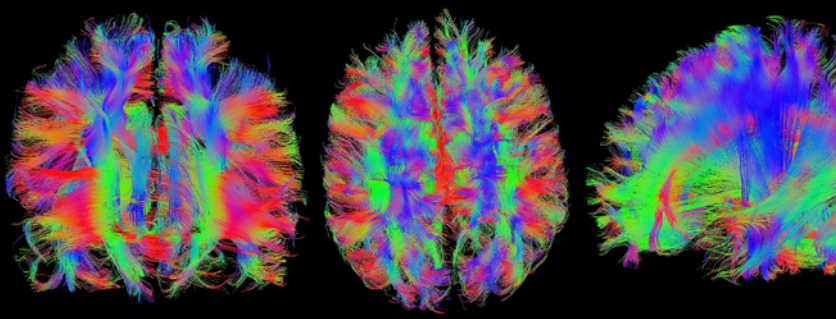


The Israeli Human Neuroimaging Conference Program

May 27, 2019

The Suzanne and Charles Goodman Brain Sciences Building,
Edmond J. Safra Campus, Jerusalem

האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

ELSC The Edmond & Lily Safra Center for Brain Sciences

8:30-9:00	**Reception**
9:00-9:15	**Welcome**

Morning Symposium (Becker Auditorium)	
9:15-9:30	Bidirectional signal exchanges during joint attention interaction – a hyperscanning fMRI study *Gadi Goelman, Hebrew University*
9:30-9:45	Face-Selective Neurons in the Vicinity of the Human Fusiform Face Area *Vadim Axelrod, Bar Ilan University*
9:45-10:00	Computerized radiological longitudinal evaluation of brain tumors after stereotactic radiosurgery *Leo Joskowizc, Hebrew University*
10:00-10:15	In-lab pre-registration: time-locking of study plans and hypotheses without preliminary review *Roy Mukamel, Tel Aviv University*
10:15-10:30	The power of being first: Decoding fMRI signatures of recalling the first item *Irit Shapira-Lichter, Rabin Medical Center*
10:30-11:00	**Coffee Break**

Morning Session A (Becker Auditorium)	
11:00-11:15	Body Representations in the Blind Brain *Or Yizhar, Hebrew University*
11:15-11:30	The representation of composite stimuli in category-selective visual cortex *Libi Kliger, Tel Aviv University*
11:30-11:45	Disability or Disease: Connectivity Pattern Changes in the Visual Network After Optic Nerve Damage *Yael Backner, Hebrew University*
11:45-12:00	The relationship between neural variability and neural oscillations *Edan Daniel, Ben Gurion University*

Morning Session B (Class 2004)	
11:00-11:15	Modeling conduction delays in the corpus callosum using MRI-measured g-ratio ***- NEW -*** *Shai Berman, Hebrew University*
11:15-11:30	Perturbation training for rehabilitation of dynamic balance in acquired brain injury victims *Katherin Joubran, Ben Gurion University*
11:30-11:45	Traumatic Brain Injury Severity in a Network Perspective: A Diffusion MRI Based Connectome Study *Reut Raizman, Sheba Medical Center & Tel Aviv University*
11:45-12:00	Tractography delineation of the vertical occipital fasciculus using quantitative T1 mapping *Roey Schurr, Hebrew University*
12:15-14:00	**Lunch & Posters**

Afternoon Symposium – Child development (Becker Auditorium)	
14:00-14:15	Predictive relations between maternal responsiveness, infant neural responses and infant social behavior over the first year of life *Tahli Frenkel, Interdisciplinary Center Herzliya*
14:15-14:30	Impaired detection of erroneous arithmetic equations in adolescents with prenatal alcohol exposure: An EEG study *Andrea Berger, Ben Gurion University*
14:30-14:45	The development of a Hebrew reading brain: The neural changes underlying reading acquisition with missing vowels and abundance of roots *Tali Bitan, Haifa University*
14:45-15:00	Hippocampal subfields maturation and the development of episodic memory in children *Noa Ofen, Weizmann Institute of Science*
15:00-15:15	Screen Brains: The Relationship between Executive Functions Abilities and Screen Exposure in Children *Tzipi Horowitz-Kraus, The Technion*
15:15-15:45	**Coffee Break**

