

Gender Differences at Critical Transitions in the Careers of Science, Engineering and Mathematics Faculty

Committee

Claude R. Canizares

Co-Chair

Dr. Claude Canizares (Co-Chair) is the Associate Provost and Bruno Rossi Professor of Experimental Physics at MIT. As Associate Provost, Dr. Canizares assists the Provost in various areas of academic administration—he oversees the MIT Lincoln Laboratory, addresses the Institute's relationships with federal agencies and is responsible for campus space usage and planning. Related committee memberships include the Institute's Committee on Resource and Space Planning (Chair); Capital Projects Committee; the Building Committee, and the Lincoln Laboratory Advisory Board and Steering Committee. Dr. Canizares also plays a role in resolving faculty grievances, and is a member of the Academic Council and the Academic Appointments Committee. Additional academic and scientific organizational memberships include the Board of Trustees of the Associated Universities Inc; the Board on Physics and Astronomy of the National Research Council; and the Air Force Scientific Advisory Board. He is also a member of the National Academy of Sciences; the International Academy of Astronautics, and a fellow of the American Physical Society and the American Association for the Advancement of Science. Dr. Canizares also served on the NASA Advisory Council and was chair of the Space Studies Board of the NRC and NASA's Space Science Advisory Committee. Dr. Canizares was nominated as chair for his expertise and knowledge in areas of faculty and administration. Dr. Canizares received his B.A., M.A. and Ph.D. degrees in Physics from Harvard University. He joined the MIT faculty in 1974, progressing to professor of physics in 1984. From 1990 to 2002, Dr. Canizares was the Director of the Center for Space Research; in 2002, he was appointed an Associate Provost at MIT.

Sally Shaywitz

Co-Chair

Dr. Sally Shaywitz (Co-Chair) received her AB (with Honors) from the City University where she was elected to Phi Beta Kappa and her M.D. from Albert Einstein College of Medicine where she also completed her residency in Pediatrics and postdoctoral fellowship in Developmental/Behavioral Pediatrics . Dr. Shaywitz is Professor Pediatrics at the Yale University School of Medicine and is currently with her husband, D. Bennett A. Shaywitz, Co-Director of the NICHD-Yale Center for the Study of Learning and Attention. Dr. Sally Shaywitz is the author of over 180 scientific articles and her research provides the basic framework: conceptual model, epidemiology and neurobiology for the scientific study of learning disabilities, particularly dyslexia, in children. Dr. Shaywitz is the author of *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at any Level* published by Alfred A. Knopf in 2003. Dr. Shaywitz was elected membership in the Institute of Medicine in 1998 and currently serves on the Advisory Council of the National Institutes of Neurological Diseases and Stroke. She was selected as recipient of the 2001 Leonard Apt Lectureship of the American Academy of Pediatrics and the 1999 Sidney Berman Award of the American Academy of Child and Adolescent Psychiatry. She is the 1998 recipient of the Clinical Service Award of the Society for the Advancement of Women's Health Research, and the 1995 recipient Distinguished Alumnus Award of the Albert Einstein College of Medicine. Dr. Shaywitz currently serves on the Committee on Opportunities to Address Clinical Research Workforce Diversity Needs for 2010 of the NRC. She served on the congressionally mandated National Reading Panel, the Committee to Prevent Reading Difficulties in Young Children of the NRC and the IOM Committee on Understanding the Biology of Sex and Gender Differences. Dr. Shaywitz is frequently invited to serve in an advisory capacity on issues relating to science and public policy, and has served as a special advisor to the U.S. Congress and U.S. Department of Education, to the National Institute of Child Health and Human Development, the National Institute of Deafness and Other Communication Disorders, the National Academy of Sciences, and the Institute of Medicine. She is currently awaiting Senate confirmation of her nomination to serve on the Board of Directions of the Educational Sciences Institute.

Linda M. Abriola

Member

Dr. Linda Abriola is Dean of Engineering and Professor of Civil and Environmental Engineering at Tufts University. Prior to that appointment, she was the Horace Williams King Collegiate Professor of Environmental Engineering at the University of Michigan. Dr. Abriola received Ph.D. and Master's degrees in Civil Engineering from Princeton University and a Bachelor's Degree in Civil Engineering from Drexel University. Her primary research focus is the integration of mathematical modeling and laboratory experiments to investigate and elucidate processes governing the transport, fate, and remediation of nonaqueous phase liquid organic contaminants in the subsurface. Dr. Abriola's numerous professional activities have included service on the US Environmental Protection Agency Science Advisory Board, the National Research Council Water Science and Technology Board, and the US Department of Energy's NABIR (Natural and Accelerated Bioremediation Research) Advisory Committee. An author of more than 100 refereed publications, Dr. Abriola has been the recipient of a number of awards, including the Association for Women Geoscientists' Outstanding Educator Award (1996) and the National Ground Water Association's Distinguished Darcy Lectureship (1996). She is a Fellow of the American Geophysical Union and a member of the National Academy of Engineering.

