

Division of Behavioral and Social Sciences and Education
Board on Science Education

**Graduate Students as Part of the Instructional Workforce for
Undergraduate STEM**

Hosted by the Roundtable on Systemic Change in Undergraduate STEM Education

Participant Biographies

Graduate Student Perspective



TYLER ANDRES-BRAY is a postdoctoral fellow with the Center for the Advancement of STEM Teaching and Learning Excellence (CASTLE) at Drexel University. He received a Ph.D. in Ecology and Evolutionary Biology from the Biological Sciences Department at Drexel in 2024, where he studied how ecological factors shape cultural tool-using behaviors and insect consumption in a group of wild chimpanzees living in central Cameroon. As a graduate student, Tyler served as a teaching assistant for four years, and completed both a graduate minor in Undergraduate STEM Education and a Certificate in College Teaching. He was awarded the Teaching Assistant Excellence Award and the Outstanding Mentorship Award in 2023 from Drexel's Graduate College. He holds an Associate Certificate from the Center for the Integration of Research, Teaching, and Learning (CIRTL) with Drexel, and is currently working on his CIRTL Practitioner Certification. At CASTLE, Tyler is involved in projects exploring: 1) faculty incentivization for adopting inclusive and effective teaching practices, and 2) assessing the perceived impact on career trajectories of a program at Drexel seeking to engage and support undergraduate

women in STEM. He intends to use his experience in the future to effect systemic change and benefit students from underrepresented groups in STEM in a tenure-track faculty position. He plans to build a research program that uses behavioral and ecological research in wild chimpanzees to benefit undergraduate education. When not conducting research, Tyler spends most of his time reading, hiking with his husband and their two dogs, or binge-watching Marvel television shows.



VICTORIA CHEBOTAeva is a Teaching Fellow at the University of Southern California. She received her Ph.D. in mathematics from the University of South Carolina, where her research focused on mathematical modeling in epidemics. During her Ph.D., she worked as a teaching assistant and instructor of record for various undergraduate mathematics courses. She also had the opportunity to work in a unique program for first-generation students and served as a mentor for international Ph.D. students and helped them adjust to their roles as teaching assistants and acclimate to the university environment. Dr. Chebotaeva also worked closely with second-year Ph.D. students, guiding them through teaching reflections and supporting their transition from teaching assistant to professor. She holds both a B.S. and M.S. in mathematics from Moscow State University (Russia).



JAMES GRIFFIN is a Visiting Lecturer in the Department of Chemistry at the University of Redlands. As a graduate student at the University of California, Irvine, his chemistry education research focused on the creation of an undergraduate Learning Assistant program to support students whose in-person laboratory instruction was interrupted by COVID-19. Dr. Griffin's driving motivation is to address retention of non-chemistry majors in introductory chemistry to increase equitable outcomes in the current STEM student–professional pipeline. He was first inspired to pursue chemistry education by the Undergraduate Teacher-Scholar program at UC Berkeley, which went on to influence the new program he spearheaded at UC Irvine. In addition to his dissertation work in both chemical biology and chemistry education, Dr. Griffin participated as a UC Irvine Pedagogical Scholar, in which he led the annual Teaching Assistant Professional Development Program for new graduate students in the Department of Chemistry and co-founded the ChemUNITY peer mentor program to address feelings of imposter syndrome among first-year graduate students. While a graduate student, Dr. Griffin served as a teaching assistant, head teaching assistant, and Instructor of Record for both undergraduate and graduate chemistry lecture and laboratory courses. After earning his Ph.D. in 2024, Dr. Griffin accepted his current position at the University of Redlands.



CHRISTIAN PEREZ is a 6th year Ph.D. Candidate in the laboratory of Manuel Leal (Chipojo Lab) in the Division of Biological Sciences at the University of Missouri, Columbia. For his dissertation, he is studying one of the smallest vertebrates in the world, *Sphaerodactylus* dwarf geckos in Puerto Rico. His work spans behavioral ecology, ecophysiology, social dynamics, and neuroanatomy. Christian has been involved with teaching and mentorship roles throughout his graduate studies. He has co-designed Ecology labs that involve field research and coding, prioritizing an active learning strategies. He also mentors undergraduates in his lab, training them on methods and encouraging them to pursue independent projects. Through the science outreach organization, Science on Wheels, he has trained graduate student speakers to have accessible conversations about science with Missouri citizens. He has also served as a graduate student representative on seminar organization and faculty hiring committees. Christian places a strong emphasis on teaching and mentorship in preparation for his next career stages in academia and can speak on his experience balancing these commitments with research progress.



