



# Executive Control as a Core Mechanism of Learning: Implications In and Out of the Classroom

## **Professor Grégoire Borst**

Professor of Developmental Psychology and Cognitive Neuroscience of Education, Department of Psychology, University of Paris, France

October 29, 2024 (Tuesday) 16:45 – 18:00 Room 703–704, Meng Wah Complex, HKU *Chair: Professor Shelley Tong* 



Registration: https://hkuems1.hku.hk/hkuems/ec\_regform.aspx?guest=Y&ueid=97054

#### Abstract:

Executive control is a set of processes supporting flexible, adaptive responses and complex goal-directed thought. It is related to a wide range of real-life outcomes from school achievement, to mental and physical health. Executive control and its development with age is under a number of influences ranging from environmental (e.g., socioeconomic status), brain (e.g., cortical folding) and genetic (e.g., SNP). Because of the importance of executive control in academic outcome, a number of cognitive training programs have tested the possibility to improve Executive Control. We will present a set of studies from our laboratory that (a) provide evidence for the role of executive control in a number of academic learning, (b) the effect of different interventions targeting executive control at different age on academic achievement and the reduction of educational inequalities, and (c) the different factors that modulate the receptivity of executive interventions at different age.

#### About the speaker:

Grégoire Borst is a full Professor of developmental psychology and cognitive neuroscience of education at the University of Paris. He is the director of the Laboratory for the study of Child Development and Education (CNRS) at La Sorbonne and a junior member of the Institut Universitaire de France. He obtained his PhD in 2005 in Paris Sud University and was then a postdoctoral fellow at Harvard University from 2006 to 2010. His work focuses on the role of cognitive and emotional control on the cognitive and socio-emotional development of children and adolescents and on learning at school and in everyday life. He has published more than 70 scientific articles and 6 books including two for children to explain the basics of the brain and the mind. He works in close collaboration with the educational community and is a senior member of the International Bureau of Education (IBE) at UNESCO & a junior fellow of the Institut Universitaire de France (IUF).



### ~ All are welcome ~

For enquiries, please contact the Office of Research, Faculty of Education at hkchow@hku.hk