

2021 ASEE Annual Conference  
**Education Research and Methods Division  
Distinguished Lecture**



**Continuing the Conversation:  
Working Towards Anti-racist  
Engineering Education**

Dr. Kelly Cross

Dr. James Holly

Dr. Leroy Long

Dr. Ebony McGee

Thursday, July 29, 2021

Session R414, 1:45pm-3:15pm

🔗 [ASEE's Virtual Conference](#)

## Session Description

Volume 109, Issue 4 of the Journal of Engineering Education highlights the work of engineering education scholars in guest editorials that address racism in engineering education history, curriculum, and research. Through the creation of that work, a recorded podcast conversation was conducted between these scholars: Dr. Kelly Cross, Dr. James Holly, Dr. Leroy Long, and Dr. Ebony McGee. In this Distinguished Lecture, that conversation will continue and engage the broad audience of ASEE Annual Conference attendees.

### Speakers:

**Dr. Kelly J Cross**  
**University of Nevada, Reno**



Dr. Kelly J. Cross, Assistant Professor of Chemical Engineering at University of Nevada Reno, is a culturally responsive practitioner, researcher, and educational leader. She earned her Bachelors of Science in Chemical Engineering from Purdue University in 2007 and Masters of Science in Materials Science and Engineering from the University of Cincinnati in 2011. Dr. Cross completed the doctoral program in the Engineering Education department at Virginia Tech in 2015 and worked as a post-doctoral researcher with the Illinois Foundry for Innovation in Engineering Education at the University of Illinois at Urbana-Champaign (UIUC). Dr. Cross worked to redesign the curriculum in Bioengineering department through the NSF program Revolutionizing Engineering Departments (RED) at UIUC. She is a member of the ASEE Leadership Virtual Community of Practice (LVCP) that organizes and facilitates Safe Zone Training workshops. Dr. Cross has conducted workshops on managing personal bias in STEM and promoting inclusion in higher education, online and in-person. Her research interests include diversity and

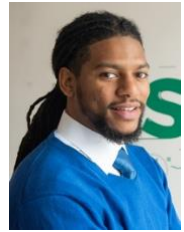
inclusion in STEM, identity construction, intersectionality, teamwork and communication skills, and educational assessment. Her teaching philosophy focuses on student centered approaches such as problem-based learning and culturally relevant pedagogy. Dr. Cross' complimentary professional activities promote inclusive excellence through collaboration.

**Dr. Leroy L. Long III**  
**Embry-Riddle**  
**Aeronautical University**  
**- Daytona Beach**



Dr. Leroy Long III is an Assistant Professor of Engineering Fundamentals at Embry-Riddle Aeronautical University in Daytona Beach, FL. Dr. Long directs a research team called Engineering, Arts & Sports Engagement (EASE). His research interests include: (a) educational equity and racial justice, (b) student retention and career readiness, as well as (c) students' ethical reasoning and technology use, with a particular focus on STEM students. He has helped to lead research, funded by the NCAA Innovations in Research and Practice Grant, to improve the well-being of the student-athlete through support of their career readiness. He has also helped to secure funding from NSF (award # 2024973) to examine the potential benefit of using critical narratives as a pedagogical tool in the professional formation of engineers.

## **Dr. James Holly, Jr.** **Wayne State University**



James Holly, Jr. is a native Detroit, educator, and researcher who is focused on mitigating anti-Blackness in P-20 STEM education. He has a bachelor's degree from Tuskegee University and a master's degree from Michigan State University, both in Mechanical Engineering. These experiences motivated his pursuit of a doctoral degree in Engineering Education from Purdue University as he sought to revolutionize the conceptualization of engineering presented to urban Black youth. Dr. Holly, Jr. is currently an Assistant Professor of Urban STEM Education at Wayne State University, where he trains aspiring math and science teachers to critically-conscious STEM educators that affirm the assets of urban non-White students. His research explores the complexities of teaching the STEM disciplines in an urban context, the process of developing engineering-literacy among pre-service teachers, and how the narratives of Black people with STEM degrees can inform equitable STEM education.

## **Dr. Ebony Omotola McGee** **Vanderbilt University**



Ebony McGee, associate professor of diversity and STEM education at Vanderbilt University's Peabody College, investigates what it means to be racially marginalized in the context of learning and achieving in STEM higher education and industry. In particular, she studies the racialized experiences and racial stereotypes affecting the education and career trajectories of underrepresented groups of color by exploring the costs of academic achievement and problematizing traditional forms of success in higher education, with an unapologetic focus on Black folk in these places and spaces. McGee's NSF CAREER grant investigates how marginalization undercuts success in STEM through psychological stress, interrupted STEM career trajectories, impostor phenomenon, and other debilitating race-related trauma for Black, Indigenous, and Latinx doctoral students.

# Past Distinguished Lecturers in the Education Research and Methods Division

Since 1980, the Educational Research and Methods Division of ASEE has sponsored the ERM Distinguished Lecture at the ASEE Annual Conference. The lecture provides an opportunity to hear thought-provoking new ideas by notable speakers, often from outside the engineering education community.

1980–Burrhus F. Skinner	2001–John D. Bransford
1981–Robert F. Mager	2002–Sue Rosser
1982–Wilbert J. McKeachie	2003–Elaine Seymour
1983–Samuel N. Postlewait	2004–James Pellegrino
1985–Fred F. Keller	2005–Jack Wilson
1986–Moshe F. Rubinstein	2006–Sheri Sheppard
1987–Benjamin S. Bloom	2007–R. Keith Sawyer
1988–Donald A. Schon	2008–Lauren Resnick
1989–William G. Perry, Jr.	2009–James E. Stice
1990–Frederick Reif	2010–David H. Jonassen
1991–K. Patricia Cross	2011–David Williamson Shaffer
1992–Alan H. Schoenfeld	2012–Charles Henderson
1993–Ernest L. Boyer	2013–Wendy Newstetter
1994–Sheila Tobias	2014–Peggy McIntosh
1995–Peter R. Seldin	2015–Susan Elrod
1996–Woodie C. Flowers	2016–Donna Riley
1997–David & Robert Johnson	2017–James Pellegrino
1998–Thomas Angelo	2019–Alice Pawley
1999–Richard M. Felder	2020–Lisa Benson
2000–Micheline T.H. Chi	