

 **Research for Inclusive
STEM Education Center**
Arizona State University

December 2022 Newsletter

RISE Center announcements

We have had a really busy fall term with new RISE Center members, lots of events, and exciting new research coming out! We would like to welcome Karin Ellison as a new affiliate member, Leah Gerber as a new affiliate member, Ally Hamie as a new core faculty member, and Saumya Ramanathan as a new core faculty member.

In collaboration with the Teaching Innovation Center, which has been newly named the Teaching and Learning Center, we hosted a set of workshops called Research, Reflect, and RISE: (1) [How can we make undergraduate science exams more equitable?](#), (2) [How can we make undergraduate science spaces more inclusive for students with disabilities?](#), and (3) How to help foster community, confidence, and growth mindset in teaching assistants. The goals of this collaboration between the RISE (Research for Inclusive STEM Education) Center and TIC (Teaching Innovation Center) are to disseminate Biology Education Research facilitated by RISE scholars, while applying effective teaching/ learning strategies during the event, and to subsequently provide a digestible summary of tools and resources for future reference.

The RISE Center hosted multiple seminars this term, all of which were recorded in case you missed them! Dr. Elizabeth Barnes from Middle Tennessee State University gave a talk entitled “ [Using religious cultural competence in evolution education to promote positive attitudes towards science and advance inclusive biology education](#)”, University of Michigan scholar Dr. W Carson Byrd’s seminar was “ [Behind the diversity numbers: Achieving racial equity on campus](#)”, and Dr. Susan Cheng from the University of Michigan talked about “Gaining momentum for disciplinary change: [A systems approach to departmental leadership in DEI](#).”

RISE Center Natural Sciences Inclusion Summit



Along with the College of Liberal Arts and Sciences, the RISE Center co-sponsored a university-wide [National Sciences Inclusion Summit](#) for almost 300 people in-person and online on Wednesday, November 9th, 2022. Students, staff, and faculty came to learn about recent research and initiatives focused on diversity, equity, and inclusion in the sciences. We kicked off the day with remarks from Dean Kenro Kusmi and ended the day with a talk by Provost Nancy Gonzales, with 17 lightning talks, 23 posters, and 6 info booths in between! We plan on this being an annual event, so if you missed it, you can listen to the [recording](#) or keep on the lookout for the event next fall!

RISE Center Visiting Scholar Megan Barker



Dr. Megan Barker from Simon Fraser University in British Columbia, Canada joined the RISE Center as a visiting scholar this term. She presented a workshop on graduate student training, a session on how to use **COPUS** as a classroom observation tool, and met with a lot of folks in the RISE Center about their research and how it influences classroom instruction.

"I'm extremely honored to be welcomed as a visiting scholar at the RISE center on my sabbatical. I saw this as an opportunity to develop my understanding of research into inclusive teaching practices, and connect with the people doing this incredibly important work. The visit far exceeded these expectations. From day one (and beforehand), I was warmly included in the RISE Center, and the broader ASU community. From meaningful one-on-one meetings with the research team and instructors, to joining thoughtful literature and data critiques at journal club, to attending an impressive summit on inclusive teaching, to getting involved in a research study, and being welcomed into classrooms and labs - this has been such a rich experience. I'm full of ideas to bring back to my own practice, and new & old connections to build on. I have learned so much - the work at ASU and in these labs is incredibly powerful. Thank you to everyone at RISE for bringing me in."

Upcoming events

Thursday January 19, 10-11 am AZ time

Virtual seminar on zoom

Form & Function: Drawing to Learn Biology

Jennifer Landon

Thursday February 2, 10 am AZ time

Virtual seminar on zoom

QuantCrit as a Methodological Framework to Support Equity and Justice in Discipline-based Education Research

Paulette Vincent-Ruz

Tuesday February 21st, 12-1pm AZ time

LSC 202 and zoom

Scientific training in the USA vs. Europe: structures, cultures, and pretzels

Liz Hambleton

Thursday March 9th, 10-11 am AZ time

Virtual seminar on zoom

Negotiating Intersectionality and science identity for African American students

Angela White

Thursday April 13th, 9-10 am AZ time

Virtual seminar on zoom

Developing robust developmental mentor networks for students from historically underrepresented groups

Paul Hernandez

New RISE Center publications

RISE Center former undergraduate Anna Abraham was first author on an article in *Advances in Physiology Education*, "[Should I write about mental health on my med school app? Examining medical school admissions committee members' biases regarding mental health conditions.](#)"

RISE Center Director Sara Brownell was a co-author on a publication in *Change* magazine about [the need for infrastructuring for equity.](#)

RISE Center core faculty Meseret Hailu had three publications: one [examining the relationship between gender and STEM education in Ethiopia](#), one on [critical race pedagogy in higher education](#), and one [examining Black immigrant women's journeys in doctoral programs.](#)

RISE Center postdoc Emma Goodwin published one of her dissertation chapters in *PLOS One* on the [experiences of students in course-based undergraduate research experiences \(CUREs\) taught by different graduate students.](#)

RISE Center core faculty Rod Roscoe had a new chapter that was just published in the book *Artificial Intelligence in STEM Education*. Click [here](#) for more information.

RISE Center awards, celebrations, and noteworthy accomplishments

RISE Center director interviewed about recent work on [LGBTQ+ individuals in STEM.](#)

RISE Center core faculty Katey Cooper was interviewed by *Nature* magazine about [graduate student mental health.](#)

RISE Center core faculty Meseret Hailu co-authored an OpEd for *University World News* on [obstacles that Black women engineers face.](#)

RISE Center core faculty Dina Verdín was recently awarded an NSF grant on "*Empowering Children of Migratory/Seasonal Farmworkers with Gamification and Culturally-Responsive Engineering Design Instruction.*"

RISE Center affiliate Keon McGuire is a co-PI on an [NSF](#) funded study exploring the intersections between race, religion, and STEM for Black students and how these factors may impede their representation in STEM fields.