

## Departmental Seminar

# The Associative Nature of Causation, 'Everyday Life' and Psychopathology

11:30 a.m. – 12:30 p.m. | July 24, 2017 (Monday)

Social Sciences Chamber | 11/F The Jockey Club Tower | Centennial Campus |  
The University of Hong Kong



### Dr. Robin A. Murphy

Associate Professor  
Department of Experimental Psychology  
University of Oxford

#### Abstract

Discovering how the human brain produces behaviours also requires a theory of related cognitions (i.e., thoughts). My work relies on the assumption that the brains of all animals are essentially Association Machines. Associations are equally important for explaining how a rat finds food as for how a medical practitioner diagnoses a disease. This cross species effort strives to understand how associations form and their implications for clinical psychological disorder (e.g., depression; Murphy & Honey, 2016. The Wiley handbook of the cognitive neuroscience of learning provides an overview of this approach). I will describe experiments with animals and humans showing how the learning of associations is determined by principles of 1) Competition or Cooperation and 2) Configuration. Converging evidence from my lab using neuropharmacology (i.e., 5-HT manipulation) and brain imaging support these hypotheses. We are also discovering how these fundamental properties lie at the heart of disordered cognitions related to the Psychopathology found in the Clinic and that found in 'Everyday Life'. Learning associations provides brains with the network of relations that we use to make sense and engage with our environments. It is this sensitivity to causal relations (e.g., an action results in an outcome) that contributes to and reflects our mental health.

~All are Welcome~