

REVOLUTION OF NEUROSCIENCE BY EVOLUTION: UNDERSTANDING BRAIN DISORDERS FROM SOCIAL GROUP DYNAMICS

Monday
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1.30PM - 2.30PM

Seminar Room
Anatomy Museum
Department of Anatomy

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Research Seminar

How humans have gotten into the humans through evolution has largely remained unclear. One of major mysteries relevant to this topic is why and how neurological and psychiatric disorders have emerged in evolution, and remained among us regardless of decreased reproductive success in affected subjects. Approaches from evolutionary medicine have barely been considered in the field of neuroscience research to date, although it could certainly provide novel perspectives, which open a new venue in the field, in our understanding of brain functions and dysfunctions. In this talk, I will present my recent studies focusing on the neural mechanisms that regulate social group dynamics of rodents and non-human primates, specifically monoamine regulation of social group structures such as social hierarchy, and social interactions among subjects in social groups of different population density. Based on these studies, I will discuss how brain disorders have emerged in the processes of brain evolution.