



# The 31<sup>st</sup> ISFN Annual Meeting

**12-14 January, 2025**  
Dan Hotel | Queen Of Sheba Hotel, Eilat



## Sunday, January 12th 2025

**11:00-13:00** Welcome, Check in (Dan Hotel | Queen Of Sheba Hotel)

*13:00-14:00 Lunch (Dan hotel, 2nd floor)*

**14:00-15:15** **Opening, Plenary Lecture 1 - Hagai Bergman**  
The Basal Ganglia's Fascinating Voyage Through the Landscape of Consciousness (Dan hotel, 0 floor)

<b>15:30-17:30</b>	<b>A1 - Tarshish B Hall</b>	<b>A2 - Coral Hall</b>	<b>A3 - Tarshish A Hall</b>	<b>A4 - Bbh B Hall</b>	<b>A5 - Bbh A Hall</b>	<b>A6 - Fiesta Hall</b>
	<b>Orit Shefi</b>	<b>Rita Schmidt, Edna Furman-Haran</b>	<b>Illana Gozes, Haitham Amal</b>	<b>Chaya Kalcheim</b>	<b>Arseny Finkelstein, Alon Rubin</b>	<b>Ofer Yizhar</b>
	<b>Neuromechanics and Neuroengineering</b>	<b>Functional differences between individuals - what can we learn from long and short term signal variations in the human brain</b>	<b>Psychiatric disorders: from molecular mechanisms to drug targets</b>	<b>Sensory systems: from development to function</b>	<b>Using large cellular populations to reveal the neuronal code</b>	<b>Beyond "adult male mice": circuits and behavior throughout the lifespan</b>
	<b>Session Speakers -</b> Shahar Alon, Matan Mussel, Adir Yarmus & Uri Nevo, Or Shahar, Tomer Kagan, Oz Mualem	<b>Session Speakers -</b> Aviv Mezer, Tal Geffen, Rita Schmidt, Ido Tavor, Gerry Leisman, Daniel Reznik	<b>Session Speakers -</b> Hermona Soreq, Illana Gozes, Hanoch Khaphzan, Shashank Ojha	<b>Session Speakers -</b> Chaya Kalcheim, Avihu Klar, Alex Binshtok, Ilan Lampl, Galit Shohat-Ophir	<b>Session Speakers -</b> Yael Bitterman, Noga Mudrik, Lilach Avitan, Alon Rubin, Arseny Finkelstein, Odeya Marmor	<b>Session Speakers -</b> Dana Rubi Levy, Daniel Zelmanoff, Shay Stern, Ofer Yizhar, Benne Praegel, Anat Kahan
	<b>Shahar Alon</b> Super-Resolved Interrogation of Molecules within Thick Brain Tissues Using Expansion Sequencing	<b>Aviv Mezer</b> Substantia nigra and putamen asymmetries explain motor dysfunction in Parkinson's disease	<b>Hermona Soreq</b> Which processes control novel cholinergic-targeting micrnas integrated into the primate genome?	<b>Chaya Kalcheim</b> Regulation of dynamic cell fate transitions during spinal cord development	<b>Yael Bitterman</b> The distributed code of goal directed behavior	<b>Dana Rubi Levy</b> Tracing life's arc through behavior

