate times to cover the operating expenses of the Society as they are incurred - payroll, payroll taxes and other withholdings, and vendor liabilities comprise the bulk of our cash needs. Adequate portfolio liquidity is the ability to turn investments readily into cash without suffering undo loss of principal.
2. **Income.** Cash in excess of immediate operating needs should be invested so as to optimize returns. The Society has intentionally accreted such excess cash, so that the ratio of current assets to current liabilities remains at least 1 to1. This ratio was 1.24 at December 31, 2014, and 1.25 as of December 31, 2015.
3. **Preservation of principal.** Safety is of prime concern in investments of operating capital. Diversifying investment vehicles and monitoring investment maturity dates and market value fluctuations greatly reduces an investment portfolio's exposure to risk. Maximum allowable positions should and have been established for different types of investments.

### **Authorized Investments.**

The investment vehicles authorized by the Board of Trustees for the operating portfolio are as follows:

- **Certificates of Deposit.** As in prior years, part of the Society's operating investment portfolio has been invested in certificates of deposit, although this portion has declined in recent years for the reasons discussed above. The weekly balance in certificates of deposit averaged 12% of the total portfolio in 2015, 9% during 2013 and 2014, about 12% in 2012, and 16% of the portfolio in 2011.

We generally purchase "jumbo" CD's of federally insured savings institutions and commercial banks that are assigned an acceptable safety rating by a weekly bank rating newsletter. Current investment policies limit the amount of investment in each bank issuing CDs to the Federal Insurance Deposit limit of \$250,000 (exclusive of accrued interest). There is no limit to the total amount of CDs that can be held by the operating investment portfolio.

Issuer	Banks & Savings and Loans
Risk of default	None - federally insured
Risk of market decline	None
Maximum Amount	\$250,000 per bank, unlimited in total

- **Treasury Bills.** T-Bills are convenient to use when we have a large planned expenditure for a predetermined future date, such as contributions to the Economic Stabilization Fund; however, better rates are available on alternative forms of short-term operating investments. Treasury Bills have no market risk associated with them because they are backed by the full faith and credit of the US government, are issued for short durations and are highly liquid. Accordingly, there is no limit to the total amount of T-Bills we may hold in our portfolio.

Issuer	U.S. Government
Risk of default	None
Risk of market decline	None if held to maturity
Maximum Amount	Unlimited

- **Cash and repos (repurchase agreements).** The AMS uses a concentration account at Citizens Bank - Massachusetts into which all receipts are automatically deposited and from which all disbursements are made. Under a repurchase agreement, cash above an established minimum balance is "swept" on a daily basis and invested overnight in repurchase agreements. Under a repurchase agreement, the customer (AMS) purchases government securities and the bank agrees to "repurchase" them the following day. The rate earned on these depends on the dollar amount of the repo; it is generally very low in comparison to rates available on other investment vehicles. Interest rates on repurchase agreements have been extremely low for a number of years. Unless one is sweeping large amounts of cash throughout the year, the interest earned does not justify the fees charged to maintain the agreement in place. The AMS has not used this investment vehicle since 1999 and it is not expected to be used in the near future.

Issuer	Citizens Bank - Massachusetts
Risk of default	Minimal
Risk of market decline	None
Maximum Amount	\$1,000,000
Comments	Collateralized by US Gov't securities

- **Money market funds.** The Board of Trustees has authorized a maximum investment of 50% of the balance in the operating portfolio at any point in time. At the end of 2015 the balance in money markets was \$5,849,266, or 40% of the entire portfolio, exclusively in Vanguard's Money Market Prime portfolio. Yields on the funds averaged 0.01% in 2015, and will likely not increase significantly anytime soon. There is little risk to principal because the valuation of the initial investment is generally not subject to change because of its short-term duration. Balances in these funds are usually maintained only at levels needed for short-term operating needs in excess of short-term maturities, or for planned investments to be made in the near future (which avoids the administrative costs of 3 month CD's or T-bills), or to take advantage of rising interest rates, since they generally under-perform alternative authorized investment vehicles.

Issuer	Vanguard and Fidelity
Risk of default	Minimal
Risk of market decline	Very Low
Maximum Amount	50% of operating portfolio balance

- **US Treasury Notes.** The Board of Trustees has authorized a maximum investment of \$1,500,000 in US Treasury Notes. A loss of market value may be incurred on these investments in a rising interest rate environment if funds are needed before maturity and have to be sold; however this risk is slight as the Society's liquidity is deemed extremely adequate. Treasury Notes can be an attractive investment when interest rates are expected to decline and the yield curve is fairly steep. This has not been the case in recent history.

Issuer	U.S. Government
Risk of default	None
Risk of market decline	None if held to maturity, otherwise value moves inversely to interest rate changes
Maximum Amount	\$1,500,000
Comments	Best used just before interest rates decline

- **Fixed Income (Bond) Mutual funds.** The Board of Trustees has authorized a maximum investment of \$2,500,000 in fixed income mutual funds (initial investment, exclusive of reinvested income and share price increases, with appropriate disclosure to Treasurers and Board), and at the end of 2015 we had \$4,542,334 invested. The initial investment amount is well below the limit. All of these investments are with the Vanguard Group of Valley Forge, PA. A combination of three funds is used: the Short-Term Corporate Bond portfolio, the GNMA portfolio, and the Long-Term US Treasury portfolio.

Issuer (currently used)	The Vanguard Group
Risk of default	Minimal
Risk of market decline	The longer the maturities of underlying investments, the higher the risk.
Maximum Amount	\$2,500,000
Comments	Market value will decline as interest rates rise and increase as rates fall.

Historically, most of the volatility in the Society's short-term portfolio has been the result of market valuation adjustments on these investments (they are marked to market monthly); however, gains or losses technically are not realized on these funds until they are redeemed. The GNMA fund is less affected by interest rate volatility than the Long-Term US Treasury, despite similarity in term length of the underlying securities, as these debt instruments support the housing industry.

The following funds are the included within the Fixed Income (Bond) Mutual funds category:

Vanguard High Grade Short-Term Corporate Bond Fund:

Issuer (currently used)	The Vanguard Group
Risk of default	Low, due to quality of underlying debt instruments and borrowers
Risk of market decline investments	Low, due to short duration of underlying
Comments	Share price is usually relatively stable; return is determined by recent interest rates, as underlying debt is short duration
2015 return	1.1%

Vanguard GNMA Fund:

Issuer (currently used)	The Vanguard Group
Risk of default	Low – while not backed by the full faith and credit of the US government, it isn't likely that the US government would allow GNMA to default on its obligations
Risk of market decline	Medium, as duration is longer
Comments	Since the GNMA obligations are linked to collateralized mortgage obligations, and mortgage rates tend to change more slowly than other long term rates, this fund is a bit less volatile when interest rates change.
2015 return	1.4%

Vanguard Long-Term US Treasury Fund:

Issuer (currently used)	The Vanguard Group
Risk of default	Low, as most underlying securities are US government direct issues
Risk of market decline	Highly sensitive to interest rate changes, as duration of underlying securities is long-term
Comments	This fund has caused most of the volatility in the Intermediate portfolio; staff mitigates some risk by adjusting investment amount
2015 return	-1.1%

- **High Yield and Convertible Bond Mutual funds.** The Board of Trustees has authorized a maximum investment of 30% of the intermediate-term portfolio investments in any combination of high yield bond and convertible securities accounts. At December 31, 2015 we had \$2,222,528 or 26% invested in these vehicles, in one convertible securities mutual fund



managed by the Vanguard Group. Gains or losses technically are not realized on these funds until they are redeemed, although, for financial statement purposes, the Society records these investments at market.

The initial investment into the fund was \$570,000 in 1998. Also included in the total funds are realized and unrealized gains since 1998. In December 2013, EISF funds of \$249,000 were moved to the convertible securities account in order to invest the funds in the intermediate portfolio.

Issuer (currently used)	The Vanguard Group
Risk of default	Medium to High
Risk of market decline	Sensitive to movements in the equity markets
Maximum Amount	30% of intermediate-term portfolio
Comments	Total returns often parallel those of equity markets
2015 Return	-1.4%

- ***Floating Rate Income funds.*** The Board of Trustees has authorized a maximum investment of \$2,000,000 in Floating Rate funds. \$1,000,000 was invested in the Fidelity Floating Rate High Income Fund in December 2004. The return for 2015 was --1.4%. Gains or losses technically are not realized on these funds until they are redeemed, although, for financial statement purposes, the Society records these investments at market.

Issuer	Fidelity
Risk of default	Low
Risk of market decline significantly	Low, possibly medium if economy falters
Maximum Amount	\$2,000,000
Comments	The fund is expected to have a relatively stable NAV with yield providing most of the return
2015 Return	-1.4%

**Summary of Operating Portfolio Investments, December 31, 2014.**

<b><u>Description</u></b>	<b><u>Value at 12/31/15</u></b>	<b><u>Current Board Limit</u></b>	<b><u>Excess over Limit</u></b>
Money Market Funds	<u>\$5,849,266</u>	50% of total portfolio	NA
Certificates of Deposit	<u>710,000</u>	\$250,000 per inst.	NA
Treasury Notes		1,500,000	NA
<i>Vanguard Bond Funds:</i>			
GNMA Fund	1,792,774		
Short-Term Corp Bond Fund	1,841,956		
LT US Treasury Fund	<u>907,604</u>		
Subtotal	<u>4,542,334</u>	2,500,000 (1)	NA
<i>High Yield and Convertible Funds:</i>			
Vanguard Convertible	<u>2,222,529</u>		
Subtotal	<u>2,222,529</u>	30% of mutual fund investments	NA
<i>Floating Rate Funds:</i>			
Fidelity Floating Rate High Inc			
Subtotal	<u>1,662,169</u>	2,000,000	NA
Common Stock	<u>\$20,698</u>	Unrestricted gifts	
Total (3)	<u>\$15,006,996</u>		

- (1) Limit is exclusive of reinvested dividends and share price increases. See discussion above.  
 (2) The total share of the portfolio owned by the EISF was \$482,844 as of 12/31/15.

