Welcome to the PNW MAA: New Faculty

This fall our section is excited to welcome many new faculty. Our newest Project NExT fellows are James Gossell (University of Alaska, Fairbanks), Erin Griffin (Seattle Pacific University), Alex John Quijano (University of Portland), and Amy Wiebe (University of British Columbia Okanagon). We also welcome Charles Camacho (University of Washington) as a Section NExT fellow this year, as well as Kate Lorenzen (Linfield University) and Kelsey Marcinko (Whitworth University) who were welcomed as Project NExT fellows last year. We also welcome Abigail Wacher and Angela Siple as new Teaching Professors at Seattle University, Sarah Kerrigan as assistant professor at George Fox University, and Kelvin Rivera-Lopez who is at Gonzaga University as a URM Postdoc.

Charles Camacho

Dr. Charles Camacho is from Calexico, CA, and earned a bachelor's degree in mathematics from the University of California, Berkeley and a PhD in mathematics from Oregon State University.

His mathematical interests include low-dimensional topology and combinatorics. Dr. Camacho is passionate about quality mathematics education for all students, and is especially interested in serving students of color, first generation students, and students from low-income backgrounds. He is currently the mathematics/physics instructor with the STARS program at the University of Washington. Besides mathematics and education, Dr. Camacho enjoys music, playing the guitar, hiking, biking, and reading science fiction short stories.

James Gossell

James Gossell works as a Term Assistant Professor at the University of Alaska Fairbanks. His research areas include Graph Theory and Commutative Algebra, and his favorite class to teach is Abstract Algebra. Prior to joining UAF, James attended Clemson University where he met his wife Anna and received his PhD in Mathematics. Since moving to Alaska in 2021, James enjoys spending his free time running on trails, competing in local snowshoe races, and staying up late to watch the northern lights.

Erin Griffin

Erin Griffin is in her second year as an assistant professor in the Department of Mathematics at Seattle Pacific University.

In 2021, she received her PhD in Mathematics from Syracuse University where she worked with Will Wylie. She received her B.S. in mathematics with a minor in philosophy from Cal Poly San Luis Obispo. Erin's research interests lie somewhere in the intersection of differential geometry and conformal geometry with a focus on geometric flows. In her free time, she enjoys visiting local coffee shops with her dog, Ricci.

Alex John Quijano

Alex John Quijano is a data scientist and applied mathematician who studies natural language evolution. Alex earned a B.S. in Mathematics from East Tennessee State University in 2015 and a Ph.D. in Applied Mathematics from the University of California Merced in 2021. He served as a data science and machine learning intern at Lawrence Livermore National Laboratory. Alex formerly worked as a Visiting Assistant Professor of Statistics at Reed College, where he taught courses in Data Science, Probability, and Statistics. In his graduate work, he applied a statistical model that mimics neutral drift evolution to examine the word rank evolution of eight languages using the Google Ngram dataset. He also applied word embedding/matrix models to quantify word context changes of Hashtags on Twitter. Alex enjoys cooking and sharing meals with his family and friends when he is not studying or teaching applied mathematics.

Amy Wiebe

Amy Wiebe just started as an assistant professor at the University of British Columbia Okanagan.
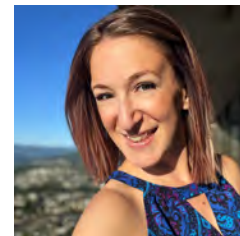
She spent the last year as an NSERC/PIMS postdoctoral fellow at Simon Fraser University, and before that she was a Dirichlet postdoctoral fellow at Freie Universität Berlin. She received her PhD from the University of Washington in 2019 under the supervision of Rekha Thomas. Her research interests includes combinatorics, particularly the study of realization spaces of polytopes, and the applications of these combinatorial problems to optimization. Amy grew up in the PNW and is excited to be continuing her career in the area.

Mathematical Matters

Newsletter of the Pacific Northwest Section of the MAA

In This Issue. . .

## PNW Section New Chair Elect: Kathy Temple

by Kathy Temple

I'm a faculty member at Central Washington University in Ellensburg, where I teach courses in actuarial science, statistics, and whatever else needs to be filled. I grew up outside Spokane, went to the University of Washington for undergrad, and earned a PhD in probability theory at the University of Wisconsin-Madison. I've been involved with the PNW MAA since 2006 (Ashland meeting!) when I was introduced to Section NExT through being a national NExT Fellow. I really value the insights on teaching and being a faculty member that I've gotten from Section NexT and from the section meetings more broadly – every meeting I come home with a new idea or something to try or a new topic that I'm excited about. I'm thrilled to be serving as chair-elect and look forward to working with the other officers to continue and expand the great work our section is doing.

