

Iqbal Hamza, Ph.D.

Dr. Iqbal Hamza has been a professor at the University of Maryland since 2002; his current research focuses on uncovering heme-trafficking pathways in eukaryotes. Dr. Hamza received his Ph.D. in biochemistry from SUNY–Buffalo School of Medicine and was recognized for discovering novel iron-regulated genes in bacteria. He completed his postdoctoral fellowship at the Washington University School of Medicine in St. Louis, where his studies on human diseases of copper metabolism using transgenic mouse models were funded by a National Institutes of Health (NIH) Ruth L. Kirschstein National Research Service Award (NRSA) from the National Heart, Lung, and Blood Institute and a K01 grant from the National Institute of Diabetes and Digestive and Kidney Diseases. At the University of Maryland, Dr. Hamza's pioneering work with the invertebrate *Caenorhabditis elegans* animal model demonstrated that this roundworm is exceptional because it does not synthesize heme but rather utilizes environmental heme to manufacture heme-containing proteins. He exploited *C. elegans* genetics to identify previously unknown heme-trafficking pathways in humans and laid the groundwork for the discovery of heme transport pathways in parasites. Dr. Hamza's research program has been funded by grants from the NIH, March of Dimes, and the Roche Foundation for Anemia Research. Postdoctoral fellows in Dr. Hamza's research group have been funded by NIH NRSA and European Union Fellowships. He has reviewed articles for more than 40 different journals and has served as a standing member of the NIH Integrative Nutrition and Metabolic Processes Study Section and as a reviewer for various European granting agencies. Dr. Hamza also has chaired two Gordon Research Conferences—The Chemistry and Biology of Tetrapyrroles in 2018 and Cell Biology of Metals in 2019—and is a fellow of the American Association for the Advancement of Science.