

Eric Hegg obtained his B.A. from Kalamazoo College and his Ph.D. from the University of Wisconsin under the direction of Professor Judith Burstyn. It was during his time at Wisconsin that he became interested in metalloenzymology, studying the role of metal ions in enzymes that hydrolyze DNA, RNA, and proteins. After receiving his Ph.D., Eric joined Larry Que's group at the University of Minnesota as an NIH postdoctoral fellow where he studied non-heme iron dioxygenases and established his long-standing interest in understanding how nature synthesizes and activates small molecules such as H₂ and O₂. Following his postdoctoral work, Eric and his family moved to Salt Lake City where he joined the faculty of the University of Utah and began his independent research career. He received a Cottrell Scholars Award in 2002 and a National Science Foundation Career Award in 2004. When the opportunity arose, Eric and his wife eagerly returned to the northern Midwest to join the faculty at MSU, where Eric is a Professor in the Department of Biochemistry & Molecular Biology. Eric has served a variety of roles within the Great Lakes Bioenergy Center since its founding in 2007, and he served as the MSU Subcontract Lead for the GLBRC from 2013 through the end of 2019. In January 2020, Eric accepted the position to become the Associate Dean for Budget, Planning, Research, and Administration in the College of Natural Science. Eric has participated in two leadership activities at MSU; in 2016, he was a Big Ten Academic Alliance Leadership Program Fellow, and in 2017-2018 he was an Academic Advancement Network Leadership Fellow. In 2019, Eric was elected a Fellow in the American Association for the Advancement of Science (AAAS).

Research in the Hegg lab focuses on elucidating how microbes perform environmentally important reactions. In particular, they are studying various enzymes critical to the global nitrogen cycle, including an enzyme that converts the environmental contaminant nitrite into ammonia as well as enzymes that produce the potent greenhouse gas N₂O. The Hegg lab also studies how microbes break down biomass to release the sugars and lignin from the plant cell wall, and how these structural components of the plant cell wall can be used to form biofuels and bioproducts. Ultimately, they are interested in applying the knowledge gained from these studies to address real-world problems.