Outside of work, my hobbies include biking, walking, fiber arts (knitting and spinning), and serving as cat furniture for our cat Chibi. If you want to spot me at a meeting, just look for the person knitting!

PNW Section New Secretary-Treasurer: Christine Cole

by Christine Cole
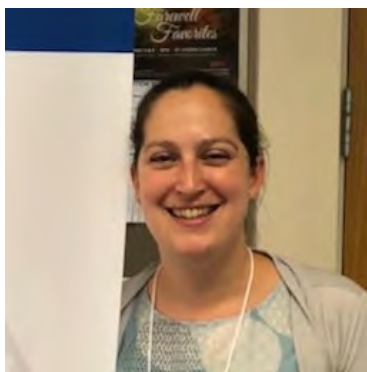
I'm an Associate Teaching Professor at Seattle University, where I typically teach classes in the Calculus and Precalculus series, as well as Differential Equations. I grew up in University Place, Washington near the Tacoma Narrows Bridge, which replaced the bridge that was nicknamed "Galloping Gertie" due to its famous collapse in 1940. After graduating high school, I moved halfway across the country to attend Macalester College in St. Paul, MN, where I double-majored in Math and Physics. I earned my PhD in Applied Mathematics from the University of Washington, focusing on applications in Mathematical Biology. Before I joined the faculty at Seattle U, I served as a Visiting Assistant Professor at Pacific Lutheran University.

My earliest experience with the MAA was through taking family trips to the Joint Mathematics Meetings with my (now retired) dad, Bruce Lind, who was a professor at the University of Puget Sound. I became active in my own right as an MAA member as an undergraduate, and became a PNW NExT Fellow shortly after joining the faculty at Seattle U. I was a member of the organizing committee when Seattle U hosted the section meeting in 2018, and I am excited to serve as the new Secretary-Treasurer for our section. My students have greatly benefitted from the ideas and insights that are shared at our section meetings, and I enjoy the opportunity to connect with colleagues and learn more about how things work at other institutions in our section. I look forward to seeing everyone at this year's meeting at George Fox University!

Section NExT News

by Megan Buzby

As noted above, we are pleased to welcome Charles Camacho, a new faculty member at the University of Washington, whose focus is working with STEM students from under-served, low-income, and first-generation backgrounds. We've also had a good influx of Project NExT fellows joining Section NExT this year (see above) and look forward to their contributions and discussion at our spring meeting. As usual, the Section NExT meeting will take place Friday, March 17. More information will be forthcoming through the Section NExT listserv.

Applications to Section NExT for new faculty members will be Wednesday, December 14. Note the early deadline this year to give time for a decision before the early spring meeting. More details can be found on the PNW Section website or feel free to contact Megan Buzby at mbuzby1@alaska.edu with questions.

Pacific Northwest MAA April Meeting 2022 Recap

by David Hartenstine

On April 1 and 2, 2022, Western Washington University was delighted to host the first in-person section meeting since 2019. It was a beautiful early spring weekend in Bellingham, Washington. The pandemic had complicated the planning of this meeting; in January 2022, just three months before we welcomed the section to campus, it wasn't clear whether we'd be able to host an in-person meeting at all. Even if we could, we didn't know whether people would be comfortable coming to campus and participating in the type of meeting we took for granted before 2020.

More than 120 people from 41 different institutions, including about 60 students, attended the meeting in-person, and about 20 participated virtually. There were more than 50 presentations.

Among the highlights were three outstanding plenary talks. MAA President and UW-Tacoma Professor Jennifer Quinn's "Digraphs and Determinants" got things started on Friday evening; Dr. Emilie Purvine (Pacific Northwest National Laboratory) discussed "Mathematics for Cybersecurity" on Saturday morning, and Professor Talea Mayo of Emory University gave the final plenary talk "Mathematics Applied: The Use of Computational Models to Understand Climate Change Impacts and Storm Surge Risk".

On Friday, Section NExT met in the morning, and, in the afternoon, there were two minicourses, one on cryptology, and another on machine learning and knot theory. Saturday's program featured six special sessions, as well as an opportunity for students to talk with recent math alumni about preparing for job interviews and career opportunities for math majors. The meeting closed with a reception on Saturday evening.

