

Division of Behavioral and Social Sciences and Education

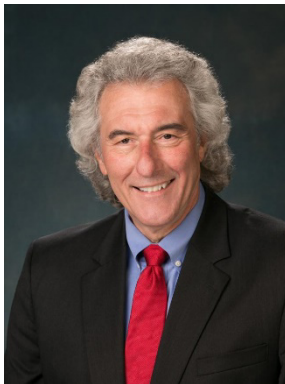
BOARD ON HUMAN-SYSTEMS INTEGRATION

Human-Centered Design of Exoskeletons

Speaker Biographical Sketches



Christopher (Chris) R. Reid is the President of the Human Factors and Ergonomic Society and a Technical Fellow for Boeing's Environment, Health & Safety (EHS) organization in Charleston, SC. He is the EHS portfolio manager of wearable technology (e.g., exoskeletons, mixed reality, and wearable sensing and computing systems). Prior to Boeing, Dr. Reid worked for Lockheed Martin on astronaut spacesuit assessment as a Human Factors & Ergonomics Discipline Lead at NASA and as a Human Factors Engineer for the US Army assessing Warfighter personal protective equipment. Dr. Reid advises on ergonomics as a Delegates Committee member for the National Safety Council's Board of Directors, sits on the Editorial Boards for the *Augmented Human Research* and *Theoretical Issues in Ergonomics Sciences* Journals, is a 2019-2020 Special Issue Editor for the *Human Factors Journal*, Chair of the Annual ErgoX International Symposium, and Chair of the HFE Subcommittee for ASTM F48 standards on Exoskeletons. He is a recipient of both the 2018 Rising Star Award from the National Safety Council and the 2020 Black Engineer of the Year Award. He graduated from the University of Central Florida, with degrees in Electrical Engineering Technology (BS) and Industrial Engineering (MS and PhD).



William S. Marras holds the Honda Chair in the Department of Integrated Systems Engineering at the Ohio State University and serves as the Director of the Spine Research Institute at the Ohio State University. Dr. Marras holds joint academic appointments in the Department of Orthopaedic Surgery, the Department of Neurosurgery, and the Department of Physical Medicine & Rehabilitation. He is also a board certified ergonomist. His research is centered on understanding multidimensional causal pathways for spine disorders through quantitative epidemiologic evaluations, laboratory biomechanical studies, personalized mathematical modeling, and clinical studies of the lumbar and cervical spine. He holds Fellow status in six professional societies including the American Society for the Advancement of Science (AAAS) and has been widely recognized for his contributions through numerous national and international awards including two Volvo Awards for Low Back Pain Research and an honorary Sc.D. degree. In 2017 he was awarded Distinguished Scholar designation at the Ohio State University. Professor Marras has been active in the National Research Council (NRC) having served on over a dozen boards and committees and has served as Chair of the Board on Human Systems Integration for multiple terms. He has also served as Editor-in-Chief of *Human Factors* and is currently Deputy Editor of *Spine* and is the past President of the Human Factors and Ergonomics Society. Dr. Marras is an elected member of the National Academy of Engineering.