

Subra Suresh, Sc.D.

President, Carnegie Mellon University



Subra Suresh is the ninth president of Carnegie Mellon University, where he began his tenure on July 1, 2013. Prior to assuming this role, he served as director of the National Science Foundation (NSF).

A distinguished engineer and scientist, Suresh is the first and only university president to be elected to all three National Academies — the National Academy of Medicine (2013), the National Academy of Sciences (2012) and the National Academy of Engineering (2002). He is one of only 19 Americans and the only Pennsylvanian to be elected to all three National Academies. He is also an elected member of the American Academy of Arts and Sciences and a fellow of the National Academy of Inventors.

Suresh was nominated by President Barack Obama and unanimously confirmed by the U.S. Senate as the director of the NSF in September 2010. As director of this \$7 billion independent federal agency, he led the only government science agency charged with advancing all fields of fundamental science and engineering research and related education.

Before joining the NSF, Suresh served as the dean of the School of Engineering and the Vannevar Bush Professor of Engineering at the Massachusetts Institute of Technology (MIT). His research at MIT, which continues at Carnegie Mellon, into the properties of engineered and biological materials, and their connections to human diseases, has been published in more than 300 research articles, 25 patent applications and three books. This research has shaped many disciplines and technologies at the intersections of engineering, science and medicine. Suresh's research and inventions have benefited industry practice through licensing of intellectual property, a technology startup and numerous consulting and advising activities. More than 100 students, postdoctoral fellows and visiting scholars have been members of his research group, and many of them now occupy prominent positions in academia, industry and government worldwide.

Graduating from high school at the age of 15, Suresh received his bachelor of technology degree from the Indian Institute of Technology in Madras, in first class with distinction; a master's degree from Iowa State University; and completed a doctor of science degree from MIT in two years. Following postdoctoral research at the University of California, Berkeley, and the Lawrence Berkeley National Laboratory, he joined the faculty of engineering at Brown University in December 1983, and was promoted to full professor in July 1989. He joined MIT in 1993 as the R.P. Simmons Professor of Materials Science and Engineering and served as head of MIT's Department of Materials Science and Engineering from 2000-2006.

In his leadership roles at MIT, Suresh helped create new state-of-the-art laboratories, the MIT Transportation Initiative and the Center for Computational Engineering; led MIT's efforts in establishing the Singapore-MIT Alliance for Research and Technology (SMART) Center; and oversaw the recruitment of a record number of women faculty members in engineering. His accomplishments as head of NSF included the creation of the Innovation Corps (NSF I-Corps), the Global Research Council, the Graduate

Research Opportunities Worldwide initiative and Science Across Virtual Institutes program. Since becoming president of Carnegie Mellon in 2013, Suresh has led the establishment of several major programs and initiatives including: the Simon Initiative to enhance the impact of technology-enhanced learning within the university and around the globe; the BrainHub to further CMU's interdisciplinary strengths to advance brain research; the largest infrastructure development project in the university's history catalyzed by record fundraising outcomes during the past two years; the Swartz Center for Entrepreneurship; and the Presidential Fellowships and Scholarships Program.

Suresh has been elected to 15 academies based in the U.S., China, India, Sweden, Germany, Italy, Spain and France. He has been elected a fellow or honorary member of all the major materials research societies in the United States and India. He has been awarded 11 honorary doctorate degrees from institutions in the U.S., England, Sweden, Spain, Switzerland, India and China. He was awarded the Padma Shri, one of the highest civilian honors, by the President of India in 2011.

His alma mater, IIT Madras, recognized him as a Distinguished Alumnus in 1997 and conferred an honorary doctorate degree at its 50th Convocation held in 2013, at which he was the Chief Guest of Honor and keynote speaker. In 2006, MIT's Technology Review magazine selected Suresh as a "Top 10" researcher whose work will "have a significant impact on business, medicine or culture." His many honors for his scholarly research during the past decade include: the 2006 Acta Materialia Gold Medal; the 2007 European Materials Medal from the Federation of European Materials Societies; the 2008 Eringen Medal of the Society of Engineering Science; the 2011 General President's Gold Medal from the Indian National Science Congress; the 2011 Nadai Medal and the 2012 Timoshenko Medal from the American Society of Mechanical Engineers; the 2012 R.F. Mehl Award from the Minerals, Metals & Materials Society; the 2013 Benjamin Franklin Medal in Mechanical Engineering and Materials Science from the Franklin Institute; and the 2015 Industrial Research Institute Medal.

Suresh serves on several public and private boards, including: Hewlett Packard Inc. the Battelle Memorial Institute, the Dietrich Foundation, the Allegheny Conference on Community Development, the Pittsburgh Cultural Trust and the Pittsburgh Symphony Orchestra. He is also a member of the Science, Technology and Innovation Council of the Munich-based multinational company, Siemens AG, and has previously served as a director of LORD Corporation, as well as several nonprofit organizations in the United States and abroad.