## **Retirement Plan Investment Committee**

### **General Description**

- Committee is a standing committee of the Board of Trustees.
- Number of members is four, consisting of the Director of Human Resources (Chair), Chief Financial Officer, Associate Treasurer, and a member of the Board of Trustees who, at the time of the appointment, has at least two years remaining in their term as Trustee.
- Term is two years.

### **Responsibility**

The Committee's primary responsibility is choose and monitor plan funding options in a prudent manner insuring that the Society fulfills its Plan Sponsor responsibilities. The Committee will make reports to the Board concerning its activities at least annually.

### **Principal Activities**

The principal activities of the Committee include:

- Establishing and managing an Investment Policy Statement (IPS) approved by the Board of Trustees.
- Controlling fees and expenses.
- Designing and reviewing Plan investment menus.
- Selecting and terminating funding options.
- Monitoring and documenting Plan investment performance.
- Generating communications to participants when necessary.

### **Other Activities**

The Committee may choose to hire an outside Independent Investment Advisor/Manager to:

- Propose investment options according to criteria established in the IPS.
- Report and review investment options' performance against established peer groups and benchmarks according to frequencies required by the IPS.
- Monitor changes at fund management firms

### **Miscellaneous Information**

The Committee will meet at least annually, but may meet at other times as needed to carry out fiduciary responsibilities.

Staff support for the Committee is provided by the Director of Human Resources and the Chief Financial Officer.

The Society maintains a website with information relevant to the Investment Committee. Such information includes minutes, investment performance information, and other information relating to the Society's investments.

### **Authorization**

May 2016 ECBT Minutes, Item 3C.4; *update 5/21/16*

Regarding membership of Committee, the BT approved replacing the fifth-year elected member of the BT with a member of the BT who, at the time of the appointment, has at least two years remaining in their term as Trustee.

May 2011 ECBT Minutes, Item 3.9; *update 12/7/11*

Regarding Retirement Plan Administration, the BT approved a recommendation from the Executive Director to establish a Retirement Plan Investment Committee with the following members: Director of Human Resources (Chair), Chief Financial Officer, Associate Treasurer, and fifth year elected member of the BT.

November 2011 ECBT Minutes, Item 3C.3

BT approved charge for committee.

### **Note to the Chair**

Committee chairs should be informed, at the beginning of each fiscal period, the budget of their committees and cautioned to remain within the budget. Such items as travel reimbursement to, accommodations for, and meals for guests of any kind fall within these budgets.

Work done by committees on recurring problems may have value as precedent or may have historical interest. Accordingly, the Council has requested that a central file system be maintained for the Society by the Secretary. Committees are reminded that copies of every sheet of paper should be deposited (say once a year) in this central file. Confidential material should be noted, so that it can be handled in confidential manner.

### **Past Members**

Year    Members

2011	John M. Franks, Emily Riley, Tammy KingWalsh, Carol Wood
2012	Zbigniew Nitecki, Emily Riley, Karen Vogtmann, Tammy King Walsh
2013	Zbigniew Nitecki, Emily Riley, Ronald Stern, Tammy King Walsh
2014	Zbigniew Nitecki, Mark Green, Emily Riley, Tammy King Walsh
2015	William Jaco, Zbigniew Nitecki, Emily Riley, Tammy King Walsh

## Update on proposals planned or submitted

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### **Mathematics Research Communities, 2017-2019**

- Support of Mathematics Research Communities for 2017, 2018 and 2019
- The total request for three years of support is \$1,511,848.
- Proposal was submitted to the Infrastructure Program, Division of Mathematical Sciences at NSF in early April

The current funding for the MRCs supports the program through 2016. Discussions with NSF about renewal of support have taken place. The ECBT approved preparation and submission of this proposal in May 2015.

### **Joint proposal of the AMS and the National Alliance for Doctoral Studies in the Mathematical Sciences for support of the 2016 *Field of Dreams* conference**

The ECBT approved preparation and submission of this proposal at its May 2015 meeting. The plan could not be pursued when the National Alliance decided not to try to form a closer partnership with the AMS. The AMS cannot participate in a proposal to fund a program over which it has no control.

### **Proposal to support travel grants for MCA2017**

- Proposal to be submitted to the Infrastructure Program, Division of Mathematical Sciences at NSF.
- A request in the range of \$100,000 to \$120,000 is likely.
- The ECBT approved the submission of this proposal at the November 2015 meeting.

SIAM has expressed interest in jointly making a proposal to NSF for MCA2017 travel support of some invited speakers and early career participants from the U.S. The MAA also wishes to participate. The NSF funded a proposal for \$105,000 in 2013 when MCA2013 was held in Guanajuato.

The proposal is currently being prepared and will be submitted soon.

## Renewal proposal to the Simons Foundation to support the AMS-Simons travel grants in 2017, 2018, and 2019

- Funding request on the order of \$900,000 to \$1,000,000 is expected
- The ECBT approved the submission of this proposal at the November 2015 meeting.

The current funding from the Simons Foundation will support the competition for new travel-grant awards for recent doctoral recipients in 2016. Continuation of the program after 2016 requires a renewal of the funding. The proposal should be submitted in spring or summer 2016.

## Travel Support for the *Math in Moscow* Program

- Funding request of about \$320,000
- To be submitted to the DMS Infrastructure Program in fall 2016 (co-funded)
- The ECBT approved the submission of this proposal at the November 2015 meeting.

The Independent University of Moscow (IUM) is a small, elite institution of higher learning that focuses primarily on mathematics. It was founded in 1991 at the initiative of a group of well-known Russian research mathematicians, who now comprise the Academic Council of the University. Since April 2001, the National Science Foundation (NSF) has awarded four continuing grants to the American Mathematical Society (AMS) with funds to be used to support mathematically talented U.S. undergraduates for a semester of study at the *Math in Moscow* program of the IUM. Based on the success of the existing Travel Support for the *Math in Moscow* Program, the AMS is requesting a continuation of funding for three years, in the amount of about \$320,000. These funds will be used to underwrite a substantial part of the typical cost for a semester of study in the program for ten undergraduates per (academic) year.

The *Math in Moscow* program is a fifteen-week-long research experience for mathematically talented students. This program consists primarily of courses in mathematics and theoretical computer science, and provides an academically enriching experience because it allows mathematically talented students to meet and work with other students who share a talent and interest in mathematics, as well as the chance to work with some of the world's leading mathematicians. The program provides an experience of mathematics that the students would not find in the U.S. This is because students experience the field of mathematics as it is practiced in the Russian tradition, the main feature of which has always been the development of a creative approach to mathematics, with the emphasis being on problem solving rather than memorizing theorems. Indeed, for the Independent University, discovering mathematics under the guidance of an experienced teacher is the central principle of its program, and the *Math in Moscow* program emphasizes in-depth understanding of carefully selected material rather than broad surveys of large quantities of material.

In addition to the academically enriching experience that the *Math in Moscow* program provides, there is another strong rationale for supporting such a program. It is a way to build vital scholarly connections between the Russian and U.S. mathematics communities, which are certainly in the best interest for the future scientific research of both countries. Creating ties between mathematicians in our two communities, both young and old, will promote scientific cooperation far into the future.

## **Proposal from the MathJax Consortium for research and development on semantic enrichment of math on the web**

- Joint proposal from the AMS and SIAM, the principal partners of the consortium
- Research plan and goals are being discussed with the Sloan Foundation and the Simons Foundation
- The amount of the request is expected to be about \$240,000 for a two-year period.

The MathJax Consortium received \$139,688 from the Sloan Foundation to fund an 18-month research project on semantic enrichment of math on the web based on a syntactic tree structure underlying the *Presentation MathML* representation of a mathematical expression. The approach was shown to be useful for Accessibility (automatic text-to-speech conversion of math for the visually impaired), responsive equations (which can be collapsed or expanded to improve display on devices with small screens), and search.

***We request approval of the ECBT to plan, prepare and submit this proposal.***

*Donald McClure  
Executive Director  
May 4, 2016*





ICMI EC Meeting 2015		€ 3,077.59	3.75%
Bank Account fee		€ 52.90	0.06%
<b>Total Expenditure in 2014</b>		<b>€ 82,115.24</b>	<b>100%</b>

### 3.2. Commission for Developing Countries (CDC)

<http://www.mathunion.org/cdc/>

## Report on CDC activities in 2014

Herb Clemens & Lena Koch



The Commission for Developing Countries (CDC) is a nine-member commission. Its members are elected or appointed for a four-year term by the IMU General Assembly.

The CDC members 2011-2014 were:

- José-Antonio de la Peña (Mexico) - CDC President
- C. Herbert Clemens (USA) - CDC Secretary for Policy
- Srinivasan Kesavan (India) - CDC Secretary for Grant Selection
- Carlos Cabrelli (Argentina) - Latin American Member
- Wandera Ogana (Kenya) - African Member
- Hoang Xuan Phu (Vietnam) - Asian Member
- Ragni Piene (Norway) - CDC member appointed by the IMU EC
- Polly W. Sy (Philippines) - CDC member appointed by the IMU EC
- Angel Ruiz (Costa Rica) - CDC member appointed by the ICMI EC
- Ingrid Daubechies (USA), IMU President and Ex-officio CDC Member

The CDC is supported by staff members of the IMU Secretariat, Berlin who manage most of the administration of the CDC.

During 2014 the Commission for Developing Countries (CDC) has continued to use the funds it receives from the International Mathematical Union (IMU) to support mathematics research and advanced mathematical teaching in developing countries, guided by the basic principles incorporated into its original charge:

- I. Work with and support local mathematical leadership in developing countries.
- II. Leverage resources through partnering and networking with other organizations with goals compatible with the CDC mandate.
- III. Set clear norms of quality, transparency and accountability.

Guided by these principles, the CDC allocated its funds in 2014 for the following purposes:

**A) Project Support**

Under this category the CDC supported capacity building projects and programs in mathematics and mathematics education, be they international, regional or local initiatives in developing countries. The CDC evaluates and selects the grant recipients.

