

Department of Economics – Neuroeconomics Seminar

March 14, 2019 - 17:00 - 18:00

Lesley Fellows McGill University

Valuing trees or forests? Orbitofrontal contributions to multi-attribute decision-making

Orbitofrontal and ventromedial prefrontal cortex are implicated in value-based decision-making, but the underlying mechanisms remain unclear. Most decisions (at least outside the lab) involve options with multiple attributes. How does the brain identify the relevant attributes, link those attributes to value, and combine that information across attributes? I will present research in humans with focal damage to orbitofrontal cortex that begins to address these questions. This work provides evidence that orbitofrontal damage impairs the biasing of attention to visual features based on reward, and changes which attributes are prioritized during value-based choices between complex stimuli such as faces or artwork. I will discuss how putative prefrontal valuation processes may interact with ventral visual stream systems involved in object recognition.