About the Researchers

Dr. Emily R. Miller joined the Association of American Universities (AAU) in 2012 as the Director for AAU's Undergraduate STEM Education Initiative. In this role she is responsible for the operational and policy components of a multi-institution project aimed at systemic and sustained improvement of undergraduate STEM education at research-intensive institutions. She manages a number of external grants in support of the Initiative. Miller serves as a liaison to member universities, national associations, and federal agencies on behalf of the Initiative. Previously, Miller was a research and curriculum specialist for the Association for Community College Trustees, an assistant director of career services at Tufts University, worked in alumni relations at Harvard Business School, and collaborated with the Association of Governing Boards. Miller has published on the topics of post-secondary institutional leadership, specifically as it relates to governance and administration; organizational change in universities and colleges; and higher education policy. Miller earned her PhD in Higher, Adult, and Lifelong Education from Michigan State University; MA in Education Policy and Management from Harvard Graduate School of Education; and BA in Political Science from Gettysburg College.

Dr. James S. Fairweather serves as co-Principal Investigator of the AAU Undergraduate STEM Education Initiative. He is Professor Emeritus of Higher and Adult Education, Michigan State University. Dr. Fairweather is widely known for his work on faculty roles and rewards, engineering education, and higher education policy. His books Faculty Work and Public Trust and Entrepreneurship and Higher Education as well as his National Academy of Sciences White Paper Linking Evidence and Promising Practices in STEM Undergraduate Education are considered seminal in the field. Dr. Fairweather has extensive experience in researching and reforming STEM education. He served on the National Academy of Sciences Committee on Disciplinary-based Educational Research which published the principal summative work on postsecondary STEM education. He has been co-PI of the Engineering Coalition for Schools for Excellence in Education and Leadership (ECSEL) and the Center for the Integration of Research, Teaching and Learning. Dr. Fairweather has served as chair of the editorial board of the Journal of Higher Education, received the career research award from the AERA Division J, been named a Fulbright Scholar, and awarded an Erasmus Mundus Professorship by the European Union. He received his Ph.D. in Higher Education from Stanford University in 1980.

Dr. Mary Deane Sorcinelli is Distinguished Scholar in Residence at Mount Holyoke College, Senior Scholar for the Bay View Alliance to Reform STEM Undergraduate Education, and Professor Emeritus, Department of Educational Policy, Research and Administration, University of Massachusetts Amherst. She also served as Associate Provost for Faculty Development and Founding Director of the Center for Teaching & Faculty Development at UMass Amherst. Sorcinelli is a nationally-known researcher in the areas of academic careers, faculty professional development, mentoring, teaching and learning, and the evaluation of teaching. She has written over 100 articles, book chapters, and books. She has served as an external reviewer and on the boards of advisors of NSF ADVANCE, CIRTL, IUSE and WIDER grants, as well as directed foundation-funded projects aimed at promoting educational innovations, including Mellon, Microsoft, and Hewlett Foundations, and the Carnegie Foundation for the Advancement of Teaching. Sorcinelli holds an M.A. in English from Mount Holyoke College and an Ed.D. in Educational Policy from UMass Amherst. She received a career award from University's 2013 Distinguished Alumni Award, the 2014 Massachusetts Women Leaders in Higher Education Lifetime Achievement Award, and a career recognition award from the Professional and Organizational Development Network in Higher Education.