**B) Volunteer Lecturer Program**

The goal of this program is to offer universities in the developing world lecturers for intensive 3-4 week courses in mathematics at the advanced undergraduate or master's level.

**C) Grants for Conferences**

The Conference Support Program gives partial support to conferences organized in developing and economically disadvantaged countries. The Program also supports major international conferences occurring in developed countries to enable them to invite mathematicians from developing countries. The funds are for academic use only (travel or living expenses of invited speakers or participants coming from developing countries). The CDC Grant Selection Committee (GSC) selects the grant recipients.

**D) IMU-Simons Travel Fellowship for Individuals**

The IMU- Simons Travel Fellowship supports travel costs for research visits (minimum stay is four weeks) by mathematicians based in developing and economically disadvantaged countries to an international centre of excellence. The Simons Foundation, based in New York, funds the program. The Foundation has been annually giving the amount of USD 25,000 during the period 2014-2016. It replaces the Individual Research Travel Grant Program during this time. The CDC Grant Selection Committee (GSC) selects the grant recipients.

**E) Abel Visiting Scholar Program**

In 2013 the Niels Henrik Abel Board (Norway) and the CDC launched the "Abel Visiting Scholar Program". The Niels Henrik Abel Board gives an annual grant of USD 15,000 to support mathematicians professionally based in developing countries to visit an international research collaborator for a period of one month. The period is extendable for up to three months in the case of matching support from the host institution. The program is designed for postdoctoral mathematicians in the early stages of their professional careers. It is designed to offer the opportunity for a 'research sabbatical,' a necessary complement to teaching and other academic duties for mathematicians desiring to also sustain a viable research program. The Abel Visiting Scholar Program Selection Committee selects the grant recipients.

**F) Reports on mathematics research and graduate education in emerging nations**

CDC members and regional partners prepared three reports about the current state of mathematics in Africa, Asia and Latin America and on opportunities for new initiatives to

support mathematical development. The reports were made available in August 2014 at the MENAO Symposium. They can be found at: <http://www.mathunion.org/cdc/research-and-useful-links/>

### **G) Special Projects: MENAO**

In 2014 CDC members and in particular the CDC MENAO sub-committee members Herb Clemens, Ragni Piene and Wandera Ogana and the CDC Administrator invested considerable energy and time organizing the *Mathematics in Emerging Nations: Achievements and Opportunities* (MENAO) symposium. The daylong event was held prior to the opening of the International Congress of Mathematicians (ICM) in Seoul, Korea on August 12<sup>th</sup>, 2014.

### **Administrative Costs**

Administrative costs are kept to no more than 10% of the CDC operating budget. The CDC Administrator salary and many other administrative expenses are covered by the IMU Secretariat budget, which receives its funds from the German Ministry of Education and Research (BMBF) and the Federal State of Berlin. Therefore administrative costs charged to the IMU budget were very low in 2014.

### **A) Project Support**

In 2014, projects and activities in Africa, South East Asia, Mongolia and Central America were supported from the CDC Project Grant program:

#### AMMSI 2014 Scholarships

AMMSI is a network of mathematics centres in sub-Saharan Africa that organizes conferences and workshops, visiting lectureships and an extensive scholarship program for mathematics graduate students doing PhD work on the African continent.

As in the previous years, the CDC supported in 2014 the request from AMMSI to support the African graduate student scholarship program in the amount of EURO 20,000 for the academic year 2014. USD 2,000 was used for administration and the remainder of the EURO 20,000 went to African graduate students as scholarships.

The AMMSI scholarship program continued to need international bridge funding to maintain its vital work of supporting the continent's next generation of mathematical leadership. In 2014 the supported students were from the University of Ngaoundere, Cameroon, University of Dar el Salaam, Tanzania, Malawi Mzuzu University, University of Zambia, Zambia and the University of Botswana, Botswana.

More details can be found on the AMMSI website: <http://www.ammsi.org>

#### CIMPA IBN Prize

CDC supported the 2013 Ibni Oumar Mahamat Saleh Prize with EURO 1,500. The awardee was Koffi Wilfrid Houeadanou. More information can be found at: <http://smf4.emath.fr/en/PrixIbni/Documents/proclamation-2013-en.pdf>

#### XXX Iberoamerican Math Olympiad

In 2014 the CDC gave a grant to support the XXX Iberoamerican Math Olympiad in 2015 in Puerto Rico (EUR 5,000).

#### Mongolia

The CDC supported the visit of Michel Jambu and Herb Clemens to Mongolia in September 2014. An agreement was reached with the University of Mongolia to begin participation in the CDC's Volunteer Lecturer Program. Michel Jambu remained at the University of Mongolia to give an intensive 3-week short course. CDC supported this activity with Euro 2,422.36.

#### Master Student Support

The CDC gave support to the Cambodian RUPP student Chuom Veasna, to travel to CIMAT

(Mexico) to complete a master's degree. CIMAT gives support for local expenses (housing and food) and CDC supported his travel cost to Mexico (EURO 1,500).

### **B) Volunteer Lecturer Program (VLP)**

The CDC supported eight lecturers under its Volunteer Lecturer Program in 2014:

1. B. Rousselet (University of Nice Sophia Antipolis, France) gave a course, as a part of the Master of Mathematics program of RUPP (Cambodia) during February 2014. CDC supported the course with € 2,349.94.

2. Fidel R. Nemenzo (University of the Philippines) gave a course in "Introduction to Number Theory" as a part of the Master of Mathematics program of RUPP (Cambodia) from 1 -18 April 2014. CDC supported the course with € 1,949.73.

3. Patrick Scott (University of New Mexico, USA) visited the Universidad Pedagógica Nacional Francisco Morazán in Tegucigalpa, Honduras to deliver an intensive course from September 28 - October 30, 2014. CDC supported the course with € 2,963.84.

4. Kasso A. Okoudjou, (University of Maryland, College Park, USA) gave a course in "Harmonic analysis, time-frequency analysis, and wavelets" at Institut de Mathematiques et de Sciences Physiques (IMSP) de l'Université d'Abomey Calavi, Benin from January 7 - January 26, 2014. CDC supported the course with € 706.11.

5. Gonzalo Aranda Pino (Universidad de Málaga, Spain) gave a course in "Number Theory", from 24 November – 19 December 2013 in Erbil, Iraq, Erbil CDC supported the course with € 3,403.82.

6. Brigitte Lucquin (Université Pierre et Marie Curie Paris 6, France) gave a course in "Introduction aux equations aux derivees partielles et a leurs approximations II" as part of the Master of Mathematics program of RUPP (Cambodia) from 11 - 29 November 2013. CDC reimbursed the cost of € € 870.00

7. Rüdiger Müller, (WIAS Berlin, Germany) gave a course in "Numerical Methods for Partial Differential Equations" Dec. 2 - Dec. 21, 2013 at Urgench State University, Urganch City, Uzbekistan. CDC reimbursed from its 2014 funds the accommodation and living costs. CDC supported the course with € 1,006.55.

8. Michel Jambu, (Université de Nice Sophia Antipolis) gave Professeur Emérite Laboratoire J.A. Dieudonné UMR 7351 CNRS a course from December 13, 2013- January 6, 2014 at the Master Program at RUPP, Cambodia. CDC supported the course with €1,448.15.

### **C) Grants for Conferences**

During the interval 1st January – 31st December 2014, the Grant Selection Committee of the Commission for Developing Countries received a total of **48** applications for financial support, in the two existing categories:

Conferences in developing countries\*

Conferences in developed countries\*\*

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\* In 2010, the IMU/CDC definition of a developing country was where the Per Capita Gross National Income according to the World Bank's Development Indicators (Atlas methodology) was not in excess of USD 7,500 (World Development Indicators database, World Bank, revised 9 July 2010.)

A total of **29 awards** were made.

**Conferences in developing countries**

Support was granted in **27 cases** for conferences taking place in the following developing countries:

Country	Number of Awards	Total value of awards (Euro)
Argentina	4	8,000
Brazil	1	2,000
Cameroon	3	4,500
Colombia	1	2,500
Ecuador	1	1,000
India	2	3,000
Indonesia	1	1,500
Iran	2	3,500
Laos	1	1,500
Mongolia	1	2,500
Morocco	4	6,000
Pakistan	2	2,500
Palestine	1	1,000
Peru	1	2,000
Senegal	1	2,000
Serbia	1	1,500
Tunisia	1	2,000
<b>Total</b>	<b>27</b>	<b>€47,000</b>

**Conferences in Developed Countries**

Support was granted in **2 cases** for conference participation of developing country mathematicians to conferences taking place in the following **developed countries**:

Country	Number of Awards	Total value of awards (Euro)
Uruguay	2	€4,500
<b>Total</b>	<b>2</b>	<b>€4,500</b>

Total Spending for Conference Grants /Year	Total value of awards (Euro)
2014	51,500

**D) IMU-Simons Travel Fellowship for Individuals**

Country	Number of Awards	Total value of awards (Euro)
Cameroon	1	1,200
China	1	1,000
India	1	2,346.04
Iran	3	4,200
Myanmar	1	2,600

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\*\* CDC support to this category is intended solely for the participation of mathematicians from developing countries. Furthermore, conference organizers are required to demonstrate that they will match the funds being requested from/granted by CDC by an equal amount from other sources also dedicated to the participation of mathematicians from developing countries.

Senegal	1	2,100
Uzbekistan	1	1,000
Vietnam	1	1,400
<b>Total</b>	<b>10</b>	<b>€ 15,846.04</b>

*The IMU Simons Funds are not budgeted to the general CDC budget, but kept in a separate budget line.*

**E) Abel Visiting Scholar Program**

List of the Abel Visiting Fellowship Awardees 2014:

**Cyrille Nana**, lecturer, University of Buea, Cameroon: His research concerns holomorphic functions of several complex variables. In the research project he aimed to extend previous joint work with Bonami and Garrigós on estimates for Bergman projections in bounded domains. Nana was hosted by Aline Bonami and Sandrine Grellier at the University of Orléans, France.

