Inside the AMS

AMS Department Chairs Workshop

The annual workshop for department chairs will be held a day before the start of the 2019 Joint Mathematics Meetings in Baltimore, Maryland, on Tuesday, January 15, 2019, from 8:00 am to 6:30 pm at the Marriott Inner Harbor hotel.

Workshop leaders will be Malcolm Adams, former head, Department of Mathematics, University of Georgia; Gloria Marí-Beffa, Associate Dean for the Natural, Physical and Mathematical Sciences, University of Wisconsin—Madison; Douglas Mupasiri, head, Department of Mathematics, University of Northern Iowa; and Jennifer Zhao, chair, Department of Mathematics and Statistics, University of Michigan–Dearborn.

What makes a chair different from any other engaged faculty member in the department? This workshop examines the chair's role in leading a department. The day will be structured to include and encourage networking and sharing of ideas among participants and will include four sessions:

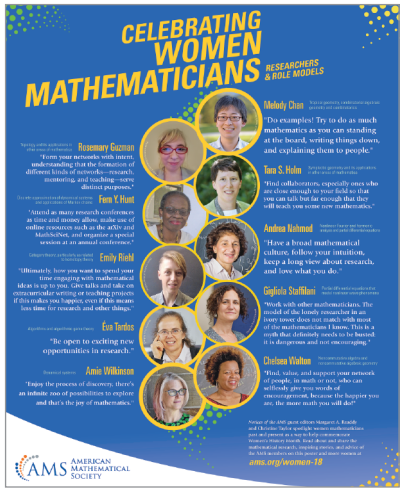
1. Reassessing the relationship between pure and applied mathematics.
2. Math in the data movement.
3. Professional development and evaluating faculty.
4. The next step: moving to higher administration.

The workshop registration fee of US$200 is in addition to and separate from the Joint Meetings registration. Those interested in attending should register at `http://bit.ly/2MHngPu` by **December 19, 2018**. For further information, please contact the AMS at 202-588-1100 or `alb@ams.org`.

— Anita L. Benjamin
AMS Office of Government Relations

From the AMS Public Awareness Office

Celebrating Women Mathematicians: Researchers and Role Models Poster



Notices March 2018 guest editors Margaret A. Readdy and Christine Taylor (`https://www.ams.org/women-18`) spotlight women mathematicians past and present as a way to commemorate Women's History Month in this newly available poster from the AMS.

This poster features some of the women profiled by Readdy and Taylor in the March issue with their words of advice to young mathematicians, and it is free upon request via the AMS Posters web page at `https://www.ams.org/posters`. Copies will also be available in the AMS exhibit at the 2019 Joint Mathematics Meetings in Baltimore.

—Annette Emerson and Mike Breen
AMS Public Awareness Officers
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Making an Impact: Transitioning from Math PhD to Journalist

Yen Duong
2018 AMS-AAAS Mass Media Fellow

During my last year of graduate school, I was struggling with how I could do "good" in the world—what would my impact be? It was 2016. I had just become pregnant with my daughter when my son turned two, and I felt a furious drive to keep them safe and make the world a better place for them. It took me two long meandering years to find my answer via the AMS-sponsored AAAS Mass Media Fellowship.

I considered political activism, tutoring, management consulting, data science, and project management. I met with the university's career counselor, who was specifically assigned to grad students and postdocs looking for a career outside of academia, and with my alma mater's career services. I read *What Color is Your Parachute?* and completed the accompanying workbook. I did informational interviews. I wrote blog posts. I felt like I was nowhere.

And then I was just sad and struggling to finish my thesis before the baby was born. I didn't apply for math jobs that fall since I didn't love research or teaching enough to go the uncertain postdoc, tenure-track route of uprooting my family.

I stayed home with the kids after I defended with my two-month-old. I liked hanging out with them well enough, so why not make it a full-time gig? As my toddler would now say, that year wasn't my favorite. Many people are excellent stay-at-home parents, but also many people play team sports, and it is okay that I do not fit into either of those groups. I decided to stop feeling bad about things I'm not good at and instead continue looking for things I am good at.

Throughout grad school I had attended plenty of alternate career panels at excellent mathematical and professional development conferences, such as the Topology Student Workshop, Underrepresented Students in Topology and Algebra Research Symposium, the regional Women in Mathematics Symposia, and the Women and Mathematics program at the Institute for Advanced Study. During my year as a stay-at-home parent I applied for a data science fellowship, curriculum/tutoring jobs, e-learning stuff, and a research coordinator position. While I wasn't chipper at the time, I am now ecstatic about my failure to land any of those. That meant I could do the Mass Media Fellowship and find the right path for me to make an impact with my particular skills and experiences.

Before I even applied for the fellowship, I emailed the program director to ask about how I, as a mother of a toddler and a baby, could do the ten-week program, in which fellows are assigned to 23 sites scattered across the country from NPR in Washington, DC, to KQED in Sacramento and the *St. Louis Post-Dispatch*. As it turned out, the director had also had a child during her PhD and very much wanted to support working parents. I ended up applying on the condition that I only wanted to work at Raleigh's *The News & Observer*. I took the three-hour train or drive home every weekend to see my kids, prepare dinners, and give my spouse a chance to sleep in (or sleep at all, depending on how the baby was handling her teething that week).

