**R. McKell Carter, Ph.D.**

Assistant Professor

Institute of Cognitive Science and Department of Psychology and Neuroscience

University of Colorado Boulder

**Title:** “The temporal parietal junction constructs a social context for decision making”.

**Abstract:** Our preferences change dramatically with social context. While the presence of a grandmother may discourage the purchase of alcohol, the presence of an old friend may strongly increase the likelihood of drinking. In previous work, we have identified a region of the brain, the temporal parietal junction (TPJ), that is uniquely predictive of behavior in a social setting but not in a non-social setting. While this provides evidence that the TPJ is uniquely involved in social function, a number of alternative hypotheses describing TPJ function have been offered. In an effort to reconcile these alternative explanations, we propose the Nexus model of TPJ function. The Nexus model of TPJ function proposes that novel functions (like the ability to consider others intentions) arise when divergent processes like memory, attention, semantic, and social representations come into close proximity as is the case in the TPJ. This model makes specific function and localization predictions. I will describe ongoing work testing some of these predictions in both basic and translational settings, as well as some future work made possible by the extraordinary community at CU Boulder. We conclude that the TPJ constructs a social context that is utilized by frontal regions to produce the dramatic effects on decision making we see when interacting with others.