

FROM SINGLE SYNAPSES TO CLINICAL STUDIES. THERAPEUTIC DEVELOPMENTS FROM OPTOGENETICS

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The main goal of my talk will be to discuss the role of long-term plasticity at excitatory synapses in the limbic system in modulating the development and expression of cocaine-dependent behaviors, in order to produce novel therapeutic strategies that could reverse these long-term synaptic changes, and as a consequence, drug-dependent behaviors. During my lecture, I will present published and unpublished results on the basic mechanisms that underlie cocaine-dependent plasticity, and the promising results from our clinical studies that were created based on our results obtained with optogenetics.