2019–2020 CADRE FELLOWS BIOGRAPHIES

Yemimah A. King

Purdue University

Yemimah A. King is a doctoral student in the Department of Human Development and Family Studies (HDFS) at Purdue University, where she studies early language and math development. She is a research assistant who works under the advisement of Dr. David Purpura on an NSF-funded math language storybook intervention. The goal of this intervention is to increase preschoolers' engagement in early math activities. Her role on this project primarily consists of storybook development, data collection, and mentoring undergraduate research assistants. She is interested in examining the links between learning experiences at home (e.g., parent-child interactions and media use) and school readiness skills—particularly math and language—in preschool age children. She received her master's degree in HDFS at Purdue University and her bachelor's degree in Psychology at Georgia State University.

Nominating PI: David Purpura

Tiffany Maxon

Education Development Center

Tiffany Maxon is an education researcher whose interests lie in informal learning environments that support increased accessibility to fundamental education for young learners ages 2–8. She is particularly interested in equitable access to education for low-income families and how media—videos, games, apps, etc.—can help close existing gaps. She has also supported several EDC projects with her project management skills. She holds a Master of Education in Human Development and Psychology from the Harvard Graduate School of Education. She also received dual bachelor's degrees from the University of Chicago: a BA in Cinema and Media Studies and a BA in East Asian Languages and Civilizations. She is proficient in Mandarin and conversant in French.

Nominating PI: Megan Silander

David McKinney

University of Nevada, Las Vegas

David McKinney is a postdoctoral scholar with the Motivation - Planning Lessons to Activate eNgagement in Science (M-PLANS) project at the University of Nevada, Las Vegas. On this project he works with a multi-disciplinary team to support science teachers in Nevada and Michigan in implementing motivationally supportive NGSS-aligned instruction. He earned his PhD in Education from the Johns Hopkins University School of Education in 2019. As a doctoral student, he worked on the STEM Achievement in Baltimore Elementary Schools (SABES) project. For his dissertation, he used survey data from the SABES project and district administrative data to identify and describe common motivation profiles of elementary students in Baltimore City Public Schools and to relate those profiles to each other over time and to important academic outcomes and predictors. Prior to his doctoral studies, he taught middle school science and mathematics for eight years in New York City Public Schools.

Nominating PI: Gwen Marchand

Roxanne Moore

Washington State University

Roxanne Moore is a doctoral student in the Mathematics and Science Education program in the College of Education at Washington State University. She works at the intersection of mathematics education, cultural studies, and philosophy, seeking to critically examine and productively expand the revolutionary action necessary to engage in the people's vocation, the humanization of all. Her areas of expertise include rehumanizing mathematics, critical mathematics education, critical race theory and the mathematical experiences of Black students, values/valuing in mathematics in Hawai'i, implementations of critical pedagogy, complexity theory in mathematics education, and mixed methods research. She is a former secondary mathematics teacher and K-8 school leader. She received her M.Ed. in Secondary Education with an emphasis in mathematics from Chaminade University of Honolulu, and a BA in Law, Letters, and Society with a minor in African & African-American Studies from the University of Chicago.

Nominating PI: Paula Groves Price

Alice Morgan

West Virginia University

Alice Morgan is a PhD candidate in the Recreation, Parks, and Tourism department at West Virginia University. After earning her MS in Outdoor Education from the University of Edinburgh, Alice led the outdoor and sustainability program at Shenandoah University for several years before beginning her work at WVU. Currently, she works as a graduate research assistant for WVU's Science Adventure School, where her research focuses on academic relevancy and promoting excitement for STEM subjects in sixth-grade students through adventure and environmental education activities. Alice is also pursuing a graduate certificate in Geographic Information Systems, with a focus on adventure tourism.

