

Motor Control Science Club, May 5, 2023, 11:00 AM CET

The lecture is open to everybody

When the spark goes out: The neurology of apathy and motivation

Prof. Masud Husain
Nuffield Dept Clinical Neurosciences & Dept
Experimental Psychology, University of Oxford,
United Kingdom, www.masudhusain.org

Host: Prof. Thilo van Eimeren,
Clinic for Neurology of the Faculty of Medicine,
University of Cologne

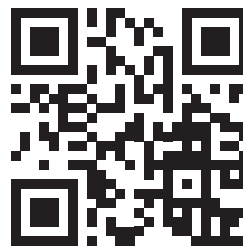


Disorders of motivation are common across brain disorders. Neurologists frequently encounter pathological apathy across a range of conditions, including neurodegenerative disorders such as Parkinson's disease (PD) and small vessel cerebrovascular disease (SVD). Unfortunately, we understand very little about the mechanisms underlying the syndrome.

In this talk, I'll put forward a conceptual framework to understand apathy by considering the processes that normally underlie motivated, goal-directed behavior. In particular I'll focus on the ability to generate options for behavior and effort-based decision making for rewards.

Several lines of evidence suggest that when we make decisions about how much effort we might invest, we weigh up the costs involved against the potential rewards to be obtained. Functional imaging in healthy people reveals both medial frontal and ventral striatal involvement when we make such decisions. In PD and SVD patients with apathy, this evaluation is altered. They show blunted sensitivity to rewards and less inclination to invest effort for low rewards. Both these factors can be improved by dopaminergic medication in PD. The findings support the view that it is possible to provide a mechanistic account of apathy and also obtain better understanding of brain systems underpinning normal human motivation.

Live @
MTI (Biochemie) Building 44b
Universitätsklinikum Köln
Joseph-Stelzmann-Str. 50
50931 Köln
<https://lageplan.uni-koeln.de/#!44b>



Zoom in for hybrid:
<https://uni.koeln/DB9ZJ>