

## **Jayathi Y. Murthy, Ph.D.**

Jayathi Y. Murthy is the Ronald and Valerie Sugar Dean at the UCLA Henry Samueli School of Engineering and Applied Science, with about 190 faculty members, and more than 6,000 undergraduate and graduate students. Murthy is also a distinguished professor in the Mechanical and Aerospace Department.

UCLA Samueli is recognized around the world as a leader in engineering education, research and service. Established in 1945, the school has developed generations of rigorously trained engineers and been a home for solutions to challenges in critical fields including energy, sustainability, healthcare, communications, transportation, infrastructure and information technology. Under Murthy's leadership, UCLA Samueli has focused on growth in areas critical to the 21st century, including engineering in medicine and biology; sustainable and resilient urban systems; artificial intelligence, machine learning and data science; cybersecurity and the future internet; robotics and cyberphysical systems; as well as advanced materials and manufacturing.

As the first woman dean at UCLA Engineering, Murthy has also made expanding access to a UCLA engineering education a top priority. This includes deepening relationships with area community colleges, increasing outreach to underrepresented minorities and easing the transition for transfer students. She also led the effort to establish WE@UCLA – a program that supports the full participation of women in engineering.

Murthy's research interests include nanoscale heat transfer, computational fluid dynamics, and simulations of fluid flow and heat transfer for industrial applications. Recently, her focus is on sub-micron thermal transport, multiscale multi-physics simulations of micro- and nano-electromechanical systems (MEMS and NEMS), and the uncertainty quantifications involved in those systems. Before joining UCLA Engineering as dean in January 2016, Murthy was chair of the Department of Mechanical Engineering at the University of Texas at Austin, and held the Ernest Cockrell Jr. Memorial Chair in Engineering. From 2008 to 2014, Murthy served as the director of the Center for Prediction of Reliability, Integrity and Survivability of Microsystems (PRISM), a \$21 million center of excellence supported by the National Nuclear Security Administration (NNSA).

Prior to joining the University of Texas at Austin, Murthy was Professor of Mechanical Engineering at Purdue University from 2001 to 2011 and held the Robert V. Adams Chair from 2008-2011. Before joining Purdue, she was a professor of mechanical engineering at Carnegie Mellon University in Pittsburgh. Murthy began her career at Arizona State University, where she was an assistant professor of mechanical and aerospace engineering from 1984 to 1988. Murthy was one of the earliest employees of the New Hampshire-based Fluent, Inc., the developer and vendor of the world's most widely used computational fluid dynamics software, FLUENT. She worked there from 1988-1998. The algorithms she developed form the basis of many widely-used commercial computational fluid dynamics codes.

Murthy received a Ph.D. in mechanical engineering from the University of Minnesota, a master's degree from Washington State University and a B. Tech from the Indian Institute of Technology, Kanpur, where she was named a distinguished alumna in 2012. She is a member of the US National Academy of Engineering (NAE), a foreign fellow of the Indian National Academy of Engineering (INAE), a fellow of the American Society of Mechanical Engineers (ASME) and the recipient of many honors, including the ASME Heat Transfer Memorial Award in 2016 and the ASME Electronics and Photonics Packaging Division Clock Award. Murthy is the author of more than 330 technical publications, an editor of the second edition of the Handbook of Numerical Heat Transfer, and serves on the editorial boards of Numerical Heat Transfer and the International Journal of Thermal Sciences.