15:30-17:30	A1 - Tarshish B Hall	A2 - Coral Hall	A3 - Tarshish A Hall	A4 - Bbh B Hall	A5 - Bbh A Hall	A6 - Fiesta Hall
	<p><b>Matan Mussel</b> On spikes and sound in lipid membranes</p> <p><b>Adir Yarmus &amp; Uri Nevo</b> The Mechanics of Action Potentials: Studying the Kinetics and the Cytoskeletal Origins</p> <p><b>Or Shahar</b> Cell-type-specific detection of newly synthesized proteins in neurons in vivo to study the interplay between neuronal activity and translation during seizures</p> <p><b>Tomer Kagan</b> Developing a novel biosensor for the visualization of pten activity</p> <p><b>Oz Mualem</b> Visualizing neuronal cytoskeleton in super resolution to analyze self-repair mechanisms</p>	<p><b>Tal Geffen</b> Functional connectivity gradients and thought-patterns in schizophrenia</p> <p><b>Rita Schmidt</b> Increasing sensitivity in fMRI to study individual differences - advantages of high field human MRI</p> <p><b>Ido Tavor</b> Relating Activity and Connectivity in the Learning Brain</p> <p><b>Gerry Leisman</b> Living the inverted "U": Connecting the ups and downs from fetus to grave in movement and cognition</p> <p><b>Daniel Reznik</b> Dissociating Distinct Cortical Networks Associated with Subregions of the Human Medial Temporal Lobe</p>	<p><b>Illana Gozes</b> Adnp/nap (davunetide) protection in brain diseases is sex-dependent</p> <p><b>Hanoch Khaphzan</b> The role of mitochondrial dysfunction in the early brain development of angelman syndrome</p> <p><b>Shashank Ojha</b> A Crosstalk between nitric oxide and mTOR signaling pathway in autism spectrum disorder (ASD)</p>	<p><b>Avihu Klar</b> Stepping, flying and swimming - evolution of patterned locomotion in tetrapods</p> <p><b>Alex Binshtok</b> Molecular and structural plasticity of nociceptive peripheral terminals underlying pathological pain</p> <p><b>Ilan Lampl</b> Detection and Neural Encoding of Whisker-generated Sounds in Mice</p> <p><b>Galit Shohat-Ophir</b> A highly conserved A-to-I RNA editing event within the glutamate-gated chloride channel GluCl<math>\alpha</math> is necessary for olfactory-based behaviors in Drosophila</p>	<p><b>Noga Mudrik</b> Decomposed linear dynamical systems (dlDs) for studying neural dynamics within &amp; between brain areas</p> <p><b>Lilach Avitan</b> Cracking the social code using whole-brain recording of the larval zebrafish</p> <p><b>Alon Rubin</b> Internal structure of neuronal codes for space in hippocampus and cortex</p> <p><b>Arseny Finkelstein</b> Multi-regional and local mechanisms of cortical communication during goal-directed behavior</p> <p><b>Odeya Marmor</b> Brain wide network within and between naturally socializing mice</p>	<p><b>Daniel Zelmanoff</b> Oxytocin signaling regulates maternally directed behavior during early life</p> <p><b>Shay Stern</b> The dynamic structure of behavioral individuality across developmental timescales</p> <p><b>Benne Praegel</b> Behavioral and neuronal signatures of adolescence in the mouse auditory cortex</p> <p><b>Anat Kahan</b> The afternoon role of the circadian VIP neurons in regulating the mammalian estrous cycle</p>

17:30-18:00 *Coffee Brake & exhibition (Dan hotel, 0 floor)*



18:00-19:00 **Plenary Lecture 2 - György Buzsáki**  
Credit assignment in the brain: mechanisms of memory selection and consolidation (Dan hotel, 0 floor)

19:00-20:30 *Dinner (According to your hotel)*

20:30-22:30  **Beer, wine and Poster Session A - All presenters stand by their posters** (Queen Of Sheba hotel)