Afternoon Session C (Becker Auditorium)	
15:45-16:00	Deep TMS over the mPFC and ACC alters brain connectivity and reduces relapse to alcohol use *Maayan Harel, Ben Gurion University*
16:00-16:15	Default mode network dynamics predict sequences of cognitive states ***- TIME CHANGED -*** *Talia Brandman, Weizmann Institute of Science*
16:15-16:30	Disrupted network topology in premenstrual dysphoric disorder is related to childhood maltreatment *Rotem Dan, Hebrew University*

Afternoon Session D (class 2004)	
15:45-16:00	Dissociable neural mechanisms of opening vs. closing the gate to working memory *Gal Nir-Cohen, Ben Gurion University*
16:00-16:15	Non-invasive detection of molecular profiles in the aging human brain *Shir Filo, Hebrew University*
16:15-16:30	Building an Empathic Brain ***- TIME CHANGED -*** *Yoni Levi, Interdisciplinary Center Herzliya*
16:30-16:45	Illuminating disorientation in Alzheimer's disease through the use multimodal neuroimaging *Greg Founshtein, Hebrew University*

17:00-17:50	**Keynote lecture: Angelika Lingnau** **The role of the lateral occipitotemporal cortex in action processing – evidence from human fMRI and MEG**

18:00-18:30	**Business meeting: Advancing the Israeli Human Neuroimaging Annual Gathering**

POSTERS LIST

1. **Cortical Layer Parcellation in the General Population Using Inversion – Recovery MRI**

   Zvi Baratz[1], Omri Tomer[1], Ittai Shamir[1], Dor Kaptzon[1], Daniel Barazany[1], Assaf Horowitz[1], Maya Faraggi[1], Yaniv Assaf[1]

   [1]Tel Aviv University, Israel.

2. **Sub-voxel Estimation of Fat Infiltration in Degenerative Muscle Disorders using Multi-T2 Analysis**

   Dvir Radunsky[1], Noam Omer[1], Yann Le Fur[2], David Bendahan[2], and Noam Ben-Eliezer[1,3]

   [1]Department of Biomedical Engineering and Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel; [2]Aix Marseille University, CNRS, CRMBM, Marseille, France; [3]Center for Advanced Imaging Innovation and Research, New York University, New York, NY, USA.

3. **A probabilistic method for modelling cortical layer composition in sub-voxel resolution**

   Omri Tomer[1], Zvi Baratz[1], Ittai Shamir[2], Dor Kaptzon[2], Assaf Horowitz[1], Maya Faraggi[2], Daniel Barazany[2] and Yaniv Assaf[1,2]

   [1]Sagol School of Neuroscience, [2]Department of Neurobiology, Faculty of Life Sciences, Tel Aviv University;

4. **Subdividing the superior longitudinal fasciculus to its subcomponents using quantitative T1 mapping**

   Roey Schurr[1], Ady Zelmen[1], Aviv A. Mezer[1]

   [1]Edmond & Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Israel.

5. **Modeling conduction delays in the corpus callosum using MRI-measured g-ratio**

   Shai Berman[1], Shir Filo[1], Aviv A. Mezer[1]

   [1]Edmond and Lily Safra center for Brain Sciences, Hebrew University of Jerusalem, Jerusalem, Israel.

