

CHRISTOPHER J. KEANE, Ph.D.

Vice President for Research

Professor of Physics

Christopher Keane is Vice President for Research and Professor of Physics at Washington State University. He received a B.S. degree in Physics and Engineering, Magna Cum Laude, from the University of Rochester in 1980. He received his Ph.D. in Astrophysics from Princeton University in 1986. Dr. Keane then joined the Inertial Confinement Fusion Program at Lawrence Livermore National Laboratory (LLNL), performing computational and experimental research in x-ray lasers, inertial confinement fusion (ICF), and ultra-high intensity laser–matter interactions.



Dr. Keane joined the U.S. Department of Energy in 1996 as the Associate Director of the Office of Inertial Fusion within the Office of Defense Programs in what is now the National Nuclear Security Administration (NNSA). He held several leadership positions at NNSA, ultimately serving from 2004-2007 in the Senior Executive Service as Assistant Deputy Administrator for Inertial Fusion and the National Ignition Facility (NIF) Project. In this latter position, Dr. Keane was responsible for the NNSA ICF Program, including construction of the \$3.5 billion NIF laser. He also worked closely with NNSA, Office of Science, and Office of Science and Technology Policy leadership to establish programs aimed at advancing the study of fundamental high energy density science. This includes the NNSA/Office of Science Joint Program in High Energy Density Laboratory Plasmas. This program now supports a large fraction of the U.S. researchers involved in this rapidly evolving and exciting area of science.

Dr. Keane rejoined LLNL in 2007 and went on to serve as director of the NIF User Office from 2009 through June 2014. In this role he worked with LLNL, Department of Energy, and other leaders to launch the NIF user program. This successful program allows academic and other users to conduct astrophysics and other experiments aimed at using the football-stadium sized NIF’s unique capability to examine the behavior of matter at extreme pressure. Dr. Keane also served in 2014 as Acting Deputy Principal Associate Director for Science and Technology within the LLNL NIF and Photon Sciences Directorate.

Dr. Keane joined Washington State University in 2014. He has taken significant steps to reshape the University’s research enterprise. Dr. Keane spearheaded the 120-day study identifying WSU’s areas of research excellence and areas where operational improvements were needed. He led WSU faculty and staff in articulating “grand challenges” – institutional multidisciplinary research areas that focus on urgent regional, national, and global problems. The grand challenges effort resulted in the funding of four focused research initiatives that have yielded an approximate 17x financial return in terms of

awards received. He has also led major operational improvements to the WSU Office of Research. This included enhancing performance and efficiency of offices overseeing animal and human subject experiments, commercialization and industrial engagement, proposal submission and award, and other services essential for supporting faculty and staff engaged in the research enterprise. WSU has recorded record research expenditures in the past several years under Dr. Keane's leadership.

Dr. Keane also has significantly strengthened the partnership between WSU and the Pacific Northwest National Laboratory (PNNL), launching three WSU-PNNL Joint Research Institutes as well as programs supporting Ph.D. research at PNNL for WSU graduate students and joint research appointments for PNNL staff and WSU faculty. He serves on the Board of Directors for the Pacific Northwest National Laboratory.

Dr. Keane is a Fellow of the American Association for the Advancement of Science and a member of the American Physical Society. He is the recipient of the NNSA Silver Medal, the Defense Programs Award of Excellence, and the Fusion Power Associates Special Award. He has also served on several major national and international advisory and review committees, including the DOE Fusion Energy Sciences Advisory Committee, the United Kingdom Fusion Advisory Board, and most recently the Los Alamos National Laboratory Complex Natural and Engineered Systems Review Committee. He has authored more than 100 scientific publications.

In 2018, Dr. Keane was elected to membership in the Washington State Academy of Sciences, an organization that advances science in the state and informs public policy.

Dr. Keane was elected as a member of the Association of Public and Land Grant Universities Council on Research Executive Committee in 2016. He was elected Chair of the APLU COR in summer 2020, with his appointment lasting through mid-November 2021.