# Monday, January 13th, 2025

08:30–10:30

B1 – Tarshish B Hall	B2 – Coral Hall	B3 – Tarshish A Hall	B4 – Bbh B Hall	B5 – Bbh A Hall	B6 – Fiesta Hall
<b>Abigail Livny-Ezer</b>	<b>Benedetta Heimler</b>	<b>Dan Frenkel</b>	<b>Ben Engelhard</b>	<b>Tal Laviv</b>	<b>Oded Rechavi</b>
<b>The use of Artificial Intelligence (AI) in medical neuroimaging, will it change practice?</b>	<b>Cognitive-motor-affective interactions during naturalistic behaviors in virtual reality</b>	<b>Impairment in metabolic pathways in neurodegenerative disease</b>	<b>Circuit mechanisms of motor learning and control in animals and humans</b>	<b>Molecular mechanisms of synaptic plasticity in the developing and adult brain</b>	<b>“Cogito, ergo sum” – how perception shapes our physiology</b>
<b>Session Speakers –</b> Abigail Livny-Ezer, Dr. Yaara Erez, Firas Mawase, Maya Kadushin, Tzipi Horowitz-kraus, Sarah Stern	<b>Session Speakers –</b> Michal Ramot, Rony Hirschhorn, Ramit Ravona, Prof. Plotnik, Benedetta Heimler	<b>Session Speakers –</b> Francisco J.Quintana, Jens Pahnke, Ronit Pinkas-Kramarski, Dan Frenkel, Hagit Eldar Finkelman, Sapir Golan Shekhtman	<b>Session Speakers –</b> Hadas Benisty, Roy Mukamel, Ariel Tankus, Gilad Silberberg	<b>Session Speakers –</b> Shira Knafo, Ivo Spiegel, Sharbel Eid, Leore Heim, Maya Shelly	<b>Session Speakers –</b> Shamgar Ben-Eliyahu, Noam Sobel, Liron Rozenkrantz, Lior Laufer, Elham Taha
<b>Abigail Livny-Ezer</b> Diagnosis, outcome prediction and precision medicine in brain disorders using connectomics and ai	<b>Michal Ramot</b> Harnessing the full power of naturalistic paradigms for the study of human behavior	<b>Francisco J.Quintana</b> Regulation of the immune response in the CNS by astrocytes	<b>Hadas Benisty</b> M1 reorganization of layer 2-3 network dynamics underlying motor learning	<b>Shira Knafo</b> Exploring the Interplay of Hippocampal TACR3 and Systemic Testosterone in the Regulation of Anxiety	<b>Shamgar Ben-Eliyahu</b> Psycho-behavioral and pharmacological stress-management interventions in cancer patients improve pro-metastatic molecular tumor characteristics
<b>Yaara Erez</b> Augmenting multi-modality neuroimaging in patients with brain tumors using ECOG, fMRI and AI	<b>Rony Hirschhorn</b> Exploring Unconscious Processing with Immersive Virtual Reality	<b>Jens Pahnke</b> Abca transporters modulate essential metabolic pathways and protect against neurodegeneration	<b>Roy Mukamel</b> Linking actions to their sensory consequences in the human brain	<b>Ivo Spiegel</b> The genomic basis of behavioral state-dependent modulation of sensory processing and neural circuit	<b>Noam Sobel</b> The inspirational brain
<b>Firas Mawase</b> Leveraging Artificial Intelligence for Advanced Neural Prosthetics: Enhanced Detection of Dexterous	<b>Ramit Ravona</b> A new biomarker for apathy and depression in cognitive impairment based on physiological reactivity	<b>Ronit Pinkas-Kramarski</b> Impaired autophagy in apoE expressing cells	<b>Ariel Tankus</b> Speech features neural encoding in the thalamus of parkinson’s disease and essential tremor patients	<b>Sharbel Eid</b> Unraveling the Dynamics of MeCP2 in Neuronal Circuits: A Novel Approach Using 2pFLIM to Explore DNA Damage Response in Rett Syndrome	<b>Liron Rozenkrantz</b> How beliefs shape reality: from information processing to physical health
<b>Maya Kadushin</b> (from Ido Tavor’s lab) Predicting cognitive abilities from brain connectivity using artificial intelligence	<b>Meir Plotnik</b> More than meets the eyes - gait modulations due to gravity	<b>Dan Frenkel</b> The link between metabolic changes in gila cells to the development of neurodegenerative diseases	<b>Gilad Silberberg</b> Striatal Circuits Underlying Sensorimotor Functions	<b>Leore Heim</b> Channeling Mitochondrial Calcium for Homeostatic Regulation of Hippocampal Activity	<b>Lior Laufer</b> Organization of temporal patterns of behavior across a full developmental trajectory
<b>Tzipi Horowitz-kraus</b> Does AI provide new information or validate existing findings? Current and future directions in dyslexia	<b>Benedetta Heimler</b> Evaluating cognitive-motor interactions in Parkinson’s disease using a novel VR-based assessment	<b>Hagit Eldar Finkelman</b> Mitochondria repair in Huntington’s disease	<b>Sapir Golan Shekhtman</b> Regional Fat is Related to Lower Cognitive Functioning and Brain Volumes in High AD-Risk Males	<b>Maya Shelly</b> he role of non-vesicular lipid transport at ER-PM contact sites in phosphoinositide signaling in dendrite development in early circuit establishment	<b>Elham Taha</b> Slow maturation of olfactory circuits underlying innate odor preference

