



# Community for Advancing Discovery Research in Education

## 2024 CADRE FELLOWS BIOGRAPHIES



### **Miranda M. Allen**

*Texas Tech University*

Miranda M. Allen is a doctoral candidate in STEM Education in the Department of Curriculum and Instruction at Texas Tech University. Her research explores secondary science education for grades 9–12, advancing Black girls in STEM education, and the development of informal STEM learning environments. Bringing a wealth of experience from her 12-year career in education, Miranda has made significant contributions as a high school science teacher, a K–8 STEM coordinator, and a director of after-school and summer STEM initiatives. Her dissertation research delves into the experiences and identity development of Black girls in high school science, investigating how their stories, shared both formally and informally, can transform our understanding and practice of science education. Through her work, Miranda is dedicated to influencing the current academic discourse, aiming to reshape the narrative and perception of Black girls in STEM fields.

**Recommender:** Weverton Ataide Pinheiro



### **Jerome Amedu**

*University of New Hampshire*

Dr. Jerome Amedu is a postdoctoral researcher in the Department of Mathematics and Statistics at the University of New Hampshire. He currently works on two projects—a research project investigating AI use in mathematics education and a larger meta-research project focusing on best practices around teaching and learning algebra in the U.S. Before joining the University of New Hampshire, he earned his PhD in Learning and Teaching in STEM (concentration in Mathematics Education) from North Carolina State University, where he investigated math teachers' perceptions of the effects of informal learning for his dissertation. Jerome was part of the inaugural cohort of the NC State Holmes Scholars Program. His research interests include teacher learning, educational technology, and issues around equity and diversity. Jerome holds an MS in Mathematical Sciences from Lappeenranta University of Technology, Finland, and a BS in Mathematics Education from the University of Maiduguri, Nigeria.

**Recommender:** Ruby L. Ellis



### **Fangxing Bai**

*University of Cincinnati*

Fangxing Bai is a doctoral candidate in Quantitative Research Methods in Educational Studies at University of Cincinnati. His research focuses on the development of quantitative research methods for STEM education research. He specializes in designing and analyzing studies with complex but authentic designs to detect a broad range of effects (e.g., main, moderation, and mediation effects). He has expertise in (non-)linear structural equation modeling (particularly in smaller sample sizes), and he is actively involved in developing and applying explanatory machine learning methods that integrate precise prediction, pattern detection, and robust explanations. He is committed to creating user-friendly R packages and ShinyApps to make sophisticated statistical methods more accessible to researchers and practitioners.

**Recommender:** Ben Kelcey



## Tajma A. Cameron

*Drexel University*

Tajma Cameron is a doctoral candidate in the School of Education at Drexel University, pursuing her degree in Education, Education Leadership, and Policy. Prior to arriving at Drexel, Tajma earned a BS in Biology from Temple University, an MS in Biotechnology Studies, and an MAT with a Biology certification from UMGC. In addition to being a doctoral student, Tajma is a certified Biology teacher (grades 7–12) in Maryland and Pennsylvania and worked as a science and math teacher teaching a range of courses to 9th-12th grade students.

Tajma's overall research focuses on how culturally affirming, sustaining, and creative instructional practices and curriculum can be utilized to cultivate and nurture Black girls' STEM identity in formal school settings and informal STEM environments.

**Recommender:** Dara Bright



## Destinee Cooper

*Clemson University*

Destinee Cooper is a doctoral student in Engineering and Science Education at Clemson University. Before pursuing her PhD, she taught high school chemistry for Anderson School District Five (SC) and Prince George's County Public Schools (MD). Destinee's research broadly focuses on culturally relevant pedagogy in chemistry and advancing equity in STEM education. She is currently a graduate researcher on the NSF S-STEM Hub project, *Practices and Research on Student Pathways in Education from Community College and Transfer Students in STEM*, where she examines how chemistry faculty understand and implement culturally relevant

practices to support STEM transfer students. She is also a senior fellow in the Knowles Teacher Initiative and coaches early career science teachers. Destinee earned an MA in Education from Stanford University and a BS in Chemistry from Winthrop University.

**Recommender:** Matthew Voigt



## Justice Ejike

*Georgia State University*

Justice Ejike is a doctoral student at Georgia State University, majoring in Teaching and Learning with a concentration in Science Education. His scholarly work focuses on advancing Black youth in STEM education, constructivist applications to science learning, and enhancing the instructional practices of STEM teachers. With over eight years of experience, Justice has served as a middle/high school teacher, STEM coach, and science curriculum developer.

