



VABILO

Slovenska akademija znanosti in umetnosti in Slovensko fiziološko društvo vljudno vabita na predavanje, ki ga bo imel

prof. dr. Felipe L. Barros,

v petek, 11. 11. 2016 ob 11.00 uri v veliki dvorani SAZU, Novi trg 3/I v Ljubljani.

»The energy broker of the brain«

Evolutionary design has cornered neurons into a fragile situation. Their chief role is to process information, which is done by dissipating energy. Energy is available in the circulation in the form of glucose, but also abundant in the blood stream is glutamate, a powerful neurotoxin. Strategically interposed between neurons and blood are astrocytes. What is the role of these cells in the delivery of energy to neurons? Astrocytes release neuromodulators in Ca^{2+} -dependent fashion; do they also control neuronal performance through lactate and other metabolites, an alternative form of gliotransmission? This talk will discuss how genetically-encoded FRET sensors, elucidating changes in metabolites at cellular level, are providing some insights into these questions.

Felipe L. Barros, Center for Scientific Studies, Valdivia, Chile, qualified as a Medic in 1988 and got his Ph.D. in Sciences in 1993 at the Universidad de Chile, advised by David Yudilevich. From 1993 to 1996 he was a Wellcome Trust Fellow in Steve Baldwin's lab in Leeds, UK. In 1996 he became Assistant Professor and then Associate Professor at the University of Chile. In 2000, he joined the Centro de Estudios Científicos as Principal Investigator. How do organisms balance the flux of energy? To address this question, his team is developing new molecular tools, capable of measuring metabolic parameters with high spatiotemporal resolution

Predavanje bo v angleščini.

prof. dr. Helena H. Chowdhury
predsednica SFD

akad. Robert Zorec, tajnik IV. razreda

V Ljubljani, 25.10. 2016