10:30–11:00 *Coffee Brake (Dan hotel, 0 floor)*

11:00–13:00	C1 – Tarshish B Hall	C2 – Coral Hall	C3 – Tarshish A Hall	C4 – Bbh B Hall	C5 – Bbh A Hall	C6 – Fiesta Hall
	<b>Tawfeeq Shekh-Ahmad</b>	<b>Anat Arazi, Yoni Kupchik</b>	<b>Tal Burstyn-Cohen</b>	<b>Boaz Barak</b>	<b>Gali Umschweif</b>	<b>Bruce Hope</b>
	<b>Recent Advances in Gene Therapy for Neurological Disorders</b>	<b>10:45–13:45 Eilat student's panel – 100 students</b>	<b>Cellular interactions guiding neural development and function</b>	<b>Myelin and oligodendrocytes dysfunction in neuropathology</b>	<b>cellular and molecular regulation of stress-induced behavior</b>	<b>Molecular, cellular, and circuit mechanisms of drug-related learning</b>
	<b>Session Speakers –</b> Tawfeeq Shekh-Ahmad, Moran Rubinstein, Mustafa Obeid, Rami Aqeilan	<b>Session Speakers –</b> Anat Arazi, Yoni Kupchik, Nimrod Brand	<b>Session Speakers –</b> Shahar Kasirer, Orit Shefi, Gil Levkowitz, Roberta Fresia, Dalit Sela-Donenfeld	<b>Session Speakers –</b> Inbar Fischer, Tal Iram, Elior Peles, Tamir Ben Hur	<b>Session Speakers –</b> Gali Umschweif-Nevo, Gal Richtel-Levin, Dorit Farfara-Cohen, Yair Shemesh, Alaa saleh	<b>Session Speakers –</b> Itay Shalom, Bruce Hope, Rami Yaka, Segev Barak, Yoni Kupchik
	<b>Tawfeeq Shekh-Ahmad</b> CNS-targeted Antioxidant Gene Therapy for Treating Epilepsy		<b>Shahar Kasirer</b> Mechanics of hair cell regeneration in the inner ear	<b>Inbar Fischer</b> White matter abnormalities in a mouse model for autism with a human-based mutation in shank3 gene	<b>Gali Umschweif-Nevo</b> Neurensin-2: a novel cell-type-specific stress-responsive protein	<b>Itay Shalom</b> Probing the circuit underlying cocaine-induced stereotypies with a novel behavior analysis platform
	<b>Moran Rubinstein</b> Dravet syndrome mouse models for novel gene therapy development		<b>Orit Shefi</b> Neuronal interactions with nano-based platforms for directing neuronal growth engineering	<b>Tal Iram</b> Oligodendrocyte aging and rejuvenation	<b>Gal Richter Levin</b> The dorsal dentate gyrus – a surprising player in stress vulnerability and resilience	<b>Bruce Hope</b> Cell types and unique transcriptomic alterations of neuronal ensembles activated by cocaine-induced
	<b>Mustafa Obeid</b> Neuron-Specific AAV-Mediated WWOX Gene Therapy Rescues Mortality and Seizure Phenotypes in WOREE Syndrome Models		<b>Gil Levkowitz</b> Neural plate progenitors give rise to both anterior and posterior pituitary cells	<b>Elior Peles</b> Differential subcellular distribution of SynCAM/Cadm proteins in neurons guides myelin targeting	<b>Dorit Farfara-Cohen</b> Serotonergic regulation of peripheral immune cell recruitment to the brain	<b>Rami Yaka</b> Role of the translational machinery in cocaine-induced behaviours
	<b>Rami Aqeilan</b> Epilepsy in a dish: Using brain organoids for studying WWOX-related neurological disorders and gene therapy		<b>Roberta Fresia</b> Protein s (pros1) regulates microglial development and function	<b>Tamir Ben Hur</b> The journey to cell therapy for demyelinating diseases	<b>Yair Shemesh</b> A paradigm shift in translational psychiatry through rodent neuroethology	<b>Segev Barak</b> Long-term alcohol consumption enhances accumbal myelination and impairs neural connectivity
			<b>Dalit Sela-Donenfeld</b> Hindbrain boundaries–niches of neural progenitor/ stem cells regulated by their extracellular matrix		<b>Alaa saleh</b> Biophysical mechanism underlying epigenetically inherited stressful behavior	<b>Yoni Kupchik</b> Synaptic plasticity alterations in ventral pallidal circuitry after abstinence from cocaine