Jane E. Buikstra

Member

Dr. Jane Buikstra is a biological anthropologist and archaeologist and is the Leslie Spier Distinguished Professor of Anthropology at the University of New Mexico, and was formerly the Harold H. Swift Distinguished Service Professor of Anthropology at the University of Chicago. She received her Ph.D. from the University of Chicago. She was elected to the National Academy of Sciences in 1987. Her research interests include paleopathology, human skeletal biology, paleo-demography, forensic anthropology, genetic relationships within and between paleopopulations, paleodiet, and funerary archaeology. She teaches Human Osteology, Paleopathology, Bioarchaeology, Forensic Anthropology, Archaeology of Death, and Field Archaeology. She is a past President of the American Anthropological Association and the American Association of Physical Anthropologists and is currently President of the Center for American Archeology and the Paleopathology Association. She has received numerous research grants from National Science Foundation, the National Endowment for the Humanities, the Wenner-Gren Foundation, the National Geographic Society, and the Smithsonian Institution. She has edited or authored 14 books and monographs, including *Prehistoric Tuberculosis in the Americas* (1981) and *The Bioarchaeology of Tuberculosis: A Global View on a Reemerging Disease* (2003) with Charlotte Roberts. In addition, she has published over 100 articles or chapters on a variety of subjects, including bone chemistry in eastern North America, ancient treponematosi and tuberculosis in the Americas and in Egypt, leprosy in the Americas, diet and health of Argaric peoples (Bronze Age, Spain), australopithecine spinal pathology, trauma in Copan's founding dynasty (Maya), coca-chewing, cranial deformation, tuberculosis, and funerary rituals of ancient Andeans.

Alicia L. Carriquiry

Member

Dr. Alicia Carriquiry, B.S. (Ag Engineering) Universidad del Uruguay, M.Sc. (Animal Genetics), University of Illinois, M.Sc. (Statistics), Iowa State University, Ph.D. (Statistics and Animal Science), Iowa State University, is Associate Provost and Professor of Statistics, Iowa State University. Dr. Carriquiry is an Elected Member of the International Statistical Institute and a Fellow of the American Statistical Association. She is Past President of the International Society for Bayesian Analysis, and serves on the Executive Committee of the Institute of Mathematical Statistics. She has been a Trustee of the National Institute of Statistical Sciences since 1997, and has served in its Executive Committee. She is also a member of the Board of the Plant Sciences Institute at Iowa State University and chairs a task force appointed by the President of the university on issues associated to accessibility to programs, services and activities for people with disabilities. Dr. Carriquiry is Editor of Statistical Sciences and Associate Editor of Bayesian Analysis, and serves on the editorial boards of several Latin American journals of statistics and mathematics. Dr. Carriquiry has published over 50 refereed articles and technical reports, and has co-edited four books. Her research interest is in the development of Bayesian methods, and on the application of those methods to problems in public health, human nutrition, genetics, and economics. She has also worked in the area of stochastic volatility and other non-linear models for time-dependent data. She has served on three National Academies committees: the Subcommittee on Interpretation and Uses of Dietary Reference Intakes; the Committee on

Ronald G. Ehrenberg

Member

Dr. Ronald Ehrenberg is the Irving M. Ives Professor of Industrial and Labor Relations and Economics at Cornell University and Director of the Cornell Higher Education Research Institute. Dr. Ehrenberg received his B.A. in mathematics from Harpur College (SUNY Binghamton) in 1966 and a Ph.D. in economics from Northwestern University in 1970. From July 1, 1995 to June 30, 1998, he served as Cornell's Vice President for Academic Programs, Planning and Budgeting. A member of the Cornell faculty for 27 years, Dr. Ehrenberg has authored or co-authored over 120 papers and books. He is a research associate at the National Bureau of Economic Research and a past president of the Society of Labor Economists. Dr. Ehrenberg has previously served on the Committee on Dimensions, Causes, and Implications of Trends in Early Career Events for Life Scientists and the Committee on Methods for Forecasting Demand and Supply of Doctoral Scientists and Engineers. He is a member of the PGA Oversight Committee and previously served on the OSEP Advisory Committee.

