

NEWS

from the Department of Mathematical Sciences

EXCEL

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CREATE

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DISCOVER

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CONNECT

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EXPLORE

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SERVE

“

It is invaluable to have a friend who shares your interests and helps you stay motivated”

”

— Maryam Mirzakhani

We had

32

students complete their master’s degrees in the Department of Mathematical Sciences

and

38

students finish their undergraduate work.

PROUD OF

our recent grads

**Anna Schenfisch** earned her PhD in Mathematics in the Spring of 2023 with a dissertation titled “Faithful Sets of Topological Descriptors and Algebraic  $\mathbb{K}\mathbb{K}$ -Theory of Multi-Parameter Zig-Zag Persistence Modules.” Anna is now a postdoctoral researcher at Eindhoven University of Technology in the Netherlands.

**Amy Kong** completed her PhD in Mathematics Education in summer 2023. Her dissertation study was “Two-Year Community College Students’ Understanding of Rational Expressions.” She is currently the Director of eLearning and Faculty Development and a mathematics instructor at Helena College.

And this past Fall Semester, **Priscilla Bacino** received her PhD in Statistics. With the dissertation “Correlation-based Hierarchical Multiple Testing Procedures.” She is currently employed with Atrium, a data science company.

Celebratory side notes

For faculty member **Blair Davey, PhD**, 2023 was a year worth celebrating. In the spring, she was notified by the National Science Foundation that her research will be funded for five years by a prestigious CAREER award. Her work is focused on elliptic and parabolic partial differential equations, and beyond her own research, the grant also provides funding for a summer workshop in Bozeman that will gather graduate students and postdoctoral researchers from around the nation to advance their own understanding in this area.

Blair has been a member of the Department of Mathematical Sciences since 2020. In 2023, she was tenured and promoted to Associate Professor of Mathematics.”



EXCITED ABOUT

our new faculty this year



**Breschine (Bree) Cummins, PhD**, has broad interests in the field of mathematical and computational biology, and her current research interests include modeling the genetic control of cellular processes, modeling social processes related to disease spread, and most recently, exploring complex dynamics through the lens of artificial intelligence. When she’s not doing math, she’s dancing, sailing or gardening. *Pictured top left.*



**Allechar Serrano López, PhD**, has research interests in number theory and arithmetic geometry; in particular, she works in arithmetic statistics and in number field asymptotics. Allechar’s service work centers around supporting communities that have been historically and systemically excluded in STEM by creating and supporting programs, such as the workshop called Rethinking Number Theory and the Association for Women+ in Mathematics at Universidad de Costa Rica. Outside of math, Allechar enjoys baking, making ice cream, thrifting, watching YouTube videos about fashion history and reading.

**Samidha Shetty, PhD**, focuses her research on semi-parametric methodology for missing data. More broadly, she applies semi-parametric methods to different statistical domains. She is also extremely passionate about collaborative applied and methodological research in diverse scientific areas. Some recent collaborations explored the impacts of restless leg syndrome and genetics on fetal growth and the relationship between sleep patterns and head impacts in football players. Apart from statistics, she also enjoys reading, cooking and dancing. *Pictured bottom left.*



MATHEMATICAL SCIENCES

college and university awards



Elizabeth Mery  
*Director of the department's tutoring center*  
2023 CLS Outstanding Teaching Award



Mary Alice Carlson, PhD  
*Associate Professor of Mathematics Education*  
2023 CLS Excellence in Integration Award



Veronica Baker  
*Calculus Student Success Coordinator*  
2023 Provost's Excellence in  
Open Education Award

Bozeman, MT 59717-2400  
PO. Box 172400  
2-214 Wilson Hall  
Department of Mathematical Sciences

College of  
LETTERS & SCIENCE

MONTANA  
STATE UNIVERSITY





The **Mathematical Sciences General Scholarship** fund enables us to award scholarships to deserving students. The **Kenneth J. Tiahrt** fund lets us support the needs of graduate students. The **John W. Hurst Faculty Excellence** fund and the **Mathematics Education Faculty Enrichment** fund support faculty scholarship and research. Gifts to the **Mathematical Sciences General Support** fund and the **Academic Improvement in Mathematical Sciences** fund enable us to support a variety of programs, research and students in the department. Visit [msuaf.org/give-mathematics](https://msuaf.org/give-mathematics) to make a gift.