If the fellowship didn't offer so many sites or didn't explicitly include a note on the application about parents of young children, I wouldn't have done it. I wasn't going to leave my baby for a seventh of her life. I was still breastfeeding when the fellowship began, and my site had an easily-accessible lactation room near a sink and paper towels. Though my last location had a lactation room, it required me to check out a key from a library for a two-hour period at a time. That meant schlepping to the library, back up to the lactation room, down to the library, and back up to my office three times a day. I spent most of that summer working at home instead of in the office for convenience, but that probably meant I got less math done. For more on supporting working mothers in our community, please read the July 2018 issue of the online *Journal of Humanistic Mathematics*.

I appreciated the support of AAAS and happily drank the Kool-Aid at orientation in DC on how the 170-year old organization founded the US Forestry Service and the National Science Foundation and sent expert witnesses for the Scopes Monkey trial. I was thirsty for answers on how to do good in the world, and I'm happy I stumbled into the cult of science communication. Here I could combine my mathematical

skill set of reading and teaching myself from dense, jargon-heavy text with my communication passions, which had until now been relegated to my grad school blog, Baking and Math.

On my first day in Raleigh, I went through a corporate orientation with a gaggle of 20-year-old journalism majors, then was shown to my desk. My editor told me to settle in for a few minutes until he could wrap up a few stories. Suddenly the entire newsroom was yelling as the police had just released dash cam video and cell phone video of police officers assaulting an unarmed black man with their flashlights and a police dog. Several reporters started transcribing, others were on the phone with community leaders and the police, and the editors met to figure out a plan to responsibly roll out the news with analysis and commentary. That was the day that journalism grabbed me, and it hasn't let go.

I contacted museums, research institutions, and universities to get started, and by the end of the day, thanks to—, I had a lead on an upcoming art exhibit done in collaboration with a bunch of scientists. That first news story was straightforward and I only had to learn a little bit about gravitational waves to include some science. The next story involved a deep dive into CDC data and a statistics-heavy paper about heroin.

That was the first of many abstruse, dense research papers I read over this summer. I actually found them easier to read than the papers from my thesis research. My teaching background also prepared me for adapting arguments and creating interesting analogies and ways to explain different ideas to different audiences.

It was so fun to spend several hours learning all about fields I knew nothing about—big dives into paleontology, genetics, and climatology, just to name a few. My mathematical experiences gave me confidence in my ability to teach myself any subject. I wasn't intimidated by protomammals, polygenic scores, or phenology because I know that all words have definitions and I can grasp definitions; the real story, just like in math, is how those jargon-like terms interact and why we care about them. I would puzzle through studies and background research until I was ready for interviews, when scientists were surprised and delighted by my knowledge.

Of the 25 stories I wrote this summer, ten were on the front page of the *N&O*, and a few landed on the front page of Durham's *The Herald-Sun*. One of my favorite stories of the summer was a dive into peanut allergies and upcoming treatments for them, for which I interviewed biopharmaceutical companies, medical researchers, parents, and a six year old. My story on using polio to treat brain cancer was also a big hit, and I covered a few other medical stories too.

From the grandparents who wanted the photo we ran of a child marveling at the gravitational lensing simulation in that first art exhibit to the caretaking spouse who asked for a copy of the brain cancer research paper, people wanted science news and they wanted to know what's happening in science research that can affect their lives. The more people like science, the more they'll support science. This is a way for me to make the impact I've been searching for—I help persuade people to believe in "real news" and facts and evidence-based reasoning.

Some time ago I talked with Evelyn Lamb, a past AMS-sponsored Mass Media Fellow, about the guilt of leaving academia and not setting an example for women mathematicians. Evelyn, now a well-known math writer, pointed out that she might be doing more good by spreading knowledge and awareness of mathematics through her stories. I'm so grateful to the AMS and AAAS for giving me the opportunity to do the same. Math will always be part of me, and I will always spread my love of it. Thanks to the AMS, I can now do that in a way that better matches my strengths and vision of what I want my life to look like.

Now I look forward to continuing to be involved in the math community, maybe as a panelist in 'alternative careers' at various meetings. I've accepted a part-time job with the award-winning nonprofit news organization North Carolina Health News and plan on filling the rest of my time with freelance science journalism, connecting with the Science Communicators of North Carolina group for freelance leads. I've appeared on the excellent PhDrinking and My Favorite Theorem podcasts, and had two speaking gigs this fall, one at a high school and one at a state university. None of this would have happened without the support of the AMS and the Fellowship. I cannot imagine what my life would have looked like without this fellowship—it is the jumping off point for the rest of my career doing what I love.

—Yen Duong

For more information on the AMS-AAAS Mass Media Fellowship and application details, go to `https://www.ams.org/programs/ams-fellowships/media-fellow/massmediafellow`. *Application deadline for summer 2019 is* ***January 15, 2019****.*