

22 April, 2025

Lopatie Conference Centre, Weizmann Institute of Science

# Pre-ISMIRM 2025



## PROGRAM

8:45-9:15

Gathering and Coffee

9:15-10:45

### Cutting-Edge Advances in Neuroimaging

Chair: **Dr. Or Perlman**, Tel-Aviv University (10 minutes allotted for each presentation + 2 minutes for discussions)

- **Yaniv Yosha**, Or Perlman, Tel Aviv University "Metabolic CEST MR imaging of glucosamine uptake in brain tumors"
- **Maryana Pozin**, Aviv Mezer, The Hebrew University of Jerusalem "Mapping Brain Iron with Quantitative MRI: Validation and Applications"
- **Noga Kertes**, Moti Freiman, Technion "SMC-DTI - Simultaneous Motion Correction and DTI parameter estimation Via unsupervised deep learning framework"
- **Amir Seginer**, Weizmann Institute of Science "Acoustic Spectrum and Ghosting in EPI: Timing is Everything (and it is Not Just Echo Spacing)"
- **Tal Oved**, Efrat Shimron, Technion "Nex-Gen Personalized MRI: Boosting Low-Field MRI Reconstruction with a Feature-Fusion Transformer and High-Field Priors"
- **Santosh Kumar Maurya**, Rita Schmidt, Weizmann Institute of Science) "A new compact hexagonally-structured artificial dielectric for enhancing B1+ at 7T especially for TIAMO-like acquisition"
- **Hagar Shmueli**, Or Perlman, Tel Aviv University "Multi-Metabolite AI Boosted CEST-MRF in an MPTP Mouse Parkinson's Model"

10:45-11:05

Coffee Break

11:05-11:50

KEYNOTE LECTURE by **Dr. Renana Eitan**, Jerusalem Mental Health Center, Hebrew University

**"Toward Personalized Deep Brain Stimulation for Neuropsychiatric Disorders"**

11:50-13:05

### From Function to Novel Biomarkers: Bridging the Gap

Chair: **Dr. Galit Saar**, Technion (10 minutes allotted for each presentation + 2 minutes for discussions)

- **Levan Baranes**, Vadim Axelrod, Bar Ilan University "Neural Processing of Subjectively Invisible Face and Scene Clips"
- **Guy-Shlomo Baz**, Rita Schmidt, Weizmann Institute of Science "Initial evidence for hemodynamic activity during motor observation in the human putamen using multi-echo EPI at 7 T"
- **Dana Schonberger**, Dafna Ben Bashat, Sourasky Medical Center "Placental morphology assessment in growth-restricted fetuses using MRI"
- **Nitzan Avidan-Pearl**, Moti Freiman, Technion "Neural Network Methods Enhance Test-Retest Repeatability of IVIM Parameter Estimation in Pancreatic Imaging"
- **Dan Cohen**, Amnon Bar-Shir, Weizmann Institute of Science "In Vivo Fluorine Metabolic Imaging (FMI) of Cancer"
- **Doreen Padan**, Michal Neeman, Weizmann Institute of Science "Placental oxygen transfer dynamics upon murine gestational hypoxia offer a possible novel adaptation mechanism"

13:05-13:50

Lunch Break

13:50-14:20

LECTURE BY SIEMENS

14:20 – 15:05

KEYNOTE LECTURE by **Dr. Avinoam Bar-Zion**, Biomedical Engineering, Technion

**"Ultrasound-enhanced blood-brain barrier opening: from MRI guidance to acoustic control"**

15:05-15:25

Coffee break

15:25-16:40

### Identifying and Enhancing Biomarkers for Clinical Impact

Chair: **Prof. Michal Neeman**, Weizmann Institute of Science (10 minutes allotted for each presentation + 2 minutes for discussions).

- **Narmeen Haj**, Katrien Vandoorne, Technion "Visualizing Vascular Bone Marrow Niche Alterations in Diabetes"
- **Tamir Shor**, Moti Freiman, Technion "T1-PILOT: Optimized Trajectories for T1 Mapping Acceleration"
- **Tammy Riklin Raviv**, "Unsupervised Bias Field Correction via Deep Image Decomposition and Symmetry"
- **Lital Ben Moyal**, Michal Neeman, Weizmann Institute of Science "MRI-based monitoring of iron deficiency in the maternal-fetal unit"
- **Rotem Benisty**, Moti Freiman, Technion "Isotropic Abdominal MRI Restoration from Anisotropic Data using Generative Multi-Plane Deep Learning"
- **Hyla Allouche-Arnon**, Amnon Bar-Shir, Weizmann Institute of Science "Quantitative In vivo Mapping the HSV1-TK Reporter Gene Expression with ?hot-spot? 2H-MRI"

16:40-16:45

CLOSING REMARKS

Organizing committee

**Dr. Rita Schmidt**,  
Weizmann Institute of Science

**Dr. Edna Furman-Haran**,  
Weizmann Institute of Science

**Dr. Daphna Link-Sourani**  
Technion Human MRI Research Center

[Registration and Abstracts submission for oral talk](#)



Abstracts submission Deadline  
**10 March, 2025**

Conference Coordinator  
**May Bender**  
maybe@weizmann.ac.il