



Rickey E. Carter, Ph.D.

Professor of Biostatistics



Rickey E. Carter, Ph.D., is a consultant in the Division of Clinical Trials and Biostatistics, Department of Health Sciences Research at Mayo Clinic in Florida, with a joint appointment in the Department of Artificial Intelligence and Informatics. Dr. Carter joined the staff of Mayo Clinic in 2009 and holds the academic rank of professor of biostatistics, Mayo Clinic College of Medicine and Science.

Dr. Carter earned his B.S. in mathematics at Winthrop University in Rock Hill, South Carolina, and his Ph.D. in biostatistics at Medical University of South Carolina.

Dr. Carter's collaborative research interests are in the areas of cardiology, diabetes, dermatology and translational science. He actively researches new approaches to the design and analysis of research studies from a statistical perspective. Recently, his interests are extending into digital health through the development and testing of artificial intelligence (AI) algorithms.

Dr. Carter leads the Biostatistics, Epidemiology and Research Design (BERD) unit with the Mayo Clinic Center for Clinical and Translational Science (CCaTS). In this capacity, he provides strategic oversight on how to position Mayo Clinic in the areas of pragmatic clinical trials and research conducted at the intersection of data science and traditional research methodological approaches. He is an accomplished clinical trial biostatistician who has led the data coordinating centers for multiple national and international clinical trials.

Dr. Carter also leads the Digital Innovation Laboratory at Mayo Clinic's campus in Florida. This dry lab is a machine learning shared resource that engages in activities ranging from using electrocardiogram for the detection of cardiovascular diseases to performing work-design and unsupervised-image segmentation for high-resolution digital representations of tissue samples. The goal of Dr. Carter's lab is to help accelerate discovery and improve care by providing new tools to aid front-line healthcare providers. He and his teams have earned several Mayo Clinic Team Science Awards.

Dr. Carter has given presentations to both national and international audiences, and he has authored over 400 journal articles and abstracts. He is the past statistical editor for the European Heart Journal, currently serves as an editor of Mayo Clinic Proceedings: Digital Health, and is a member of the European Society of Cardiology Journal Family Ethics Committee.

In addition to his research activities, Dr. Carter is active in education, including mentoring many Ph.D. students, among others. He holds full faculty privileges in Clinical and Translational Science and Artificial Intelligence in Healthcare at Mayo Clinic Graduate School of Biomedical Sciences. He has also held leadership roles in the Department of Quantitative Health Sciences and has served and currently serves on many Mayo Clinic committees.

Dr. Carter is a fellow of the European Society of Cardiology. His additional professional memberships include the American Statistical Association and the Association for Clinical and Translational Statisticians, where he has served as president. He currently serves on the Scientific Advisory Board of Anumana, Inc., and he has served as a scientific reviewer on multiple National Institutes of Health studies.