Julie Chen Bio

Julie Chen is the Vice Chancellor for Research & Economic Development and a professor of mechanical engineering at the University of Massachusetts Lowell. As the Chief Research Officer, Chen directs UMass Lowell's nearly \$95 million research enterprise, which also includes industry partnerships, technology transfer, startups & innovation, core research facilities, and economic development programs.

She has facilitated numerous innovative collaboration models that bring together industry, government, and academia, including:

- The Fabric Discovery Center, the nation's first center to integrate three Manufacturing USA Institutes, coupling the expertise in smart textiles, flexible electronics, and robotics with the Massachusetts Medical Device Development Center and the university's Innovation Hub, UML's medical device, biotech, and technology incubators; and
- UMass Lowell's Core Research Facilities, shared high-tech equipment that enables efficient maintenance, training, and enhanced access of by faculty, students, and over 200 external industry users; and
- The Rist Institute for Sustainability and Energy that brings together experts in science, engineering, economics, policy, business, education, and operations to address complex challenges in sustainability and climate change; and
- Various institutes and centers such as the Raytheon-UMass Lowell Research Institute and HEROES, a unique interdisciplinary research and development partnership that brings together complementary expertise, intellectual assets, and research expertise from UMass Lowell and <u>U.S. Army Combat</u> <u>Capabilities Development Command Soldier Center</u> to enhance the protection of U.S. soldiers.

Chen joined the UMass Lowell faculty in 1997 after six years as an assistant professor at Boston University. She spent 2002-2004 in Washington, D.C., serving as the program director for the Materials Processing and Manufacturing as well as the Nanomanufacturing Programs at the National Science Foundation. She was appointed vice provost for research in 2009 and was promoted to vice chancellor in 2016 with an added external and outreach focus. As a member of the Executive Cabinet, Chen has helped lead the implementation of the 2020 Strategic Plan, resulting in an expansion and modernization of physical infrastructure, the recruitment of outstanding faculty and students, increases in retention and graduation rates, advances in diversity, equity and inclusion, and historic growth of revenues from research, online programs and the endowment.

She was the 2010 Technical Program Chair for the American Society of Mechanical Engineers International Mechanical Engineering Congress and Exposition and served in several leadership roles on the Congress Steering Committee, Nominating Committee, and in her technical division.

Chen has served on many editorial boards, advisory committees, and review panels for journals and federal agencies, including NSF, the National Institutes of Health, the National Academies, the Department of Energy, and the Department of Defense. Based on her expertise in materials, nanomanufacturing, and advanced manufacturing, she has testified before Congress and represented the United States in several international workshops.

Chen serves on the board for the Massachusetts Life Sciences Center and the MassTech Collaborative, as well as on the Massachusetts Advanced Manufacturing Collaborative and the Massachusetts Military Asset and Security Strategy Task Force.

A strong advocate for Diversity, Equity and Inclusion initiatives, Chen serves as the co-lead for the university's Council on Social Justice and Inclusion. Additionally she was one of the co-principle

investigators on a \$3.5 million NSF ADVANCE Institutional Transformation grant to help support and elevate women faculty in Science Technology Engineering and Mathematics (STEM) disciplines at UMass Lowell.

Chen received her PhD, Master of Science, and Bachelor of Science degrees from the Massachusetts Institute of Technology in mechanical engineering where she was a student athlete and academic all-American. In 2019 she was awarded an honorary degree from Queens University Belfast and is a recipient of the U.S. Army Public Service Commendation Medal – its fourth-highest civilian honor – in recognition of her leadership in developing the innovation ecosystem.