

Bin He is Trustee Professor of Biomedical Engineering, Professor of the Neuroscience Institute, and Professor by courtesy of Electrical and Computer Engineering 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, noninvasive brain-computer interface (BCI), and neuromodulation. 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 (1st Edition, 2005; 2nd Edition, 2013; 3rd Edition, 2020), 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, a Nobel Prize winning campus. 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. During 2011-2018, Bin He served as the director of the NSF IGERT Training Program on Systems Neuroengineering. During 2012-2017, Bin He served as 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. From February 2018 to February 2020, Bin He served as the Head of the Department of Biomedical Engineering at Carnegie Mellon University. Over the three years, the department has made substantial progress - research expenditure increased by 60%, PhD student population increased by 50%, graduate underrepresented minority student population nearly doubled, and graduate program ranking increased from the top 26th to the 22nd to the 17th according to US News and World Report.

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, he 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, and during his tenure the journal's impact factor nearly doubled. From 2014-2019 Bin He served as a Member of the NIH BRAIN Multi-Council Working Group. Bin He has been recognized by a number of prestigious awards, including IEEE EMBS Distinguished Service Award in 2014, IEEE EMBS Academic Career Achievements Award in 2015, IEEE Biomedical Engineering Award in 2017, IEEE EMBS William J Morlock Award in 2019, among others.

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