6. **Volitional Limbic Modulation in Post-Traumatic Stress Disorder**

   Tom Fruchtman-Steinbok[1,3], Gadi Drori[1,2], Avihay Cohen[1], Nimrod Keynan[1,3], Talma Hendler[1,2,3,4]

   [1]Sagol Brain Institute, Tel-Aviv Medical Center, Tel-Aviv, Israel; [2]Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel; [3]School of Psychological Sciences, Gershon H. Gordon Faculty of Social Sciences, Tel Aviv University, Tel Aviv, Israel; [4]Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel;

7. **White Matter Patterns Related to Math vs. Reading Challenges in Children with Developmental Dyslexia**

   Noam Glukhovksy[1], Rola Farah[1], Tzipi Horowitz-Kraus[1]

   [1]Faculty of Bio medical Engineering and Faculty of Education in Science and Technology, Technion, Israel Institute of Technology

8. **qMRI grey matter microstructural changes predict healthy aging and identify Multiple Sclerosis**

   Asier Erramuzpe[1], Roey Schurr[1], Aviv Mezer[1]

   [1]Hebrew University, Jerusalem, Israel

9. **The Effects of Traumatic Brain injury Factors on Brain Activation During an Executive Task**

   Sarel Shlomo[1], Maayan Sapir[1], Leeron Rabinov[1], Niv Tik[1], Reut Raizman1, Liat Ben Ami[1], Galia Tsarfaty[1,2], Elena Tchvaloon[3], Assia Klots[3], Ofer Keren[2,3], Zion Zibly[2,4], Abigail Livny[1,5]

   [1]Division of Diagnostic Imaging, Sheba Medical Center, Tel Hashomer, Israel; [2]Sackler Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel; [3]Head Trauma Rehabilitation Department, [4]Department of Neurosurgery, [5]J. Sagol Neuroscience Center, Sheba Medical Center, Tel Hashomer, Israel;

10. **Neural correlates of future weight loss, a possible role for brain-gastric connectivity**

    Gidon Levakov[1,2], Alon Kaplan[3], Anat Yaskolka Meir[3], Ehud Rinott[3], Gal Tsaba[3], Hila Zelicha[3], Nachshon Meiran[2,4], Ilan Shelef[2,5], Iris Shai[3], Galia Avidan[1,2,4]

    [1]Department of Brain and Cognitive Sciences, [2]Zlotowski Center for Neuroscience, [3]Department of Epidemiology, [4]Department of Psychology, [5]Department of Imaging, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

11. **The Neural Correlates of Social Synchrony in ASD**

    Inbar Zvia Marton-Alper[1], Nevat Michael[1], Karklinsky Matan[2], Gvirts Hila[3], Shamay-Tsoory Simone G.[1]

    [1]University of Haifa, Israel; [2]Weizmann Institute of Science, Israel; [3]Ariel University, Israel.

12. **Neuroanatomy of Face Recognition Memory**

    Shir Ben-Zvi Feldman[1], Nachum Soroker[1,2], Daniel A. Levy[3]

    [1]Sackler Faculty of Medicine, Tel-Aviv University, Israel; [2]Lowenstein Rehabilitation Hospital, Raanana, Israel; [3]Baruch Ivcher School of Psychology, Interdisciplinary Center Herzliya, Israel;

13. **Long Term Effect of Prematurity on Emotional Empathy Neural Activation Patterns in Adolescents**

    Adi Ulmer Yaniv[1,2], Roy Salomon[1], Ruth Feldman[2]

    [1]The Gonda Multidisciplinary Brain Research Center, Bar-Ilan University; [2]Simms-Mann Professor of Developmental Social Neuroscience at the Interdisciplinary Center (IDC).

14. Network Representation of Persistent Visual Categories

Gal Vishne[1], Edden M. Gerber[1], Robert T. Knight[2], Leon Y. Deouell[1]

[1]The Hebrew University of Jerusalem, Israel; [2]University of California, Berkeley, USA.

15. Behavioral and neural mechanisms underlying visual expertise

Nilly Weiss[1], Galia Avidan[1,2]

[1]Department of Psychology and [2]Department of Cognitive and Brain Science, Ben-Gurion University, Israel.

