



Colloquium lecture of Dr. Isabella Sarto-Jackson

The Making and Breaking of Minds.
How social interactions shape the human mind

The human brain reorganizes itself and flexibly adjusts to fluctuating environmental conditions by means of neuroplastic processes. Neuroplasticity provides the basis for wide-ranging learning and memory processes that are particularly profuse during childhood and adolescence. At the same time, the exceptional malleability of the developing brain leaves it highly vulnerable to negative impact from the surroundings.

Abusive or neglecting social environments as well as socioeconomic deprivation cause physiological stress responses that can severely compromise cognitive development, emotional processing, and executive brain functions by altering the underlying neurobiochemical homeostasis. Importantly, such detrimental neurophysiological consequences are not limited to the traumatized individual but can be transmitted to the offspring through a process of social niche construction.

Proof of concept is supported by research on transgenerational trauma.

Dr. Isabella Sarto-Jackson

Isabella Sarto-Jackson is a neurobiologist, executive manager of the Konrad Lorenz Institute for Evolution and Cognition Research, and president of the Austrian Neuroscience Association.

She holds a Master's degree in genetics and a PhD in neurobiochemistry. She has worked as a neuroscientist at the Center for Brain Research of the Medical University in Vienna and subsequently extended her research focus to cognitive science and evolutionary biology.

She teaches at the University of Vienna, Webster Vienna Private University, and Comenius University in Bratislava.

She is associate editor of the journal *'Biological Theory'* and co-chair of the education committee of the International Society for the History, Philosophy, and Social Studies of Biology.

Her work is highly interdisciplinary lying at the interface of neurobiology, cognitive science, evolutionary biology, and social education.

Her particular passion is advocating for children and youth at risk.



This lecture takes place at Liebiggasse 5, 1010 Wien, Lecture Hall G 2nd floor and will be streamed Thursday, May 19, 2022; 3 pm