**Olena Vaneeva**, senior researcher at the National Academy of Sciences, Ukraine: Vaneeva’s research focuses on symmetry analysis in the study of nonlinear PDE models, and the project aimed to address classification of symmetries and finding closed-form solutions for variable coefficients PDEs. She was hosted by Prof. C. Sophocleous at the University of Cyprus in Nicosia, Cyprus.

**Do Duc Thuan**, lecturer at Hanoi University of Science and Technology, Vietnam: Thuan’s field of research is control problems of dynamical systems under perturbations, and the research project concerns controllability radii of delay descriptor systems. He was hosted by Prof. Volker Mehrmann at the Technical University of Berlin, Germany.

**F) Research**

Regional Reports

The editors of the regional reports completed their work in 2014. The reports were approved in final form by August 2014 and made available during the MENAO symposium at the ICM 2014 in Seoul, Korea. They can be found at: <http://www.mathunion.org/cdc/research-and-useful-links/>.

**G) Special Projects: MENAO**

In 2014, the IMU held a daylong symposium prior to the opening of the International Congress of Mathematicians (ICM) in Seoul, Korea entitled *Mathematics in Emerging Nations: Achievements and Opportunities* (MENAO). A sub-committee of the CDC and the CDC Administrator organized the symposium. Approximately 260 participants from around the world, including representatives of embassies, scientific institutions, private business and foundations attended the session. The event was supported by the IMU with EURO 100,000. The MENAO goals were broad and several were achieved (e.g. supporting regional networks, raising the profile of mathematicians based in developing countries and the presenting of the regional reports). Future symposia on this topic should perhaps be more focused on a well-defined defined target audience and very concrete and specific development goals. A positive outcome of MENAO was its raising awareness within the mathematical community and its importance to create regional networks.

All lectures can be found at:

[https://www.youtube.com/watch?v=eODi4b5d27Y&list=PL0c-546bsozhAecE1btXl18B08p1fL\\_7u](https://www.youtube.com/watch?v=eODi4b5d27Y&list=PL0c-546bsozhAecE1btXl18B08p1fL_7u)

The result booklet can be found at:

[http://www.mathunion.org/fileadmin/CDC/cdc-uploads/menao\\_doku\\_141120.pdf](http://www.mathunion.org/fileadmin/CDC/cdc-uploads/menao_doku_141120.pdf)

**Administration**

The administrative costs consisted primarily of shipments and bank transfers.



**CDC Income**

CDC's principal source of 'core' income is an annual grant from the International Mathematical Union (IMU). IMU in turn receives its financial support from IMU member countries as well a generous grant from the Niels Henrik Abel Board (Norway). The CDC Administration is managed by Lena Koch, a staff member from the IMU Secretariat (WIAS Berlin). The IMU Secretariat receives an annual subvention from the IMU Secretariat (WIAS Berlin) host country Germany for administrative purposes.

The CDC would like to express its profound thanks to the IMU, the Niels Henrik Abel Board, the Simons Foundation NY and the IMU Secretariat at the WIAS Berlin for all the support and collaboration.

More information about CDC and its activities can be found on the website:  
[www.mathunion.org/CDC](http://www.mathunion.org/CDC)

We look forward to future collaboration.

Herb Clemens, Secretary for Policy CDC  
 Lena Koch, IMU Secretariat  
 May 2015

Photo Credits:  
 Angel Pineda  
 Wolfgang Dalitz  
 Lena Koch

<b>CDC Income and Expenditure 1.1.2014 - 31.12.2014</b>			
<b>Revenue by Source</b>		<b>In EURO</b>	<b>%</b>
Savings 2013 (1.1.2014)		€ 177,652.71	63.04%
IMU and Special Grant Niels Henrik Abel Memorial Fund Board		€ 104,081.00	36.03%
Bank interest		€ 67.45	0.02%
<b>Total Budget 2014</b>		<b>€ 281,801.16</b>	<b>100%</b>
<b>EXPENDITURE by Category</b>		<b>In EURO</b>	<b>%</b>
Volunteer Lecturer Program (VLP)		€ 14,698.14	14.90%
Administrative Cost		€ 1,806.10	1.83%
Project Support		€ 29,794.42	30.20%
Conference Grants		€ 51,500.00	52.20%
CDC Meeting Berlin 2013		€ 858.28	0.87%
<b>Total Expenditure</b>		<b>€ 98,656.94</b>	<b>100%</b>
<b>Savings 2014</b>		<b>€ 183,144.22</b>	

*Note: The Simons Funds as well as the funds for the Abel Visiting Scholar Program are not budgeted to the general CDC budget, but kept in a separate budget line.*

	€	€
Carry forward		58,368.24
		-----
<b>Simons Foundation</b>		
Per 1 Jan. 2014		18,661.74
Contribution (kUSD 25)	19,012.85	
Travel Fellowships for 9 mathematicians	<u>-14,348.70</u>	<u>4,664.15</u>
Per 31 Dec. 2014		23,325.89
		-----
<b>IMU Developing Country Fund</b>		
Per 1 Jan. 2014		22,165.74
<b>Contribution FIMU (kUSD 17)</b>		<u>13,466.83</u>
Per 31 Dec. 2014		35,632.57
		-----
		<u>117,326.70</u>

The funds shown under **Special Development Fund (SDF)** are for the support of mathematicians from developing countries for travel to International Congresses of Mathematicians (ICM). An international committee decides on the grant applications.

The cash of the SDF collected between 2007 and 2010 for the congress in August 2010 in Hyderabad/India was fully expended. The cash collected for the congress in August 2014 in Seoul/Republic of Korea was not needed to finance the travel costs of ICM participants because the Korean Mathematical Society (KMS) provided travel assistance in the amount of kUSD 2,000 for mathematicians from developing countries. Cash of SDF not required for ICM 2014 is to be used for the ICM 2018 in Brazil.

The cash received from the **Simons Foundation** is designated as a Travel Fellowship for research stays of mathematicians from developing countries.

The cash received from the Friends of IMU (FIMU) during the reporting year included in the **IMU Developing Country Fund** are for the promotion of mathematical research and scholarships in developing countries.



# Appropriated Spendable Income **DRAFT**

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**This version of the plan allocates \$282,000 of the total available 2017 funding of \$284,374. We encourage the Board to make suggestions as well for alternative allocations. The amounts below are merely suggestions (based on expenses expected to be budgeted in November 2016). We recommend deferring any action until the 2017 budget is adopted in November.**

Each year, the Board approves a list of designated projects that are paid for (in part) by spendable income from the unrestricted endowment. Those projects are selected to represent a variety of activities all of which are consistent with the mission of the Society.

Here are brief descriptions of the projects for 2017 appropriations.

## **Fellows of the American Mathematical Society (\$10,000)**

The selection and induction of new Fellows are expected to incur total expenses of approximately \$10,000 in 2017. The budgeting of some revenue from unrestricted endowment will offset part of the recurrent expenses.

## **AMS Congressional Fellow (\$80,000)**

For several years now the AMS has supported a congressional fellow. Fellows are placed in a congressional office (or equivalent) and spend a year serving that office. Fellows do NOT represent the AMS, but they provide mathematical expertise, in addition to gaining government expertise themselves. The goal is to build a cadre of knowledgeable mathematicians who can serve the interests of mathematics, either inside or outside government.

## **Mathematics Research Communities (\$10,000)**

The MRC program is funded (mainly) by a grant from the National Science Foundation, which pays for participant support and the basic cost of operation. We found in the past four years, however, that having a budget for extras not covered by the NSF grant greatly enriched the program. MRC promises to be a gem in the Society's outreach programs, and investing some extra money in those extras will pay great dividends in the future. Two specific items that the 2017 funding will help support are (i) modest support for follow-up collaboration by participants of MRCs in prior years and (ii) partial support by the AMS of participants from abroad. In addition to this appropriation from spendable income from unrestricted endowment, we will provide \$10,000 from accrued spendable income from the Beal Prize fund.

### **Centennial Fellow (\$50,000)**

The revenue from donations to the support of the Centennial Fellowship is no longer adequate to fully support one Fellow. This appropriation will supplement funds from (i) current donations and (ii) spendable income from the small endowment fund in order to support the Centennial Fellow.

### **SACNAS Sponsorship and Participation (\$7,000)**

The AMS continues to support the work of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). The AMS sponsors a scientific session at the SACNAS annual meeting and staffs a booth.

### **Programs of the Department of Education and Diversity (\$50,000)**

During its first full year, these funds will enable the new department to offer direct support to programs such as EDGE, selected REUs, and the National Alliance for Doctoral Studies in the Mathematical Sciences that promote diversity in graduate education. The support may include access to AMS services such as MathPrograms.org as well as modest contributions.

### **AMS-AAAS Mass Media Fellow (\$10,000)**

For more than 15 years, the AMS has supported a graduate student participant in this widely recognized program run by the American Association for the Advancement of Science. The student is placed in a media outlet during the summer and gains experience while providing scientific expertise. The former media fellows frequently contribute to the work of the Public Awareness Office.

### **AMS Graduate Student Chapters (\$15,000)**

There are now 41 active AMS Graduate Student Chapters. Each one receives up to \$500 per year for support of chapter activities. Some funds are received as donations, but the donations need to be supplemented from operating funds. The program is described at <http://www.ams.org/programs/studentchapters>.

### **MathJax Development and eBook Innovation (\$20,000)**

MathJax is server-based software for rendering LaTeX expressions into mathematical expressions that can be displayed by standard web browsers and by ebook applications. MathJax development is supported jointly by the AMS and SIAM. In 2013, the AMS became the managing member of the MathJax joint venture. Since its release in 2010, MathJax has gained a broad group of users and financial supporters. A current priority for ongoing development is to adapt MathJax to the ePub3 standard for electronic books.

This holds great promise for displaying mathematics with free flowing text, which is important for the quality of display of mathematics on small screen devices.

### **Project NExT (\$15,000)**

Project NExT is a professional development program of the MAA for new or recent PhDs in the mathematical sciences that addresses all aspects of an academic career. Each year the AMS sponsors six Project NExT Fellows who are affiliated with PhD-granting institutions and who show promise in mathematics research.