16. Properties of language recruitment in the congenitally deprived visual network

Benedetta Heimler[‡1,2], Galit Buchs[‡1,3], Lior Reich[1,2], Amir Amedi[1,2,3]

[1]Department of Medical Neurobiology, Institute for Medical Research Israel-Canada, Faculty of Medicine, Hebrew University of Jerusalem, Hadassah Ein-Kerem, Jerusalem, Israel; [2]The Edmond and Lily Safra Center for Brain Research, the Hebrew University of Jerusalem, Hadassah Ein-Kerem, Jerusalem, Israel; [3]Department of Cognitive Science, Faculty of Humanities, Hebrew University of Jerusalem, Israel;

17. Population Receptive Fields' Size and Complex Visual Dysfunction: a Posterior Cortical Atrophy Model

Pieter de Best[1], Noa Raz[1], Nitzan Guy[2], Tamir Ben-Hur[1], Serge Dumoulin[3,4,5], Yoni Pertzov[6], Netta Levin[1]

[1]Department of Neurology, the Hadassah Hebrew University Medical Center, Jerusalem, Israel; [2]Department of Cognitive Sciences, the Hebrew University of Jerusalem, Israel; [3]Spinoza Center for Neuroimaging, Amsterdam, Netherlands; [4]Department of Experimental and Applied Psychology, VU University, Amsterdam, Netherlands; [5]Department of Experimental Psychology, Helmholtz Institute, Utrecht University, Utrecht, Netherlands; [6]Department of Psychology, the Hebrew University of Jerusalem, Israel.

18. Single Neurons in the Human STN and GPi Represent Motor and Visual Parameters

Yael Lustig[‡1], Ido Strauss[‡1,3], William D. Hutchison[4,5], Itzhak Fried[1,3,6], Andres M. Lozano[4], Ariel Tankus[1,2,3]

[1]Department of Neurology and Neurosurgery, Sackler Faculty of Medicine, [2]Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel; [3]Functional Neurosurgery Unit, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel; [4]Division of Neurosurgery, Department of Surgery, [5]Department of Physiology, Faculty of Medicine, University of Toronto, Toronto Western Hospital, Ontario, Canada; [6]Department of Neurosurgery, David Geffen School of Medicine and Semel Institute for Neuroscience, University of California at Los Angeles (UCLA), Los Angeles, CA, USA.

19. The "creatures" of the human cortical somatosensory system

Noam Saadon-Grosman[1,2], Yonatan Loewenstein[‡3,4], Shahar Arzy[‡1,2]

[1]Neuropsychiatry Lab, Department of Neurology, Hadassah Hebrew University Medical Center, Jerusalem, Israel; [2]Department of Medical Neurobiology, Faculty of Medicine, Hadassah Hebrew University Medical School, Jerusalem, Israel; [3]The Edmond and Lily Safra Center for Brain Sciences and the Alexander Silberman Institute of Life Sciences, [4]Dept. of Cognitive Sciences and The Federmann Center for the Study of Rationality, The Hebrew University, Jerusalem, Israel.

20. Alpha suppression in the somatosenseory cortex is finger specific

Nir Ofir[1], Noam Schwar[1], Kyousuke Kamada[2], Robert Prückl[3], Christoph Guger[3], Ayelet N. Landau[1]

[1]Hebrew University of Jerusalem, Israel; [2]Asahikawa University, Japan; [3]g.tec medical engineering GmbH, Austria.

21. Finding an Implicit Marker for Embodiment

Goldway Noam[1,2], Gurevitch Guy[1], Azamy Araz[3], Gefen Ido[4], Vaknin. Tom[2], Hendler Talma[1,2,5,6], Raz Gal[1,2,7]

[1]Sagol Brain Institute, Wohl Institute for Advanced Imaging, Sourasky Medical Centre, Tel Aviv, Israel; [2]Sagol School of Neuroscience, Tel Aviv University, Tel-Aviv, Israel; [3]Faculty of Medical Sciences, Radboud University, Nijmegen, Netherlands; [4]Adi Lautman Interdisciplinary Program for Outstanding Students, [5]Sackler School of Medicine, [6]School of Psychological Sciences, [7]Steve Tisch School of Film and Television, Tel Aviv University, Tel-Aviv, Israel.

