

## Departmental Seminar

# Cognitive flexibility: Neuropsychological basis and implications for psychiatry and education

**Prof. Trevor W Robbins**  
*University of Cambridge, Fudan University*

### ABSTRACT

I will consider how psychological construct of cognitive flexibility can be measured in humans and other animals in different ways and suggest that it can be regarded as a specific component of more general executive function. I will also show that it can be fractionated to some extent on the basis of psychological and neural evidence linking it to different regions of the prefrontal cortex. I will demonstrate its validity and utility in understanding everyday behaviour and attitudes, in the psychiatric context of compulsive behaviour, and potentially for education, relating to training creative thinking.



### ABOUT THE SPEAKER

Trevor is Professor of Cognitive Neuroscience at the University of Cambridge from 1997, being based in Cambridge for most of his scientific career and receiving his PhD there in 1975. He was also Professor of Expt. Psychology and Head of the Dept. of Psychology (2002-2017). He is now an honorary Professor at Fudan University.

He is a Fellow of the British Psychological Society (1990), British Pharmacological Society (2017), Academy of Medical Sciences (2000), and Royal Society (2005), the most prestigious science society in the U.K. He has published over 980 peer-reviewed articles, (H index 2014, Web of Science; 262, Google Scholar). He has co-edited ten books, most recently (with N. Fineberg) *Neurobiology and Treatment of OCD: Accelerating Progress*. (Springer, 2021). He edits *Psychopharmacology* (since 1980) and *Current Opinion in the Behavioral Sciences*, and is an editorial advisor for *Science*.

Trevor directs the 'Behavioural and Clinical Neuroscience Institute' (founded in 2005) the mission of which is to enhance translation from basic to clinical neuroscience. In 1987, he co-invented the CANTAB computerized neuropsychological test battery, used in over 700 centres world-wide. He is especially interested in frontal lobe function, including cognitive flexibility and its neurochemical modulation, relevant to clinical disorders especially of impulsive-compulsive behaviour.

He received the Distinguished Scientific Contribution Award from the American Psychological Association (2011). In 2014 he shared the Brain Prize of the Grete Lundbeck European Brain Research Foundation, the most valuable in neuroscience, for his work on human mental disorders. He received Lifetime Achievement Awards from the British Association for Psychopharmacology (2015) and the British Psychological Society (2018). In 2016, he received the Robert Sommer Award for research into schizophrenia. In 2017 he received the Gold Medal of the Society for Biological Psychiatry (USA) and the Goldman-Rakic Award (from the Brain and the Behavior Foundation) for outstanding research in cognitive neuroscience. Trevor has been rated by Semantic Scholar as the "4th Most Influential Neuroscientist of the Modern Era". He received the William James Fellow Award of the Association for Psychological Science (2021) and the highest research rankings in both Psychology and Neuroscience according to res.com (2022 and 2023).

<https://research.com/scientists-rankings/neuroscience/psychology>

He was made a CBE in the U.K. New Year's Honours list. in 2012 "for services to medical research".

Date:  
3 May 2024 (Friday)

Time:  
11:00am - 12:30pm

Venue:  
Room B5, LG/F,  
Ho Tim Building, CUHK

Language:  
English



ALL ARE WELCOME

Online Registration:  
<https://cloud.itsc.cuhk.edu.hk/webform/view.php?id=13687260>

Registration Deadline: 1 May 2024



Enquiry:  
Tel: 3943 6213