13:00–14:00 *Lunch (Dan hotel, 2nd floor)*

**14:00–15:00** **Plenary Lecture 3 – Chaya Kalcheim**  
Regulation of patterning and cell fate decisions during neural development (Dan hotel, 0 floor)

15:30-17:30

D1 - Tarshish B Hall

D2 - Coral Hall

D3 - Tarshish A Hall

D4 - Bbh B Hall

D5 - Bbh A Hall

D6 - Fiesta Hall

Hanna Keren

Omer Revah

Pablo Blinder

Yuval Nir

Ramon Birnbaum

Haim Sompolinsky

**Virtual environments for the study of human behavior and perception**

**Human brain organoids in neurodevelopment and disease**

**New insights into Brain Barriers development and function**

**Sleep: unconscious restoration, from molecules to behavior**

**Neuronal transcription regulation**

**Neuroscience of Knowledge**

**Session Speakers -**  
Tom Schonberg, Elana Zion-Golumbic, Roy Salomon, Hanna Keren, Adi Lustig

**Session Speakers -**  
Orly Reiner, Abed Mansour, Omer Revah, Miri Danan, Gotthold, Daniel Halperin

**Session Speakers -**  
Ayal Ben-Zvi, Tali Ilovitsh, Preethi Rajamannar, Nir Cafri, Meshi Zorsky

**Session Speakers -**  
Gali Krayden, Refaela Atsmon, Halen Baker, Yuval Nir, Anat Arzi

**Session Speakers -**  
Eran Meshorer, Evan Eliot, Dan Bracha, Igor Ulitsky, Ramon Birnbaum

**Session Speakers -**  
Haim Sompolinsky, Galit Yovel, Ariel Goldstein, Winrich Freiwald, Mathew Diamond

**Tom Schonberg**

XR as a tool to densely study human behavior

**Orly Reiner**

MorphoNeuroChip: Unveiling Brain Malformations' Secrets at the Molecular Level

**Ayal Ben-Zvi**

Unique features of the arterial Blood-Brain Barrier

**Gali Krayden**

Sleep and repair of DNA breaks across evolution

**Eran Meshorer**

Pluripotent stem cell models reveal altered genetic and epigenetic pathways in Huntington's disease

**Haim Sompolinsky**

Geometry of Neural Representations: From Vision to Language

**Elana Zion-Golumbic**

The Neural Underpinnings of Attention and Distraction in (virtual) Realistic Environments

**Abed Mansour**

A novel neuroimmune human brain organoid model to study microglia in health and disease

**Tali Ilovitsh**

Nanobubble-mediated BBB opening as a platform for enhanced delivery to brain capillaries

**Refaela Atsmon**

Homeostatic regulation of CA1 firing rate set points and contextual memory retrieval in mice