22. Disentangling empathy-related processes in the human brain

Ayam Greental[1,3‡], Ofir Shany[1,2‡], Gadi Gilam[1,2], Maya Bleich-Cohen[1], Daniella Perry-Ziv[1], Moran Ovadia[1], Avihay Cohen[1], Talma Hendler[1,2,3,4], Gal Raz[1,3]

[1]Sagol Brain Institute, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel; [2]School of Psychological Sciences, Faculty of Social Sciences, [3]Sagol School of Neuroscience, [4]Department of Physiology and Pharmacology, Sackler Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel.

23. Immersive EFP NeuroFeedback: Proof of concept study

Yoav Zamir[1]

[1]Sagol School for neuroscience, Tel Aviv University, Israel.

24. A Role for Amygdala-Pallidum Pathway in Human Maternal Bonding

Yoni Amir, Bradford C. Dickerson, Ciprian Catana, Lisa Feldman Barrett, Shir Atzil

[1]Department of Psychology, the Hebrew University of Jerusalem, Jerusalem Israel; [2]Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital and Harvard Medical School, Charlestown; [3]Department of Psychology, Northeastern University, Boston; [4]Yale Child Study Center, New Haven; [5]Gonda Brain Research, [5]Bar Ilan University,Ramat Gan, Israel; [6]Department of Neurology, Massachusetts General Hospital, Harvard Medical School, Boston.

25. Striatal signature in preference-modification training without external reinforcements

Salomon, T.[1], Botvinik-Nezer, R.[1,2], Oren, S.[1,2], Schonberg, T.[1,2]

[1]Department of Neurobiology, Tel Aviv University; [2]Sagol School of Neuroscience, Tel Aviv University.

26. Neural correlates of effort-based valuation with prospective choices

Nadav Aridan[1], Nicholas J. Malece[2], Russell A. Poldrack[2,3], Tom Schonberg[1,2,4]

[1]Department of Neurobiology, Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel; [2]Imaging Research Center, The University of Texas at Austin, Austin, TX; [3]Department of Psychology, Stanford University, Stanford, CA; [4]Sagol School of Neuroscience, Tel Aviv University, Tel Aviv, Israel.

27. Neural Markers of Spatial Attention to Speech

Dan Agmon[‡1], Paz Har-Shai[‡1], Elana Zion-Golumbic[1]

[1]Gonda Multidisciplinary Brain Research Center, Bar Ilan University, Israel.

28. Neural Decoding of Concurrent Speech: Effects of Selective and Distributed Attention

Kaufman Maya[1], Zion Golumbic Elana[1]

[1]Gonda Multidisciplinary Brain Research Center, Bar Ilan University, Israel.

29. The involvement of extra-linguistic high cognitive functions in pragmatic inferences

Tal Tehan[1], Einat Shetreet[2]

[1]Sagol school of neuroscience, [2]Department of Linguistics, Tel Aviv University.

30. Ventral-stream white matter pathways associated with performance on a morpheme-based production task

Maya Yablonski[1], Benjamin Menashe[1,2], Michal Ben-Shachar[1,2]

[1]The Gonda Multidisciplinary Brain Research Center, [2]Department of English Literature and Linguistics, Bar-Ilan University.

31. Can Morphology Compensate for Phonological Deficits in Hebrew Adults with Dyslexia? an fMRI Study

Tammar Truzman[1,2], Yael Weiss[3], Tami Katzir[4], Tali Bitan[1,5]

[1]Language and Brain plasticity lab, the Institute of Information Processing and Decision Making (IIPDM), [2]Dept. of Communication Sciences and Disorders, University of Haifa, Israel; [3]Psychology Dept. University of Texas, Austin; [4]Dept. of Learning Disabilities, The E.J. Safra Brain Research center for the study of Learning Disabilities, [5]Dept. of Psychology, University of Haifa, Israel;

32. Functional connectivity of EF and visual regions during verb generation related to improved reading

Emma Twait[1], Tzipi Horowitz-Kraus[1,2]

[1]Educational Neuroimaging Centre, Faculty of Biomedical Engineering, Faculty of Education in Science and Technology, Technion, Haifa, Israel; [2]Reading and Literacy Discovery Centre, Cincinnati Children's Hospital Medical Centre, Cincinnati, Ohio, USA.

