

Community for **Advancing Discovery Research** in **Education**

2025 CADRE FELLOWS BIOGRAPHIES



Margaret Ann Bolick

Clemson University

Margaret Ann Bolick is a doctoral candidate in Engineering and Science Education at Clemson University in rural South Carolina. Before pursuing a PhD, she taught high school mathematics and science courses in the Boston Public School System, where she developed a passion for disrupting systems negatively impacting student success. Margaret Ann's research focuses on systems-level comparisons across international contexts and the impacts on first-generation college students in first-year mathematics courses. Currently, Margaret Ann is a graduate researcher on the NSF-funded project, Achieving Critical Transformations in Undergraduate Programs in Mathematics (ACT UP -

Math). In this role, she investigates the inclusion of students in equity-oriented departmental change groups within mathematics departments. Margaret Ann earned both her MAT in Mathematics Education as a Noyce Scholar and her BS in Biomedical Engineering from Boston University. **Recommender:** Matthew Voigt

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Yin Hong Cheah

University of Idaho

Yin Hong Cheah is an assistant professor of instructional technology at the University of Idaho. She earned her PhD in Curriculum and Instruction, specializing in Learning Technologies, from The University of Texas at Austin in 2023. Before transitioning to academia, Cheah taught middle school mathematics and science for eight years. She also served as a research associate at Singapore's National Institute of Education, contributing to three government-funded STEM research projects. Cheah's research centers on enhancing K-12 teachers' technology practices, particularly in addressing the digital learning divide between privileged and underserved STEM learners. Grounded

in a socio-critical perspective, her work examines whether, how, and under what conditions technology can be effectively and meaningfully utilized by teachers to empower students as digital learners. Currently, she is investigating the unique challenges and opportunities in Idaho's rural school contexts to support teachers in developing competencies for designing and implementing AI-enhanced STEM curricula.

Recommender: Julie Amador



Heidi Cian

Maine Mathematics and Science Alliance

Heidi Cian is a STEM education specialist at the Maine Mathematics and Science Alliance (MMSA), a 501(c)3 nonprofit organization that develops inspiring new ways to excite learners in science, technology, engineering, and mathematics. Heidi's scholarship considers how recognizing oneself as a STEM person can be nurtured through reciprocal knowledge-sharing between schools, families, and researchers. She explores this in rural Maine, situating her work in the rich cultural, experiential, and intellectual expertise that characterize communities across the state. With a background in qualitative and quantitative research, Heidi is interested in equitable data collection methods that can

account for diverse expertise and how it may be expressed among rural communities. Heidi holds a PhD in Science Curriculum and Instruction from Clemson University and previously worked as a high school science teacher in South Carolina.

Recommender: Remy Dou



Nicollette Frank

University of Montana

Dr. Nicollette Frank (she/her) earned her PhD in Educational Theory and Practice at the University of Georgia and currently works as an education and evaluation research associate with Broader Impacts Group (University of Montana) and as an adjunct education instructor at Helena College in Helena, Montana. Prior to her doctoral studies, she earned her BA in Psychology at the University of Montana and her MEd in Integrated Arts at Plymouth State University. She has taught in early childhood and elementary settings across the country, prioritizing content integration through emergent curricula. Nicollette's experience in science education research has grown significantly

during her time with Broader Impacts Group, where she has contributed to various projects focused on culturally relevant STEM education and broadening access to STEM opportunities in rural and tribal communities. She is particularly committed to co-creating meaningful opportunities for science education in Montana. **Recommender:** Beth Covitt



Min Jung Lee

University of North Dakota

Min Jung Lee is a postdoctoral research fellow for the STEM STRONG project at the University of North Dakota. She currently works on the DRK-12 project, Investigating How Combining Intensive Professional Development and Modest Support Affects Rural Elementary Teachers' Science and Engineering Practice, exploring the impacts of professional learning, followed by modest supports, on rural elementary teachers to promote enduring instructional improvements. Before joining the University of North Dakota, she was a postdoctoral research fellow at Old Dominion University for the Ed+gineering project. She received both her PhD and MS in Science

Education from Teachers College, Columbia University and her BS in Chemistry from Kyung Hee University, South Korea. With years of research experience in STEM education, along with teaching experience at all levels of K-12 science, her academic interests lie in integrated STEM education and teacher education aiming to support and empower teachers to implement interdisciplinary STEM approaches effectively.

