Bin He is the Trustee Professor and Head of the Department of Biomedical Engineering, and Professor by courtesy in the Department of Electrical and Computer Engineering, and Professor of the Neuroscience Institute at Carnegie Mellon University. Dr. He has made significant research and education contributions to the field of neuroengineering and biomedical imaging, including functional biomedical imaging, multimodal neuroimaging, and noninvasive brain-computer interface (BCI). His pioneering research has helped transforming electroencephalography from a 1-dimensional detection technique to 3-dimensional neuroimaging modality. His lab demonstrated for the first time for humans to fly a drone and control a robotic arm just by thinking about it using a noninvasive BCI. He has contributed significantly to neuroengineering education including editing the first textbook in Neural Engineering, and led multiple NIH and NSF training grants in neuroengineering.

Bin He received his BS in 1982 in electrical engineering, from Zhejiang University, Hangzhou, China. He later went to study in Japan and obtained his M.S. in electrical engineering and PhD (highest honors) in bioelectrical engineering from the Tokyo Institute of Technology. Bin He completed his postdoctoral fellowship at Harvard-MIT Division of Health Sciences and Technology in United States. After working as a Research Scientist at MIT, he later joined the faculty of Electrical Engineering and Bioengineering at the University of Illinois at Chicago, where Bin He was named a University Scholar by the university president.

In January 2004, Bin He became the Professor of Biomedical Engineering at the University of Minnesota, Minneapolis. He also served as the founding director of Center for Neuroengineering at Minnesota from 2007-2017. Since 2011, Bin He has served as the director of the NSF IGERT Training Program on Systems Neuroengineering. In August 2012, Bin He was named the director of the Institute for Engineering in Medicine, a campus-wide research institute aimed at advancing innovative engineering solutions for tomorrow's medicine, by fostering collaborations between biomedical colleges and College of Science and Engineering at the University of Minnesota. In February 2018, Bin He became the Department Head of the Department of Biomedical Engineering at Carnegie Mellon University. He leads the Biomedical Functional Imaging and Neuroengineering Laboratory, which was founded at the University of Minnesota and relocated to Carnegie Mellon University in 2018.

From 2002 to 2005, Bin He was the President of the International Society of Bioelectromagnetism. From 2007 to 2008, he was the President of International Society for Functional Source Imaging. From 2005 to 2007, he served as Vice President of IEEE Engineering in Medicine and Biology Society (EMBS). From 2009 to 2010, Bin He was the President of the EMBS. In 2009, he served as the Conference Chair of the 31st Annual International Conference of EMBS, which attracted a record number of participants from the international biomedical engineering community. In 2013, served as the chair of the EMBS 6th International Conference on Neural Engineering. Bin He has been elected as the Chair of International Academy of Medical and Biological Engineering from 2018-2021. He was Editor-in-Chief of IEEE Transactions on Biomedical Engineering from 2013-2018.

Bin He has been recognized by a number of prestigious awards, including the IEEE EMBS Academic Career Achievements Award in 2015, IEEE Biomedical Engineering Award in 2017, IEEE EMBS Willian J Morlock Award in 2019, among others.



Carnegie Mellon University 5000 Forbes Ave. Scott Hall 4N120A Pittsburgh, PA



