

COLLEGE OF SCIENCE AND TECHNOLOGY

MATHEMATICS

NEWSLETTER

Winter 2020

Millersville University, Department of Mathematics ♦ www.millersville.edu/math

Congratulations to Drs. Blum & Shoemaker on Retirement!



In September 2019, a large number of former and current faculty members gathered in Gordinier to honor **Drs. Dorothee J. Blum** and **Lewis Shoemaker** who retired in January 2019 and June 2019 respectively. Retirees (and spouses) in attendance that evening included: Dotti Blum (Charlie Batten), Pat Brislin, Chuck Denlinger (Gloria), Don Eidam (Cindy), Lew Shoemaker (Deena), Irene Sigler (John), Bob Smith, Jim Stager (Diana), and Clark Taylor (Mary).

In January 2019, Dr. **Dorothee J. Blum** retired from the Mathematics Department after 30.5 years of dedicated service. In April 2019, she was granted the honorary title of Associate Professor of Mathematics Emeritis. She was “a devoted and successful teacher” who taught 29 different undergraduate and graduate courses in mathematics, six of which she developed herself. She was an active scholar and published refereed papers in the

fields of graph theory, mathematics education and the history of mathematics. She gave multiple presentations, reviewed NSF grant proposals and reviewed books. She authored her own book, “Algebraic Foundations and Structures for Pre-Service Middle Level Teachers” for use with our own middle-level education majors.

Dr. Blum was actively involved in curriculum development and modifications to improve our programs, educational outcomes and student experiences. She supervised numerous students’ research projects, directed nine honors theses and served on 48 MU honors theses committees. Dr. Blum was truly willing to do anything to help the department, and particularly our students - she even served as a student teaching supervisor for a semester. In her time at MU she also served 12 years on the University Honors Committee, two and a half years as the associate director of the University

Honors College, 10 years on the Glenn Hazeltine Women in Mathematics and Science Day Conference Planning (two years as chair) and 11 years as the mathematics instructor for the Summer Academic Excellence Program. Additionally, Dr. Blum mentored numerous faculty colleagues over the years and advocated for both her students and colleagues. Her influence on the mathematics department and our students will continue long past her retirement.

In June 2019, **Dr. Lewis Shoemaker** retired from the Mathematics Department after 32 years of dedicated service, teaching undergraduate and graduate mathematics and statistics courses, including six statistics courses he developed for the department. Dr. Shoemaker was active in

curriculum development, particularly in upper-level statistics courses, distance learning statistics courses, and the actuarial and statistics options. His department and university service including faculty grants, sabbatical leave, promotion and tenure, judicial affairs, faculty search committees, department evaluation, and student evaluations. Dr. Shoemaker was also an active member of professional organizations including the American Statistical Association and the Institute of Mathematical Statistics. His contributions to the mathematics department, particularly regarding statistics will continue to be impactful for many years to come. In his retirement, Dr. Shoemaker is already enjoying spending quality time with his two granddaughters and having more time to hike, hunt, and travel.

Dr. Catepillan's Fall 2018 Sabbatical

The purpose of Dr. Ximena Catepillan's Fall 2018 sabbatical leave was to further her professional development in the branch of mathematics known as **Ethnomathematics** by writing, and ultimately publishing, the second edition of the textbook **Mathematics in a Sample of Cultures** (Catepillán, Szymanski, and Cardwell) from Kendall-Hunt Publishing Co. She collected material for the new chapters during the previous years. Trips to Bolivia in 2015, Brazil Amazonas in 2017, Chile annually, Cuba in 2016, Guatemala in 2006 & 2016, Mexico in 2006 – 2010, 2013 & 2016, and Peru 2007 & 2008, allowed her to visit with a group of archaeologists, indigenous communities to gather information about their mathematics.



At Universidad de la Frontera with the lecture organizing committee

She is now using the textbook in the courses **Mathematics in Non-European Cultures**, MATH 102, and the Freshman Seminar: **Culture, Science, and Mathematics in the Pre-Columbian Americas**, UNIV 103. Dr. Catepillan developed MATH 102 when the African American Studies minor was created at Millersville, and her native South American indigenous ancestry played an important role in the development of the seminar UNIV 103. Ethnomathematics is a rapidly developing interdisciplinary area of Mathematics with connections to history, geography, anthropology, archaeology, art, and astronomy, and other fields. It demonstrates the diversity of approaches to mathematical ideas in different cultures of the world, especially those that are non-European. It takes a step toward a global, multicultural view of Mathematics.

