



## **Brainy Days in Jerusalem: An Interdisciplinary Celebration**

June 18-20, 2019

Goodman Building, Jerusalem

Organizing Committee: Merav Ahissar, Inbal Goshen, Israel Nelken and Yonatan Loewenstein

### **Tuesday, June 18<sup>th</sup>**

9:00 – **Organizing Committee** – Opening remarks

*Session I- Space representation in the brain* Chair: Yoram Burak

09:15 – **Kate Jeffery**, *University College London* – How gravity shapes the neural representation of complex space

10:00 – **Yoav Adam**, *Harvard University* – Voltage imaging and optogenetics reveal behavior dependent changes in hippocampal dynamics

10:45 – *Coffee break*

*Session II- Theoretical views of network dynamics* Chair: Lior Fox

11:15 – **Christian Machens**, *Champalimaud Centre for the Unknown* – An alternative view of what neural circuits may be doing

12:00 – **Omri Barak**, *Technion* – Stable memory with unstable synapses

12:45 – *Lunch break*

*Session III- Autism: Causes and manifestations* Chair: Eva Kimell

13:45 – **Simon Baron-Cohen**, *University of Cambridge* – Autism and sex differences

14:30 – **Merav Ahissar**, *The Hebrew University* – Perceptual bias reveals slow-updating in autism and fast-forgetting in dyslexia

15:15 – *Coffee break*

*Session IV- Human Language and speech* Chair: Johannes Niediek



15:45 – **Inbal Arnon**, *The Hebrew University* – The facilitative effect of entropy reduction on language learning

16:30 – **Edward Chang**, *University of California San Francisco* – The encoding of speech sounds in the human Wernicke's area

**17:30 – Cocktail party: Celebrating ELSC's 10th anniversary**

### Wednesday, June 19<sup>th</sup>

*Session V- New frontiers in memory research* Chair: Adi Doron

9:00 – **Sheena Josselyn**, *University of Toronto* – The Amygdala and Memory: Recalling the past, imaging the future

9:45 – **Inbal Goshen**, *The Hebrew University* – Surprising roles for astrocytes in plasticity and memory

10:30 – *Coffee break*

*Session VI- Non Mammalian brains* Chair: Itamar Landau

11:00 – **Lilach Avitan**, *The Hebrew University* – Behavioural signatures of a developing neural code

11:45 – **Mark Shein-Idelson**, *Tel Aviv University* – Sliders & Dragons: Reptilian model systems for exploring cortical computation

*Session VII- Higher brain functions* Chair: Abed Nashef

12:30 – **Ofer Yizhar**, *Weizmann Institute of Science* – Prefrontal circuits for cognitive control

13:30 – *Lunch break*

### Thursday, June 20<sup>th</sup>

*Session VIII- Plasticity of excitatory and inhibitory network components* Chair: Katarzyna Winek



09:00 – **Elly Nedivi**, *Massachusetts Institute of Technology* – Visualizing molecular events in synapse formation in vivo

09:45 – **Tim Vogels**, *University of Oxford* – Motor primitives in time and space by targeted gain modulation in recurrent cortical networks

10:30 – *Coffee break*

**Session IX -- Brain to body and body to brain** Chair: Shir Filo

11:00 – **Aviv Mezer**, *The Hebrew University* – Non-invasive detection of age-related molecular profiles in the human brain

11:45 – **Asya Rolls**, *Technion* – Bi-directional communication between the brain and the immune system

**Session X- Cognition in animal models** Chair: Adi Mizrahi

12:30 – **Carlos Brody**, *Princeton University* – Neural circuit mechanisms underlying cognition in rats

13:15 – **Closing remarks**

13:30 – *Lunch*