



**May 2022 Newsletter**

## ***RISE Center Activities: Spring Update***

As we wrap up spring semester, we are happy to announce a few major accomplishments for the center. Our RISE Center website is officially live! Please check it out [here](#) for information about the center and upcoming events (or recorded talks of previous events).

We are also happy to introduce the core members of the RISE Center! More information about each of them is below. The RISE Center is currently accepting additional applications to be core members or affiliate members. Core members are individuals who are conducting research focused on inclusive STEM education at the college level and are interested in being a central part of the RISE Center community by participating in joint grant proposals, collaborative projects, providing collegial feedback and support on research endeavors, and attending RISE Center events. Affiliate members are more peripherally involved and may want to learn from the activities of the center and attend some RISE Center events, but are not engaged in active scholarship. Staff and faculty are both welcome in either role. If you are interested, please contact Sara Brownell ([sbrownel@asu.edu](mailto:sbrownel@asu.edu)).

## ***School of Life Sciences JEDI Update***

Special Advisors Nancy Grimm and Sharon J. Hall, and SOLS Director Jennifer Fewell collaborated with the Center for Improvement of Mentored Experiences in Research (CIMER) at the University of Wisconsin to develop a [Culturally Aware Mentor training opportunity](#) for SOLS faculty. This training will guide 20-25 faculty members to understand the sources and impact of bias on diverse graduate trainees, and to improve the training environment for students from underrepresented groups.

# Introducing RISE Center Core Members

We are proud to introduce our inaugural group of core members of the RISE Center!



**Naneh Apkarian**

**Assistant Professor in the School of Mathematical and Statistical Sciences**

Dr. Apkarian has a research-focused PhD in Mathematics Education from San Diego State University, with a concentration in Research in Undergraduate Mathematics Education. She is experienced with a variety of research projects and methods ranging from individual interviews aimed at exploring students' thinking to classroom design experiments and the roles of classroom discourse to national surveys.

**Sara Brownell**

**RISE Center Director**

**Professor in the School of Life Sciences**

Trained as a PhD neuroscientist, Sara transitioned to become a discipline-based education researcher and conducts research on how we can make undergraduate biology learning environments more inclusive, specifically focusing on women, LGBTQ+ students, students with disabilities, transfer students, and religious students.







**Brooke Coley**

**Assistant Professor in the Ira A. Fulton Schools of Engineering**

Dr. Brooke Coley is an assistant professor in engineering at the Polytechnic School of the Ira A. Fulton Schools of Engineering at Arizona State University. Dr. Coley is a bioengineer and social justice scholar. In her work, she hopes to push the bounds of traditionally heteronormative engineering environments through transdisciplinary approaches.

**Katelyn (Katey) Cooper**

**RISE Assistant Director of Evaluation**

**Assistant Professor in the School of Life Sciences**

Katey is the PI of the Cooper Biology Education Research Lab at ASU and an Assistant Professor in the School of Life Sciences. Her research group examines how to make biology learning environments more inclusive for students with anxiety and depression.



**Meseret F. Hailu**

**Assistant Professor in the Mary Lou Fulton Teachers College**

Dr. Meseret F. Hailu is an Assistant Professor of Higher and Postsecondary Education at Arizona State University (ASU). Her research focuses on the retention of minoritized women in STEM higher education pathways. Recently, her work has focused on 1) how Black immigrant women in the U.S. persist in engineering, and 2) how higher education institutions in Eastern Africa conceptualize and implement equity initiatives.

**Chris Mead**

**Assistant Research Scientist in the School of Earth and Space Exploration**

Chris is an assistant research scientist in the School of Earth & Space Exploration and the Center for Education Through Exploration at Arizona State University. His research has focused on understanding how digital learning experiences can be designed and used most effectively in helping students to learn. Currently Chris is working on a variety of research and evaluation projects connected to digitally-mediated learning.





**Barret Michalec**

**Associate Professor in Edson College of Nursing and Health Innovation & Center Director for CAIPER**

A sociologist by training, Michalec's research examines socialization and professionalization processes and mechanisms nested within health professions education and practice – most notably those impacting socio-emotional and team-based skills and attributes. His work also explores disparities in health, healthcare, and within the health professions, with a focus on how structural design of pre-professional pathways may perpetuate the lack of diversity of the healthcare workforce.

**Fabio Milner**

**Professor & Center Director in the School of Mathematical and Statistical Sciences**

Dr. Fabio Milner studies structured population models, including demography, epidemics, ecology, and tumor growth. Populations are usually structured by age (demographic and/or age-of-disease), and may also be structured by sex, size, or other relevant variables. The team studies theoretical properties of the models, such as existence, uniqueness, preservation of non-negativity, and asymptotic behavior, as well as real-life applications.