During her sabbatical, she was invited at **Universidad de la Frontera** in Temuco, Chile, to give a presentation to math education majors and faculty about the Ethnomathematics courses she teaches at Millersville. Temuco is a city in a Chilean region that has the largest population of indigenous persons in the country, the Mapuche. As a result, from her Ethnomathematics presentation in Temuco, she has been invited to teach an Ethnomathematics course for graduate students of the Master in Mathematics Education at **Universidad de Santiago de Chile (USACH)** in the summer 2020.

Dr. White's 2018-2019 Sabbatical: 35 schools & 50+ program alumni

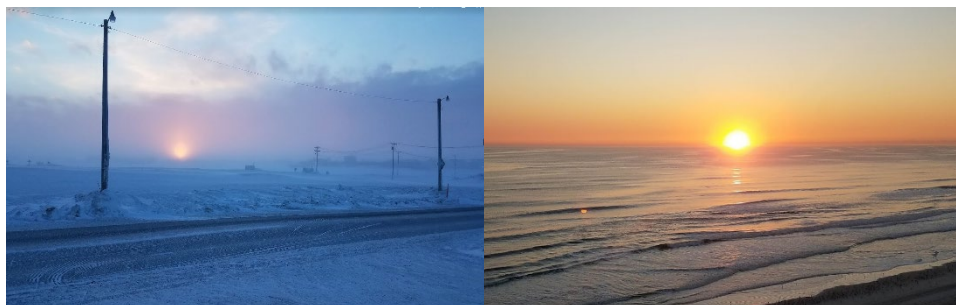
During the 2018-2019 academic year, **Dr. Janet A. White** took a sabbatical leave to experience the current practices and realities in secondary schools. The overall purpose was to reconnect with the world of secondary mathematics education through our own Millersville University Alumni. Her intent was to learn more about current school environments in order to make personal and programmatic changes that might better prepare our MU mathematics teacher candidates. As such, she spent the year travelling to 35 middle and high schools – observing, co-teaching, meeting and interviewing approximately 50 alumni, and observing or working with approximately 2500 secondary mathematics students. While most schools were Pennsylvania high schools, her visitations took her to nine states (including Alaska), and included eight middle schools and two technical high schools.

The most notable change she witnessed was the access and use of technology. Approximately 75% of the schools visited were 1-1 schools (where each student has access to a laptop or tablet computer for in school and home use). The way in which the technology impacts instruction varied greatly, and she found that many teachers do not feel well trained to do so resulting in a range of methodologies from simply digitized materials such as textbooks and handouts, to investigations of mathematics with engaging applications and interactive websites, to the utilization of online lesson materials from a wide variety of sources. Experiencing all of this firsthand, and speaking to in-service teachers about the changes that have occurred in their teaching and the challenges they face as a result helped to frame new emphases for the methods course and student

teaching experiences as well as potential future topics for graduate mathematics education courses.

Program alumni (both BSE and MEd alumni) shared personal suggestions for program improvement as well as indicated components of their own preparation that contributed to their success in the classroom. These suggestions were immediately put into practice in the fall 2019 semester, when Dr. White taught the methods course (MATH 405). Specifically a deeper focus on technology and classroom management jumped to the front of the “to cover” list. Additionally, more opportunities for in-class lesson study and more frequent class presentations that allowed for class discussion and peer critiques were included. Departmentally, the mathematics educators have reorganized the program based on some alumni feedback. Some of these changes include a now 4-year approach to secondary mathematics with teacher candidates experiencing at least one course per year focused on secondary mathematics pedagogy or content. While still moving through the curriculum approval process, we are hopeful to begin implementing the new courses as early as the Spring 2021.

Dr. White describes her year as “productive, informative, and personally quite rewarding. I consider myself most fortunate to have had the opportunity to reconnect with our graduates in a way that refreshed and reset my knowledge of current practices in the region. We have the best graduates – it was a lot of fun!” The best part is that this experience will continue to be valuable to her teaching, our overall program, and our students for many years to come.



