Mark E McComb, PhD

Dr. McComb is a Research Assistant Professor of Medicine at Boston University School of Medicine, a member of the Vascular Biology Unit, a member of the Center for Biomedical Mass Spectrometry, Director of the Evans Center Biomarkers Associated Research Consortium and Director of the Cardiovascular Proteomics Center Core Research Laboratory, one of 7 National Heart Lung and Blood Institute Proteomics Centers. He has authored and co-authored more than 40 peer reviewed publications and textbook chapters and more than 180 conference proceedings including numerous invited lectures. He is a member of the American Chemical Society, the American Society for Mass Spectrometry and the Human Proteome Organization.

Dr. McComb's research aims encompass the development and application of mass spectrometry and proteomics based technologies for the characterization of human disease. His current focus is directed towards the identification and characterization of differentially expressed proteins and differentially observed post-translational modifications of proteins associated with cardiovascular disease in order to identify and biomarkers which correlate with the clinical manifestation of heart disease. The Cardiovascular Proteomics Center's Core Laboratory develops and applies state-of-the art proteomics methodology and instrumentation towards the identification and characterization of proteins which may be perturbed by an oxidative stress mechanism in-vivo. By studying these proteins and modifications the aim is to identify patterns of changes in oxidative stress induced post-translational modification events in order to gain a global comprehensive understanding of the progression of metabolic induced cardiovascular disease. Identification of specific proteins and modifications which change as a function of disease will ultimately lead to the development of diagnostic and prognostic biomarkers which will have tremendous clinical utility.