33. The role of Executive functions in reading comprehension in children with dyslexia: an fMRI study

Raya Meri[1], Tzipi Horowitz-Kraus[1]

[1]Faculty of Bio medical Engineering and Faculty of Education in Science and Technology, Technion, Haifa, Israel.

34. Many ways to read your vowels: The development of a Hebrew reading brain

Upasana Nathaniel[1], Bechor Barouch[1], Yael Weiss[2], Tami Katzir[3], Tali Bitan[1]

[1]Psychology Dept., IIPDM, University of Haifa, Israel; [2]Psychology Dept. University of Texas at Austin, Austin, TX, US; [3]Dept. of Learning Disabilities and The Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, University of Haifa, Israel.

35. Do roots compensate for missing vowels in children reading Hebrew words? Evidence from fMRI

Bechor Barouch[1], Yael Weiss[2], Tami Katzir[3], Tali Bitan[1]

[1]Psychology Dept., IIPDM, University of Haifa, Israel; [2]Psychology Dept. University of Texas at Austin, Austin, TX, US; [3]Dept. of Learning Disabilities and The Edmond J. Safra Brain Research Center for the Study of Learning Disabilities, University of Haifa, Israel.

36. Maternal reading ability and diffusion properties of white matter tracts in pre-school age children

Rola Farah[1], Tzipi Horowitz-Kraus[1]

[1]Faculty of Bio medical Engineering and Faculty of Education in Science and Technology, Technion, Haifa, Israel.

37. The relations between screen-exposure and altered attentional brain activation in preschool children

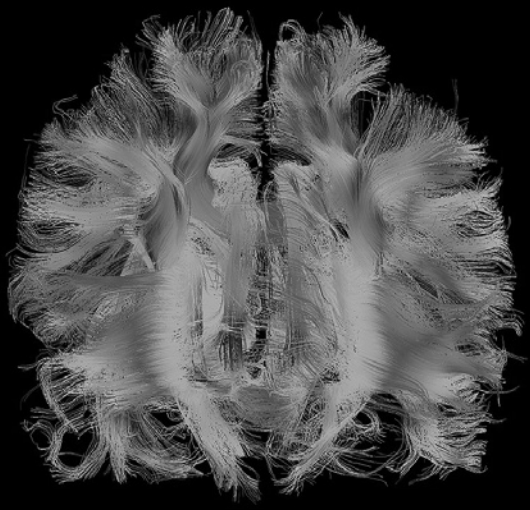
Michal Zivan[1], Sapir Bar[1], Xiang Jing[2],, Tzipi Horowitz-Kraus[1,3,4]

[1]Educational Neuroimaging Center, Faculty of Education in Science and Technology and [2]Faculty of Biomedical Engineering, Technion, Haifa Israel; [3]Department of Neurology, [4]Reading and Literacy Discovery Center, Cincinnati Children's Hospital Medical Center, Ohio, USA.

38. Mindfulness Training is related to Improved Executive Functions in Preschool Children: An EEG Study

Ilana Shlomov[1], Nava Levitt-Binnun[2], Tzipi Horowitz-Kraus[1,3]

[1]Educational Neuroimaging Center, Faculty of Education in Science and Technology, Faculty of Biomedical Engineering, Technion, Israel; [2]MUDA Segol center for brain and mind, School of Psychology, Inter Disciplinary Center (IDC), Hertzelia; [3]Reading and Literacy Discovery Center, General and Community Pediatrics, Cincinnati Children's Hospital; Medical Center, Cincinnati, Ohio, USA



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