Two extremes: Sunrise/sunset in Utqiagvik, AK (1/27/2019); Sunrise, Daytona Beach, FL (2/06/2019)

MATHville Students

Get to know our math majors/graduates:

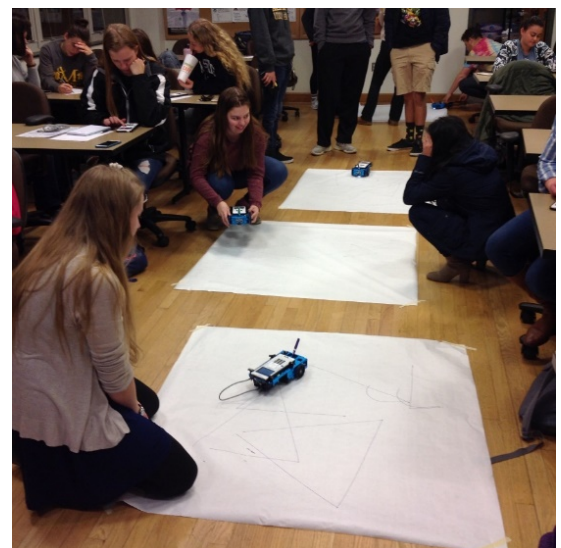
Steve Forsythe from Sinking Spring graduated Magna Cum Laude with a bachelor's degree in mathematics with a concentration in actuarial science and a minor in computer science in December 2019. Forsythe accepted an Actuarial Analyst position in October. "My fiancé encouraged me to seek higher education at the age of 27. I chose math because it was the hardest subject I could think of. I chose a career in actuarial science for the same reason. I am thrilled by challenge and motivated by curiosity," says Forsythe. After graduation, he went to Puerto Rico to meet his fiancé's extended family and celebrate his 30th birthday. When he returns, he will start his career full-time while pursuing his Associate of the Casualty Actuarial Society credential. Congratulations to Steve!

MEMU: Mathematics Educators at Millersville University, an NCTM affiliate



MEMU Members who participated in Math Fair at Wickersham Elementary School Thursday, October 24, 2019.

In Fall 2019, 35 prospective mathematics teachers joined MEMU (Mathematics Educators at Millersville University). The organization planned the sixth math fair that was held at Wickersham Elementary School in the School District of Lancaster that contained approximately 30 games and hosted approximately 40 students from grades 1 through 5. During bi weekly meetings, when time was not spent planning for the math fair or fundraising events for the organization, members engaged in various activities designed to further their growth as a future K-12 mathematics teacher. Some of the activities throughout the fall semester included having guest speakers come and engage the members in tasks centered around African American quilting, using dominoes to teach and reinforce exponential rules to ELL students, and Danish/Scandinavian woven Christmas hearts. The members also became familiar with Texas Instrument Robots and coding challenges one evening. These activities helped to develop the knowledge of members to seek out ways to help their students and themselves once they take on the task of teaching.



MEMU members working with TI Robots at November MEMU

Pre-service Teacher Day

On Saturday, October 19, 2019, the math department sponsored a school bus to take future mathematics teachers to the third annual Preservice Teacher Day held at West Chester University. More than 30 future mathematics teachers from Millersville University attended the conference. Dr. Kathleen McAneny gave the key-note address on Standards for Mathematical Practices in Action and participants had a choice to attend three different breakout sessions that included topics such as DESMOS Polygraph, Think Like an Egyptian, Purposeful Discourse, Teaching for Engagement, Using Mistakes to identify misconceptions, and many more. There was a panel discussion on the first year in the classroom and student teaching, where tips were shared for those preparing for the next step in their journey as well as time for questions for the panel members. A productive day was enjoyed by all who attended.

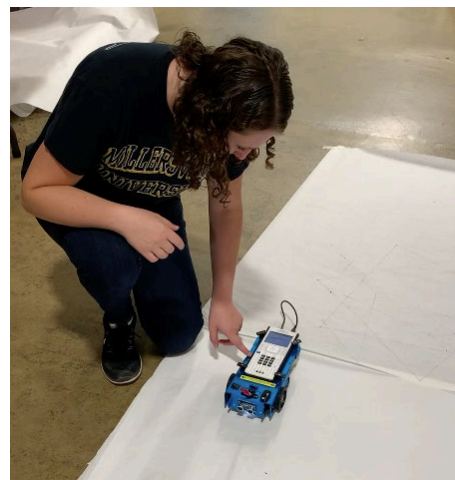


MATH Day at Lancaster Science Factory

On Saturday, September 28th, the Lancaster Science Factory and Archie's Math partnered to create a celebration of mathematics, the very first Math Day, that was free to the public from 10 a.m. to 4 p.m. There were approximately 500 attendees. Faculty and students from the Millersville University Mathematics Department participated in the event by facilitating a demonstration of the Texas Instrument Robots and a math game where students used two different colored counters to solve for two unknowns in a given situation. It was a wonderful free community event where students and parent engaged with mathematics.



