Brainy Days in Jerusalem: an Interdisciplinary Celebration
June 21-25, 2015
Mishkenot Sha’ananim, Jerusalem
Organizing Committee: Yoram Burak, Yosi Yarom and Eilon Vaadia

Sunday, June 21, 2015
19:30-23:00 – Opening Gala Event – The Khan Gallery (for invited guests only)

Monday, June 22, 2015
8:45-9:00 – Eilon Vaadia – The Hebrew University of Jerusalem, Israel – Opening remarks

Chair: Chaya Kalcheim
9:00-9:50 – Sagiv Shifman – The Hebrew University of Jerusalem, Israel
Chromatin regulators in neurodevelopmental disorders
9:50-10:40 – Leslie Vosshall – The Rockefeller University, USA
The genetic basis of innate behaviors

10:40-11:10 – Coffee Break

Chair: Idan Segev
11:10-12:00 – Omri Barak – Technion – Israel Institute of Technology, Israel
Neural dynamics of perceptual detection under temporal uncertainty
12:00-12:50 – Shaul Druckmann – Janelia Farm Research Campus, USA
Dynamic attractors and non-coding spaces in a delayed working memory task

12:50-14:00 – Light lunch

Chair: Eran Meshorer
14:00-14:50 – Inna Slutsky – Tel Aviv University, Israel
Interplay between population firing stability and single neuron dynamics in hippocampal networks
14:50-15:40 – Christian Lüscher – University of Geneva, Switzerland
From synaptic causalities to blue prints for novel therapies in addiction

15:40-16:10 – Coffee Break

Chair: Yifat Prut
16:10-17:00 – Matteo Carandini – University College London, UK
Soloists and choristers in a cortical population
17:00-17:50 – Ranulfo Romo – National Autonomous University of Mexico, Mexico
Where and how in the cerebral cortex do single neurons process more than one sensory modality during perceptual judgments?

Free evening
Tuesday, June 23, 2015

Chair: Amir Amedi
9:30-10:20 – Ehud Zohary – The Hebrew University of Jerusalem, Israel
On the representation of viewed hand actions in the human cortex
10:20-11:10 – Galia Avidan – Ben-Gurion University of the Negev, Israel
Altered topology of neural circuits in congenital prosopagnosia

11:10-11:40 – Coffee Break

11:40-12:30 – Nikos Logothetis – University of Tübingen, Germany
NET-fMRI of large-scale brain networks: Mapping dynamic connectivity in epochs of synaptic and system consolidation

12:30-13:30 – Light lunch

Chair: Baruch Minke
13:30-14:20 – Hermona Soreq – The Hebrew University of Jerusalem, Israel
Checks and balances of cholinergic signaling in brain and body functions
14:20-15:10 – Kobi Rosenblum – University of Haifa, Israel
From molecular and cellular mechanisms underlying cortical-dependent memories to cognitive enhancers

15:10-15:40 – Coffee Break

15:40-16:30 – Ami Citri – The Hebrew University of Jerusalem, Israel
Behavioral Transcriptomics: A molecular perspective on experience-dependent plasticity

16:30-20:30 – Trip to the old city + dinner (for invited guests only)

Wednesday, June 24, 2015

Chair: Moshe Abeles
9:00-9:50 – Israel Nelken – The Hebrew University of Jerusalem, Israel
The transformation of surprise representations in the ascending auditory system
9:50-10:40 – Anthony Zador – Cold Spring Harbor Laboratory, USA
Corticostriatal circuits underlying auditory decisions

10:40-11:10 – Coffee Break

Chair: Mickey London
11:10-12:00 – Misha Ahrens – Janelia Farm Research Campus, USA
The neural substrate of a short-term motor memory
12:00-12:50 – Adam Cohen – Harvard University, USA
Optical electrophysiology with microbial rhodopsins

12:50-14:00 – Light lunch

Chair: Naftali Tishby
14:00-14:50 – Shimon Ullman – Weizmann Institute of Science, Israel
Atoms of visual recognition
14:50-15:40 – Emo Todorov – University of Washington, USA
Synthesis of contact-rich behaviors with optimal control

15:40-16:10 – Coffee Break

Chair: Yonatan Loewenstein
16:10-17:00 – Haim Sompolinsky – The Hebrew University of Jerusalem, Israel
Computational perspectives on neuronal representations
17:00-17:50 – Heller Lecture – Joshua Tenenbaum - MIT, USA
Reverse-engineering common sense in the human mind and brain

20:00-22:00 – Dinner – Angelica restaurant (for invited guests only)

Thursday, June 25, 2015

Chair: Yosi Yarom
9:00-9:50 – Yoram Burak – The Hebrew University of Jerusalem, Israel
Efficient coding of a dynamic trajectory in the entorhinal cortex
9:50-10:40 – Nachum Ulanovsky – Weizmann Institute of Science, Israel
Neural codes for 2-D and 3-D space in the hippocampal formation of bats

10:40-11:10 – Coffee Break

Chair: Marshall Devor
11:10-12:00 – Michael Häusser – University College London, UK
All-optical interrogation of neural circuits
12:00-12:50 – Yang Dan – UC Berkeley, USA
Neural circuits controlling sleep

12:50-14:00 – Light lunch

Chair: Inbal Goshen
14:00-14:50 – Chris De Zeeuw – Netherlands Institute for Neuroscience, The Netherlands
Cerebellar conditioning and rebound: Two sides of the same coin
14:50-15:40 – Andreas Lüthi – Friedrich Miescher Institute for Biomedical Research, Switzerland
Deconstructing fear

15:40-16:10 – Coffee Break

16:10-17:00 – Adi Mizrahi – The Hebrew University of Jerusalem, Israel
Coding new smells and new sounds in the transition to motherhood

17:00-17:30 – ELSC graduation and awards ceremony

18:30 – Closing dinner – HaChatzer restaurant (for invited guests only)

For further details & registration, visit our website:
elsc.huji.ac.il/elsc-conference