Professor Robert Brownstone joined the Sobell Department of Motor Neuroscience in 2015. He joins UCL from Dalhousie University in Canada, where he was a Professor in the Departments of Surgery (Neurosurgery) and Medical Neuroscience, and a neurosurgeon at the QEII Health Sciences Centre in Halifax, Nova Scotia.

Brownstone’s research program is built around the philosophy that while motor system disease phenomenology can be defined in people (his clinical practice), mechanisms must be studied in animal models in order to develop better treatment strategies. To this end, his lab has developed preparations and methodologies to study neural circuits in the mouse brain stem and spinal cord and their role(s) in motor behaviours. The lab uses a variety of tools to study circuits: from the study of biophysical properties in reduced preparations to the study of animal behaviour in targeted knock-out mice. They have identified a number of key circuits, including neural circuits underlying hand grasp function.

The focus in the lab is to understand how motor circuits contribute to rehabilitation of movement in disease or injury. As movement is affected in many neurological conditions, his research program has widespread impact for the development of new strategies to improve movement in people with neurological disorders.

Wednesday 5th October 2016, 4pm
The Wolfson Institute for Biomedical Research
Cruciform Café, 1st Floor Cruciform Building,
Gower Street
London, WC1E 6BT