MAA Seaway Section Governor's Report Board of Governors Meeting at JMM in Boston January 3, 2012

# 1) President Report (Paul Zorn)

Thanks to Barbara Faires, Secretary of the MAA, for her excellent work on behalf of the Executive Committee and the entire MAA. This is Michael Pearson's first meeting as Executive Director of MAA. A public tribute to retired MAA Treasurer John Kenelly was passed by acclamation.

This is the 97<sup>th</sup> annual Joint Math Meetings. The 100<sup>th</sup> anniversary is in 2015. Planning has begun.

Did you know that the MAA has administered the Putnam exam since 1937? (It started out as an English competition between Harvard and Yale.) December 2011 was the 97<sup>th</sup> Putnam Exam. The Putnam family lives in Boston and has supported the running of the exam for 72 years.

The NSF may change the name of the NSF Division of Mathematical Sciences to NSF Division of Mathematical and Statistical Sciences. There has been much discussion on this issue. 90% of the 80 electronic responses are against the change.

Please visit the Art Exhibit near the Exhibit Hall. This occurs at each JMM. Let Barbara Faires know if you are interested in judging at the Art Exhibit.

### 2) Associate Secretary Report (Gerard Venema)

We have record attendance above 6100 at this JMM.

Brian Lane, Assistant Director of Meetings the last seven years, is leaving the MAA and that position is currently vacant. Meeting attendance has increased 50% during his time with the MAA.

30% of all MAA members attend either a national meeting or a section meeting each year.

### 3) Budget Comments (Rick Cleary, Associate Treasurer)

Thanks to MAA Staff for attending to the operating budget every day. Estimate of \$144000 deficit in 2011 operating budget is accurate. The MAA made unexpected arrangements for a web consultant and changed to TIAA-CREF investment management, still staying within the projected deficit.

Bentley University MBA students will intern at the MAA this spring and complete a business study of the MAA for "a very nice price".

#### 2012 dues increases:

- Regular membership increase \$5
- Student dues increase \$2
- Motion to keep student dues the same was defeated
- Dues have been the same for several years
- First time different paper and e-journal membership prices

### 4) Finance Report (Jim Daniel, Treasurer)

The MAA has hired TIAA-CREF to handle its investments. Previously they used Fidelity and Vanguard, where Tina Straley and Sharon Tryon did the actual buying and selling based on the recommendations of the Investment Committee. Now TIAA-CREF will do this based on the MAA Investment Committee Policy.

A compensation policy for MAA Officers is being discussed. Negotations for cost of release time for officers must occur with the individual college or university each time a person is elected. This is difficult to budget for, since each school is different.

### 5) First Vice President Report (Francis Su)

A report was presented from the Association for Women in Science (AWIS) and the MAA on underrepresentation of women in publication and awards from most societies and journals in STEM fields.

Data from 1991 - 2009 on membership versus publication and award percentages was presented.

Recent PhDs earned by women: 28%

MAA membership (guessing based on name only): women 22%, men 68%, can't tell 10%

Women authored articles in MAA journals: 11%

Women named lecturers: 20% Service awards to women: 25% Teaching awards to women: 32%

Data is needed on submissions of articles and nominations of prizes.

Statement on Implicit Bias given to all selection committees and journal editors. Share this document. Even the research committee on this project experienced implicit gender bias when taking the implicit association test at <a href="https://www.implicit.harvard.edu">www.implicit.harvard.edu</a> during their work. Try it yourself <a href="https://www.awis.org/awards/">www.awis.org/awards/</a>

Task Force recommends double masked (double blinded) review of articles and award nominations. The CMJ already does use this process.

Some MAA journal editors are against this recommendation, and believe they are unbiased. In expository writing, the author may be hindered by not being able to identify himself or herself freely. Need time to discuss this recommendation. The motion was tabled, but will come up again at MathFest 2012. New Seaway Governor, take note!

### 6) Past President Report (David Bressoud)

a) The Second Century Campaign: The MAA will need to continue to fund Project NExT, the American Mathematical Competitions, and keep up the MAA buildings. An outline of the campaign will be brought to Board of Governors at MathFest 2012. The quiet phase (donations from large donors) begins this year.

b) Joint Statement about high school and college calculus courses from the MAA/NCTM Joint Committee on Mutual Concerns

There was a previous 1986 statement to this same effect, but the data from David's NSF Calculus Study indicates that a restatement is needed.

2012 Draft Position Statement developed by David Bressoud (MAA), Michael Boardman (AP Exams), Gail Burrill (past NCTM President) and others.

The MAA/NCTM Joint Committee on Mutual Concerns is particularly interested in the Governors' reactions to and thoughts on the three main recommendations in the MAA/NCTM Joint Position Statement:

- 1. Students who enroll in a calculus course in secondary school should have demonstrated mastery of algebra, geometry, trigonometry and coordinate geometry.
- 2. The calculus course offered in secondary school should be treated as a college-level course.
- 3. The college curriculum should acknowledge the ubiquity of calculus in secondary school and offer entering students courses that are fresh and engaging.

