



האוניברסיטה העברית - הפקולטה לחקלאות המכון לביוכימיה, מדעי המזון והתזונה



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הנושא:

The molecular basis of memory

המפגש יתקיים

ביום א', 2 מרץ 2014, בשעה 9:00

מועדון סגל

Abstract:

Many neurons of all animals that exhibit memory (snails, worms, flies, vertebrae) present arborized shapes with many varicosities and boutons. These neurons, release neurotransmitters and contain ionotropic receptors that produce and sense electrical signals (ephaptic transmission). The extended shapes maximize neural contact with the surrounding neutrix (neural extracellular matrix (nECM)+ diffusible (neurometals and neurotransmitters) as well as with other neurons. We propose a *tripartite* mechanism of animal memory based on the dynamic interactions of splayed neurons with the "neutrix". Their interactions form cognitive units of information (*cuinfo*), metal-centered complexes within the nECM around the neuron. Emotive content is provided by NTs, which embody molecular links between physiologic (body) responses and psychic feelings. We propose that neurotransmitters form mixed complexes with *cuinfo* used for tagging emotive memory.

סגל וסטודנטים מוזמנים להשתתף

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