



The 31st 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)

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
	Orit Shefi	Rita Schmidt, Edna Furman-Haran	Illana Gozes, Haitham Amal	Chaya Kalcheim	Arseny Finkelstein, Alon Rubin	Ofer Yizhar
	Neuromechanics and Neuroengineering	Functional differences between individuals - what can we learn from long and short term signal variations in the human brain	Psychiatric disorders: from molecular mechanisms to drug targets	Sensory systems: from development to function	Using large cellular populations to reveal the neuronal code	Beyond "adult male mice": circuits and behavior throughout the lifespan
	Session Speakers - Shahar Alon, Matan Mussel, Adir Yarmus & Uri Nevo, Or Shahar, Tomer Kagan, Oz Mualem	Session Speakers - Aviv Mezer, Tal Geffen, Rita Schmidt, Ido Tavor, Gerry Leisman, Daniel Reznik	Session Speakers - Hermona Soreq, Illana Gozes, Hanoch Khaphzan, Shashank Ojha	Session Speakers - Chaya Kalcheim, Avihu Klar, Alex Binshtok, Ilan Lampl, Galit Shohat-Ophir	Session Speakers - Yael Bitterman, Noga Mudrik, Lilach Avitan, Alon Rubin, Arseny Finkelstein, Odeya Marmor	Session Speakers - Dana Rubi Levy, Daniel Zelmanoff, Shay Stern, Ofer Yizhar, Benne Praegel, Anat Kahan
	Shahar Alon Super-Resolved Interrogation of Molecules within Thick Brain Tissues Using Expansion Sequencing	Aviv Mezer Substantia nigra and putamen asymmetries explain motor dysfunction in Parkinson's disease	Hermona Soreq Which processes control novel cholinergic-targeting micrnas integrated into the primate genome?	Chaya Kalcheim Regulation of dynamic cell fate transitions during spinal cord development	Yael Bitterman The distributed code of goal directed behavior	Dana Rubi Levy 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>Matan Mussel On spikes and sound in lipid membranes</p> <p>Adir Yarmus & Uri Nevo The Mechanics of Action Potentials: Studying the Kinetics and the Cytoskeletal Origins</p> <p>Or Shahaar 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>Tomer Kagan Developing a novel biosensor for the visualization of pten activity</p> <p>Oz Mualem Visualizing neuronal cytoskeleton in super resolution to analyze self-repair mechanisms</p>	<p>Tal Geffen Functional connectivity gradients and thought-patterns in schizophrenia</p> <p>Rita Schmidt Increasing sensitivity in fMRI to study individual differences - advantages of high field human MRI</p> <p>Ido Tavor Relating Activity and Connectivity in the Learning Brain</p> <p>Gerry Leisman Living the inverted "U": Connecting the ups and downs from fetus to grave in movement and cognition</p> <p>Daniel Reznik Dissociating Distinct Cortical Networks Associated with Subregions of the Human Medial Temporal Lobe</p>	<p>Illana Gozes Adnp/nap (davunetide) protection in brain diseases is sex-dependent</p> <p>Hanoch Khaphzan The role of mitochondrial dysfunction in the early brain development of angelman syndrome</p> <p>Shashank Ojha A Crosstalk between nitric oxide and mTOR signaling pathway in autism spectrum disorder (ASD)</p>	<p>Avihu Klar Stepping, flying and swimming - evolution of patterned locomotion in tetrapods</p> <p>Alex Binshtok Molecular and structural plasticity of nociceptive peripheral terminals underlying pathological pain</p> <p>Ilan Lampl Detection and Neural Encoding of Whisker-generated Sounds in Mice</p> <p>Galit Shohat-Ophir A highly conserved A-to-I RNA editing event within the glutamate-gated chloride channel GluClα is necessary for olfactory-based behaviors in Drosophila</p>	<p>Noga Mudrik Decomposed linear dynamical systems (dlDs) for studying neural dynamics within & between brain areas</p> <p>Lilach Avitan Cracking the social code using whole-brain recording of the larval zebrafish</p> <p>Alon Rubin Internal structure of neuronal codes for space in hippocampus and cortex</p> <p>Arseny Finkelstein Multi-regional and local mechanisms of cortical communication during goal-directed behavior</p> <p>Odeya Marmor Brain wide network within and between naturally socializing mice</p>	<p>Daniel Zelmanoff Oxytocin signaling regulates maternally directed behavior during early life</p> <p>Shay Stern The dynamic structure of behavioral individuality across developmental timescales</p> <p>Benne Praegel Behavioral and neuronal signatures of adolescence in the mouse auditory cortex</p> <p>Anat Kahan 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