**Evan Eliot**

Forebrain neuronal Smc3 regulates appetite, weight, and metabolic health

**Galit Yovel**

Disentangling the Contributions of Vision and Language in Perception and Memory

**Roy Salomon**

Keep it Real- Using virtual reality to understand real human behaviors

**Omer Revah**

Using stem cells to build a model of the human cortex in vivo

**Preethi Rajamannar**

Oxytocin may regulate its own uptake via blood flow dynamics

**Halen Baker**

Sleep and sedation in basal ganglia in health and Parkinson's disease

**Dan Bracha**

Probing and Reprogramming Transcriptionally Active Liquid Bodies in Living Cells

**Ariel Goldstein**

Deep Modeling of Cognition

**Hanna Keren**

Studying mood dynamics in a rich virtual context

**Miri Danan Gotthold**

Early neurodevelopment at the single-cell resolution

**Nir Cafri**

Blood Brain Barrier Dysfunction in Drug Resistance Epilepsy: A Multi-Center Feasibility Study

**Yuval Nir**

Sleep and memory consolidation in health and disease

**Igor Ulitsky**

Regulation of neuronal chromatin environments by long noncoding RNAs

**Winrich Freiwald**

Neuroscience of Knowledge: from Face Perception to Person

**Adi Lustig**

Heart rate related measures response to visual-physical incongruent walking conditions

**Daniel Halperin**

Mechanomorphogenesis governed by guidance receptor Plexin-B2 is critical for gating neuronal differentiation and cytoarchitecture of neuroepithelium

**Meshi Zorsky**

Exosomes from neural cells enhance barrier functions in iPSC-based model of the human BBB

**Anat Arzi**

Unconsciousness Dynamics: From Sleep to Disorders of Consciousness

**Ramon Birnbaum**

Deciphering gene regulatory elements during inhibitory interneuron differentiation using deep neural

**Mathew Diamond**

Neuronal mechanisms underlying a single (not just the average) decision

**Noemi Bronstein**

**Novel Biodetectors for Live Cell Imaging**

Sponsored by:

 **alomone labs**

17:30-18:00 Coffee break (Dan hotel, 0 floor)

**18:00-19:00** **Plenary Lecture 4** – Haim Sompolinsky  
From Brain to Mind: Emergent Properties of Neuronal Circuits (Dan hotel, 0 floor)

**19:00-20:00** **ISFN General Assembly Business Meeting – Regular and emeritus members only** (Tarshish A)

19:00-20:30 *Dinner (According to your hotel)*

20:30-22:30 **Poster Session B** (Queen Of Sheba hotel)

22:30-24:30  **Beers, wine & DJ party** (Fiesta Hall, Dan hotel)

## Tuesday, January 14th, 2025

08:30-10:30	E1 – Tarshish B Hall	E2 – Coral Hall	E3 – Tarshish A Hall	E4 – Bbh B Hall	E5 – Bbh A Hall	E6 – Fiesta Hall
		<b>Dana Cohen</b>	<b>Gadi Gilam, Alexander Binshtok</b>	<b>Ehud Cohen</b>	<b>Oren Shriki</b>	<b>Dori Derdikman, Yaniv Ziv</b>
		<b>Rethink about the role of the external globus pallidus in basal ganglia functions</b>	<b>Modulating pain from the terminal to the brain – Basic and translational insights into mechanisms of pathological pain</b>	<b>Cellular proteostasis mechanisms in health and disease</b>	<b>Artificial neural networks as models of biological sensory processing</b>	<b>Learning and Memory: From mice to humans</b>
		<b>Session Speakers –</b> Hagai Bergman, Dana Cohen, Joshua A. Goldberg	<b>Session Speakers –</b> Avraham Yaron, Ben Title, Irit Weissman–Fogel, Gadi Gilam	<b>Session Speakers –</b> Avraham Ashkenazi, Adrian Israelson, Ehud Cohen, Ronit Ilouz, Reut Bruck–Haimson	<b>Session Speakers –</b> Oren Shriki, Tal Golan, Galit Yovel, Omri Barak, Jonathan Kadmon	<b>Session Speakers –</b> Itzhak Fried, Dori Derdikman, David Omer, Ayal Lavi, Erez Simony
		<b>Hagai Bergman</b> Discharge features of the non-human primate external globus pallidus during sleep	<b>Avraham Yaron</b> The kinesin family member 2a (kif2a) gates nociception	<b>Avraham Ashkenazi</b> Regulators of $\alpha$ -synuclein secretion and spread in Parkinson’s disease	<b>Oren Shriki</b> Sensory recurrent networks: optimal information representation, hallucinations, and synaesthesia	<b>Itzhak Fried</b> In Search of Engrams: Single neuron recordings and deep brain stimulation in the human temporal lobe
		<b>Dana Cohen</b> Multidimensional encoding in the rodent external globus pallidus	<b>Ben Title</b> The Guardians of Passage: Adaptive Changes in the Output from the First Nociceptive Neural Network	<b>Adrian Israelson</b> Targeting low levels of MIF expression as a potential therapeutic strategy for ALS	<b>Tal Golan</b> Disentangling representational geometries in neural network models of human perception	<b>Eran Stark</b> Short term memory in freely moving mice
		<b>Joshua A. Goldberg</b> Oscillatory correlations in the globus pallidus explained	<b>Irit Weissman–Fogel</b> Reinforcement of pain modulation– a mechanism based teratemtn for pain relief in chronic pain	<b>Ehud Cohen</b> A Nucleolar Mechanism Suppresses Proteostasis across the Organism by the Modulation of Multiple Signaling Pathways	<b>Omri Barak</b> Aligned and oblique dynamics in recurrent neural networks	<b>Dori Derdikman</b> Active experience, not time, determines within day representational drift in dorsal CA1