**Kristen Parrish****RISE Center Associate Director****Associate Professor in the School of Sustainable Engineering and the Built Environment**

Kristen Parrish is an Associate Professor in the School of Sustainable Engineering and the Built Environment and Chair of the Graduate Programs for the Del E. Webb School of Construction at ASU. Her work focuses on integrating energy efficiency measures into building design, construction, and operations processes. Specifically, she is interested in novel design processes that financially and technically facilitate energy-efficient buildings.

**Darryl Reano****Assistant Professor in the School of Earth and Space Exploration**

Darryl Reano is an assistant professor in the School of Earth and Space Exploration. Before joining ASU, Reano was a postdoctoral associate in the STEM Transformation Institute at Florida International University. Reano's research is focused on creating culturally relevant educational environments using Indigenous research frameworks.





**Rod D. Roscoe**

**Associate Professor in the Ira A. Fulton Schools of Engineering**

Rod is an associate professor of human systems engineering with an overarching goal to have a lasting and positive impact on educational systems (including technology, teaching, and learning) for diverse learners. Rod's research brings together learning science, computer science, user science, and equity science to implement and evaluate educational technologies for diverse learners. Rod also explore how people-centered principles of inclusion and equity can be infused into engineering education and engineering cultures.

**Dina Verdín**

**Assistant Professor in the Ira A. Fulton Schools of Engineering**

Dr. Dina Verdín is trained in the fields of Engineering Education and Industrial Engineering. Her research objective is to broaden participation in engineering by focusing on issues pertaining to access and persistence for students' who are minoritized in engineering based on their race/ethnicity, gender, socioeconomic status, and those who live at the intersection of multiple identities. The aim of her research is to understand and dismantle the barriers that hinder access and persistence in engineering.



**Nicholas Wiesenthal****RISE Media & Communications****Ph.D. Student in the School of Life Sciences**

Nick is a first-year Ph.D. student in the Cooper Biology Education Research lab at ASU studying mental health in undergraduate and graduate research and learning spaces. Along with his research, Nick manages and handles communications and media-related tasks for the RISE Center.

***RISE Center Visiting Scholar***

We hosted our first visiting scholar during the month of February. Dr. Jamie Jensen who is an Associate Professor at Brigham Young University spent the month at the center as part of her sabbatical. Dr. Jensen is a biology education researcher who is collaborating with the Center on a project focused on making sure that evolution acceptance instruments.

She gave two seminars, the first was entitled [“Flipped/Hybrid and Online Education: Best Practices for Optimal Learning”](#) and the second was [“Helping Students Overcome Barriers to Accepting Evolution: Lessons From The Classroom”](#).



## ***New RISE Center Publications***

RISE Center graduate student Taya Misheva developed a revised version of the most popular instrument to measure student acceptance of evolution and published it in CBE Life Sciences Education. You can find the publication and read more about Taya's work [here](#).

RISE Center graduate student Baylee Edwards explored how student religious, political, and gender identity affected student perceptions of topics in bioethics. You can find the publication and read more about Baylee's work [here](#).

RISE Center undergraduate student Anna Abraham and graduate student Carly Busch found that women and instructors of color were differentially impacted by student incivility online. This is Anna's first publication which you can read more about [here](#).

RISE Center graduate student Tasneem Mohammed explored the experiences of undergraduates with depression in online science learning environments. You can find the publication and read more about Tasneem's work [here](#).

## ***RISE Center Awards, Celebrations, and Noteworthy Accomplishments***

RISE Center Director Sara Brownell was elected as an American Society for the Advancement in Science (AAAS) Fellow. Additional information regarding this achievement can be found [here](#).

RISE Center undergraduate Samantha Maas and RISE Center graduate student Carly Busch won 1st prize for their respective student poster sessions at the national meeting of the American Society for the Advancement in Science (AAAS).

RISE Center Assistant Professor Katelyn (Katey) Cooper received the American Physiological Society (APS) Teaching Section New Investigator Award. Katey also received an NSF CAREER award to examine how graduate research and teaching alleviated and exacerbate graduate student mental health. Additional information on Katey's NSF CAREER award can be found [here](#).

RISE Center undergraduate Anna Abraham received the American Physiological Society (APS) Horowitz Outstanding Undergraduate Abstract Award and Research Excellence Award at the Experimental Biology (EB) 2022 conference.

Dr. Brianne Arviso is the first Native American to graduate with a Ph.D. in construction engineering or management in the United States. Dr. Arviso is advised by the RISE Center's Associate Director, Kristen Parrish.

RISE Center graduate students Nicholas Wiesenthal and Tasneem Mohammed along with incoming graduate student Jynx Pigart-Coleman were awarded the NSF Graduate Research Fellowship Program (GRFP). Additional information regarding this achievement can be found [here](#).



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ASU ahead of MIT and Stanford – U.S. News & World Report, 7 years, 2016–2022