Karli K. Watson, PhD

Research Associate, Senior Staff

Cognitive Neuroscience

Duke University

Gut feelings: How the brain forages for food and social information

Foraging decisions, such as which foods to eat, which to avoid, and when and where to find them, are problems that all animals must solve to survive. Among primates, decisions that optimize social information gathering are as crucial to survival as foraging decisions. Individuals must decide whom to befriend, whom to seduce, and when to pick a fight or offer a helping hand. The outcomes of these decisions strongly impact the fitness of every monkey and ape. In humans, the inability to appropriately make these decisions is often pathological. Primate foraging and social decisions are behaviorally linked in the context of of social feeding, food competition, and socially learned food preferences. I will discuss how foraging for food and social information is processed in the primate cortex, and how the neural mechanisms mediating these behaviors overlap and diverge. I will also address how and why social deficits occur in individuals with disordered eating behavior. Finally, I will discuss future work aimed at understanding the relationship between feeding and cognition in a free ranging colony of rhesus monkeys by studying body weight, gut microbiota, genetics, and behavior.