McKell Carter, PhD

Postdoctoral Fellow

Center for Cognitive Neuroscience

Duke University

**Title:** Using brain states and biomarkers to build a cognitive model of social decision

making

**Abstract:** To make adaptive decisions in a social context, humans must identify relevant agents in the environment, infer their underlying strategies and motivations, and predict their upcoming actions. I will describe brain states and genetic markers that predict how we use social information in higher-order cognitive processes. I will detail novel applications of statistical learning techniques that we used to characterize unique social information in the brain and how these techniques can be targeted to better characterize brain function during cognitive control, motivated learning, and psychiatric disorders. By incorporating our findings into a meta-analytic framework, we were able to propose a cognitive model of brain function in the temporal-parietal cortex that synthesizes previously conflicting results.