

Joint Policy Board for Mathematics Meeting

April 27, 2015
Washington, DC

Minutes

Members Present: Robert Bryant (President, AMS), Jim Crowley (Exec Dir, SIAM), Barbara Faires (Secretary, MAA), David Levermore (VP for Sci Pol, SIAM), Don McClure (Exec Dir, AMS), David Morganstein (President, ASA), Michael Pearson (Exec Dir, MAA), Stephen Pierson (Dir of Sci Pol, ASA), Carla Savage (Secretary, AMS), Francis Edward Su (President, MAA), Ron Wasserstein (Exec Dir, ASA).

Other Attendees: Anita Benjamin (AMS), Linda Braddy (MAA), Adam Huftalen (Reed Elsevier), David Manderscheid (MAA Sci Pol Chair), Miriam Quintal (SIAM), Sam Rankin (AMS), Ken Ribet (AMS Sci Pol Chair), Michael Vogelius (NSF/MPS-DMS), Henry Warchall (NSF/MPS-DMS).

The American Mathematical Society hosted this spring meeting of the JPBM. Robert Bryant, President of the AMS, began the meeting with introductions and then presented speakers.

Discussion on Open Access of Publications Based on Federally Funded Research

Adam Huftalen (ReedElsevier) presented on David Weinreich's (The Weinreich Group) behalf an overview of U.S. policies for public access to scholarly publications and data. He began with a brief review of the chronology of the public access policy in the United States (2008-2014). He discussed stakeholders' shared goals of expanded access and broadened use of all scholarly publications and associated data. He also talked about identifying objective, cost-effective ways to move forward on the issue.

Huftalen described the White House Office of Science & Technology Policy (OSTP) directive issued in February 2013 that seeks to increase access to the results of federally funded scientific research. He also discussed concerns that have arisen regarding the implementation of the directive including stakeholder compliance burdens, potential variability among responding agencies, implementation costs and the viability of an embargo-based solution for public access.

The public access plans of some of the U.S. agencies such as the Department of Energy (DOE), the National Science Foundation (NSF) and the Department of Defense (DOD) were also summarized. There are 15 agency plans so far – all have 12 month embargo as a preference, which was suggested by OSTP.

Huftalen talked specifically about using CHORUS (a suite of services and best practices that provides a sustainable solution for agencies and publishers to deliver public access to published articles reporting on funded research in the United States) and how it differs from PubMed (which comprises more than 25 million citations for biomedical literature from MEDLINE, life science journals, and online books). CHORUS is supported by dues paid from publishers, the amount varies depending on gross publishing revenues. He encouraged attendees to review the CHORUS website to learn more.

DMS Presentation

Michael Vogelius (NSF-MPS/DMS Director) spoke about the Division of Mathematical Sciences (DMS) portion of the FY2016 NSF budget. He explained that DMS funding has actually increased slightly in this year's budget over the FY2013 budget which was down significantly due to sequestration. The DMS budget for FY2015 is at \$232 million, which is down from the \$240s million from 2010-2012.

The DMS currently supports programs at eight U.S.-based research institutes, at which levels of support vary. These institutes comprise about 13-14% of the DMS program budget and do not simply support a single topic but rather develops its focus based on the changing mathematical landscape. Other divisions have 'centers' that are devoted to a particular topic and which are subject to a sunset clause, which the institutes are not. Vogelius discussed the process of reviewing the institutes, the standards used and the benefits of these institutes, which DMS is very committed to.

Two other areas that make up the DMS budget are the individual investigator awards, which make up 75% of the DMS budget; and workforce programs, which fund things such as Research Training Groups (RTG), the Mathematical Sciences Postdoctoral Research Fellowships (MSPRF) and Research Experiences for Undergraduates (REU).

Discussion on DMS Budget Growth

The group discussed ways in which the community might be able to help DMS realize real budget growth. Increasing the number of proposals was agreed as one important way, mentoring within departments might help accomplish this as well as holding workshops on how to write an effective proposal (which is already being done by some societies, although with rather limited attendance). The group also discussed whether educating the leadership at NSF about the value of mathematics would be worthwhile.

