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 18th

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 19th**

*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 20th**

*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