

## Abstract

**Dr. Tallie Z. Baram - EPFL Life Science Seminars Series - June 26, 2015**

The cognitive effects of stress are profound, yet it is unknown if the consequences of concurrent multiple stresses on learning and memory differ from those of a single stress of equal intensity and duration. We compared the effects on hippocampus-dependent memory of short (hours long) concurrent loud noise, jostling and restraint (multi-modal stress) with those of restraint or of loud noise alone. We then examined if differences in memory impairment following these two stress types might derive from their differential impact on hippocampal synapses and networks, distinguishing dorsal and ventral hippocampus. The talk will describe synaptic, network and cognitive consequences of short multi-modal, 'modern-life'-like stress, and discuss the underlying mechanisms.