



Biographical Information for Theodore W. Berger, Ph.D.:

Dr. Theodore W. Berger is the David Packard Professor of Engineering, Professor of Biomedical Engineering and Neuroscience, and Director of the Center for Neural Engineering at the University of Southern California. Dr. Berger's research uses an integrated experimental and theoretical approach to develop biologically realistic nonlinear models of the nervous system, and is leading to neural prosthetic devices intended to replace damaged brain regions. Dr. Berger received his Ph.D. from Harvard University in 1976; his thesis work received the James McKeen Cattell Award from the New York Academy of Sciences. He conducted postdoctoral research at the University of California, Irvine from 1977-1978, and was an Alfred P. Sloan Foundation Fellow at The Salk Institute from 1978-1979. Dr. Berger joined the Departments of Neuroscience and Psychiatry at the University of Pittsburgh in 1979, being promoted through to Full Professor in 1987. During that time, he received a McKnight Foundation Scholar Award, twice received an NIMH Research Scientist Development Award, and was elected a Fellow of the American Association for the Advancement of Science. Since 1992, he has been Professor of Biomedical Engineering and Neuroscience at the University of Southern California, and was appointed the David Packard Chair of Engineering in 2003. While at USC, Dr. Berger has received an NIMH Senior Scientist Award, was given the Lockheed Senior Research Award in 1997, and was elected a Fellow of the American Institute for Medical and Biological Engineering in 1998. Dr. Berger also received a Person of the Year "Impact Award" from the AARP in 2004 for his work on neural prostheses, was a National Academy of Sciences International Scientist Lecturer in 2003, and an IEEE Distinguished Lecturer in 2004-2005. Dr. Berger was elected a Senior Member of the IEEE in 2005, received a "Great Minds, Great Ideas" award from the EE Times in the same year, and in 2006 was awarded the USC Associates Award for Creativity in Research and Scholarship. Dr. Berger was elected a Fellow of the IEEE in 2010, received the EMBS Academic Career Achievement Award in 2013, and his work was chosen as one of the "10 Breakthrough Technologies" of 2013 by the MIT Technology Review. Most recently, Dr. Berger was chosen as one of the "100 Global Thinkers of the Year" by Foreign Policy, and in 2016 he received the Australian Medical Society Medal for Medical Research. He has published over 300 journal articles, conference proceedings, and book chapters, and is the co-editor of Toward Replacement Parts for the Brain: Implantable Biomimetic Electronics as Neural Prostheses published by the MIT Press in 2005, as well as the lead co-editor of Brain-Computer Interfaces published in 2008 by Springer. Dr. Berger's research continues to be supported by DARPA, ONR, NSF, NIBIB and NINDS. Translation of some of Dr. Berger's research has led to commercialization efforts through start-up companies: Safety Dynamics, Inc., Rhenovia Pharma, Inc., Neuralgenix, LLC, and KERNEL LLC.