Expect an electronic vote of the Board of Governors on this statement in the spring, before MathFest

Some background: The MAA has an NSF grant to study calculus. Survey data are being studied now.

620,000 students complete a calculus course in high school. This equals 20% of all high school students in the US. The number of students taking Calculus I *in the fall semester* in all US 2 and 4 year colleges/universities is half that, near 325,000. Evidence shows that students are pushed into calculus and don't belong there. One out of six students who completed a calculus course in high school then took remedial math as their first course in college.

61% of all students taking Calculus I in college have completed a calculus course in high school.

2% of calculus I students in college (5000 - 6000 students) took AP Calculus AB as juniors, AP Calculus BC as seniors, then take Calculus I again in college. This makes no sense. The traditional Calculus I course in college needs to be adapted. We need alternatives in both college and high school. Overwhelmingly the high school calculus experience is Advanced Placement (AP). There are much smaller numbers of International Baccalaureate and dual enrollment calculus courses in high school.

MAA and NCTM need to work together on the transition from high school to college.

Anecdotal based discussion among the board members:

Dan Teague (North Carolina School for Mathematics and Science) questions David's background information that students do not consciously take calculus on purpose, they do it because their friends are taking it. He believes that students are being told they should take calculus (rather than statistics) to improve their college admissions. Is this true? (No data exists to study this.)

Physics programs require algebra and trigonometry. (Students are not getting it.)

Macalester College starts all math and science majors in a Discrete Math course with proofs, then they determine where to start in college calculus. David also suggests introduction to Linear Algebra in first year.

Note: 44 states have approved Common Core Standards for the high school curriculum. Completing the current Common Core Standards will lead a student to be ready to take College Algebra. Common Core Standards are being developed that will lead students to be ready to take Precalculus and then Calculus.

### 7) Membership (Bob Anastasio):

Currently 1100 graduate and 400 undergraduate student members. Actively promoting high school teacher membership, now have over 750.

Membership Committee (Ockle Johnson) is studying the impact of electronic Library access to full journal articles.

# 8) Strategic Planning Working Group on SIGMAAs, Final Report (Doug Ensley).

SIGMAAs reach new potential MAA members.

Committee on SIGMAAs made seven recommendations:

- a) SIGMAA Mission Statement: SIGMAAs establish and support communities of colleagues who share a common interest through networking, professional development, ...
- b) SIGMAA Financial Statement: A budget for each SIGMAA will be established based on membership. Can not be rolled over annually. SIGMAA dollars will only be used for SIGMAA activities.

SIGMAA dues given for one SIGMAA are available to all SIGMAAs. (Motion against this failed.)

- c) Communication: Committee on SIGMAAs will regularly review relevant MAA Office Procedures (communication issues, staff changes).
- d) Committee on SIGMAAs will review each SIGMAA every four years. Annual report, use of funds, benefit to members, benefit to mathematical community, procedures to develop sustainable leadership.
- e) Create and support e-communities on MAA Online (both SIGMAAs and Sections). Consider e-only SIGMAA communities (no dues, no officers).
- f) Define SIGMAA membership separately from MAA membership. (SIGMAA members are members in many organizations outside the MAA. Excellent outreach opportunity.)
- g) SIGMAAs should report through the MAA structure rather than directly to the Executive Committee.

### 9) Michael Pearson (Executive Director Report)

The NSF reviewed the MAA, their questions were answered, NSF Mathematics Program Director Lee Zia wrote a strong letter on behalf of the MAA, relationship of MAA with NSF accountants is fully restored.

Open positions at MAA: Associate Executive Director, Chief of Staff, Associate Director for Meetings. Jack Haynes, consultant for the MAA(physics, teachers, AIP, NSF Program Director) will assist in reviewing the business study done by the Bentley University students in Spring 2012, and help determine which positions are most needed for the MAA to function effectively and efficiently.

### 10) Sharon Tryon (MAA Chief Financial Officer)

\$164,000 currently given to the Greater MAA Fund. Average gift was \$200.

Last year \$110,000. Budgeted \$70,000. Thank you for your support.

### 11) Communications and Publications (Ivars Peterson)

- a) Distinguished Lectures Fund: Grant was approved by NSA very quickly. May increase webcasting.
- b) American Mathematical Monthly now has an orange cover and a Facebook page. Orange is the new editor Scott Chapman's college color NC State. This is tradition for the Monthly/
- c) Beginning in January 2012, table of contents alert will include a single pdf of the whole issue, which is searchable.
- d) MAA Books now has a blog. Authors will post. Excerpts, supplementary material available.

## 12) Council on Prizes and Awards (Jerry Porter)

Change to Haimo Award criteria. New criteria allow Haimo Award to go to previous (not current) Section Teaching Award Winners. This gives Sections more time to submit a Haimo application.

Respectfully submitted to Seaway Section Executive Committee, Cheri Boyd