Regular attendees of our section meetings were able to reconnect, faculty new to the section had the chance to meet colleagues from throughout the region, and many students had the opportunity to attend their first in-person mathematical conference.

Announcement: PNW MAA Spring Meeting 2023, March 17-18

The Pacific Northwest Section of the MAA will be having their next section meeting **March 17-18, 2023**. The meeting will be held at *George Fox University*, in Newberg, OR. Additional details will be available in the next issue of the newsletter.

Section Awards 2022

At the spring meeting, our section celebrated the following anniversaries and awards:

25-year award
Brian Blitz
Michelle Ghrist
Rebecca Plassman

50-year award
Michael Chamberlain
Roger Nelson

Distinguished Teaching Award
Laurie Cavey, Boise State University

Distinguished Teaching Award Nominations

Distinguished Teaching Award Nominations are due November 1, 2022. Initial nominating materials (the first page of the Nomination Form) are usually due to the Section Secretary/Treasurer in late October of each year. Complete materials are usually due from selected semi-finalists in early January of the following year.

- Eligibility requirements: `http://www.maa.org/Awards/Haimo_EGN.pdf`
- Nomination form: `http://www.maa.org/Awards/Haimo_NF.pdf`

Northwest Undergraduate Mathematics Symposium

by NATHAN GIBSON AND JEFFREY OVALL

We are announcing the 14th annual Northwest Undergraduate Mathematics Symposium, which will take place on Saturday, November 12, 2022, at Portland State University. NUMS is a regional mathematics conference providing a venue for undergraduate students to present mathematical research and projects. The keynote speaker will be Nancy Ann Neudauer (Pacific University).

This November meeting provides an excellent opportunity for undergraduate students involved in REUs this summer, or who worked on projects last academic year, to present their work. Talks on original research as well presentations on independent study projects are very welcome.

More information about the meeting, including registration instructions, can be found here: `sites.google.com/pdx.edu/nums2022`

The deadline for submitting abstracts and for participant registration for the symposium will close on November 4, 2022. For more information contact Nathan Gibson at nums@math.oregonstate.edu.

Eastern Washington University's Successful Noyce Project

by JACKIE COOMES

Five years ago, in 2017, the Eastern Washington University Department of Mathematics, in partnership with the Community Colleges of Spokane and Spokane Public Schools, was granted a 5-year, $1.459 million Robert Noyce grant to prepare science and mathematics majors to teach in high-need school districts. Since then, EWU's Noyce project has graduated 29 science and math teachers with STEM degrees, and 19 of them are teaching in high-need districts. Five more Noyce Scholars will graduate in the next year. Of the 29 graduated Noyce Scholars, 11 earned both a BS in mathematics and a teaching degree with state teaching certification. Two more scholars are on track to also complete both math and secondary math degrees. One highlight of the project is that the demographic composition of the math majors is more diverse than the demographic of education majors at EWU in general. Of the 13 math Noyce scholars, five are Hispanic, one African American, and one Native Alaskan.

EWU Noyce scholars received up to $ 26,000 in scholarships as juniors and seniors. Beyond the scholarships, Noyce Scholars received additional support and opportunities to prepare to teach in high-need schools by learning more about culturally responsive teaching than in their education program. They also received early mentoring in high-need schools. The project provided summer and monthly professional development, and volunteer experiences with the Science Olympiad, the Mobius Science Center, and Washington State Math Council Mathematics Contest. All scholars participated in research experiences, some which were at other universities such as in the STAR program, a program at Cal Poly in San Luis Obispo that focuses on providing authentic research experiences to K-12 teachers and helps them translate it into their practices. Several Noyce Scholars also attended conferences for future STEM teachers, while still others participated in professional development focusing on the use of drones in their teaching, and at Northern Arizona University's one-week session, Explorations with Sequences, Series, and Mathematical Patterns. Once teaching, all Noyce Scholars continue to meet for Induction for two years.

2023 Pacific Inland Mathematics Undergraduate Conference

The next PiMUC conference will be held
Saturday April 1st, 2023
Gonzaga University, Spokane, WA

`https://sites.google.com/view/pimuc/home`

A note from the editor

If you have any major changes in your department or University, I'd love to highlight them in an upcoming "University Spotlight" column. Please email me with any contributions or other section news.