Abigail Livny-Ezer	Benedetta Heimler	Dan Frenkel	Ben Engelhard	Tal Laviv	Oded Rechavi
The use of Artificial Intelligence (AI) in medical neuroimaging, will it change practice?	Cognitive-motor-affective interactions during naturalistic behaviors in virtual reality	Impairment in metabolic pathways in neurodegenerative disease	Circuit mechanisms of motor learning and control in animals and humans	Molecular mechanisms of synaptic plasticity in the developing and adult brain	“Cogito, ergo sum” – how perception shapes our physiology
Session Speakers – Abigail Livny-Ezer, Dr. Yaara Erez, Firas Mawase, Maya Kadushin, Tzipi Horowitz-kraus, Sarah Stern	Session Speakers – Michal Ramot, Rony Hirschhorn, Ramit Ravona, Prof. Plotnik, Benedetta Heimler	Session Speakers – Francisco J.Quintana, Jens Pahnke, Ronit Pinkas-Kramarski, Dan Frenkel, Hagit Eldar Finkelman, Sapir Golan Shekhtman	Session Speakers – Hadas Benisty, Roy Mukamel, Ariel Tankus, Gilad Silberberg	Session Speakers – Shira Knafo, Ivo Spiegel, Sharbel Eid, Leore Heim, Maya Shelly	Session Speakers – Shamgar Ben-Eliyahu, Noam Sobel, Liron Rozenkrantz, Lior Laufer, Elham Taha
Abigail Livny-Ezer Diagnosis, outcome prediction and precision medicine in brain disorders using connectomics and ai	Michal Ramot Harnessing the full power of naturalistic paradigms for the study of human behavior	Francisco J.Quintana Regulation of the immune response in the CNS by astrocytes	Hadas Benisty M1 reorganization of layer 2-3 network dynamics underlying motor learning	Shira Knafo Exploring the Interplay of Hippocampal TACR3 and Systemic Testosterone in the Regulation of Anxiety	Shamgar Ben-Eliyahu Psycho-behavioral and pharmacological stress-management interventions in cancer patients improve pro-metastatic molecular tumor characteristics
Yaara Erez Augmenting multi-modality neuroimaging in patients with brain tumors using ECOG, fMRI and AI	Rony Hirschhorn Exploring Unconscious Processing with Immersive Virtual Reality	Jens Pahnke Abca transporters modulate essential metabolic pathways and protect against neurodegeneration	Roy Mukamel Linking actions to their sensory consequences in the human brain	Ivo Spiegel The genomic basis of behavioral state-dependent modulation of sensory processing and neural circuit	Noam Sobel The inspirational brain
Firas Mawase Leveraging Artificial Intelligence for Advanced Neural Prosthetics: Enhanced Detection of Dexterous	Ramit Ravona A new biomarker for apathy and depression in cognitive impairment based on physiological reactivity	Ronit Pinkas-Kramarski Impaired autophagy in apoE expressing cells	Ariel Tankus Speech features neural encoding in the thalamus of parkinson’s disease and essential tremor patients	Sharbel Eid Unraveling the Dynamics of MeCP2 in Neuronal Circuits: A Novel Approach Using 2pFLIM to Explore DNA Damage Response in Rett Syndrome	Liron Rozenkrantz How beliefs shape reality: from information processing to physical health
Maya Kadushin (from Ido Tavor’s lab) Predicting cognitive abilities from brain connectivity using artificial intelligence	Meir Plotnik More than meets the eyes - gait modulations due to gravity	Dan Frenkel The link between metabolic changes in gila cells to the development of neurodegenerative diseases	Gilad Silberberg Striatal Circuits Underlying Sensorimotor Functions	Leore Heim Channeling Mitochondrial Calcium for Homeostatic Regulation of Hippocampal Activity	Lior Laufer Organization of temporal patterns of behavior across a full developmental trajectory
