

You are warmly invited to hear the lecture by

Dr Patrick A. Forcelli

**Department of Pharmacology & Physiology
Georgetown University**

TARGETED PHARMACOTHERAPY AND CIRCUIT MANIPULATIONS FOR SEIZURES ACROSS THE LIFESPAN

on

THURSDAY 26th SEPTEMBER AT 12:00

Venue:

Seminar room
Ground floor, Building D
Institute of Physiology CAS
Videnska 1083
84, 150 06 Prague 5



Dr Forcelli graduated in 2006 in Biology and Psychology at the Boston College. He completed his PhD in Neuroscience in 2011 followed by postdoctoral training at Georgetown University in Washington D.C. Currently, he is a Co-Director of Program in Pharmacology.

Dr Forcelli has an excellent track-record in experimental epilepsy research. In his research, Dr Forcelli primarily focuses on the elucidation of the pathophysiological principles behind seizure emergence and the pharmacological aspects of epilepsy treatment. To dissect the neural circuits involved in the seizure and anti-epileptic effect of pharmacotherapy, he effectively combines advanced scientific approaches ranging from electrophysiology to optogenetics, chemogenetics and behavioral analysis.

In his lecture, Dr Forcelli will discuss caveats associated with current pharmacotherapy for the treatment of seizures during periods of brain development and the progress in understanding how anti-seizure medications can impact the developing brain at the level of biochemistry, brain structure and synaptic physiology, and behavior. He will then turn to circuit-based approaches to treat seizures by harnessing and disrupting activity in basal ganglia-brainstem-thalamocortical networks.