

Endless Frontier Symposium 2022: Research and Higher Education Institutions for the Next 75 Years

Committee

Alan I. Leshner

Chair

Alan I. Leshner (NAM) is Chief Executive Officer, Emeritus of the American Association for the Advancement of Science and former Executive Publisher of the journal *Science* and the *Science* family of journals. He served as permanent CEO from December 2001 through February 2015, and then as Interim CEO from July-December 2019. Before joining AAAS, Dr. Leshner was Director of the National Institute on Drug Abuse at the National Institutes of Health. He also served as Deputy Director and Acting Director of the National Institute of Mental Health, and in several roles at the National Science Foundation. Before joining the government, Dr. Leshner was Professor of Psychology at Bucknell University, where he taught and conducted research on the relationship between hormones and behavior. Dr. Leshner is an elected fellow of AAAS, the American Academy of Arts and Sciences, the National Academy of Public Administration, and many others. He is a member and served as Vice Chair of the governing Council of the National Academy of Medicine (formerly the Institute of Medicine) of the National Academies of Sciences, Engineering and Medicine. He served two terms on the National Science Board, appointed first by President Bush and then reappointed by President Obama. Dr. Leshner received Ph.D. and M.S. degrees in physiological psychology from Rutgers University and an A.B. in psychology from Franklin and Marshall College. Dr. Leshner has received many honors and awards, including the Walsh McDermott Medal from the National Academy of Medicine and seven honorary Doctor of Science degrees.

Mahdieh Aghazadeh

Member

Mahdieh Aghazadeh joined Janssen Supply Chain team as a principal engineer after many years of experience in R&D and quality teams with medical and pharmaceutical sectors of Johnson and Johnson, with focus on fit to plan and flawless technology transfer for production scale of biopharmaceutical manufacturing. In her previous role, she investigated compatibility and performance of novel materials for use in medical devices. Mahdieh's research interest and areas of expertise spanned from environmental analysis and techno-economic evaluation of bioethanol production, additive manufacturing of orthopaedic implants, and innovations in customer centric medical device design. She completed her PhD at Purdue University in 2016 and has been working at different capacities at Johnson and Johnson since and was recently accepted into New Voices cohort of 2021-23.

Kim Hunter Reed

Member

Kim Hunter-Reed, Ph.D., is Louisiana's Commissioner of Higher Education. Working with the Louisiana Board of Regents, Reed is leading the state's efforts to increase educational attainment by developing its talent base to result in a more prosperous Louisiana. To reach the state's goal of doubling the number of credentials awarded annually by 2030, she focuses on transformational policies and deep collaborative engagement in line with Regents' talent imperative. In support of that vision, her work is focused on strengthening the state's education-to-employment pipeline, accelerating student success, reskilling and training those seeking new career opportunities, finding solutions through research and discovery, and contributing significantly to the state's post-pandemic economic recovery. Reed is a nationally recognized student advocate with extensive higher education and government experience. In addition to leading the Colorado Department of Higher Education, she served in President Barack Obama's administration as Deputy Undersecretary at the U.S. Department of Education and led the White House initiative on historically black colleges and universities.

In 2020, she was recognized nationally as the 2020 exceptional leader by the State Higher Education Executive Officers Association (SHEEO). A Lake Charles native, Reed received a Doctorate in Public Policy from Southern University, as well as a Master's degree in Public Administration and a Bachelor's degree in Broadcast Journalism from Louisiana State University.

Richard A. Meserve

Member

Richard A. Meserve, JD, PhD, (NAE) is President Emeritus of the Carnegie Institution for Science. He is also Senior Of Counsel at the law firm of Covington & Burling LLP. Before assuming the Carnegie presidency in April 2003, he was Chairman of the U.S. Nuclear Regulatory Commission (NRC), having served since October 1999. He currently serves as Chairman of the International Nuclear Safety Group, chartered by the International Atomic Energy Agency. Early in his career, he served as legal counsel to the President's science advisor, and was a law clerk to Justice Harry A. Blackmun of the United States Supreme Court and to Judge Benjamin Kaplan of the Massachusetts Supreme Judicial Court. Dr. Meserve received a B.A. from Tufts University, a J.D. from Harvard Law School, and a Ph.D. in applied physics from Stanford University. He is a member of the National Academy of Engineering (NAE) and has previously served on numerous committees and boards of NASEM.

Shirley M. Tilghman

Member

Shirley Tilghman (NAS/NAM) is a president emerita and professor of molecular biology at Princeton University. Dr. Tilghman was elected Princeton University's 19th president on May 5, 2001. An exceptional teacher and world-renowned scholar and leader in the field of molecular biology, she served on the Princeton faculty for 15 years before being named president. During her tenure, the university expanded its undergraduate and graduate student bodies, and instituted a four-year college system. She oversaw the creation of major new academic programs, including the Princeton Neuroscience Institute, the Andlinger Center for Energy and the Environment, and the Lewis Center for the Arts. Upon the completion of her term in June of 2013, she returned to the faculty. During her scientific career as a mammalian developmental geneticist, Dr. Tilghman studied the way in which genes are organized in the genome and regulated during early development. Dr. Tilghman is an Officer of the Order of Canada, the recipient of a Lifetime Achievement Award from the Society for Developmental Biology, the Genetics Society of America Medal, and the L'Oreal-UNESCO Award for Women in Science. She is a member of the American Philosophical Society, The National Academy of Sciences, the Institute of Medicine and The Royal Society of London. She serves as a trustee of Amherst College, the Carnegie Endowment for International Peace, the Institute for Advanced Study, and the King Abdullah University of Science and Technology, and as a director of Google Inc. Dr. Tilghman received her honors B.Sc. in chemistry from Queen's University in Kingston, Ontario, and her Ph.D. in biochemistry from Temple University.

Michael S. Witherell

Member

Michael Witherell (NAS) is the Director of Lawrence Berkeley National Laboratory and Professor of Physics at UC Berkeley. Previously, he was Vice Chancellor for Research and held the Presidential Chair in Physics at the University of California, Santa Barbara. (UCSB). Dr. Witherell served as director of Fermi National Accelerator Laboratory (Fermilab), the largest particle physics laboratory in the country, from 1999 to 2005. From 1981 to 1999, he was a faculty member in the UCSB Physics Department. Dr. Witherell was elected to membership in the National Academy of Sciences in 1998 for his work in the application of new technologies that "profoundly influenced all subsequent experiments aimed at the study of heavy-quark states." In 2004, he received the U. S. Secretary of Energy's Gold Award, the highest honorary award of the Department of Energy. Dr. Witherell is a member of the National Academy of Sciences and a fellow of the American Physical Society, the American Association for the Advancement of Science, and the American Academy of Arts and Sciences. He currently sits on the Committee on Science, Engineering and Public Policy at the National Academies. He received his Ph.D. from the University of Wisconsin, Madison, in 1973 and his B.S. from the University of Michigan, Ann Arbor, in 1968.