

*The National Academies of*  
**SCIENCES • ENGINEERING • MEDICINE**  
BOARD ON SCIENCE EDUCATION

**Committee on Developing Indicators for Undergraduate STEM Education**  
**Public Comment Session**  
**Speaker Biosketches**

**SUSAN AMBROSE** is Senior Vice Provost for Undergraduate Education and Experiential Learning at Northeastern University. She is also a professor of education and history. She earned her Doctorate of Arts in history from Carnegie Mellon University where she served as Associate Provost for Education, Director of the Eberly Center for Teaching Excellence, and as a Teaching Professor in the Department of History. She is internationally recognized as an expert in college-level teaching and learning, and has conducted workshops and seminars for faculty and administrators throughout the United States and around the world. Her focus is on translating research to practice in the design of curricula, courses and educational experiences for both undergraduate and graduate students.

**MICA ESTRADA** is an Assistant Professor in the Department of Social and Behavioral Sciences and the Institute of Health and Aging at the University of California at San Francisco's School of Nursing. Her area of expertise is social influence, including the study of identity, forgiveness, intergroup relations, and integrative education. She is leading longitudinal, theory-driven research and evaluation for several interventions designed to increase persistence of historically underrepresented students in STEM fields. In addition, she is co-PI on a National Science Foundation Climate Change Education Partnership grant that provides educational tools and learning opportunities to San Diego regional leaders and residents regarding the changing climate. Recently, she received the Leadership Institute Graduate Award from the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) in 2013 and is a recipient of the Adolphus Toliver Award for Outstanding Research in 2016. She earned her Ph.D. in Social Psychology from Harvard University.

**ADAM GAMORAN** is President of the William T. Grant Foundation where he has prioritized supporting research to deepen understanding of programs, policies, and practices that reduce inequality in youth outcomes, and to improve the use of research evidence. He came to the Foundation from the University of Wisconsin-Madison, where he held the John D. MacArthur Chair in Sociology and Educational Policy Studies. His research career focused on understanding educational inequality by attending to such challenging issues as academic tracking, racial segregation, school organization, and curriculum reform. He is an elected member of the National Academy of Education and the American Academy of Arts and Sciences, and was twice appointed by President Barack Obama to the National Board for Education Sciences. He was appointed as chair to the Board on Science Education at the National Academies of

Sciences, Engineering, and Medicine. Previously, he chaired the Independent Advisory Panel of the National Assessment of Career and Technical Education for the U.S. Department of Education.

**JILLIAN KINZIE** is Associate Director for the Center for Postsecondary Research and the National Survey of Student Engagement (NSSE) at Indiana University. She is also a Research Associate at the National Institute for Learning Outcomes Assessment. While at Indiana University she has coordinated the master's program in higher education and student affairs, as well as the NSSE Institute project activities. She has more than a decade of additional experience as a research associate in academic and student affairs. Her research interests include college choice, first year student development, teaching and learning in college, access and equity and women in underrepresented fields. She earned her Ph.D. in Higher Education from Indiana University.

**ANNETTE PARKER** is President of South Central College in the Minnesota State Colleges and Universities system. She has more than 35 years of manufacturing industry and workforce development experience from General Motors, Lansing Community College and the Kentucky Community and Technical College System. She has served on President Obama's Advanced Manufacturing Partnership (AMP) Steering Committee 2.0 and sat on the National Career Pathways Network Board. She currently serves on the American Association of Community Colleges Board, Manufacturing Institute Education Council, Manufacturing Skills Standards Council Leadership Council, National Academy of Sciences "Education, Training, and Certification Pathways to Skilled U.S. Workforce" Committee and Council for Adult and Experiential Learning Board of Directors. She earned her Ed.D. in Educational Leadership from Western Kentucky University.