Reports from Washington Representatives

Sam Rankin (AMS), Miriam Quintal (SIAM) and Steve Pierson (ASA) all spoke with regard to HR 1806, the America COMPETES Act reauthorization bill, which was recently marked up. This bill is very controversial and there have been many letters opposing it or at least expressing concern about its requirement for specifying funding by directorate rather than letting the National Science Foundation decide where to distribute the funding among its directorates, as it has always done. This would make it very easy for Congress to target certain fields of science for much smaller investments.

The status of the FY2016 federal budget process was also discussed. The President's FY2016 budget request for NSF was \$7.724 billion .. the outcome of the request is not known at this time because the appropriations process is in its early stages and funding bills for the NSF have not been completed. However, it is likely we will not see much in the way of increases without sequestration relief.

The group asked what the community could do to impact the appropriations process and it was mentioned that mounting a grassroots effort could have some impact and that presenting anecdotal evidence of the importance of NSF research funding was a powerful way to frame the argument for increased funding.

It was mentioned that the Coalition for National Science Funding (CNSF) will hold its annual Exhibition on Capitol Hill on April 29, 2015 and that the AMS, ASA and MAA are among the 35 organizations and universities that will be presenting NSF funded research to Congressional representatives. The Exhibition usually attracts almost 300 attendees, including 8-10 Members of Congress.

Society Reports and Issues

Don McClure (AMS) spoke on public access and reported that the AMS is a member of CHORUS, which looks to be well run and managed. He also reported that the AMS is moving forward with the creation of a new department of Education and Diversity to be focused on graduate programs. The search for a director of this new office will begin after approval by the AMS Council and Board of Trustees in a few weeks with a start date of January 1, 2016.

David Morganstein (ASA) reported that ASA is continuing with a PR campaign that began last year aimed at high school students and teachers/counselors. He also spoke about ASA's efforts to improve visibility of the profession, particularly of their partnership with Sense about Science. He reported that ASA's meetings have grown significantly in size with many first-time attendees and mentioned a greater emphasis of work centered around mentoring this year.

Michael Pearson (MAA) reported on MathFest's centennial meeting to be held this summer in Washington, DC. He also mentioned that Mark Saul will be moving to the MAA full time in June as Director of Competitions. He noted that more than 350,000 students participate each year in the American Mathematics Competitions (AMC).

Jim Crowley (SIAM) reported that SIAM is moving toward joining CHORUS also. He also mentioned that Rachel Levy (Harvey Mudd College) has been appointed the new VP for Education and that internships will be a major effort for SIAM over the next few years.

Mathematics Awareness Month

SIAM reported that the Math Awareness Month poster for 2015 has been printed and mailed. The theme is "Math Drives Careers." Sam Rankin reported that the posters were distributed on Capitol Hill recently by the AMS Committee on Science Policy and that congressional staffers were very interested in the topic of jobs and careers.

ASA is planning for the 2016 poster and proposed the theme 'The Future of Prediction,' which would bring attention to the variety of ways in which mathematics is used to predict things such as weather, retail sales, sports performance, traffic, disease outbreak and online dating. Ron Wasserstein suggested using the website to create and track a prediction of some sort that would encourage people to continue to come back to the website.

Discussion on next year's poster was very positive and the group felt it was a good idea to have something new available on the website each day, a clue or short article related to prediction. Other ideas discussed for a possible prediction project related to the 2016 elections and the NCAA tournament.

ASA asked that suggestions for the name of the poster and of people that could serve on an advisory committee to work on it be sent to them in the next few weeks.

JPBM Communications Award

The AMS chairs for 2015 and is organizing the selection committee for the 2016 JPBM Communications Award. Each organization was asked to designate one person to serve on the committee – Robert Bryant will serve for AMS, Francis Su for MAA, Jim Crowley for SIAM and ASA will advise later of its volunteer.

Simon Singh, a previous selection, expressed an interest in giving a public lecture at the Joint Mathematics Meetings, but Carla Savage did not think this was going to be possible in 2016. She will look into something else and advise the group. It was agreed that one society would serve as 'host' to the recipient and invite them to JMM activities. Also, it was suggested by Carla Savage that the selection process be moved up on the calendar so that there would be more time to get the recipient to the JMM. She suggested choosing the selection committee for 2017 at the October 2015 JPBM meeting.

Other Business

Other subjects discussed included coordinating the STEM education activities of the different societies and the Common Vision 2025 project.

Date of Next Meeting

The spring 2016 JPBM meeting will be held on Monday, April 25, 2016 in Washington, DC.

Submitted by Anita Benjamin
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