Justice is a graduate research assistant under the advisement of Dr. Natalie King, where he supports education and research initiatives for the Alan T. Waterman project (NSF Award #EES-2325869), designed to strengthen the STEM teacher workforce. Justice holds a BS in Kinesiology from Georgia Southern University and an MAT in Science and Math Education from Georgia State University.

**Recommender:** Natalie King



## **Kristina Kramarczuk**

*University of Maryland, College Park*

Kristina Kramarczuk is a PhD candidate in the Department of Teaching, Learning, Policy and Leadership at the University of Maryland, College Park. Starting in January 2024, she will be working as an assistant clinical professor for the First Year Innovation and Research Experience (FIRE) and leading her own FIRE stream titled *Computing & Society*. She was a former public high school chemistry teacher in Miami, Florida, and a summer computing instructor for the Kode With Klossy program. Based on her experiences in STEM education, her research seeks to understand 1) how PK-12 central office leaders, school administrators, and teachers interpret and define computer science (CS) education and 2) how their perceptions influence student experiences in PK-12 CS learning spaces and beyond. She also believes it is imperative to design, conduct, and produce research that honors the real-life experiences of marginalized groups within the computing education community: women, Black, Hispanic/Latino/a/x, first-generation, and low-wealth individuals. She has an MS in Education and Social Change from the University of Miami and a BS in Microbiology and Spanish from the University of Wisconsin–Madison.

**Recommender:** Ebony Terrell Shockley



## **Samuel Lee**

*Boston College*

Sam Lee (they/he) is a doctoral candidate in Curriculum and Instruction with a focus on science education and language at Boston College. Sam earned an MSE in Literacy Education (5–12) from Fordham University and a BA in Biology and Secondary Education from Boston College. A native New Yorker (shout out Queens!), their research interests focus on expanding how we view and position racialized and minoritized bi/multilinguals' languaging practices for figuring out natural and designed phenomena in the world. Currently, Sam is a research assistant on the DRK–12 project, *Supporting Teacher Customizations of Curriculum Materials for Equitable Student Sensemaking in Secondary Science* (Award #2101384), exploring and developing tools to support teacher's curriculum changes for equitable sensemaking. Sam's dissertation stems from this co-design work to consider a "linguistic otherwise possibility" of engaging in science that centers bi/multilingual's rich and complex meaning-making practices while desettling harmful monolingual and raciolinguistic ideologies in teaching.

**Recommender:** Katherine L. McNeill



## **Kim Megyesi-Brem**

*Claremont Graduate University*

Kim Megyesi-Brem is a doctoral student in Education in the School of Educational Studies at Claremont Graduate University. A former middle school math teacher who enjoys teaching math methods to teacher candidates, her research explores ways to expand access to STEM education for students from low-socioeconomic backgrounds. Her dissertation is a comparative study of egalitarian math norms as a means of dismantling the impact of status in the classroom in middle schools in Japan and the United States. Kim also studies math norms as a transformative element of math self-efficacy development in preservice elementary teachers. In her role as research assistant for Dr. Guan Saw, she contributes to work on *Developing and Validating STEM Social Capital Scales* (NSF Award #2113395). Kim is also a California State University Chancellor Doctoral Incentive Program Fellow and has received a Claremont Graduate University Crossing Boundaries Research Award.

**Recommender:** Guan Saw



## **Luis Montero-Moguel**

*The University of Texas at San Antonio*

Luis Montero-Moguel is a PhD student in Interdisciplinary Learning and Teaching specializing in STEM education at The University of Texas at San Antonio (UTSA). Luis holds an MSc in Mathematics Education from the University of Guadalajara and a BSc in Mechanical Engineering. He has experience teaching mathematics for high school and engineering students. As part of his doctoral program, Luis obtained a certificate in iSTEM-Education and is also pursuing a certificate in Engineering Education. He has experience as an engineer in design projects. He is interested in expanding equitable and high-quality learning opportunities for engineering and K–12 students through mathematical modeling. His research focuses on exploring the process of refining mathematical ideas and engineering concepts that students develop while engaging in model development sequences built in real engineering contexts. At UTSA, he is graduate research assistant on two grants, one funded by NSF and another by IES.

