

## Section Representative Report JMM 2018

As we ease our way into our new role as section representatives, our meeting structures have changed. We heard from Michael Pearson, Executive Director of the MAA, then the **seven** Council Chairs of the MAA: Council on Meetings and Professional Development, Council on Members and Communities . Council on Outreach Programs, and Council On Prizes And Awards, The Council on Programs and Students in the Mathematical Science, Council on Publications and Communications, and Council on the Profession.

We also worked on revising the Core Values of the MAA.

**From Michael Pearson** – Year 1 under new bylaws. The new structure will allow MAA to be more responsive and nimble as we navigate a complex and rapidly-changing environment. In May, we executed a partnership agreement with Taylor & Francis (T&F) that promises to sustain revenue and control costs for our journals program. While MAA will continue to have full editorial control, the marketing, sales, production, and distribution will be managed by T&F. The MAA American Mathematics Competitions program reaches more than 300,000 students every year. While one aspect of the program is the identification and cultivation of mathematical talent, we want to use the program to improve the quality of problem-solving activities in secondary mathematics classes. Visit the [Curriculum Inspirations pages](#) on the MAA website for more ideas. The MAA has successfully bid to host the IMO in the U.S. in 2021. The MAA has set a goal to serve as many well-qualified Project NExT applicants as we can by 2019. The work of the marketing and communications team showed positive results in 2017, with attendance at MAA MathFest 2017 up roughly 20% over recent years. The launch of the new [Career Resource Center](#) also serves as a preview of how we aim to modernize MAA's presence on the web. Keep an eye out for stories on the Careers page from the NSF-funded MAA Pre-industrial Careers in Mathematics program (PIC Math).

### Council Chair Reports

**The Council on Meetings and Professional Development (Jim Buchanan, chair)** includes the Committee on Professional Development. This committee looks for what may be missing from the meeting program. When gaps are discovered, the committee works to fill them in keeping with its charge, which is to

- look for gaps in the professional development opportunities currently offered by the MAA and make suggestions to the Council on Meetings and Professional Development to address these deficiencies; and

identify trends and focus areas that may be of wide interest to members and seek ways of providing professional development opportunities within those areas.

**The Council on Members and Communities (Jennifer Galovich, Chair)** consists of the following Committees:

Business, Industry and Government (BIG)

Membership

Sections

SIGMAAs

Mission -- the council understands that its charge is to identify and support initiatives that strengthen the MAA as a mathematical community (Membership) as well as to forge coherent connections among the various sub-communities identified either geographically (Sections) or by special interest (BIG, SIGMAAs)

As a council each committee reports on its own work and challenges, seeking feedback from the other chairs and ideas for collaboration. We have also discussed a possible reorganization of our council to include other communities. This recommendation was forwarded to the CCC and is currently under discussion.

**The Council on Outreach Programs (Elgin Johnston, Chair)** sponsored a talk by Janes Tanton at each of the JMM 2017 (Weird ways to Multiply) and MathFest 2017 (Exploding Dots.) The Council is also sponsoring a talk by James Tanton at this meeting (How to Fold a Tie.)

In 2017 we had three important personnel changes in the American Mathematics Competitions. Paul Zeitz of San Francisco University became Chair of the Committee on American Mathematics Competitions, and Bela Bajnok of Gettysburg College has been appointed AMC Director and will be overseeing the editorial aspects of the AMC. Travia Gervais of the MAA Washington Office will act as Competitions Assistant.

The College Board-MAA Committee on Mutual Concerns met on Tuesday, January 3, 2017. Bill Trapp from College Board reported on the 2016 SAT Suite of Assessments Results for the class of 2015-2016. Gail Burrill presented a report of the undergraduate faculty from PCMI on making data science a core part of the curriculum at college. Stephen Davis did an update on the implementation year for the new AP Calculus curriculum. And David Bressoud presented an update on the NSF-sponsored project *The Role of Calculus in the Transition from High School to College Mathematics*. The committee is scheduled to meet again on Tuesday, January 9, 2018.

**The Council on Prizes and Awards Council (COPA) (T. Christine Stevens, chair)** comprises nineteen committees, each charged with choosing the winner of a particular prize. The committees benefit from the talents of a large number of MAA members, who generously give their time to reading and evaluating papers, books, and nominations. Since MAA rules generally limit members of prize and award to committees to a single term, openings occur frequently. Because most of the prize and award committees conduct their business without face-to-face meetings, they can be a good assignment for an MAA member who wants to be involved but cannot commit to a lot of travel.

