Dear members, students and guests of the Zlotowski center for Neuroscience,

Our next seminar will be held on Wednesday, March 6th, 16:00

Venue: Building 51 room 015

"How a key interface between the brain’s neuro-hormonal and vascular systems is assembled”?

Presented by

Prof. Gil Levkowitz

Department of Molecular Cell Biology
The Weizmann Institute of Science, Israel

Abstract:

The hypothalamo-neurohypophyseal system (HNS) is an evolutionarily conserved neuroendocrine interface through which the brain regulates body homeostasis by means of releasing neuro-hormones (i.e. oxytocin and vasopressin) from the hypothalamus to the blood circulation. The basic components of the HNS are the hypothalamic axonal projections, endothelial blood vessels and astroglial-like cells, termed pituicytes. These three tissue types converge and interact at the ventral forebrain to establish an efficient neuro-vascular interface, which allows the release of neurohormones from the brain to the periphery. In contrast to blood–brain barrier (BBB)–containing CNS vessels, neurohypophyseal capillaries are permeable, which enables bypassing the BBB to transfer HNS hormones and blood-borne substances between brain and circulation. I will present our recent molecular and functional analysis that revealed a new role for pituicytes, in establishing a permeable neuro-vascular conduit that bypasses the BBB.

If you wish to meet Prof. Levkowitz in person please contact Prof. Hava Golan at havag@bgu.ac.il

Please note that the talk will begin at 16:00 exactly.

See you all,
Hava Golan, Seminar coordinator