MEMU Officers, Katie Latshaw, Lauren Bauer, and co-advisor Dr. Cynthia Taylor at Math Day



MU BSE Major, Lauren Bauer, prepares a TI robot at Math Day

MATH Club

The Fall 2019 semester the Mathematics Department restarted the Math Club. As one of our first events we helped organize a trip to the EPaDel Careers in Math Conference at Kutztown University. A total of 49 students and five faculty members attended from our university, including all the officers of Math Club. After the conference we were able to debrief all the information that the speakers shared with us. Our club also invited a student who passed one actuarial exam speak on actuarial sciences and how to prepare for the exams. We are looking forward to being able to help organize and run the EPaDel and PASSHEMA conference that will be held at Millersville in the Spring 2020. During the rest of the year we will be doing personal polynomials, celebrating Pi Day, and spreading the love of math!



Math Club Officers at EPaDel: Elisabeth Cunningham, President; Katherine Pheysey, Vice-President; Alana Danelski and Julia Geesaman, Co-Directors of Records; Brianna Hileman, Treasurer.



Katherine Pheysey, Vice-President; Elisabeth Cunningham, President

Spring 2018 & 2019 Honors & Awards

Class of 1866 Award:

2019 - Adeline Guthrie, Jamie Wittick

2018 - Quyen Do, Quinn Minnich

Mathematics Faculty Award:

2018 - Roxanna Keller, Joshua Larson, Aubrey Merced

Isaac F. Seiverling Award:

2019 - Susan Lloyd, Noelle Shellenberger

2018 - Adeline Guthrie

Harry E. Canter Statistics Award:

2019 - Adeline Guthrie

2018 - Quyen Do

Lee E. and Laura H. Boyer Award:

2019 - Elizabeth Dulac, Adeline Guthrie

2018 - Quinn Minnich



Graduating seniors and M.Ed. students in attendance

Upcoming Graduate Offerings

Summer I 2020: **Linear Algebra: 5/11/2020-6/12/2020**

Summer II 2020: **Probability and Statistics: 6/15/2020-7/17/2020**

Abstract Algebra: 6/15/2020-7/17/2020

Elementary and Secondary Mathematics Connections: 6/15/2020-7/10/2020

Summer III 2020: **Number Theory: 7/15/2020-8/14/2020**

Logic & Foundations of Mathematics: 7/15/2020-8/14/2020

MU Math Majors and Alumni featured speakers at MU/F&M Colloquium

Shane Bookhultz (2017), who is currently a graduate student in statistics at Virginia Tech, co-presented with his graduate advisor, Dr. Scotland Leman, “Research Analytics, Machine Learning, Artificial Intelligence, Data Science, and even Statistics: Navigating the data seas at Virginia Tech!” in the fall of 2019.

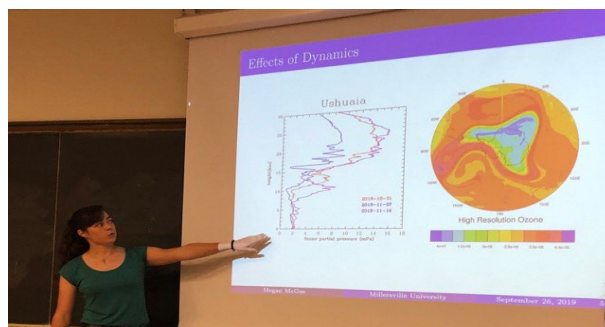
Qyyen Do (2018) who is now a graduate student, studying statistics at Virginia Tech, presented her REU project “Realistic Applications of the Kelly Criterion to College Football Betting” and her research project, “An Open Two-Compartment Model and the Exponential Peeling Method for Parameter Estimation” during her senior year in the fall of 2017.

