Matthew O’Donnell, Ph.D.

Matthew O’Donnell is the Frank and Julie Jungers Dean of Engineering at the University of Washington since 2006. Under his leadership, the College of Engineering created a new program in molecular engineering that includes the construction of a dedicated facility scheduled to open in 2012. Additionally, he advanced key strategic initiatives in the College, including new energy and computational sciences research programs, has grown the overall size and strength of the College through new faculty hires, completed the most successful fundraising campaign in the College’s history, and reinvigorated undergraduate programs through an emphasis on experiential learning.

O’Donnell is a biomedical engineer who is renowned for his interdisciplinary focus. An expert in ultrasound imaging, his research uses coherent energy sources for non-invasive biomedical imaging. His specific research interests include ultrafast optics, in-vivo microscopy, catheter imaging of coronary arteries, optoacoustic arrays, and elasticity and molecular imaging.

O’Donnell is currently the principal investigator on two National Institutes of Health grants dealing with applications of ultrasound and photoacoustic imaging. He has graduated 25 Ph.D. students and mentored 15 post-doctoral fellows. He holds 55 patents and has authored or co-authored more than 300 publications. In addition, he is associate editor of the journal *Ultrasonic Imaging*, a fellow of both the technology professional organization IEEE and the American Institute for Medical and Biological Engineering, and a member of the American Physical Society. O’Donnell was elected this past February to the National Academy of Engineering—one of the highest professional honors accorded an engineer. And he was recognized by Notre Dame with the 2009 Distinguished Alumnus Award.

He received both his undergraduate and doctoral degrees in physics from Notre Dame. O’Donnell began his career as a postdoctoral fellow and senior research associate in physics and medicine at Washington University in St. Louis. He went on to a research fellowship in electrical engineering at Yale University, and then to a decade of private-sector experience as a research and development physicist at the General Electric Company in New York. Returning to the academy in 1990, O’Donnell joined the faculty of the University of Michigan as a professor of electrical engineering and computer science. He later chaired that university’s biomedical engineering department from 1998 to 2006.