



האוניברסיטה העברית בירושלים
הפקולטה לחקלאות, מזון וסביבה ע"ש רוברט ה. סמית
המכון לביוכימיה, מדעי המזון והתזונה



Ami Citri, PhD

Laboratory for Experience-Dependent Neuroplasticity
The Hebrew University, Jerusalem

<http://elsc.huji.ac.il/citri/home>

הנושא:

Transcription networks provide insight into the neural circuitry of addiction

המפגש יתקיים
ביום א', 15 יוני 2014, בשעה 9:00
מועדון סגל

Abstract:

Addiction is the result of maladaptive neuroplastic modifications of the brain's natural reward circuitry, induced by the repetitive experience of drugs of abuse. Rodent models of drug addiction are well studied and provide substantial insight into the mechanisms underlying the long-term memory induced by drug experience. Importantly, drugs of abuse induce robust and reliable behavioral responses in rodents, as well as robust neuroplastic events in defined brain nuclei. Therefore, beyond providing a model for the mechanisms underlying addiction, studying the experience induced by drugs of abuse provides a potent and convenient model system to study experience-dependent neuroplasticity. Using simple rodent models, we have identified clear and robust transcriptional programs induced in the nucleus accumbens of mice following cocaine experience. These transcriptional responses evolve following consecutive drug experiences, revealing a number of intriguing molecular events, which we are actively investigating in the lab, and which we believe could underlie the persistent memory of drug experience in addiction. Based on our study of the transcriptional response, we have further developed a number of experimental tools that enable higher resolution in the analysis of the neuronal circuits encoding cocaine experience. We will describe our approaches and observations.

סגל וסטודנטים מוזמנים להשתתף
לתיאום פגישה: yaelf@savion.huji.ac.il