SOPHIA VICENTE is a Postdoctoral Associate at Elizabethtown College and the Greenway Center for Equity and Sustainability. She holds a Ph.D. in Engineering Education and a master's in industrial and systems engineering from Virginia Tech, along with a bachelor's degree in industrial engineering from Penn State. With over six years of experience in engineering education, she is dedicated to improving the experiences of STEM students through research, practice, and policy. While at Virginia Tech, she served as both an Instructor of Record and a Graduate Teaching Assistant (GTA) for introductory engineering courses. Furthermore, as Graduate Assistant for Engineering Graduate and Professional Studies, in 2023 she led an effort to evaluate the experiences of GTA's and Instructors in the College of Engineering. Her commitment to excellence in teaching was recognized through her selection as a member of the Virginia Tech Academy for Graduate Teaching Assistant Excellence (VT GrATE), and she served as the Graduate Representative on the university-wide Commission on Undergraduate Studies and Policies from 2020 to 2021. Sophia's ongoing research centers on experiential learning and workforce development. In her current role, she is conducting research on an innovative work-integrated learning program for engineering undergraduate students focused on equity and sustainability. Throughout her work, Sophia is passionate about bridging research, practice, and policy to improve undergraduate STEM education.

Professional Learning to Prepare Graduate Students
to Serve as Teaching Assistants



RIQUE CAMPA is a Senior Associate Dean in the Graduate School and a Professor of Wildlife Ecology in the Department of Fisheries and Wildlife at Michigan State University (MSU). In his roles in the Graduate School, he develops, implements, and evaluates career and professional development programs. In addition, he also directs activities and grants at MSU associated with the CIRTL (Center for the Integration of Research, Teaching, and Learning) Network including the FAST (Future Academic Scholars in Teaching) Fellowship Program and the NIH-funded national Postdoc Academy. Dr. Campa's related research interests focus on the career and professional development associated with graduate education. He earned both his Ph.D. and M.S. from Michigan State University, and holds a B.S. from the University of Missouri, Columbia.



PAULA LEMONS is Professor of Biochemistry and Molecular Biology and Senior Associate Dean for Academic Innovation in the Franklin College of Arts and Sciences at the University of Georgia. Paula leads a research group of graduate students and undergraduates who conduct discipline-based education research. The group investigates biochemistry learning and instruction, focusing on ways to maximize student success in science classrooms. She serves as Principal Investigator of the UGA DeLTA project, where she and her colleagues focus on expanding the use of evidence-based, improvement-oriented, and equity-centered teaching evaluation practices in university departments. She has a career-long track record of research, evaluation,

and professional development related to graduate teaching assistants. As an administrative leader, she leads Franklin's work in graduate and undergraduate education, with a focus on building creative academic programs, helping students develop as career leaders, and developing students, faculty, and staff to lead in Franklin at UGA and beyond.



RENÉE LINK is a Associate Professor of Teaching in the Department of Chemistry at the University of California, Irvine who designs, manages and teaches the organic chemistry lab courses taken by over 1,000 UCI students each year. Although her training was in organic chemistry methodology, she discovered that her true passion was in helping students learn organic chemistry. Her scholarly activity focuses on using active learning in large courses to create a more inclusive and equitable learning experience for students from all backgrounds. As a community college transfer student and first-generation college graduate, Dr. Link serves as a mentor for UCI graduate and undergraduate students navigating the complex world of academia. She received her Ph.D. in chemistry from the University of California, Irvine and a B.S. in chemistry from the University of California, San Diego.



SEAN YEE is an Associate Professor of Mathematics Education at the University of South Carolina (USC) and the Co-director of the Center for Science Education. Dr. Yee taught secondary school mathematics for eight years and trained preservice teachers in Ohio and California before joining USC to focus on pedagogy courses for mathematics graduate student instructors. Dr. Yee's research on mentoring, induction, and professional development (PD) for college mathematics instructors emphasizes generating communities of practice around student-centered instructional methods such as active-learning strategies. Dr. Yee's national proceedings, publications, and external funding have focused on PD for novice STEM educators, established for the purpose of equitable access to evidence-based teaching practices. Dr. Yee received his Ph.D. from Kent State University in Mathematics Curriculum and Instruction.