### **IMU Volunteer Lecturer Program (\$5,000)**

In accordance with the previous approval by the ECBT, the AMS contributes \$5,000 each year to support the Volunteer Lecturer Program of the IMU's Commission for Developing Countries. The funds support expenses of the volunteer lecturer and of the participating students.

### **Travel Grant Support for MCA2017 (\$10,000)**

The ECBT has approved a contribution of \$40,000 to the pool of funds to be used to support travel expenses of early career mathematical scientists from Latin America to participate in MCA2017. The contribution will be made in 2017 and this \$10,000 is a portion of the total amount.

The recommendations above total \$282,000.

*Don McClure, Executive Director  
Emily Riley, Chief Financial Officer  
May 5, 2016*



## Financial Statements

### American Mathematical Society

December 31, 2015 and 2014

# AMERICAN MATHEMATICAL SOCIETY

## *Financial Statements*

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*Independent Auditors' Report*

The Board of Trustees  
American Mathematical Society  
Providence, Rhode Island

We have audited the accompanying financial statements of American Mathematical Society (the "Society"), which comprise the balance sheets as of December 31, 2015 and 2014, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



*Opinion*

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Mathematical Society as of December 31, 2015 and 2014, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

*Mayer Hoffmann McCann P.C.*

May 20, 2016

Providence, Rhode Island



AMERICAN MATHEMATICAL SOCIETY

*Balance Sheets*

	<i>December 31,</i>	
	<i>2015</i>	<i>2014</i>
<b>Assets</b>		
Cash	\$ 1,018,324	\$ 1,022,196
Certificates of deposit	710,000	1,601,460
Short-term investments	14,454,171	13,331,743
Accounts and contributions receivable, net of allowances of \$258,480 and \$294,801 in 2015 and 2014, respectively	1,150,407	655,752
Deferred prepublication costs	568,295	634,436
Completed books	1,291,914	1,194,235
Prepaid expenses and deposits	1,880,319	1,507,034
Land, buildings and equipment, net	4,379,852	4,449,507
Long-term investments	<u>127,034,621</u>	<u>126,818,565</u>
<b>Total assets</b>	<b>\$ <u>152,487,903</u></b>	<b>\$ <u>151,214,928</u></b>
<b>Liabilities and Net Assets</b>		
Liabilities:		
Accounts payable and accrued expenses	\$ 3,589,866	\$ 3,873,144
Accrued study leave pay	698,508	722,406
Deferred revenue	12,613,091	11,451,092
Postretirement benefit obligation	<u>7,321,355</u>	<u>7,408,478</u>
<b>Total liabilities</b>	<b><u>24,222,820</u></b>	<b><u>23,455,120</u></b>
Net assets:		
Unrestricted:		
Undesignated	120,955	-
Designated	<u>111,782,413</u>	<u>111,171,200</u>
	111,903,368	111,171,200
Temporarily restricted	10,665,546	11,050,480
Permanently restricted	<u>5,696,169</u>	<u>5,538,128</u>
<b>Total net assets</b>	<b><u>128,265,083</u></b>	<b><u>127,759,808</u></b>
<b>Total liabilities and net assets</b>	<b>\$ <u>152,487,903</u></b>	<b>\$ <u>151,214,928</u></b>

**AMERICAN MATHEMATICAL SOCIETY**

*Statements of Activities*

	<i>Years Ended December 31,</i>	
	<b>2015</b>	<b>2014</b>
Changes in unrestricted net assets:		
Operating revenue, including net assets released from restrictions:		
Mathematical reviews	\$ 11,521,492	\$ 11,344,158
Journals	5,206,573	5,306,814
Books	3,494,449	3,687,814
Dues, services, and outreach	5,427,103	3,893,767
Investment returns appropriated for spending	2,074,382	1,799,700
Other publications-related revenue	605,080	631,772
Grants, prizes and awards	1,753,884	1,592,929
Meetings	1,321,735	1,189,114
Short-term investment income	64	381,349
Other	68,216	77,375
	<hr/>	<hr/>
<b>Total operating revenue</b>	<b>31,472,978</b>	<b>29,904,792</b>
Operating expenses:		
Mathematical reviews	7,696,350	7,596,576
Journals	1,515,997	1,501,487
Books	3,442,729	3,236,476
Publications indirect	1,216,181	1,418,636
Customer services, warehousing and distribution	1,625,478	1,751,542
Other publications-related expense	141,647	157,416
Membership, services and outreach	4,533,481	4,054,224
Grants, prizes and awards	2,138,628	1,871,237
Meetings	1,268,016	1,154,390
Governance	569,277	506,583
Member and professional services indirect	891,823	775,200
General and administrative	3,915,508	3,989,842
Other	100,011	118,363
	<hr/>	<hr/>
<b>Total operating expenses</b>	<b>29,055,126</b>	<b>28,131,972</b>
<b>Excess of operating revenue over operating expenses</b>	<b>2,417,852</b>	<b>1,772,820</b>
Nonoperating revenues and expenses:		
Investment returns less investment returns available for spending	(1,872,939)	8,348,819
Use of board designated funds from Endowment Income		
Stabilization Fund	(6,680)	(6,335)
Use of board designated funds from Retrodigitization Fund	-	(159,130)
Depreciation of in-house software development labor	(53,810)	(66,701)
Postretirement benefit-related changes other than net periodic cost	247,745	(1,173,541)
	<hr/>	<hr/>
Change in unrestricted net assets	<b>732,168</b>	<b>8,715,932</b>

**AMERICAN MATHEMATICAL SOCIETY**

*Statements of Activities (Continued)*

	<i>Years Ended December 31,</i>	
	<i>2015</i>	<i>2014</i>
Changes in temporarily restricted net assets:		
Contributions	\$ 332,307	\$ 176,795
Investment returns	13,503	1,459,507
Net assets released from restrictions	<u>(730,744)</u>	<u>(554,467)</u>
Change in temporarily restricted net assets	<u>(384,934)</u>	<u>1,081,835</u>
Change in permanently restricted net assets:		
Contributions	<u>158,041</u>	<u>272,137</u>
Change in permanently restricted net assets	<u>158,041</u>	<u>272,137</u>
<b>Change in net assets</b>	<b>505,275</b>	<b>10,069,904</b>
Net assets, beginning of year	<u>127,759,808</u>	<u>117,689,904</u>
<b>Net assets, end of year</b>	<b>\$ <u>128,265,083</u></b>	<b>\$ <u>127,759,808</u></b>

**AMERICAN MATHEMATICAL SOCIETY**

*Statements of Cash Flows*

	<i>Years Ended December 31,</i>	
	<i>2015</i>	<i>2014</i>
<b>Cash flows from operating activities:</b>		
Change in net assets	\$ 505,275	\$ 10,069,904
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation	674,977	954,799
Provision for (recovery from) losses on accounts receivable	(36,321)	31,577
Net realized and unrealized losses (gains) on long-term investments	2,674,364	(8,785,695)
Net realized gains on short-term investments	(1,046)	(407,479)
Contributions restricted for permanent investment	(158,041)	(272,137)
Contributions in-kind	(925,442)	-
Loss on disposal of equipment	3,300	15,458
Changes in assets and liabilities:		
Accounts receivable	(458,334)	(9,031)
Deferred prepublication costs	66,141	(79,142)
Completed books	(97,679)	88,673
Prepaid expenses and deposits	(373,285)	(293,833)
Accounts payable and accrued expenses	(307,176)	(95,954)
Deferred revenue	1,161,999	(220,639)
Postretirement benefit obligation	(87,123)	1,300,148
	<u>2,641,609</u>	<u>2,296,649</u>
<b>Net cash provided by operating activities</b>		
<b>Cash flows from investing activities:</b>		
Purchases and sales of short-term investments, net	(195,940)	(2,491,907)
Purchases and redemptions of certificates of deposit, net	891,460	(649,931)
Purchases of property and equipment, net	(608,622)	(292,486)
Sales of long-term investments	-	18,084,786
Purchases of long-term investments	(2,890,420)	(20,921,439)
	<u>(2,803,522)</u>	<u>(6,270,977)</u>
<b>Net cash used in investing activities</b>		
<b>Cash flows from financing activities:</b>		
Contributions restricted for permanent investment	158,041	272,137
	<u>158,041</u>	<u>272,137</u>
<b>Net cash provided by financing activities</b>		
<b>Net decrease in cash</b>	<b>(3,872)</b>	<b>(3,702,191)</b>
Cash at beginning of year	1,022,196	4,724,387
	<u>1,022,196</u>	<u>4,724,387</u>
<b>Cash at end of year</b>	<b>\$ 1,018,324</b>	<b>\$ 1,022,196</b>

*Notes to Financial Statements**Note 1 - Description of Organization and Summary of Significant Accounting Policies**Description of Organization*

The American Mathematical Society (the "Society") was created in 1888 to further mathematical research and scholarship. It is an international membership organization, currently approximately 28,000 members. The Society fulfills its mission with publications and professional programs to further the interests of mathematical research, scholarship and education.

The Society is incorporated under the laws of the District of Columbia and follows the provisions of the Uniform Prudent Management of Institutional Funds Act (the "Act") as enacted.

*Basis of Financial Statement Presentation*

The financial statements of the Society have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America ("GAAP").

The Society presents information regarding its financial position and activities according to three classes of net assets described as follows:

*Unrestricted* - All resources over which the governing board has discretionary control. The governing Board of the Society may elect to designate such resources for specific purposes. This designation may be removed at the Board's discretion.

*Temporarily restricted* - Resources accumulated through donations or grants for specific operating or capital purposes. Such resources will become unrestricted when the requirements of the donor or grantee have been satisfied through expenditure for the specified purpose or program or through the passage of time.

*Permanently restricted* - Endowment resources accumulated through donations or grants that are subject to the restriction in perpetuity that the principal be invested. These net assets include the original value of the gift, plus any subsequent additions. Unexpended appreciation on permanently restricted net assets is included in temporarily restricted net assets until appropriated by the Board in accordance with the Act for use unless otherwise instructed by the donor.