08:30-10:30	E1 - Tarshish B Hall	E2 - Coral Hall	E3 - Tarshish A Hall	E4 - Bbh B Hall	E5 - Bbh A Hall	E6 - Fiesta Hall
			<b>Gadi Gilam</b> The Neural Bases of Emotion Regulation of Pain in Chronic Pain	<b>Ronit Ilouz</b> Mutation in Protein Kinase A (PRKAR1B) gene drives pathological mechanisms of Neurodegeneration  <b>Reut Bruck-Haimson</b> UFMylation regulates proteostasis in C. elegans	<b>Jonathan Kadmon</b> Rethinking backpropagation: training large neural networks with low-dimensional error signals	<b>David Omer</b> The Naming of Nonhuman Primates, Hints about the Evolution of Human Language  <b>Ayal Lavi</b> Causal role of insular cortex neuronal activity manifolds in appetitive and aversive learning  <b>Erez Simony</b> The Movie After-Effect: Widespread Activity-Dependent Renormalization Revealed during Ecological Stimuli in the Human Cortex

10:30-11:00 *Coffee Brake (Dan hotel, 0 floor)*

11:00-12:00 **Announcement of Prizes: The Sieratzki Prize for Advances in Neuroscience, Best mentor Prize, Poster Competition prize (Dan hotel, 0 floor)**

12:15-14:15	F1 - Tarshish B Hall	F2 - Coral Hall	F3 - Tarshish A Hall	F4 - Bbh B Hall	F5 - Bbh A Hall	F6 - Fiesta Hall
	<b>Gaddi Blumrosen</b>	<b>Lior Mayo</b>	<b>Gilad Silberberg, Ilan Lampl</b>	<b>Michal Rivlin</b>	<b>Abed Mansour, Zeev Melamed</b>	<b>Yoav Livneh</b>
	<b>Monitoring and Diagnostics of neurological disease and disorders at home environment settings</b>	<b>Here and Back Again, A Neuroimmunology's Tale</b>	<b>Structure and function of interhemispheric communication</b>	<b>Coding principles in sensory and motor systems: breaking the rules</b>	<b>Stem-cells based technologies to study brain disorders</b>	<b>Brain-body interactions in the insular cortex</b>
	<b>Session Speakers -</b> Hadas Lewy, Jason Friedman, Inbal Maidan, Gaddi Blumrosen, Hila Gvirtz, Joachim Beharn	<b>Session Speakers -</b> Lior Mayo, Eran Blacher, Alon Monsenero, Or Shemesh, Itay Zalayat	<b>Session Speakers -</b> Katayun Cohen-Kashi, Noa Rivlin, Michael Sokoletsky, Netanel Ofer, Elad Avidan	<b>Session Speakers -</b> Moshe Parnas, Rony Azouz, Mati Joshua, Inbal Shainer, Elyashiv Zangen, David Deutsch	<b>Session Speakers -</b> Shani Stern, Zeev Melamed, Gad Vatine, Eran Hornstein, Mahmood Ali, Ahd hamdan	<b>Session Speakers -</b> Sarah Stern, Yael Prilutski, Yoav Livneh, Stav Shtiglitz, Kobi Rosenblum, Asya Rolls
	<b>Hadas Lewy</b> Research and Development of digital parameters for functional and cognitive assessment at home	<b>Lior Mayo</b> Targeting CNS-infiltrating myeloid cells in neuroinflammation	<b>Katayun Cohen-Kashi</b> Behavioral states control binocular vision through input-specific mechanisms	<b>Moshe Parnas</b> Battle of the memories - how the brain prevents the co-formation of conflicting memories	<b>Shani Stern</b> Seeking Convergence and Divergence between Autism and Schizophrenia using genomic tools and iPSC patient derived neurons	<b>Sarah Stern</b> Insular cortex circuits mediating flexible feeding behaviors