**You can help her by encouraging your friends and colleagues to nominate a diverse set people for MAA prizes and awards.**

**The Council on Programs and Students in the Mathematical Science (COPS) (Su Doree, chair)** work centers on Curriculum, Pedagogy, and Activities for Students. Some highlights of our recent work:

- The Committee on Teaching Undergraduate Mathematics (CTUM) has just released MAA's first-ever **Instructional Practices (IP) Guide** to address pedagogy and complement the CUPM Curriculum Guide.
- The Committee on the Undergraduate Program in Mathematics (CUPM) continues to work to disseminate the **CUPM Curriculum Guide** and to plan for continuous updating of the guide. They are also working with the Committee on Departmental Review to insure that department chairs and external consultants for **Program Review** are aware of (and use) the CUPM Curriculum Guide.
- Several committees are collaborating on efforts to increase **Mathematical Modeling, Applied Mathematics, Statistics, and Data Science**, including updating those parts of the CUPM guide and

collaborating on K-12 modeling-based curricula with Society for Industrial and Applied Mathematics' (SIAM) and the National Council of Teachers of Mathematics (NCTM). These areas are of special interest given the recent release of the American Statistical Association's (ASA) Guidelines for Assessment and Instruction in Statistics Education (GAISE-II) and SIAM's Guidelines for Assessment and Instruction in Mathematical Modeling Education (GAIMME) reports.

- The CUPM Subcommittee on Curriculum Renewal Across the First Two Years (CRAFTY) completed a 2-year project to study and disseminate information about efforts to renew introductory mathematics courses. Products included a 9-article series on **Curriculum Renewal in the MAA FOCUS**. They are also collaborating with national efforts on **Mathematics Pathways** and **Co-requisite models**. The NSF-funded SUMMIT-P) project led by Susan Ganter is using the **Curriculum Foundations project** reports to inform curriculum renewal in the first two years across multiple institutions and courses.
- The Committee on Undergraduate Student Activities and Chapters (CUSAC), CUPM Subcommittee on Research by Undergraduates, and the Committee on Graduate Students continue to hold well-attended **Activities for Students** at national meetings – including lectures and activities for students, the undergraduate research poster session, contests, and other activities.
- The Committee on Two Year Colleges (CTYC) continues to **strengthen connections between community colleges**, the American Mathematical Association of Two-Year Colleges (AMATYC), and the MAA. This work is especially important as AMATYC works on the upcoming AMATYC Impact curriculum guide (a follow-up to Beyond Crossroads) and as more students transfer from two-year to four-year institutions.
- The Council continues **to actively organize sessions at national meetings** including panels, workshops, mini-courses, and contributed paper sessions.)

The **Council on Publications and Communications (Jennifer Quinn, chair)** are responsible for promoting mathematical exposition through a specific publication product. In 2017, the MAA entered into two publication partnerships, one for journals and the other for books. There is excitement and trepidation around the transitions. The journals produced by Taylor & Francis will appear in January 2018 and new book approval processes are being implemented to satisfy our AMS partners.

#### **The Council on the Profession (Jenna Carpenter, chair)**

**Science Policy Committee** is discussing how Sections might better participate in policy efforts. The SPC hopes to organize a blue-ribbon panel on science and mathematics communication for JMM 2019.

**Committee on Departmental Reviews** is in need of individuals from under-represented groups, from 2-year colleges, and with experience in Masters programs in Math Ed. We are working with CUPM to develop programming for Mathfest 2018.

**Committee on Early Career Mathematicians** paired 54 early career mathematicians and mentors in the MAA Mentoring Network and hosted a networking event at Mathfest (combined with PosterFest). We will be part of the NSF resubmission to study professional development opportunities.

**Committee on Faculty and Departments** is publishing a series of "Guideline Statements" to replace the 2003 Guidelines for Programs and Departments in Undergraduate Mathematical Sciences. In 2017, Statement #1: "Best Practices in Recruitment, Retention, Development, and Evaluation of Faculty in College and University Mathematical Sciences Departments" was completed. Statement #2 on technology and resources and Statement #3 on student success are in process with Statement #4 on curriculum slated for 2018.

**Joint Committee on Women** fall meeting was held via teleconference to reduce expenses and the travel time. JCW hopes to extend/enhance society mentoring networks, explore training of TAs and Junior Faculty about safety and harassment issues, collect data on gender representation of journal editorial boards, and generate a list of women mathematicians in various research areas.

**At-Large Member for Inclusion Spectra** (LGBT+ Mathematicians) will host a Panel at JMM 2018: Out in Mathematics: Professional Issues Facing LGBTQ Mathematicians, as well as an on-site reception and a brainstorming session. There is interest in how to help mathematicians suffering from depression and other mental illness to connect and possibly forming an affinity group.

**Joint Committee on Teaching Assistants and Part-Time Instructors** has a JMM 2018 panel on Teaching-Focused Faculty at Research Institutions, and a panel on The Experiences of Foreign Graduate Students as GTAs. The increased use of full-time teaching- focused faculty, often non-tenure track but indefinitely renewable positions, should be considered by the math professional organizations.

**Committee on the Participation of Women** has organized a JMM 2018 panel session titled “Implicit Bias and Its Effects in Mathematics” and a contributed paper session titled “Attracting, Involving, and Retaining Women and Underrepresented Groups in Mathematics --Righting the Balance.”

**MAA Committee on Committee on Minority Participation in Mathematics** discussed ways to support or work with other committees. Lisa Marano will work with CPM & CUSAC to broaden the participation of minorities. We are working with AMS Director of Education and Diversity, Helen Grundman to brainstorm on joint activities, such as adding AMS support to the MAA-SIAM-AMS Hrabowski-Gates-Tapia-McBay session (named after four influential scientists of color to recruit, welcome, encourage, mentor, and support individuals from underrepresented groups in the USA)