**Recommender:** Guadalupe Carmona



## **Nasriah Morrison**

*Columbia University*

Nasriah Morrison is a doctoral candidate in the Mathematics Education program at Teachers College, Columbia University, where she works as a research fellow with Dr. Erica Walker and Dr. Robin Wilson on their DRK–12 project, *Storytelling for Mathematics Learning and Engagement*. She earned her BA at the University of California, Berkeley, and her MA at Teachers College, Columbia University. As a middle and high school mathematics teacher and Math for America fellow for over a decade, Nasriah investigated how integrating racially expansive histories into secondary mathematics curricula can support students belonging to historically excluded racial and ethnic groups in developing strong mathematics identities. Her dissertation research builds on this work in exploring the interactions between mathematics conceptions, self-efficacy, and identity development throughout the narratives of contemporary Black mathematicians.

**Recommender:** Erica Walker



## **Takeshia Pierre**

*University of Florida*

Takeshia Pierre is a PhD candidate in Curriculum and Instruction in Science Education at the University of Florida, minoring in Quantitative Research and Evaluation Methodology. Before her entrance into STEM education, Takeshia earned a master's degree in public health and a bachelor's degree in health science at the University of Florida (UF) and worked across six health colleges at the UF health science center. Her education and experience working within these spaces and K–12 schools refined her skills in interdisciplinary education, curriculum development, and research across STEM fields. Adopting a transnational, critical, and intersectional lens, Takeshia's research aims to amplify the voices of STEM learners and professionals across the Black Diaspora and uncover institutions that support their STEM matriculation and retention. She has earned opportunities to conduct culturally responsive professional development with STEM teachers domestically and has developed collaborations with global STEM scholars across North America, Africa, and Europe.

**Recommender:** Rose Pringle



## **Dyanne Baptiste Porter**

*Georgia Institute of Technology*

Dr. Dyanne Baptiste Porter is a postdoctoral research fellow at Georgia Tech's Center for Education Integrating Science, Mathematics, and Technology. She currently works on the DRK-12 project, *Measuring the Effectiveness of Middle School STEM-Innovation and Engineering Design*, exploring middle school engineering teachers' pedagogy to help contextualize K-12 STEM and engineering pedagogical content knowledge and practices. She earned her PhD in Mathematics Education from Columbia University, MAT in Mathematics 6-12 from Agnes Scott College, and BS in Bioengineering from Syracuse University. With over eight years of teaching experience in all levels of high school mathematics, along with administrative roles as a mentor teacher and dean of students, her research interests also include purposeful mathematics, interdisciplinary pedagogy, and the benefits of mentorship for first-generation students in STEM.

**Recommender:** Jessica D. Gale



## **Jaquelina Schmittlen-Garbocci**

*University of Tennessee-Knoxville*

Jaquelina Schmittlen-Garbocci is an early stage doctoral student in the Theory and Practice in Teacher Education program with a concentration in Science Education at the University of Tennessee-Knoxville. She was a chemistry teacher in Argentina and graduated from the National University of Rosario. Before beginning her doctoral studies, she worked with the Latinx community as part of the Youth and Family Department of Centro Hispano de East TN. Her research interests center on Latinx girls' science identity development and agency in both formal classrooms and informal out-of-school contexts. She is also interested in how racialized school experiences shape Latinx girls' identity and agency. She is currently working in collaboration with Centro Hispano on a pilot study; she developed a science curriculum that was implemented in summer 2023 and hopes to learn about the girls' experiences developing a science identity in an inclusive, informal setting.

**Recommender:** Frances K. Harper



## **Jordan Sherry-Wagner**

*University of Washington*

Dr. Jordan Sherry-Wagner earned his PhD in Learning Sciences and Human Development at the University of Washington and currently works as a postdoctoral scholar on the DRK-12 project, *Learning in Places*. Coming to the work with a background in psychology, philosophy, and early childhood education, Jordan's scholarship draws upon participatory design-based methods and analysis of knowledge and interaction to better understand how dynamics of culture, development, and identity mediate learning in early place-based education. Specifically, he studies the role of ethical speculation in supporting sophisticated socio-ecological inquiry, alongside pedagogical approaches that cultivate educators' attunement to diverse forms of sensemaking to develop their capacities for ethical pedagogical mediation. Prior to his doctoral training, Jordan received his master's in education while working both as a curriculum specialist at the Childcare Quality and Early Learning Center and as founding co-director of a mixed-age family childcare center where he served for over a decade.

**Recommender:** Carrie Tzou