



Community for Advancing Discovery Research in Education

2018 POSTDOC BIOGRAPHIES



Valeria Aguirre Holguín

New Mexico State University

Dr. Valeria Aguirre Holguín is a postdoctoral researcher in mathematics education at New Mexico State University. She holds master's and bachelor's degrees in Mathematics from University of Texas at El Paso and Universidad Autónoma de Ciudad Juárez, respectively. She has taught graduate and undergraduate courses in mathematics and mathematics education for ten years, as well as middle school mathematics and science for two years. Valeria currently serves as program director for MathSnacks, a DRK-12 grant that emphasizes the improvement of middle school mathematics teaching and learning through innovative resources. She also works with Mathematically Connected Communities, a project funded by the New Mexico Public Education Department that creates learning communities of mathematics educators, mathematicians, and public school leaders to improve K-12 mathematics teaching. Her research interests include undergraduate students' understandings of proof and mathematical definitions, history and pedagogy of mathematics, as well as the development of teachers' mathematical content knowledge.



Jennifer King Chen

University of California, Berkeley

Dr. Jennifer King Chen received her PhD from the Education in Math, Science and Technology program at University of California, Berkeley. Her dissertation research investigated the impact of science inquiry instruction that incorporates student choice to promote more reflective, autonomous, and self-guided learning. Prior to graduate school, Jenn earned her BA in astrophysics from UC Berkeley and was a curriculum developer with the Great Explorations in Math and Science group at the Lawrence Hall of Science. She is a recipient of the K. Patricia Cross Future Leaders Award (administered by the Association of American Colleges and Universities), a National Science Foundation Graduate Research Fellowship, and the CADRE Fellowship. At Berkeley, Jenn has mentored undergraduate students through the Cal Teach and Cal NERDS (New Experiences for Research and Diversity in Science) programs, and she has also served on university-wide committees focused on improving the quality of mentoring and teaching at UC Berkeley.



Amy Hawkins

The Genetic Science Learning Center, University of Utah

Dr. Amy J. Hawkins received her PhD in Human Genetics from the Virginia Commonwealth University School of Medicine and spent her first postdoctoral fellowship studying cancer metabolism in Jared Rutter's lab in the Department of Biochemistry at the University of Utah. She is currently a postdoctoral fellow at the Genetic Science Learning Center (GLSC) at the University of Utah, where she distills peer-reviewed scientific research into content for interactive multimedia materials for Learn.Genetics.utah.edu, the most widely used life science education website in the world. She also teaches scientific communication to other scientists, designs courses for a graduate certificate in personalized medicine for students at the University of Utah School of Medicine, and engages in scientific outreach to local policymakers. Most recently, Amy engaged the local policy community by working with the Utah State Legislature to develop a funding opportunity for the GLSC to update the Science of Addiction curriculum materials for high school students to focus on the opioid crisis.



Melissa Kjelvik

Michigan State University

Dr. Melissa Kjelvik is a postdoctoral researcher on the DRK-12 project, *Scientific Data in Schools: Measuring the Efficacy of an Innovative Approach to Integrating Quantitative Reasoning in Secondary Science*. She received her BS in Natural Resources from Northland College and her PhD from Michigan State University in Zoology and Ecology, Evolutionary Biology, and Behavior. For her dissertation research, Melissa examined ecological consequences of individual-level behavioral variation in sunfish. During graduate school she was able to work in 12+ rural Michigan school districts and learn from seasoned partner teachers through the Kellogg Biological Station's K-12 Partnership. Melissa co-founded Data Nuggets - short classroom activities designed to bring authentic data and cutting-edge scientific research into K-16 classrooms. Her experience in both ecological research and science education inform the way she thinks about innovations for K-12 education, as she is constantly incorporating both worlds while engaged with data-intensive curriculum development, teacher professional development, and outreach efforts.



Karisma Morton

University of Texas at Austin

Dr. Karisma Morton is a postdoctoral fellow at the University of Texas at Austin. Her research explores how inequality in STEM education may be created or exacerbated, particularly for students from traditionally marginalized populations. Central to her research is a focus on gender and race/ethnicity, as well as their intersection. Her research is composed of two strands of inquiry. The first explores the disparities that exist between students from underserved populations and their more privileged peers in the math and science curricula they have access to. The second investigates the experiences of students along their educational pipelines by examining factors such as achievement and course-taking and how they differ by gender-race/ethnicity group. To investigate these strands of inquiry, she analyzes national and district datasets using quantitative research methods. Karisma is a former high school math teacher who also has experience teaching math methods courses in the elementary and secondary teacher preparation programs at the University of Texas at Austin.