*Estimates*

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities, as of the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Significant estimates include allowances on accounts receivable, releases of donor restrictions, recoverability of deferred publication and completed books costs, useful lives of depreciable assets, deferred revenue, postretirement benefit obligations and accrued paid personal leave.

## AMERICAN MATHEMATICAL SOCIETY

### *Notes to Financial Statements*

#### *Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)*

##### *Operations*

The Society defines operating income as the net increase in unrestricted net assets derived from the activities related to the accomplishment of its mission, such as publications, programs, meetings and conferences, and member services. Investments appropriated for spending by the Board of Trustees are also presented as operating revenue. Investment returns less amounts appropriated for spending and other non-operational and one time charges that arise are presented as a non-operating item.

##### *Contributions, Gifts and Pledges Receivable*

Contributions are recorded as revenue when received or verifiably promised at estimated fair value. Such amounts are recorded as unrestricted, temporarily restricted, or permanently restricted support depending on the existence and nature of any donor restrictions. Contributions are considered to be available for unrestricted use unless specifically restricted by the donor or grantor. The fair value of promises to give are considered a non-recurring fair value measure. Restricted amounts are reclassified to unrestricted net assets upon satisfaction of the donor restriction. Restrictions related to the acquisition of long-lived assets are considered satisfied at the time the asset is acquired. Accounts receivable includes \$90,000 of pledges receivable at December 31, 2015. Of this amount \$50,000 of the balance is due with-in one year, with the remaining \$40,000 due over the next five years. There were no pledges receivable at December 31, 2014.

The Society receives contributed services from its members, principally as volunteer leaders in the governance structure of the Society and as volunteer members of editorial committees for the Society's various publications. The latter category of contributed services qualifies for recognition as income and expense under GAAP, as the members of the editorial committees must possess specialized skills. However, the Society has no practical way of measuring the fair value of the services received from its volunteer editorial committee members, and accordingly, no such estimate is included as revenue or expense in the accompanying financial statements.

##### *Cash*

Cash is comprised of bank accounts and petty cash. The Society maintains its cash in bank deposit accounts which, at times, may exceed federally insured limits. The Society monitors its exposure associated with cash in bank deposits and has not experienced any losses in such accounts.

##### *Certificates of Deposit*

Certificates of deposit are carried at cost plus accrued interest and are subject to similar risks as noted in cash.

##### *Accounts Receivable*

Accounts receivable are stated net of allowances for returns and doubtful accounts in the balance sheets. The allowance for doubtful accounts has been established based on a review of the aged accounts. The factors influencing management's judgment of the adequacy of the allowance for doubtful accounts include historical losses and the status of current collection efforts. The allowance for returns has been established based on historical returns. Trade accounts receivable are written off after it is evident that the collection efforts have been exhausted.

*Notes to Financial Statements**Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)**Short-Term and Long-Term Investments*

Both short-term and long-term investments are carried at fair value. Fair value is determined as per the fair value policies described later in this section. Accordingly, revenue is recorded as fair market value changes in the period in which such fair value changes occur.

Interest, dividends, and net gains or losses on all donor-restricted endowment fund investments are recorded in temporarily restricted net assets net of amounts appropriated for spending. Such amounts are reclassified from temporarily restricted net assets as used for intended purposes.

The Board of Trustees also appropriates from its other funds to support the Society's mission-driven activities. Returns from the board-designated funds, the Operating Support Fund and the Young Scholars Fund, support the operations of the Society under a spending policy.

The investments of the Society are pooled and unitized for accounting purposes. Each fund subscribes to, or disposes of, units on the basis of the fair value per unit at the end of the calendar quarter within which the transactions take place. Investment income, including interest, dividends and realized and unrealized gains and losses, is allocated quarterly based on the number of units held by each fund at the beginning of the quarter.

*Fair Value Measurements*

The Society reports investments at fair value on a recurring basis. The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level I measurements) and the lowest priority to unobservable inputs (Level III measurements). The three levels of the fair value hierarchy are described below:

Level I – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Society has the ability to access.

Level II – Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in inactive markets; inputs other than quoted market prices that are observable for the asset or liability; and inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the Level II input must be observable for substantially the full term of the asset or liability.

Level III – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

## AMERICAN MATHEMATICAL SOCIETY

### *Notes to Financial Statements*

#### *Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)*

##### *Fair Value Measurements (Continued)*

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Market price is affected by a number of factors, including the type of asset or liability and the characteristics specific to the asset or liability. Assets or liabilities with readily available active quoted prices or for which fair value can be measured from actively quoted prices generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. It is reasonably possible that changes in values of these assets or liabilities will occur in the near term and that such changes could materially affect amounts reported in these financial statements. For more information on the fair value of the Society's financial assets, see Note 3 - Investments.

##### *Deferred Prepublication Costs*

Prepublication costs, consisting of translation, editorial, composition and proofreading costs, are deferred until publication. Upon publication, prepublication costs related to books are transferred into completed books inventory and prepublication costs related to journals are expensed, effectively matching subscription revenue for such journals.

##### *Completed Books*

Publication costs of books, consisting of paper, printing, and prepublication costs, are accumulated and recorded as completed books. Costs are amortized and charged to expense generally over five years. The majority of costs are allocated to the first year after completion based on management's assessment of historical sales patterns. This method approximates completed books being recorded at the lower of cost or market.

##### *Land, Buildings, Equipment and Accumulated Depreciation*

Land, buildings, and equipment are recorded at cost less accumulated depreciation. Depreciation is provided over the estimated useful lives of the assets using straight-line or accelerated methods.

<i>Asset Classifications</i>	<i>Estimated Useful Life</i>
Land improvements	10 - 20 years
Buildings and improvements	10 - 35 years
Furniture, equipment and software	3 - 10 years
Transportation equipment	3 - 15 years



*Notes to Financial Statements**Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)**Land, Buildings, Equipment and Accumulated Depreciation (Continued)*

The Society accounts for costs incurred for software developed or obtained for internal use including capitalizing costs incurred during the application development stage with amortization on a straight-line basis beginning when the computer software is ready for its intended use.

During 2014, the Society incurred \$159,000 in costs for digitization of its backfile of books. No costs were incurred for the backfile during 2015. The “backfile” consists of books that have been published prior to the last two years. This digitization of the books that existed only in printed form prior to this project will continue through the year 2017. Although the digitization of the backfile does have value to the Society, as electronic products derived from the digitization project may be sold in the future, the value is not estimable. Therefore, the costs for digitization are expensed as incurred.

*Revenue Recognition and Deferred Revenue*

Advanced collections for mathematical reviews, membership dues and other subscriptions are deferred and recorded as income over the related membership period or subscription period. Subscriptions include traditional printed and electronic media. Meetings income is reported as revenue on the date of the event. Advance sales are reported as deferred revenue.

Books and journals revenues are recorded upon shipment, less an estimate for returns.

Grant income from government funded arrangements is recorded as revenue as costs are incurred under the related arrangement. Accounting for grant income from other sources is evaluated for proper recognition with certain grants being recorded as revenue as related costs are incurred while others are recorded as revenue upon receipt.

The Society receives various grants that are subject to audit by the grantors or their representatives. Such audits could result in requests for reimbursement for expenditures disallowed under the terms of the grant; however, management believes that these disallowances, if any, would be immaterial.

Net assets released from restrictions are classified in the respective revenue accounts on the statements of activities.

Conditional contributions received from donors are deferred and recorded as contributions revenue once the donor’s conditions are substantially met. There was \$112,000 in conditional contributions included in deferred revenue at December 31, 2015. There was no conditional contributions held at December 31, 2014.

## AMERICAN MATHEMATICAL SOCIETY

### *Notes to Financial Statements*

#### *Note 1 - Description of Organization and Summary of Significant Accounting Policies (Continued)*

##### *Service Fees*

The Society provides various supporting services to other unaffiliated organizations for a service fee. Certain transactions flow through the Society's financial accounts; however, revenues and expenses of such organizations are not included in the financial statements of the Society.

##### *Income Tax Status*

The Society is recognized by the Internal Revenue Service as an organization described under Section 501(c)(3) of the Internal Revenue Code and is generally exempt from Federal and state income taxes on related income.

##### *Uncertain Tax Positions*

The Society accounts for the effect of any uncertain tax positions based on a "more likely than not" threshold to the recognition of the tax positions being sustained based on the technical merits of the position under scrutiny by the applicable taxing authority. If a tax position or positions are deemed to result in uncertainties of those positions, the unrecognized tax benefit is estimated based on a "cumulative probability assessment" that aggregates the estimated tax liability for all uncertain tax positions. The Society has identified its tax status as a tax-exempt entity and its determinations to classify income as related and unrelated as its only significant tax positions; however, the Society has determined that such tax positions do not result in an uncertainty requiring recognition. The Society is not currently under examination by any taxing jurisdiction. The Society's Federal and state tax returns are generally open for examination for three years following the date filed.

##### *Functional Expense Allocation*

Costs have been allocated to functional classifications based on percentage of effort, usage, square footage and other criteria.

Fundraising costs for the years ended December 31, 2015 and 2014 were \$343,990 and \$320,930, respectively, and are included within membership, services and outreach in the statements of activities.

##### *Reclassifications*

Certain amounts in the financial statements for 2014 have been reclassified to conform with the 2015 presentation.