Mervin Fansler (2016) from Weill Cornell Medicine presented “Getting Something from Nothing: Zero-Inflated Models in Transcriptomics” in the spring of 2019.

Andrew Gehman (2011) from GlaxoSmithKline (GSK) presented “The Effects of Spatial Aggregation on Spatial Time Series Models” in the spring of 2018.

Joshua Larson (2018) presented his research project, “A Blood-Brain Pharmacokinetic Model to Investigate Optimal Dosage Strength and Frequency” in the fall of 2017.

Megan McGee, presented at the joint math colloquium with **Aiden Kenny** (F&M) regarding their REU experiences during the summer of 2019 at Arizona State University and Lamar University respectively. Title: “Research Experience for Undergraduates (REU): Projects, Experience, and Application.”



Megan McGee, fall 2019 colloquium

Quinn Minnich (2018) who is now studying mathematics at Michigan State, presented his REU project, “Equal Circle Packing on Flat Klein Bottles” during her senior year in the fall of 2017.

Upcoming Events

- **EPaDel PASSHE Mathematics Conference at Millersville University**
Professors Ximena Catepillan, Kevin Robinson, and Janet White are local organizers for the upcoming EPaDel PASSHE Mathematics Conference which will be held at Millersville University on March 27th and 28th, 2020. Guest speakers will include Sarah Greenwald (Appalachian State University), Audrey Malagon (Virginia Wesleyan University), and Andrew Woldar (Villanova University). Registration information coming soon: <http://sections.maa.org/epadel/>.
- **Experienced teachers needed! PreService Teacher Day “east” at Millersville University – Fall 2020**
The Millersville University mathematics education faculty are local organizers for the fourth annual PreService Teacher Day at Millersville University on Saturday, November 7th, 2020. Please contact Cynthia Taylor (cynthia.taylor@millersville.edu) or Janet White (janet.white@millersville.edu) if you would be interested in presenting an idea that you implement in your classroom to share with future teachers.

Local Schools' Participation in Department Programs

MU's MATH Department continues to sponsor well-attended regional events for area high schools.

- Over the past two years, every March, our **Annual Math Contest** hosted 97 students from 12 schools (2018) and 13 schools (2019).
- For more than 20 years, MU's Math faculty members have been part of the regional **AP Calculus and AP Statistics Simulations** organized by the IU13, and for the past 3 years, MU's Math Department has coordinated the events. This has led to on-campus and off-campus participation for over 300 students and over 40 teachers from approximately 20 schools every April.

If your school would like to participate in any of these events in 2020, please contact the Math Department Office for more information.

H i g h l i g h t s M A T H E M A T I C S

Graduate/Alumni News & Updates

Congratulations to **Rachel Chioda** (MEd 2019) and **Julie Killian** (MEd 2019) on their recent publication *Weaving Mathematics and Culture into Danish Hearts* in the Ohio School Journal of Mathematics! This publication resulted from an assignment for the Spring 2019 Ethnomathematics course where students were to write an article to be considered for publication. See their article here: <https://library.osu.edu/ojs/index.php/OJSM/article/view/6872>

Congratulations to the following MU alumni on recent accomplishments:

- Joseph DiNapoli** (BSE-2008, MEd-2012), completed his PhD in Mathematics Education at the University of Delaware, 2018, and began tenure track position at Montclair State University, Fall 2018.
- Anthony Mastriania** (BS-2012), completed his PhD in Mathematics at the University of Texas at Arlington, December 2019.
- Samuel Reed** (BS-2015), completed his MA in Mathematics at Bowling Green State University (2018)
- Karen Zwanch** (MEd-2011), completed her PhD in Mathematics Education at the Virginia Tech, 2019, and began tenure track position at Oklahoma State University, Fall 2019.

