

The Behavior Analysis Murine (BAM) laboratory at Upstate Medical University aims to identify the factors that affect the behavior of rats and mice. By training these species to perform specific behaviors (e.g., pressing levers) and arranging their environments in specific ways, researchers are able to study how they interact with, learn about, and adapt to their surroundings. The ultimate goal of this research is to learn something about the basic learning factors that contribute to human behavior. Research in the BAM lab examines a broad range of topics, but areas of particular emphasis include (a) persistence of behavior when it is faced with challenges, (b) relapse of eliminated behavior when environmental variables change, (c) choice between competing sources of reward, and (d) impulsive decision making. A secondary focus of the BAM lab is to study behavioral and neurobiological differences between rodents that display characteristics of neuropsychiatric and neurodevelopmental disorders (e.g., autism, schizophrenia, fetal alcohol syndrome) and neurotypical rodents. This work may help to inform treatments to minimize the behavioral symptoms of these disorders and clarify their neurobiological correlates. Support for this lab is provided by the Richard and Jean Clark Pediatric Research Endowment.