Recommender: Ryan Summers



Chris Pavlovich

Montana Technological University

Dr. Chris Pavlovich is an emerging researcher dedicated to advancing place-based, interdisciplinary STEM education in rural communities. Her work embraces diverse knowledge traditions and decenters Western paradigms to cultivate inclusive and impactful education. She holds a PhD in Curriculum and Instruction and an MS in Science Education from Montana State University. During her 14 years as a fifth-grade teacher, Chris founded Watershed Warriors, a curriculum rooted in local ecologies. Watershed Warriors fostered a deep understanding of place by connecting students with local scientists, industry professionals, and the region's unique ecology, empowering

them through the guidance of rural role models. Now serving as director of program services and evaluation at Ripple: The Center for Education and Ecosystem Studies, she collaboratively creates inclusive and impactful K-12 STEM experiences. Through CADRE, Chris aims to extend equitable, scalable STEM education models that bridge local knowledge to empower and equip rural students.

Recommender: Rayelynn Brandl



Kenley Ritter

University of Idaho

Dr. Kenley Ritter is a postdoctoral fellow at the University of Idaho, where she works on the DRK-12 project, Synchronous Online Video-Based Development for Rural Mathematics Coaches. She began her career as a high school mathematics teacher before transitioning to the role of school administrator in both the United States and Africa. Kenley also served as an academic coordinator at a non-profit organization before earning her PhD in Curriculum and Instruction from Baylor University. Kenley's education journey has been driven by a commitment to improving opportunities for all students, particularly those from historically marginalized communities. Her

research focuses on empowering teachers to cultivate classrooms where all students are supported and actively engaged in high-quality mathematics learning.

Recommender: Julie Amador



Elizabeth Suazo-Flores

University of North Dakota

Elizabeth Suazo-Flores is an assistant professor of mathematics education at the University of North Dakota (UND), teaching mathematics methods courses for elementary and secondary mathematics teachers. UND is in Grand Forks, North Dakota, part of an EPSCoR jurisdiction. Dr. Suazo-Flores earned her PhD in Mathematics Education from Purdue University. Her research uses socioecological approaches to position students, families, teachers, and teacher educators as knowledgeable and becoming. Dr. Suazo-Flores pursues enhancing mathematics teaching and learning by incorporating visuospatial reasoning into activities that invite teachers, families, and

learners to share information, investigate their local and global contexts, and question the status quo. Dr. Suazo-Flores sees her role as a mathematics teacher educator and researcher as offering activities and resources that allow teachers, families, and students to see themselves as doers of mathematics and stewards of their local and global contexts. **Recommender:** Melva Grant



Yao Yao

University of Nebraska-Lincoln

Dr. Yao Yao (she/her) earned her PhD in Human Sciences with a specialization in Child Development and Early Childhood Education from the University of Nebraska-Lincoln. Her research focuses on early childhood science learning, with an emphasis on empowering parents to support their children's education at home. Her dissertation investigated the impact of Elaborative Conversation Strategies (ECS) on enhancing parents' science talk quality in home learning environments, particularly among families from low-income backgrounds who may have limited access to science-rich resources such as museums or zoos. By equipping parents with effective

conversational strategies and science content knowledge, her work aims to make science learning more accessible and engaging for young children. Yao also has extensive experience in quantitative research, national data reporting, and program evaluation, further contributing to her expertise in early childhood education and parental engagement. **Recommender:** Soo-Young Hong