



## **NAME OF LABORATORY:** Cognition and Brain Plasticity Lab

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**PI:** Dr. Yulia Lerner PhD

**Director of Department:** Prof. Talma Hendler MD, PhD

**Research Objectives:** Our lab focuses on studying neural activity undergoing complex real-life events. The research involves functional and structural brain imaging, neuropsychological assessments and physiological measurements. We apply our paradigms to neuro-psychiatric disorders (e.g. mild cognitive impairment (MCI), schizophrenia, etc.), for understanding the pathological conditions. To study factors of vulnerability in a causal manner, we apply prospective imaging approach or comparing groups of affected to unaffected individuals under similar conditions (e.g. older adults and MCI, patients with schizophrenia and their unaffected siblings). While applying multi-modal paradigms, we concentrate on developing methods for identification of "functional neuromarkers" for the disease.

### **Main Research topics:**

- Investigation of human brain responses and behavior under natural conditions
- The architecture of neural circuits involving in processing of non-verbal information
- Developing functional neuromarkers for abnormal cognitive states

**Staff:** Dr. Galit Yogev-Seligmann (Postdoc); Tamir Eisenstein (MSc Student); Noga Oren (PhD Student); Shikma Nachman (RA)

### **Active Grants:**

- **Gassner** Fund for Medical Research
- **Eshkol** Scholarship for Postdoc Fellow, Ministry of Science, Technology and Space
- **Marie Curie Actions:** EU Career Integration Grant

### **Collaborations:**

- Prof. Uri Hasson (Princeton University)
- Prof. David Heeger (New York University)
- Prof. Marlene Behrmann (Carnegie Mellon University)
- Dr. Yulia Golland (Interdisciplinary Center (IDC) Herzliya);
- Dr. Erez Simony (Holon Institute of Technology)

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