**Professional Learning to Prepare Graduate Students
to Become Future Faculty**



ROBIN CRESISKI is Assistant Vice Provost for Graduate Student Development and Postdoctoral Affairs at the University of Maryland, Baltimore County. She previously served as Director of the Center for the Advancement of Scholarship and Teaching at Goucher College, and in multiple positions at Nevada State College, including Interim Provost and Executive Vice President, and Vice Provost of Scholarship and Experiential Curriculum. Dr. Cresiski has published about approaches to student success in the classroom and at the institutional level, including papers on mentoring internship students and closing equity gaps. Dr. Cresiski earned her Ph.D. in

immunobiology from Yale University and a B.S. in biology from Haverford College.



SHAMINI DIAS is Director of Transdisciplinary Curriculum and Special Projects with the Transdisciplinary Program at Claremont Graduate University and Program Director of the Masters in Transdisciplinary Analysis. Shamini founded CGU's unique Preparing Future Faculty program (now integrated with the Center for Academic and Faculty Excellence) using transdisciplinary principles that connect relationality joy, inclusion, and equity-minded principles for transformative education and leadership. She continues this development in Transdisciplinary Studies integrating ideas from complexity science, storytelling and theatre, literature, semiotics, leadership, and learning sciences with a focus on imagination and complexity mindsets as much-needed creative, adaptive capacities for justice in a post-normal world. She earned her Ph.D in Education from Claremont Graduate University.



BENNETT GOLDBERG joined Northwestern University in 2016 as the Director of the Searle Center for Advancing Learning and Teaching and Assistant Provost for Learning and Teaching. He previously led the Searle Center, a research-practice partnership with 23 staff to annually served 500 faculty and 600 graduate students and postdocs in their development into reflective practitioners of student-centered learning, plus peer-guided academic support for 4000 undergraduates. Goldberg's mission is to advance equity for marginalized and minoritized students by improving access to and success in STEM higher education through systems and cultural change. He leads the Inclusive STEM Teaching Project, a national training of faculty in inclusive pedagogy. Recently, Goldberg convened a team to advance equity in STEM graduate education by implementing and testing a department-based model of cultural change. He received a B.A. from Harvard College and an M.S. and Ph.D. in Physics from Brown University.



JACINTA MUTAMBUKI is Assistant Professor and Todd Wehr Professor of Chemical Education at Marquette University. She previously served as the Edward Bartlett Professor of Pedagogy in Chemistry at Oklahoma State University. Dr. Mutambuki's research lab in Chemical Education focuses on evidence-based instructional methods and inclusive teaching interventions and assessment of their impact on academic outcomes, as well as the development of future faculty through evidence-based and inclusive teaching programs. She has conducted workshops on evidence-based teaching for over 200 faculty members and 500 future faculty. In her position, she teaches General Chemistry courses and a graduate-level course on evidence-based teaching methods relevant to STEM disciplines. Dr. Mutambuki earned both her Ph.D. and

M.S. from Western Michigan University and holds a B.Ed. in science from the University of Nairobi in Kenya. She completed postdoctoral training as a STEM Education Research Associate at the Teaching Center at Washington University in St. Louis under the CIRTL program.

Session Moderator



ANN AUSTIN is a University Distinguished Professor in the College of Education at Michigan State University, where she has been on the faculty since 1991. She previously served as interim associate provost and associate vice president for faculty and academic staff affairs, interim dean of the College of Education and, and as associate dean for research at Michigan State. She also served as a program director for the National Science Foundation. Her research concerns organizational change in higher education, faculty careers and professional development, teaching and learning in higher education, the academic workplace, doctoral education, and reform in science, engineering, and mathematics (STEM) education. She is a fellow of the American Educational Research Association (AERA), and she has been a council member for AERA. She is a past-president of the Association for the Study of Higher Education (ASHE), and she was a Fulbright Fellow in South Africa (1998). She earned a B.A. in history from Bates College, an M.S. in higher/post secondary education from Syracuse University, a M.A. in American culture from the University of Michigan, and a Ph.D. in higher education from the University of Michigan. Dr. Austin has co-chaired the NASEM Roundtable on Systemic Change in Undergraduate STEM Education since its founding in 2017.