*Notes to Financial Statements*

*Note 2 - Land, Buildings, and Equipment, Net*

The following comprise the Society's investments in land, buildings, and equipment as of December 31:

	<i>2015</i>	<i>2014</i>
Land and improvements	\$ 422,507	\$ 422,507
Buildings and improvements	7,847,598	7,690,760
Furniture, equipment and software	5,804,509	6,588,420
Transportation equipment	65,625	65,625
Software in progress	244,292	-
	<u>14,384,531</u>	<u>14,767,312</u>
Less accumulated depreciation	<u>(10,004,679)</u>	<u>(10,317,805)</u>
	<u><b>\$ 4,379,852</b></u>	<u><b>\$ 4,449,507</b></u>

*Note 3 - Investments*

The following table summarizes the Society's investments as of December 31:

	<i>2015</i>	<i>2014</i>
Fixed income mutual funds	\$ 6,204,505	\$ 6,191,591
Convertible securities mutual fund	2,222,529	2,254,550
Domestic corporate stock	32,266	20,269
Money market mutual funds	<u>5,994,871</u>	<u>4,865,333</u>
Total short-term investments	<u>14,454,171</u>	<u>13,331,743</u>
Fixed income mutual funds	25,371,753	25,104,761
Equity mutual funds:		
Broad U.S. market stock mutual fund	85,829,583	85,474,846
Domestic real estate investment trusts	5,065,281	4,947,069
Non U.S. developed and emerging markets stock mutual fund	<u>10,768,004</u>	<u>11,291,889</u>
Total long-term investments	<u>127,034,621</u>	<u>126,818,565</u>
<b>Total investments</b>	<u><b>\$ 141,488,792</b></u>	<u><b>\$ 140,150,308</b></u>

**AMERICAN MATHEMATICAL SOCIETY**

*Notes to Financial Statements*

**Note 3 - Investments (Continued)**

Short-term and long-term investments are classified as Level I in the fair value hierarchy because of the Society's ability to obtain quoted prices at the reporting date and redeem its interest on a daily basis.

The Society's long-term investments are segregated into four separate portfolios (including mutual funds), each with its own investment manager and investment objective. The overall investment strategy is determined by the Investment Committee of the Board of Trustees and is approved by the Board of Trustees annually. The primary investment objective of the long-term investment portfolio is an average real total return (net of investment fees and the effects of consumer inflation) of at least 4% over the long term. To achieve this result, the investment portfolio is allocated approximately 75% to equity investments and 25% to fixed income investments. The equity investments are further diversified into domestic, international, and real estate holdings. Additionally, the entire portfolio is diversified across economic sectors, geographic locations, industries, and size of investees.

The following schedule summarizes the long-term investment return and its classification in the accompanying statements of activities for the years ended December 31:

	<i>2015</i>	<i>2014</i>
Dividends and interest, net of management fees	\$ 2,889,310	\$ 2,822,331
Net realized and unrealized gains (losses)	<u>(2,674,364)</u>	<u>8,785,695</u>
Investment returns	<u>214,946</u>	<u>11,608,026</u>
Less investment returns classified as temporarily restricted	<u>(13,503)</u>	<u>(1,459,507)</u>
Less investment appropriated for spending:		
Spendable income from Operations Support Fund	(2,048,000)	(1,776,000)
Spendable income from Young Scholars Fund	<u>(26,382)</u>	<u>(23,700)</u>
Sub-total	<u>(2,074,382)</u>	<u>(1,799,700)</u>
<b>Investment returns less investment returns appropriated for spending</b>	<b>\$ <u>(1,872,939)</u></b>	<b>\$ <u>8,348,819</u></b>

Management fees are incurred directly by mutual funds which the Society has holdings; such returns reported by the funds are net of such costs, and accordingly, such fees are embedded within the investment returns.

Under certain unusual circumstances, mutual funds may alter redemption provisions of their investment vehicles which could impact the liquidity of funds. No such changes to redemption provisions have occurred in 2015 or 2014.

*Notes to Financial Statements*

**Note 4 - Accrued Study Leave Pay**

Certain employees of the Society receive vested rights to study leave pay based upon salary and years of service. The Society provides for this obligation over the related years of the employees' service. The provision for the study leave pay charged to expense totaled \$147,484 and \$165,375 in 2015 and 2014, respectively.

**Note 5 - Pension and Postretirement Benefits**

The Society has contributory retirement plans (the "Plans") covering substantially all full-time employees. The Plans are administered by, and related assets are maintained with, Teachers Insurance and Annuity Association and College Retirement Equities Fund. Under the Plans, the Society contributes 9.5% of eligible compensation (with higher amounts for employees earning in excess of the social security second bend point). The Society's retirement expenses for the Plans totaled approximately \$1,291,752 and \$1,316,405 in 2015 and 2014, respectively. In addition, the Society offers an employee only plan which allows for additional contributions upon election of said employee.

The Society sponsors a defined benefit postretirement medical plan that covers substantially all full-time employees. Under the plan provisions, employees who retire from the Society at age 62 or older with at least 12 years of service are eligible for benefits under the plan upon the attainment of age 65. Plan benefits consist of health insurance coverage under a Medicare Supplement Plan and reimbursement of Medicare Part B premiums. Employees who retire before age 62 may qualify for coverage under the plan according to a longer service requirement schedule established by the Society. Spouses of eligible retirees are not covered. The plan is noncontributory and is unfunded.

The plan limits the annual benefit per retiree to \$4,000 for reimbursement of actual premiums paid for Medicare Supplement insurance and any Medicare coverage premiums. The plan was frozen effective June 30, 2006 whereby employees hired after that date are not eligible to participate in the plan. There is no provision for this maximum benefit amount to increase over time.

Net postretirement benefit cost for the years ended December 31, 2015 and 2014 consisted of the following components:

	<i>2015</i>	<i>2014</i>
Service cost	\$ 147,917	\$ 123,856
Interest cost	266,262	287,931
Amortization of prior service cost, pre-2007 amendment	-	1,722
Amortization of prior service credit, post-2007 amendment	(246,258)	(247,980)
Amortization of net experience losses	<u>166,800</u>	<u>111,300</u>
<b>Net postretirement benefit cost</b>	<b>\$ <u>334,721</u></b>	<b>\$ <u>276,829</u></b>

The prior service cost (credit) and net loss (gain) expected to be recognized as components of net periodic postretirement benefit cost for the year ending December 31, 2016 are approximately \$(246,258) and \$176,200, respectively.

**AMERICAN MATHEMATICAL SOCIETY**

*Notes to Financial Statements*

**Note 5 - Pension and Postretirement Benefits (Continued)**

The following table reconciles the plan's funded status with the amounts presented in the Society's financial statements at December 31:

	<i>2015</i>	<i>2014</i>
Projected postretirement benefit obligation, beginning of the year (and funded status)	\$ 7,408,478	\$ 6,108,330
Service and interest cost for the year	414,179	411,787
Benefits paid	(173,527)	(212,000)
Actuarial (gain) loss recognized in the year incurred	<u>(327,775)</u>	<u>1,100,361</u>
<b>Projected postretirement benefit obligation, end of year</b>	<b>\$ <u>7,321,355</u></b>	<b>\$ <u>7,408,478</u></b>
<b>Net liability recognized in the balance sheet</b>	<b>\$ <u>7,321,355</u></b>	<b>\$ <u>7,408,478</u></b>

The following table presents additional information relating to the plan for the years ended December 31:

Discount rate	4.1% (2015)	3.8% (2014)
Healthcare cost trend rate assumed for next year	Not applicable	
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	Not applicable	
Year that the rate reaches the ultimate trend rate	Not applicable	

The expected future benefit payments under plan provisions for the next ten years are as follows:

Years ending December 31:

2016	\$ 173,527
2017	319,313
2018	333,370
2019	363,494
2020	372,531
2021-2025	2,209,080

*Notes to Financial Statements*

**Note 6 - Designated Unrestricted Net Assets**

The Board of Trustees of the Society has designated components of unrestricted net assets to support certain purposes. All such designated funds within unrestricted net assets are supported by the unrestricted portion of the long-term investment portfolio. The Economic Stabilization Fund is designated to provide support for the Society in future years should an unexpected need arise. The Operations Support Fund is designated to provide current operating support to the Society via use of a 4% spending rate applied to the average of the prior four-year ending values of the fund. The Journal Archive Fund is designated to accumulate funds to support changes that may be necessary for electronic files to be available for future use due to as yet unforeseen technological changes. The Young Scholars Fund was created by the Board of Trustees in 2000 to augment the funds in Epsilon Fund for Young Scholars, a true endowment fund that supports programs for high school mathematics students. The Backfile Digitization Fund is expected to be used in future years for the digitization of the Society's backfile collection of more than 3,000 published books. In addition, the Endowment Income Stabilization Fund was established to supplement the endowment spendable income when the income does not meet a fund's established goals.

The following comprises the balances in these designated funds within unrestricted net assets as of December 31:

	<i>2015</i>	<i>2014</i>
<b>Spending subject to spending policy:</b>		
Operations Support Fund	\$ 78,291,064	\$ 78,421,514
Young Scholars Fund	843,852	868,952
Kathleen Baxter Memorial Fund	263,859	263,625
<b>Spending subject to Board approval:</b>		
Economic Stabilization Fund	30,131,910	29,407,917
Backfile Digitization Fund	111,389	111,389
Endowment Income Stabilization Fund	482,844	490,634
Journal Archive Fund	<u>1,657,495</u>	<u>1,607,169</u>
<b>Total</b>	<b>\$ <u>111,782,413</u></b>	<b>\$ <u>111,171,200</u></b>

**AMERICAN MATHEMATICAL SOCIETY**

*Notes to Financial Statements*

**Note 7 - Temporarily Restricted Net Assets**

Temporarily restricted net assets consist of amounts restricted by donors for the following purposes as of December 31:

	<b>2015</b>	<b>2014</b>
Restricted purpose:		
Prizes and scholarships	\$ 1,160,524	\$ 1,156,023
Lectures and symposia	273,020	294,444
Epsilon awards	94,765	97,545
Graduate student travel program	47,544	41,370
Translation Projects	24,658	24,765
Mathematical reviews projects and subscriptions	42,213	4,992
Childcare Grants	2,565	-
Other miscellaneous	122,637	64,755
Unspent spendable income from unrestricted use true endowment funds	84,060	125,851
Accumulated gains on true endowment gifts	<u>8,813,560</u>	<u>9,240,735</u>
<b>Total</b>	<b>\$ <u>10,665,546</u></b>	<b>\$ <u>11,050,480</u></b>

**Net Assets Released from Restrictions**

Net assets are released from temporary donor restrictions by incurring expenses satisfying the restricted purposes or by occurrence of events specified by the donors. The corresponding operating revenue released is presented on the statements of activities in the respective category. Net asset releases were as follows for the years ended December 31:

	<b>2015</b>	<b>2014</b>
Prizes and scholarships	\$ 110,611	\$ 132,923
Lectures and symposia	24,701	5,926
Fellowships	89,799	-
Epsilon awards	83,618	66,300
Graduate student travel	93,826	93,128
National Mathematics Game	19,300	23,834
Mathematical reviews projects and subscriptions	19,100	8,700
Other miscellaneous	6,902	2,552
Releases from unrestricted use true endowment funds	<u>282,887</u>	<u>221,104</u>
<b>Total</b>	<b>\$ <u>730,744</u></b>	<b>\$ <u>554,467</u></b>



*Notes to Financial Statements*

**Note 8 - Permanently Restricted Net Assets**

The Society has two types of donor-restricted endowments: gifts with no donor designations as to the use of income derived there from and gifts whose donors have designated a specific purpose in the gift instrument.