Tzipi Horowitz-kraus Does AI provide new information or validate existing findings? Current and future directions in dyslexia	Benedetta Heimler Evaluating cognitive-motor interactions in Parkinson’s disease using a novel VR-based assessment	Hagit Eldar Finkelman Mitochondria repair in Huntington’s disease	Sapir Golan Shekhtman Regional Fat is Related to Lower Cognitive Functioning and Brain Volumes in High AD-Risk Males	Maya Shelly he role of non-vesicular lipid transport at ER-PM contact sites in phosphoinositide signaling in dendrite development in early circuit establishment	Elham Taha 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
	Tawfeeq Shekh–Ahmad	Anat Arazi, Yoni Kupchik, Dorrit Inbar	Tal Burstyn–Cohen	Boaz Barak	Gali Umschweif	Bruce Hope
	Recent Advances in Gene Therapy for Neurological Disorders	10:45–13:45 Eilat student’s panel – 100 students	Cellular interactions guiding neural development and function	Myelin and oligodendrocytes dysfunction in neuropathology	cellular and molecular regulation of stress-induced behavior	Molecular, cellular, and circuit mechanisms of drug-related learning
	Session Speakers – Tawfeeq Shekh–Ahmad, Moran Rubinstein, Mustafa Obeid, Rami Aqeilan	Session Speakers – Anat Arazi, Yoni Kupchik, Nimrod Brand	Session Speakers – Shahar Kasirer, Orit Shefi, Gil Levkowitz, Roberta Fresia, Dalit Sela–Donenfeld	Session Speakers – Inbar Fischer, Tal Iram, Elior Peles, Tamir Ben Hur	Session Speakers – Gali Umschweif–Nevo, Gal Richtel–Levin, Dorit Farfara–Cohen, Yair Shemesh, Alaa saleh	Session Speakers – Itay Shalom, Bruce Hope, Rami Yaka, Segev Barak, Yoni Kupchik
	Tawfeeq Shekh–Ahmad CNS–targeted Antioxidant Gene Therapy for Treating Epilepsy		Shahar Kasirer Mechanics of hair cell regeneration in the inner ear	Inbar Fischer White matter abnormalities in a mouse model for autism with a human–based mutation in shank3 gene	Gali Umschweif–Nevo Neurensin–2: a novel cell–type–specific stress–responsive protein	Itay Shalom Probing the circuit underlying cocaine–induced stereotypies with a novel behavior analysis platform
	Moran Rubinstein Dravet syndrome mouse models for novel gene therapy development		Orit Shefi Neuronal interactions with nano–based platforms for directing neuronal growth engineering	Tal Iram Oligodendrocyte aging and rejuvenation	Gal Richter Levin The dorsal dentate gyrus – a surprising player in stress vulnerability and resilience	Bruce Hope Cell types and unique transcriptomic alterations of neuronal ensembles activated by cocaine–induced
	Mustafa Obeid Neuron–Specific AAV–Mediated WWOX Gene Therapy Rescues Mortality and Seizure Phenotypes in WOREE Syndrome Models		Gil Levkowitz Neural plate progenitors give rise to both anterior and posterior pituitary cells	Elior Peles Differential subcellular distribution of SynCAM/ Cadm proteins in neurons guides myelin targeting	Dorit Farfara–Cohen Serotonergic regulation of peripheral immune cell recruitment to the brain	Rami Yaka Role of the translational machinery in cocaine–induced behaviours
	Rami Aqeilan Epilepsy in a dish: Using brain organoids for studying WWOX–related neurological disorders and gene therapy		Roberta Fresia Protein s (pros1) regulates microglial development and function	Tamir Ben Hur The journey to cell therapy for demyelinating diseases	Yair Shemesh A paradigm shift in translational psychiatry through rodent neuroethology	Segev Barak Long–term alcohol consumption enhances accumbal myelination and impairs neural connectivity
			Dalit Sela–Donenfeld Hindbrain boundaries–niches of neural progenitor/ stem cells regulated by their extracellular matrix		Alaa saleh Biophysical mechanism underlying epigenetically inherited stressful behavior	Yoni Kupchik 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 Kalchaim
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

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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
		Dana Cohen	Gadi Gilam, Alexander Binshtok	Ehud Cohen	Oren Shriki	Dori Derdikman, Yaniv Ziv
		Rethink about the role of the external globus pallidus in basal ganglia functions	Modulating pain from the terminal to the brain – Basic and translational insights into mechanisms of pathological pain	Cellular proteostasis mechanisms in health and disease	Artificial neural networks as models of biological sensory processing	Learning and Memory: From mice to humans
