

## BIOGRAPHY

### Education:

BS and Ph.D. in Physics, University of Notre Dame, Notre Dame, IN, 1972 and 1976.

### Experience:

Following his graduate work, Dr. O'Donnell moved to Washington University in St. Louis, MO as a postdoctoral fellow in the Physics Department working on applications of ultrasonics to medicine and non-destructive testing. He subsequently held a joint appointment as a Senior Research Associate in the Physics Department and a Research Instructor of Medicine in the Department of Medicine at Washington University. In 1980 he moved to General Electric Corporate Research and Development Center in Schenectady, NY, where he continued to work on medical electronics, including MRI and ultrasound imaging systems. During the 1984-1985 academic year, he was a visiting fellow in the Department of Electrical Engineering at Yale University in New Haven, CT investigating automated image analysis systems. In 1990, Dr. O'Donnell became a Professor of Electrical Engineering & Computer Science at the University of Michigan in Ann Arbor, MI. Starting in 1997, he held a joint appointment as Professor of Biomedical Engineering. In 1998, he was named the Jerry W. and Carol L. Levin Professor of Engineering. From 1999-2006, he also served as Chair of the Biomedical Engineering Department. During 2006, he moved to the University of Washington in Seattle, WA where he was the Frank and Julie Jungers Dean of Engineering until the end of 2012. He is now a Professor of Bioengineering and Frank and Julie Jungers Dean Emeritus. His most recent research has explored new imaging modalities in biomedicine, including elasticity imaging, in vivo microscopy, optoacoustic arrays, photoacoustic contrast agents for molecular imaging and therapy, thermal strain imaging, and catheter-based devices.

### Awards:

Dr. O'Donnell has over 420 archival publications and 61 issued patents. He has won numerous awards, including the Achievement Award from the IEEE Ultrasonics, Ferroelectrics & Frequency Control Society, the Distinguished Alumni Award from the University of Notre Dame, and the William J. Morlock IEEE EMBS Award for Excellence in Biomedical Technology. He is a fellow of the IEEE and AIMBE, and is a member of the Washington State Academy of Sciences and the National Academy of Engineering.

### IEEE Activities:

I have been a member of IEEE for over 35 years and a fellow for nearly 25 years, having received the highest awards from two IEEE societies (Achievement Award – UFFC; William J. Morlock IEEE EMBS Award for Excellence in

Biomedical Technology). I have been an active participant in IEEE functions over that time, including being a reviewer for several IEEE transactions, serving on committees, acting as session chair and organizer of many IEEE conferences and workshops, and generally promoting IEEE activities in my administrative roles at the University of Michigan and the University of Washington.

#### List of Invited Talks:

I generally don't maintain a detailed list of invited talks since I have averaged about 10 such talks per year over the last 35 years or so. I have given invited/plenary talks at international symposia for several sections of the IEEE, including UFFC and EMBS. I have given invited/plenary talks at international meetings for many other scientific/technical societies, including the American Physical Society (APS), American Institute of Physics (AIP), Acoustical Society of America (ASA), Optical Society of America (OSA), several sections of the Society of Photo-Optical Instrumentation Engineers (SPIE), and the American Institute of Ultrasound in Medicine (AIUM). I have also presented many invited talks at medical conferences on the topics of ultrasound and MRI for applications in cardiovascular medicine. Finally, I deliver invited seminars and colloquia multiple times per year at universities, research institutes, and companies throughout North America, South America, Europe, and Asia.