These endowments consisted of the following at December 31:

	<b>2015</b>	<b>2014</b>
Endowment without donor designation on use of income	\$ 1,576,376	\$ 1,574,376
Endowment with donor designation on use of income:		
Prizes	1,115,573	1,078,274
Scholarships and fellowships	257,213	257,213
Symposia and lectures	303,579	285,212
China collaboration	366,757	366,757
Epsilon Fund for Young Scholars	<u>2,076,671</u>	<u>1,976,296</u>
	<b>\$ <u>5,696,169</u></b>	<b>\$ <u>5,538,128</u></b>

**Note 9 - Endowment**

The Society's endowment consists of approximately 30 individual funds established for a variety of purposes, including both donor-restricted endowment funds (true endowment) and funds designated by the Board of Trustees to function as endowments. Net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

**AMERICAN MATHEMATICAL SOCIETY**

*Notes to Financial Statements*

**Note 9 - Endowment (Continued)**

The following table summarizes the changes in endowment net assets for the year ended December 31, 2015:

	<i>Unrestricted</i>	<i>Temporarily Restricted</i>	<i>Permanently Restricted</i>	<i>Total</i>
Endowment net assets, January 1, 2015	\$ 111,171,200	\$ 9,240,735	\$ 5,538,128	\$ 125,950,063
Donor-restricted contributions	-	-	158,041	158,041
Investment income	201,443	12,381	-	213,824
Release of endowment net asset restrictions	(2,081,062)	(439,556)	-	(2,520,618)
Additions from operations	<u>2,490,832</u>	<u>-</u>	<u>-</u>	<u>2,490,832</u>
<b>Endowment net assets, December 31, 2015</b>	<b><u>\$ 111,782,413</u></b>	<b><u>\$ 8,813,560</u></b>	<b><u>\$ 5,696,169</u></b>	<b><u>\$ 126,292,142</u></b>

The following table summarizes the changes in endowment net assets for the year ended December 31, 2014:

	<i>Unrestricted</i>	<i>Temporarily Restricted</i>	<i>Permanently Restricted</i>	<i>Total</i>
Endowment net assets, January 1, 2014	\$ 101,007,256	\$ 8,266,776	\$ 5,265,991	\$ 114,540,023
Donor-restricted contributions	-	-	272,137	272,137
Investment income	10,148,519	1,365,259	-	11,513,778
Release of endowment net asset restrictions	(1,965,165)	(391,300)	-	(2,356,465)
Additions from operations	<u>1,980,590</u>	<u>-</u>	<u>-</u>	<u>1,980,590</u>
<b>Endowment net assets, December 31, 2014</b>	<b><u>\$ 111,171,200</u></b>	<b><u>\$ 9,240,735</u></b>	<b><u>\$ 5,538,128</u></b>	<b><u>\$ 125,950,063</u></b>

*Notes to Financial Statements**Note 9 - Endowment (Continued)**Interpretation of Relevant Law*

The portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Society in a manner consistent with the standards of prudence prescribed by the Act. In accordance with the Act, the Society considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

1. The duration and preservation of the fund
2. The purposes of the Society and the donor-restricted endowment fund
3. General economic conditions
4. The possible effect of inflation and deflation
5. The expected total return from income and the appreciation of investments
6. Other resources of the Society
7. The investment policies of the Society

*Funds with Deficiencies*

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor or the Act requires the Society to retain as a fund of perpetual duration. There were no deficiencies of this nature in 2015 or 2014.

*Return Objectives and Risk Parameters*

The Society has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets. Endowment assets include those assets of donor-restricted funds that the Society must hold in perpetuity or for a donor-specified period as well as board-designated funds. Under this policy, as approved by the Board of Trustees, the endowment assets are invested in a manner that is intended to produce an average annual real rate of return of approximately 4% over the long term. Actual returns in any given year may vary from this amount.

*Strategies Employed for Achieving Objectives*

To satisfy its long-term rate-of-return objectives, the Society relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The Society targets a diversified asset allocation that places emphasis on investments in equities (allocation in the portfolio between 65% to 85%, with foreign equities comprising no more than 25% of the equity total), fixed income securities (allocation in the portfolio between 15% to 25%) and alternatives (currently real estate investment trusts and emerging markets investments with an allocation in the portfolio of no more than 10%) to achieve its long-term return objectives within prudent risk constraints.

## AMERICAN MATHEMATICAL SOCIETY

### *Notes to Financial Statements*

#### ***Note 9 - Endowment (Continued)***

##### ***Spending Policy and How the Investment Objectives Relate to Spending Policy***

The Society has a policy of appropriating for distribution each year 4% of its true endowment funds' average fair value using an average determined prior to the beginning of the fiscal year of which the spending policy relates based on the prior four fiscal year end balances. The Board-Designated Operations Support and Young Scholars Fund's spending is calculated the same way. In establishing these policies, the Society considered the expected return on its endowment. Accordingly, the Society expects the current spending policy to allow its endowment to maintain its purchasing power by growing at a rate, on average over time, equal to planned payouts. Additional real growth will be provided through new gifts and any excess investment return.

#### ***Note 10 - Leases***

The Society leases certain facilities under short-term arrangements that are renewable annually based on notice.

#### ***Note 11 - Subsequent Events***

The Society has evaluated subsequent events through May 20, 2016, the date on which the financial statements were available to be issued. There were no subsequent events to be disclosed based on this evaluation.

## **Staff Policy on Conflicts of Interest**

A conflicts of interest policy for staff was first adopted by the Board of Trustees in January 1983. This policy was last reviewed and updated by the Board of Trustees in May 2016.

### **Introduction**

An institution's success depends not only on the competence of its management and staff, but also upon its reputation for honesty, integrity, candor and lack of bias in the conduct of its affairs. The AMS is proud that the American Mathematical Society has earned and maintained that kind of reputation. It seems appropriate, therefore, to provide some practical guidance in the form of a written "Code of Ethics" to assist members of the staff in making judgments and decisions which will be in the best interests of the Society.

The provisions of this Code apply to all personnel. It is the responsibility of each group or department manager to determine which provisions apply to each employee in his or her department, to communicate these policies, and to monitor adherence to them.

### **1. Confidential Information.**

Confidential information acquired through or as a result of employment shall be used solely for the Society's purposes and under no circumstances shall it be revealed to unauthorized persons. Confidential information which might reflect favorably or adversely upon the investment value or future market value of any business enterprise shall not be used in any manner for personal advantage.

### **2. Personal Gain.**

(a) It is the duty of all employees to avoid situations in which they might profit or even give the appearance of profiting personally from the Society's activities, including relationships with the Society's customers or suppliers. In order to avoid any outside affiliation that might be in conflict with their responsibilities, it is the policy of the Society to require all personnel to submit an annual statement of disclosure indicating any relevant outside affiliations and activities.

(b) No employee shall, directly or indirectly, accept or solicit anything of value as a gift, gratuity or favor under circumstances that might affect, or reasonably lead others to believe such action would affect, the employee's impartiality in behalf of the Society. Any employee who has reason to believe that any potential or existing supplier, customer or competitor of the Society is attempting to influence his or her judgment through the offering of gifts should report all relevant facts to the person in charge of his or her department.

The above is not intended to prohibit acceptance of social amenities and token gifts of purely nominal value, consistent with generally accepted business practices and good taste. Since the measurement and propriety of accepting such gifts or amenities is frequently difficult to determine, any doubt should be resolved either by declining to accept the gift or amenity, or in consultation with the employee's supervisor.

*last updated May 2016 (see May 2016 ECBT Minutes, item 3.6)*

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(c) No employee should use his or her position with the Society to obtain discounts for personal benefit.

(d) No employee should accept personal compensation, except to cover expenses, for Society-related speaking engagements.

(e) Employees should not accept offers which come to them because of their position with the Society to buy or sell securities or property on terms more favorable than those offered to the general public.

### **3. Political Activity.**

An AMS employee may not participate in political activity while on duty; or use the authority of his or her position, AMS funds, services, supplies equipment, information technology resources, vehicles, or other AMS property, to endorse, campaign for, secure support for or oppose any candidate, political party, partisan political group, referendum, or issue in an election. "Political activity" means actions directed toward the success or failure of a candidate for public office, political party, or partisan political group including, but not limited to, campaigning, political management, and soliciting financial contributions for political purposes. However, this policy is not intended to discourage employees from engaging in political activity as private citizens using their own resources. More information on the IRS restrictions on a tax-exempt organization's political activities can be found at the URL: <https://www.irs.gov/Charities-& Non-Profits/Charitable-Organizations/The-Restriction-of-Political-Campaign-Intervention-by-Section-501%28c%29%283%29-Tax-Exempt-Organizations>.

### **4. Sponsorships.**

Sponsorship of a charitable or civic organization activity or function by the Society should not be indicated by any employee without the prior approval of the Executive Director.

### **5. Report of Violations.**

Any employee having knowledge of a serious violation of this policy by another employee should immediately bring such information to the attention of the Executive Director.

### **6. Board Approval.**

This Code, together with any subsequent amendments thereto, shall be submitted to the Board of Trustees at appropriate intervals for its review to insure that it remains timely.