The following MU alumni began graduate studies:

- **Michael DeCaria** (2018) – Colorado State (Atmospheric Science)
- **Quyen Do** (2018) – Virginia Tech (Statistics)
- **Elizabeth Dulac** (2019) – U. of Tennessee, Knoxville (Computer Science)
- **Kelsey Fulton** (2017) – U. of Maryland (Computer Science)
- **Adeline Guthrie** (2019) – Virginia Tech (Statistics)
- **Kevin Goring** (2019) – Villanova (Statistics)
- **Annika Harder** (2019) – California State (Mathematics)
- **Quinn Minnich** (2018) – Michigan State (Mathematics)
- **Samuel Reed** (2015) – Middle Tennessee State (Mathematics Education)
- **Jack Warner** (2019) – U. of Louisiana (Applied Mathematics)

The following MU alumni began teaching mathematics in the following schools (2017-present):

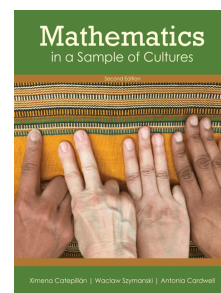
John Achille (2018) – Lower Dauphin High
 Bethany Allison (2019) – Osbourn High, Manassas, VA
 Allison Kibler Carberry (2014) – Central Bucks West High
 Ryan Donovan (2018) – Phoenixville Area High
 Daniel Ernst (2017) – Olney Charter High
 Kelly Espenshade (2018) – Eastern Lebanon County High
 Roxanna Keller Everly (2018) – Northern Middle School, Washington Co, MD
 Kyle Hissner (2018) – Red Land High
 Victoria Keller (2017) – Eastern York Middle
 Mitchell King (2017) – Penn Manor High
 Rachel Hess (2017) – Central Bucks East High
 Mason Musser (2017) – Cocalico Middle
 Andrew Hollinger (2017) – Reading Middle
 Cara Nance (2017) – Cary Grove High, Cary, IL
 Kristen Gochnauer Guzman (2017) – JP McCaskey East High
 Robert Jones (2017) – Harrisburg High School SciTech Campus
 Charles Norman (2018) – Lebanon Middle
 Adan Orozco (2019) – Manheim Township High
 Emily Shrader (2019) – Mechanicsburg Middle
 Stephanie Smith (2014) – Solanco High
 Sara Sweitzer (2019) – Hempfield High
 Jamie Walker (2017) – Hempfield High
 Rachel Weisman (2017) – Keith Valley Middle
 Devon Cadzow Warner (2018) – Cecilia Junior High, Cecilia, LA
 Cassandra Werth Waterman (2019) – Penn Manor High
 David Wuester (2018) – Lower Dauphin High

Congratulations to Dr. H. Tyrone Washington on his promotion to Associate Professor (2018).

Congratulations to Dr. Cynthia Taylor on her recent election to Secretary for the Association of Mathematics Teacher Educators. Her term of service begins February 2020.

Congratulations to **Drs. Ximena Catepillan and Antonia Cardwell**. In the summer of 2019, the second edition of “Mathematics in a Sample of Cultures” was released as an e-book. The second edition has a revised first chapter, and two brand new chapters of content.

Congratulations to Dr. Erin Moss who is serving a 3-year term on the MAA’s Committee on Faculty and Departments (2020-2023). She is also co-editor for the MAA’s blog DUE Point, a monthly blog featuring NSF-funded Department of Undergraduate Education (DUE) grant projects in mathematics, <https://www.mathvalues.org/duepoint>.



The Mathematics Department faculty has been actively publishing and presenting over the past few years, here is a sample of their work.

Presentations:

Dr. Ximena Catepillan presented at a panel “How to Increase MAA Membership,” at MathFest in Denver, CO (2018) and MathFest in Cincinnati, OH (2019).

Dr. Baoling Ma presented “Study of the recovery of nesting bald eagle population in New Jersey by statistical and mathematical models” at Joint Math Meetings in Denver, CO (2020); “Mathematical models to investigate the interactions between malaria parasites and host immune response” at the Mathematical Association of America Eastern Pennsylvania and Delaware (EPaDel) session in Center Valley, PA; “A Mathematical Model for an Amphibian Population with Distributed Birth and Metamorphosis Rates” at the AMS/MAA Joint Math Meetings in Baltimore, MD; “A Mathematical Model for an Amphibian Population with Distributed Birth and Metamorphosis Rates” for the Shippensburg University Department of Mathematics in Shippensburg, PA; “A Mathematical Model for an Amphibian Population with Distributed Birth and Metamorphosis Rates” at the Mathematical Association of America Eastern Pennsylvania and Delaware (EPaDel) session in West Chester, PA; “A Mathematical Model for an Amphibian Population with Distributed Birth and Metamorphosis Rates: at the Society for Mathematical Biology (SMB) Annual Meeting in Salt Lake City, UT.