Terrell Morton

University of Missouri

Dr. Terrell Morton is part of the inaugural cohort of Preparing Future Faculty for Faculty Diversity Postdoctoral Fellows at the University of Missouri. He obtained a PhD in Learning Sciences and Psychological Studies from the University of North Carolina at Chapel Hill, an MS in Neurobiology from the University of Miami, and a BS in Chemistry from North Carolina Agricultural and Technical State University. His research focuses primarily on student retention and matriculation in postsecondary education, including foci on the retention and matriculation of Black women in STEM and the retention of underrepresented populations (i.e., transfer students, first-generation college students, students from rural communities, and student athletes). His work involves investigating the influence of identity development and expression (e.g., racial identity, gender identity, and intersectionality) on students' perceptions, experiences, and engagements. He is trained in qualitative methodology and takes a critical perspective – informed by Critical Race Theory – with all of his work.



Maria Olivares Pasillas

TERC

Dr. Maria C. Olivares Pasillas is a postdoctoral fellow at TERC, a STEM education research and development organization in Cambridge, MA. She received her PhD from the University of California, Los Angeles Graduate School of Education and Information Studies. Previously, Maria was a graduate student researcher for Mobilize, an NSF-funded project aimed at diversifying STEM careers and education through data science education. The program sought to provide data science learning opportunities for underrepresented groups in STEM through the implementation of an introductory data science course. Her dissertation examined the classroom participation structure that emerged at an implementation site to understand the extent to which this curricular reform intervention shaped students' developing notions of data science as a field and as a set of practices. Maria is interested in understanding how Students of Color come to think of themselves as STEM-doers and how curricular reform initiatives can support students in their development of strong STEM identities through personally meaningful and enriching experiences with STEM-doing.



Lindsey Perry

Southern Methodist University

Dr. Lindsey Perry earned her PhD in Education from Southern Methodist University in 2016. She also holds an MEd in Educational Leadership and Policy Studies from the University of Texas at Arlington, and a BA in Mathematics from the University of Texas at Austin (UTeach program). After teaching elementary and middle school mathematics for two Texas school districts, Lindsey served as the assistant director of mathematics and as a mathematics assessment specialist at the Texas Education Agency. Her current research interests focus on investigating students' spatial and relational thinking abilities, developing mathematics assessments for young children and validating the interpretations of those assessments, and training educators on how to use data from assessments to make instructional decisions. Lindsey is currently a STEM research & assessment coordinator in the Research in Mathematics Education unit at Southern Methodist University.



ReAnna Roby

Michigan State University

Mississippi native, Dr. ReAnna S. Roby, is a postdoctoral research associate at Michigan State University in the Department of Teacher Education. She obtained a PhD in Interdisciplinary Learning and Teaching from the University of Texas at San Antonio, a master's in Curriculum and Instruction from Washington State University, and a bachelor's in Chemistry from Alcorn State University. Currently, she works with Drs. Angela Calabrese Barton and Kristen Bieda on separate NSF-funded projects geared toward transformation in STEM education. As a first-generation scholar, Roby's background as a Black Southern woman in science greatly informs her service, research, and teaching praxis. Roby's scholarship employs Critical Race Feminism, curriculum theory, and critical qualitative methodologies to explore the ways in which the narratives of Black women and girls in science (formally and informally) could be used to reconceptualize science curriculum.



Vecihi Serbay Zambak

Marquette University

Dr. Vecihi Serbay Zambak is currently a postdoctoral researcher in the Department of Mathematics, Statistics and Computer Science at Marquette University. In his postdoctoral appointment, he engages in research focusing on the quality of K-8 preservice teachers' mathematical argumentation and professional noticing skills. He completed his MS in Mathematics and Science Education at the University of Amsterdam and his PhD in Curriculum and Instruction at Clemson University, both with a concentration in mathematics education. His overall research interests center around the development of preservice mathematics teachers' content knowledge in technology-driven learning environments with a focus on reasoning, justification, and proof.