Seminar IRH-ICUB

Consciousness and Cognition: An Interdisciplinary Approach

https://irhunibuc.wordpress.com/2016/04/05/new-seminar-consciousness-in-

philosophy-and-neuroscience/convenor Dr. Diana Stanciu

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Date: Tuesday, 9 May 2017, 17h

Place: IRH-ICUB (1 D. Brandza Str.), conference room

Prof. Violeta RistoiuUniversity of Bucharest, Faculty of Biology

Violeta Ristoiu is Associate Professor at the University of Bucharest, Faculty of Biology, Department of Anatomy, Animal Physiology and Biophysics. She has a Bachelor's degree in Biology (1990) and a Master's degree in Medical Biology (1991) at the University of Bucharest. In 2002, she obtained her doctoral degree in Biology at the University of Bucharest, under the supervision of Prof. Dr. Maria Luiza Flonta. In 2007 Dr. Ristoiu was a visiting scientist at the Okazaki Institute for Integrative Bioscience, Japan, in the lab of Prof. Makoto Tominaga, and in 2008 she was a visiting scientist in Alnylam Pharmaceuticals, Cambridge, MA, USA. In 2015 she was a Fulbright fellow at the University of Omaha Medical Center, Department of Pharmacology and Experimental Neuroscience, Nebraska, USA in the lab of Prof. Xiong Huangui. Her research interests are related to pain pathogenesis, in particular to the role of TRPV1 channels in dorsal root ganglia neurons and the contribution of the neuro-immune interactions to pain. Her latest research has focused on the role of cytoskeleton in modulating the microglia response to central nervous system injuries.

Modulation of Microglia/Macrophages Activity by Interactions with the Cytoskeleton

Neuropathic pain is a complex syndrome caused by a primary lesion or dysfunction in the peripheral or central nervous system. Its pathogenesis is not only confined to changes in the activity of neuronal systems, but involves interactions between neurons, immune cells and immune-like glial cells mediated by inflammatory cytokines and chemokines. Among the immune cells involved in these neuro-immune interactions, macrophages and microglia act as initiators of neuropathic pain. In our group we have several running projects about the modulatory effects of CXCL1 and CXCL2 chemokines on dorsal root ganglia neurons and the contribution of TRPV1 receptors in mediating these effects, about the role of Iba-1 cytoskeleton protein in modulating microglia and macrophages responses in neuropathic pain and about K⁺ channels as markers of activation and potential therapeutic targets in microglia. In my talk I will make an overview of our most recent results on these converging topics and their relevance to the issue of consciousness.