How Early-life Experiences Shape Our Brain: Signals, Synapses, Circuits, and Behaviors

While there is a strong association between early-life experiences and adult cognitive and mental health, how adversity early in life impacts adult emotions and behaviors is unknown. Complex behaviors are executed by brain circuits whose maturation may be shaped by salient environmental signals, with consequent functional alterations. Dr. Baram will discuss the sex-dependent impact of early adversity on a novel stress-sensitive projection within the reward circuit, which provokes reward-related deficits, and address the mechanistic role of neuron-glia interactions in the impact of early-life adversity on circuit maturation.