		Session Speakers – Hagai Bergman, Dana Cohen, Joshua A. Goldberg	Session Speakers – Avraham Yaron, Ben Title, Irit Weissman–Fogel, Gadi Gilam	Session Speakers – Avraham Ashkenazi, Adrian Israelson, Ehud Cohen, Ronit Ilouz, Reut Bruck–Haimson	Session Speakers – Oren Shriki, Tal Golan, Galit Yovel, Omri Barak, Jonathan Kadmon	Session Speakers – Itzhak Fried, Dori Derdikman, David Omer, Ayal Lavi, Erez Simony
		Hagai Bergman Discharge features of the non-human primate external globus pallidus during sleep	Avraham Yaron The kinesin family member 2a (kif2a) gates nociception	Avraham Ashkenazi Regulators of α -synuclein secretion and spread in Parkinson’s disease	Oren Shriki Sensory recurrent networks: optimal information representation, hallucinations, and synaesthesia	Itzhak Fried In Search of Engrams: Single neuron recordings and deep brain stimulation in the human temporal lobe
		Dana Cohen Multidimensional encoding in the rodent external globus pallidus	Ben Title The Guardians of Passage: Adaptive Changes in the Output from the First Nociceptive Neural Network	Adrian Israelson Targeting low levels of MIF expression as a potential therapeutic strategy for ALS	Tal Golan Disentangling representational geometries in neural network models of human perception	Eran Stark Short term memory in freely moving mice
		Joshua A. Goldberg Oscillatory correlations in the globus pallidus explained	Irit Weissman–Fogel Reinforcement of pain modulation– a mechanism based teratemtn for pain relief in chronic pain	Ehud Cohen A Nucleolar Mechanism Suppresses Proteostasis across the Organism by the Modulation of Multiple Signaling Pathways	Omri Barak Aligned and oblique dynamics in recurrent neural networks	Dori Derdikman 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
			Gadi Gilam The Neural Bases of Emotion Regulation of Pain in Chronic Pain	Ronit Ilouz Mutation in Protein Kinase A (PRKAR1B) gene drives pathological mechanisms of Neurodegeneration Reut Bruck-Haimson UFMylation regulates proteostasis in C. elegans	Jonathan Kadmon Rethinking backpropagation: training large neural networks with low-dimensional error signals	David Omer The Naming of Nonhuman Primates, Hints about the Evolution of Human Language Ayal Lavi Causal role of insular cortex neuronal activity manifolds in appetitive and aversive learning Erez Simony 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
	Gaddi Blumrosen	Lior Mayo	Gilad Silberberg, Ilan Lampl	Michal Rivlin	Abed Mansour, Zeev Melamed	Yoav Livneh
	Monitoring and Diagnostics of neurological disease and disorders at home environment settings	Here and Back Again, A Neuroimmunology's Tale	Structure and function of interhemispheric communication	Coding principles in sensory and motor systems: breaking the rules	Stem-cells based technologies to study brain disorders	Brain-body interactions in the insular cortex
	Session Speakers - Hadas Lewy, Jason Friedman, Inbal Maidan, Gaddi Blumrosen, Hila Gvirtz, Joachim Beharn	Session Speakers - Lior Mayo, Eran Blacher, Alon Monsenero, Or Shemesh, Itay Zalayat	Session Speakers - Katayun Cohen-Kashi, Noa Rivlin, Michael Sokoletsky, Netanel Ofer, Elad Avidan	Session Speakers - Moshe Parnas, Rony Azouz, Mati Joshua, Inbal Shainer, Elyashiv Zangen, David Deutsch	Session Speakers - Shani Stern, Zeev Melamed, Gad Vatine, Eran Hornstein, Mahmood Ali, Ahd hamdan	Session Speakers - Sarah Stern, Yael Prilutski, Yoav Livneh, Stav Shtiglitz, Kobi Rosenblum, Asya Rolls
	Hadas Lewy Research and Development of digital parameters for functional and cognitive assessment at home	Lior Mayo Targeting CNS-infiltrating myeloid cells in neuroinflammation	Katayun Cohen-Kashi Behavioral states control binocular vision through input-specific mechanisms	Moshe Parnas Battle of the memories - how the brain prevents the co-formation of conflicting memories	Shani Stern Seeking Convergence and Divergence between Autism and Schizophrenia using genomic tools and iPSC patient derived neurons	Sarah Stern 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