**Jason Friedman**

Evaluating changes in dexterity in people with Parkinson's disease at home using an electric piano

**Inbal Maidan**

Parkinson disease severity evaluation from home based real-life facial video

**Gaddi Blumrosen**

Behavioral Based Neurological condition assessment: roadmap, and feasibility with ADHD diagnosis from real-life video

**Hila Gvirtz**

Automatic Alexithymia recognition from remote interviews with LLM models

**Joachim Behar**

Sleep physiological biomarkers derived from continuous seamless monitoring sleep stages abnormalities at home

**Eran Blacher**

Mapping the immune response in the aging gut at the setting of stroke

**Alon Monsonego**

A neuro-endocrine-immune perspective to age-related neurodegenerative disorders

**Or Shemesh**

Herpes Simplex Virus-1 Proteins Drive Alzheimer's disease Pathologies in Humans

**Itay Zalayat**

Dissecting the effects of distinct VTA projections on peripheral immunity

**Noa Rivlin**

Projections from the claustrum to the frontal cortex modulate performance and cortical representation of an attention demanding task

**Michael Sokoletsky**

Inherent coupling of perceptual decisions to motor actions in the mouse cortex

**Netanel Ofer**

Branch-specific spike failures at distal axons in mouse cortex in vivo

**Elad Avidan**

Strategies for transferring higher order information across hemispheres

**Rony Azouz**

Reliability and Stability of Tactile Perception in Rodents

**Mati Joshua**

High-Dimensional Encoding of Movement by Single Neurons in Basal Ganglia Output

**Inbal Shainer**

Positional information drives distinct traits in transcriptomically identified neuronal types

**Elyashiv Zangen**

Light-Responsive Neurons in the Medial Prefrontal Cortex Encode Light Intensity

**David Deutsch**

Mixed connectivity and local computations across a whole adult Drosophila brain

**Zeev Melamed**

Rescue of impaired axonal regeneration in ipsc-derived motor neurons affected by tdp-43 pathology

**Gad Vatine**

Modeling Neurological Disorders at the Blood Brain barrier (BBB)

**Eran Hornstein**

Organellomics: AI-driven deep organellar phenotyping reveals novel ALS mechanisms in human neurons

**Mahmood Ali**

HIKESHI-related Hypo-myelinating Leukodystrophy: a Brain-On-Chip model for pre-clinical testing of gene therapy

**Ahd hamdan**

Immunocompetent Human Midbrain Organoids to Study Neuroinflammation in Parkinson's Disease

**Yael Prilutski**

Interoceptive predictions during hunger and thirst in the insular cortex

**Yoav Livneh**

Brain-body interactions: Sensations and predictions in the insular cortex

**Stav Shtiglitz**

Cortical interoceptive predictions for neural control of nutritional choice

**Kobi Rosenblum**

Intra-insula Circuit Mediates the Association between External and Internal Sensory Information

**Asya Rolls**

Immunoception: immune representation in the brain