Nominating Co-PI: Gay Stewart

Emily Reigh

Stanford University

Emily Reigh is a doctoral candidate at Stanford University with dual specializations in Science Education and Race, Inequality and Language in Education (RILE). She is a research assistant on the Improving Practice Together (IPT) project, a district-based Research Practice Partnership that aims to build capacity for science teacher leadership through supporting discussion and argumentation in the science classroom. Her own research focuses on how students from non-dominant linguistic backgrounds engage in argumentation in the science classroom and how teachers' ideologies of language use mediate how they interpret and respond to students' contributions. Prior to graduate school, Emily was a secondary science teacher in Oklahoma and in Cairo, Egypt. She holds a BS in Chemistry and a BA in Letters, both from the University of Oklahoma, and a MA in Teaching English to Speakers of Other Languages from The American University in Cairo.

Nominating Co-PI: Jonathan Osborne

Jennifer Schellinger

Florida State University

Jennifer Schellinger is postdoctoral researcher for an NSF-funded program called Learning Through Collaborative Design – Professional Development at Florida State University (FSU). The focus of this project is to identify the most effective means by which to support teachers to foster productive epistemic discourse in science. Jennifer received a PhD in Curriculum and Instruction with a concentration in science education from FSU in 2019. During her doctoral work, she engaged in multiple research studies focusing on the potentially promising intersections that occur between science (S), technology (T), engineering (E), and mathematics (M) disciplines highlighted in reform efforts and implicit in the widely used acronym of STEM. Her current research foci centers on engaging all learners, especially girls and students of color, in sensemaking about scientific phenomenon at the intersection of other STEM disciplines in formal and informal spaces.

Nominating PI: Sherry Southerland

James E. Smith

University of Arizona

James E. Smith is a doctoral student at the University of Arizona in the Teaching, Learning, and Sociocultural Studies: Mathematics Teaching and Teacher Education and Cognitive Science Graduate Interdisciplinary Program (GIDP) minor programs. He is also a master's student in the Statistics GIDP. Prior to pursing his doctoral degree, he earned an MA in English as a Second Language and an MA in Elementary Teaching and was an elementary teacher in South Korea and the US. He currently works as a graduate assistant on the Developing and Validating a Scalable, Classroom-Focused Measure of Usable Knowledge for Teaching Mathematics: The Classroom Video Analysis Instrument project where he works on recruitment, contributes to item construction, automates data collection, and conducts psychometric analyses. His research focuses on interdisciplinary approaches to measures of teacher knowledge and practice. He is specifically interested in the use of Markov models as a novel, scalable method to measure and model elementary and middle school teachers' teaching practices and usable knowledge.

Nominating PI: Nicole Kersting

Victoria J. VanUitert

University of Virginia

Victoria J. VanUitert is a PhD student in Special Education in the Curry School of Education and Human Development at the University of Virginia. She is a research assistant on the Scientific Explorers project in which she helps with the development of materials, provides feedback, participates in team meetings, and assesses and instructs students using the study-created materials. Her research interests focus on the development of interventions to support scientific content and conceptual knowledge growth among students with high-incidence disabilities and enhancing teacher practices to further facilitate science achievement in these students. Her research interests are influenced by the experience that she had had as an elementary-school teacher of students with disabilities, English learners, gifted students, and general education students, as well as her experience with NASA's Pre-Service Teaching Institute.

Nominating Co-PI: William Therrien

Ti'Era Worsley

University of North Carolina at Greensboro

Ti'Era Worsley is a second year doctoral student in the Teacher Education and Higher Education program at the University of North Carolina at Greensboro, where she studies science education in informal spaces. She received her BS in Agricultural and Environmental Technology and MNR (Master of Natural Resources) in International Resources from North Carolina State University. She currently works with two projects: Equitable-Consequential Making among Youth from Historically Marginalized Communities (EC-Making) and Broadening Identities for Diverse Groups Engaging in STEM (BRIDGES). On EC-Making she works with historically marginalized youth in an informal makerspace at a local Boys and Girls Club and refugee center, investigating social interactions among minoritized youth and the impact of social interactions on youths' making processes and outcomes. On BRIDGES, she investigates how youth identify with STEM through engaging with socio-environmental problems. During her masters, she served as an environmental Peace Corps Volunteer in Peru.

Nominating Co-PI: Edna Tan