

Laboratory of Cardiovascular Redox Signaling



The **Kohr Laboratory of Cardiovascular Redox Signaling** has an immediate opening for a postdoctoral fellow position. This is an excellent opportunity to join an exciting, NIH-funded research team focused on demystifying sex-specific, redox-dependent differences in the heart's response to ischemic injury with the ultimate goal of identifying novel, cardioprotective signaling pathways. The role of protein S-nitrosation in the female heart, which is naturally protected from ischemic injury, is a major focus of current studies. We have developed a number of cutting-edge mass spectrometry-based proteomic methodologies to map sites of S-nitrosation and other redox-based modifications, and we use these in tandem with cellular, molecular, and biochemical methods to assess the effects of S-nitrosation on the function, stability, and localization of specific protein targets. We also utilize a number of physiological approaches to evaluate myocardial function, including the Langendorff-perfused heart preparation, *in vivo* pressure-volume loop analysis, and echocardiography. Our lab primarily utilizes cell and mouse-based models for experimentation. By defining female-specific and other protective signaling pathways in the heart, we are working to identify key therapeutic targets for the treatment of ischemic heart disease in both men and women.

We are seeking a creative scientist to pursue independent and collaborative research within the Bloomberg School of Public Health and the School of Medicine at Johns Hopkins University. State of the art facilities and excellent core laboratories are available for research projects. **The applicant should possess a PhD, MD, or equivalent. Preferred qualifications include experience in heart physiology, proteomics and/or redox biology.** Interested applicants should send a cover letter and a curriculum vitae including publications in PDF format to: mkohr1@jhu.edu.