John Darrell Van Horn, Ph.D.

Dr. Van Horn is an associate professor of neurology with additional appointments in neuroscience and in electrical engineering at the University of Southern California in Los Angeles, California. He is based in the USC Mark and Mary Stevens Neuroimaging and Informatics Institute. He received his bachelor's degree in psychology from Eastern Washington University, a masters in electrical engineering and computer science from the University of Maryland, College Park, and his PhD from the University of London in the United Kingdom. He conducted a post-doctoral fellowship at the National Institute of Mental Health on the National Institutes of Health main campus in Bethesda, MD, specializing in human neuroimaging investigation of brain function. He has held faculty positions at Dartmouth College, the University of California (USC), Los Angeles, and now, USC. He is an accomplished author (over 180 publications, h-index>48), university-level educator, and is known internationally as an expert in neuroinformatics and data sharing.

Among his research articles are many publications on multimodal neuroimaging of the brain and the characterization of mild and severe traumatic brain injury (TBI). This includes using MRI and diffusion tensor imaging to model the morphological effects of brain injury as well as the effect on white matter fiber pathways. He is the past education chair as well as program chair for the Organization for Human Brain Mapping and current vice-president of the Society for Claustrum Research. He directs the masters of science in neuroimaging and informatics masters of science program at USC – a one-of-its-kind program covering the spectrum of human neuroimaging research and practice – as well as contributes to other USC graduate programs.

He is also the principal investigator of the National Institutes of Health Big Data to Knowledge (BD2K) Training Coordinating Center, an effort to synthesize data science educational content from around the internet, index it into a common database framework, and make the information searchable, sortable, and openly available for users to organize into personalized training plans. He directs a unique series of five-day mentored and facilitated Data Science Innovation Lab events on specific topics such as mobile health, the microbiome, and single cell dynamics.

Finally, Dr. Van Horn oversees a data science scholarly rotation program which pairs junior biomedical researchers with more senior data scientists to work on projects of mutual interest. He enjoys traveling, road cycling, mountaineering, is a private pilot, and lives in Los Angeles, CA, with his wife and two daughters.