**KACY REDD** is the Director of Science and Mathematics Education Policy at the Association of Public and Land-grant Universities (APLU). She manages the Science and Mathematics Teaching Imperative (SMTI), a commitment by 132 public research universities to improve science and mathematics teacher preparation, and co-managed a four year NSF project to determine if a national association can promote institutional change to strengthen science teacher preparation at 25 universities. She has received funding from the S.D. Bechtel, Jr. Foundation to develop a Next Generation Science Standards Curriculum Alignment Tool and funding from the Alfred P. Sloan Foundation for building a STEM Education Center Network. She serves as staff lead for APLU's Research Intensive Committee, a committee of 15 presidents of RU1 institutions. Before joining APLU, she served as a science and technology policy fellow at the National Academy of Sciences on the Board of Higher Education and Workforce. Redd received her PhD in neuroscience from Columbia University, where she was funded by a HHMI Predoctoral Fellowship.

**DEBORAH SANTIAGO** is the co-founder, chief operating officer and vice president for policy at Excelencia in Education, a non-profit organization dedicated to accelerating Latino student success in higher education. For more than 20 years, she has led research and policy efforts from the community to national and federal levels to improve educational opportunities and success for all students. She co-founded Excelencia in Education to inform policy and practice, compel action, and collaborate with those committed and ready to act to increase student success. Previously she has worked in federal government as a policy analyst at the Congressional Research Service addressing legislative issues in higher education and at the U.S. Department of Education informing program and budget efforts in the Office of Postsecondary Education. She also served as the deputy director for the White House initiative on Educational Excellence for Hispanic Americans working with federal agencies and communities across the nation to improve awareness and education opportunities for Latinos. Her current work focuses on federal and state policy, financial aid, Hispanic-Serving Institutions, and effective institutional practices for student success in higher education. She serves on the board of the National Student Clearinghouse, and the advisory boards of thedream.us and Univision's Education Campaign. She received an M.A. in urban affairs from Virginia Polytechnic Institute and State University.

**SUSAN SINGER** is Vice President for Academic Affairs and Provost at Rollins College. Previously she was Division Director of the Division of Undergraduate Education at the National Science Foundation where she improved undergraduate education through implementing the undergraduate goals of the Federal Science, Technology, Engineering, and Mathematics 5-year Strategic Plan. She is a national leader in undergraduate education policy and pursues a career that integrates science and education. An American Association for the Advancement of Science (AAAS) fellow, she received both the American Society of Plant Biology teaching award and Botanical Society of America Charles Bessey teaching award. She directed Carleton's Perlman Center for Learning and Teaching, was a National Science Foundation (NSF) program officer in Biology, and is a co-author of the Vision and Change in Undergraduate Biology report. She has served on numerous boards, including the NSF Education and Human Resources Federal Advisory Committee, the Biological Sciences Curriculum Study Board; was a member-at-large for the AAAS Education Section; participates in the Minnesota Next Generation Science Standards team; and was a member of the National Academies' Board on Science Education. She earned her Ph.D. in Biology from Rensselaer.

**LINDA SLAKEY** serves as Senior Advisor for the Association of American Universities STEM Initiative and as Senior Fellow for Project Kaleidoscope at the Association of American Colleges and Universities. She was appointed to the faculty of the Biochemistry Department at the University of Massachusetts Amherst where she became the head of the department, and then Dean of the College of Natural Sciences and Mathematics. Later she was appointed the Dean of Commonwealth College, the honors college at UMass Amherst. As Dean of both colleges, she was active in supporting teaching and learning initiatives through the University. She was also

the division director of the Division of Undergraduate Education and a senior staff associate in the Office of the Assistant Director for Education and Human Resources at the National Science Foundation. She earned her Ph.D. in Biochemistry from the University of Michigan.

**LEE ZIA** is the Deputy Division Director for the Division of Undergraduate Education at the National Science Foundation. He served as the Lead Program Director for the NSF National Science, Mathematics, Engineering, and Technology Education Digital Library (NSDL) Program from its inception in FY 2000 to its sunseting in FY 2010. He served as a "rotator" in the NSF Division of Undergraduate Education during calendar years 1995 and 1996 while on leave from the Department of Mathematics at the University of New Hampshire. He rejoined the NSF as a permanent staff member in the fall of 1999. From November 2008 to December 2009, he served as a Commerce Science and Technology Fellow in the Office of Senator John D. Rockefeller IV. Most recently he served as the Lead Program Director for the STEM Talent Expansion Program (STEP). He holds earned his Ph.D. in applied mathematics from Brown University.