

Meet the editors



Thomas Heinbockel, PhD, is a professor in the Department of Anatomy, Howard University College of Medicine, Washington, DC. Dr. Heinbockel's laboratory engages in multidisciplinary research to elucidate organizational principles of neural systems in the brain, specifically the limbic and olfactory system. His research has been directed at understanding brain mechanisms of information processing and their relation to neurological and neuropsychiatric disorders. His laboratory also works on translational projects, specifically the development of novel anti-epileptic drugs and pharmacotherapeutic treatment options of drug addiction. His laboratory analyzes drug actions at the epi- and genetic level using next-generation sequencing technology. At Howard University, Dr. Heinbockel teaches histology to graduate and professional students. He studied biology at the Philipps-University, Marburg, Germany. His studies of the brain started during his MS thesis work at the Max-Planck-Institute for Behavioral Physiology, Starnberg/Seewiesen, Germany. Subsequently, he completed a PhD in Neuroscience at the University of Arizona, Tucson, Arizona, USA. After graduating, he was a research associate at the Institute of Physiology, Otto-von-Guericke-University School of Medicine, Magdeburg, Germany. Prior to his arrival at Howard University, Dr. Heinbockel held joint research faculty appointments in the Department of Anatomy and Neurobiology and the Department of Physiology at the University of Maryland School of Medicine, Baltimore, Maryland, USA. He still maintains an adjunct appointment in these departments.



Vonnie Shields, PhD, is currently Full Professor in the Biological Sciences Department and Acting Dean in the Fisher College of Science and Mathematics at Towson University, Towson, MD, USA. Dr. Shields' laboratory engages in multidisciplinary research directed towards exploring the importance of gustatory, olfactory, and visual cues in the selection of food sources. She carries out behavioral and electrophysiological studies on larval and adult insects. In addition, her laboratory examines the structural organization of insect sense organs using transmission electron and scanning electron microscopy. The overall goal of this research is to acquire a better understanding of the sensory mechanisms by which insects find host plants and detect plant-associated volatiles. The aim is to discover possible novel biocontrol agents against insect pests. At Towson University, Dr. Shields teaches a histology course for both undergraduate and graduate students and has developed a graduate-level Modern Microscopy and Microtechniques course, where she teaches, in addition to the lecture component,