



**Marian Gertner Institute
for Medical Nanosystems**
Faculty of Engineering & Faculty of Medicine
Tel Aviv University

Annual Meeting

The Marian Gertner Institute for Medical Nanosystems

Tel Aviv University

Broadcom (Samueli) Building 001

March 12th, 2025

Program

09:30 – 10:00

Gathering & coffee

10:00 – 10:10

Prof. Karen Avraham, Dean, Faculty of Medical and Health Sciences

Prof. Noam Eliaz, Dean, Faculty of Engineering

Opening remarks

Session 1

Chair: Prof. Gili Bisker

10:10 – 10:20

Ekaterina Kuznetsova, Remote Control on Cell Signaling Using Magnetic Gels

10:20 – 10:30

Buwei Shao, ASO-Mediated Knockdown of PHOX2B to Rescue CCHS

Phenotypes

10:30 – 10:40

Talya Bar-Am, Monoclonal Antibodies to Combat Antibiotic-Resistant Bacteria

10:40 – 10:50

Ilia Mezdrokhin, Modeling nanobubble dynamics at low ultrasound frequencies for theranostic applications

10:50 – 11:00

Rami Khoury, Targeted nanoparticles overcome the suppressive tumor microenvironment of BRCA1-mutated breast cancer brain metastasis

11:00 – 11:10

Pavel Bezrukov, Silvered Vaterite – Light Driven Metamaterials for biomedical application

11:10 – 11:30

Coffee break

Session 2

Chair: Prof. Lihi Adler-Abramovich

11:30 – 11:40

Tania Barnatan, Utilizing targeted nanoparticles to overcome resistance mechanisms in BRCA1-mutated high-grade serous ovarian cancer

11:40 – 11:50

Tehila Cohen, From Cells to Behavior: Investigating THC, Neurogenesis, and Stress Responses at Multiple Scales

11:50 – 12:00

Tiran Bercovici, Ultrasound-activated nanodroplets for precision drug delivery and imaging in cancer therapy

12:00 – 12:10

América García Alvarado, P-Selectin-Targeted Nanoparticles for Dabrafenib and Trametinib Delivery in Pediatric Low-Grade Gliomas Using 3D Microfluidic Models

12:10 – 12:20

Yulia Chulanova, Using Lipid Nanoparticles to Deliver Genetic Medicine for Duchenne Muscular Dystrophy

12:20 – 12:25

Prof. Lihi Adler-Abramovich and Prof. Gili Bisker, Concluding remarks

12:25 – 12:30

Group photo

12:30 – 13:30

Lunch