Dr. Erin R. Moss presented “When All of the Above Isn’t the Answer: Examining Mathematics Pedagogy through a Lens of Social Justice” at the MAA/AMS Joint Mathematics Meetings in Denver, CO (2020) with Toney, A. and Ryan C.L.; “Liberal Arts Mathematics: Online Resources and Flexible Framing” at the Eastern Pennsylvania and Delaware (EPaDel) section of the Mathematical Association of America in Center Valley, PA (2019); “Restructuring Lessons as an Antidote to Student Passivity in Introductory Courses” at the Mathematical Association of America (MAA) Annual Meeting (Mathfest) in Cincinnati, OH (2019); “A Physical Number Line as a Support for Students’ Work with Absolute Value Equations and Inequalities” at the MAA/AMS Joint Mathematics Meetings in Baltimore, MD (2019); “Inquiry into Student Thinking as a Pathway to Improved Mathematics Teaching” at the Augusta University Department of Mathematics Seminar in Augusta, GA (2018); “Supporting College Algebra Students’ Study of Mixture and Motion Problems. Mathematical Association of America (MAA) Annual Meeting (Mathfest). Denver, CO; “Methods for Supporting Teachers’ Inquiry into Power and Privilege” at the 2018 Noyce Summit in Washington, DC; “Laying the Foundation for Students’ Understanding of Areas of Triangles and Quadrilaterals” at the National Council of Teachers of Mathematics (NCTM) Annual Meeting and Exposition in Washington, DC (2018); and “Mathematics in a Feminist Theory Course” at the Mathematical Association of America (MAA) Annual Meeting (Mathfest) in Chicago, IL (2017).

Dr. Cynthia Taylor presented “Equity noticing framework—A tool for mathematics teacher educators” at AMTE in Phoenix, AZ (2020); “Identifying equitable mathematics instruction” and “What-how-who: Structuring mathematical discourse” at NCTM in San Diego, CA (2019); “Oh, say can you see? A vision of equitable instruction” at AMTE in Orlando, FL (2019); “Through the looking glass—Using literature as windows into equity in early mathematics” at NCTM in Washington, DC (2018); and “Secondary Mathematics Methods Course Goals and Activities” at AMTE in Houston, TX (2018). She also co-presented “Three Courses Designed to Develop and Expand Middle Level Preservice Teachers’ Mathematical Content Capacities” with Drs. **White** and Michael **Wisner** at ATME in Houston, TX (2018), and “Recruitment –What works” with **Janet White** at PAMTE in Shippensburg, PA (2018).

Dr. Janet White presented her sabbatical results, “A Year of Reflection on Secondary Math Teacher Preparation” at the PAMTE annual symposium 2019 at Shippensburg University and “What do Secondary Teachers Value in Program Preparation?” at AMTE 2020 in Phoenix, AZ.

Dr. Mingquan Zhan presented at the 2019 Xian International Workshop on Graphs and Combinatorics in Xian, China. He also presented at the 62nd Mighty Conference on Graph Theory in Marion, OH.

Publications:

Ma, B., Li, C. and Warner, J. (2019). Structured mathematical models to investigate the interactions between *Plasmodium falciparum* malaria parasites and host immune response. *Mathematical Biosciences*, 310, pp.65-75.

Moss, E.R. (2018). *Geometry and Proportional Reasoning in Agriculture*. Mathematics Teaching in the Middle School, Volume 24, Issue 3, pp. 184-187. Additional material published online.

Ackleh, A., Chiquet, R., **Ma, B.**, Tang, T., Caswell, H., Veprauskas, A. and Sidorovskaia, N. (2017). Analysis of lethal and sublethal impacts of environmental disasters on sperm whales using stochastic modeling. *Ecotoxicology*, 26(6), pp.820-830.

Taylor C. E., Rehm, M. (MEd 2016), & **Catepillán, X.** (2018). Maya calendars: Mathematics and culture mixed in the classroom. In S. McMillen, E. Friedland, and P. del Prado Hill (Eds.), *Integrating Math across the K-6 Curriculum*. Reston, VA: NCTM.

Consultations:

During the past three years, faculty members continue to participate in the College Board's annual AP Statistics Reading in Kansas City, MO. **Drs. Delray Schultz** (2017, 2018, 2019), **Kevin Robinson** (2018, 2019), and **Janet White** (2018).

Did we miss you? Has something new happened?

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