Joan Girgus

Member

Dr. Joan Girgus is Professor of Psychology at Princeton University and Special Assistant to the Dean of the Faculty for matters concerning gender equity. Dr. Girgus served as chair of the Psychology Department at Princeton from 1996-2002 and as Dean of the College at Princeton from 1977-87. Since 1993, Dr. Girgus has also been one of the principal organizers of the Pew Higher Education Roundtable and the Knight Collaborative, working with a broad range of colleges and universities to identify "best practices" for academic restructuring. From 1987-99, Dr. Girgus directed the Pew Science Program, a national program to improve undergraduate science education sponsored by the Pew Charitable Trusts, which gave grants to consortia of colleges and universities for collaborative projects. Dr. Girgus is currently a trustee of Adelphi University, the Wenner-Gren Foundation, McCarter Theatre, the Princeton Ballet Society. She has also served on the Board of Trustees of the American Association on Higher Education (AAHE) and Sarah Lawrence College, where she was vice-chair and chair of the Board and chair of the Executive and Finance Committee. At Princeton, as Dean of the College, Dr. Girgus chaired standing faculty committees on the course of study, examinations and standing, and undergraduate admission and financial aid, and served as a member of the President's cabinet. As Professor of Psychology, she has chaired the Committee on Women Faculty in Science and Engineering and the Faculty Committee on Conference and Faculty Appeal, and been a member of the Faculty Advisory Committee on Appointments and Advancements, the University Priorities Committee, the Faculty Advisory Committee on Policy, the President's Advisory Committee on Architecture, and the Faculty Committee on Athletics. At The City College of the City University of New York from 1969-77, Dr. Girgus served as assistant and associate professor and, for five years, as dean for the Division of Social Science. Since 1970, Dr. Girgus' research on perceptual development and personality development has led to one book, five book chapters, thirty-eight articles in refereed journals, and forty-one papers delivered at conferences and conventions. She has also written papers on undergraduate science education and on women in science. Dr. Girgus received her B.A. from Sarah Lawrence College and both her M.A. and Ph.D. from the Graduate Faculty of the New School for Social Research in New York City.

Arleen A. Leibowitz

Member

Dr. Arleen Leibowitz is Professor of Policy Studies in the UCLA School of Public Policy and Social Research. Dr. Leibowitz has conducted research in health and labor economics since obtaining her Ph.D. in Economics at Columbia University. Dr. Leibowitz's research centers on investments in human capital and in health. She has examined the role of maternal education in investments in children, educational outcomes for children, the demand for child care, the effect of education on women's labor force participation, secular trends in women's labor supply, and the effect of maternity leave on new mothers' return to work. She has also worked extensively in health economics and policy, studying cost-sharing and children's health care use, birth rates, and expenditures for prescription and over-the-counter drugs. Dr. Leibowitz's current work in health examines how public policies, such as Medicaid, and private policies, such as managed care, affect the amount and kind of health care obtained by children and by persons living with HIV. Dr. Leibowitz currently serves on the Committee on National Statistics for the NRC (CNSTAT), and has served on the Panel for Methods for Improving Enrollment in the State Children's Health Insurance Program.

Thomas N. Taylor

Member

Dr. Thomas Taylor is Roy A. Roberts Distinguished Professor at the University of Kansas. He is also Senior Curator of the Natural History Museum and Biodiversity Research Center, and Courtesy Professor for the Department of Geology. He also serves as Director of the State of Kansas NSF EPSCoR Program. He earned his PH.D. in Botany and Geology from the University of Illinois in 1964. Dr. Taylor is a Member of the National Academy of Sciences. He also serves on the National Science Foundation - Education and Human Resources Advisory Committee, Chair of the Strategic Planning and Assessment Committee for NIH BRIN KU Medical Center, Senator Pat Roberts's Advisory Committee in Science, Technology, and the Future Kansas Implementation Advisory Committee, the National Science Foundation -GPRA-Performance Assessment Advisory Committee, the National Science Foundation - MPSAC/EHRAC Committee to Review Undergraduate Education in the Math and Physical Sciences, Bioinformatics Core Advisory Committee. He serves on multiple NSF EPSCoR Advisory Boards and committees. He served on the Polar Research Board for the NRC. In addition he served as Faculty Advisor to the Chancellor of the Ohio Board of Regents and on the Government-University-Industry Research Roundtable for the State of Ohio.

Lilian S. Wu

Member

Dr. Lilian Shiao-Yen Wu, is a research scientist and Program Executive for University Relations, IBM Corporate Technology. She chairs the National Research Council's Committee on Women in Science and Engineering and serves on NSF's Committee on Equal Opportunity in Science and Engineering. She was a member of President Clinton's Committee of Advisors on Science and Technology. Her major research interests are mathematical modeling and risk analysis in business, particularly in the energy industry, and the environment. Among her other professional services, she serves on AAAS's Committee on Public Understanding of Science and Technology and DOE's Secretary of Energy's Laboratory Operations Advisory Board.