



BioMed@TAU Research Hub Bioengineering Materials, Cells & Tissues

Organs-on-a-Chip

Tuesday, March 19, 2019

Museum of Natural History, Tel Aviv University

Organized by Dr. Ben Maoz & Dr. Gad Vatine

SCIENTIFIC PROGRAM

08:30 Registration Opens

09:00 OPENING REMARKS

09:10-10:30 Session I: Cancer and Metabolism

Chair: Koby Nahmias

09:10 Maria Khoury (Nati Korin lab, Technion)

Microfluidics for designing cardiovascular nano-medicines

09:30 Prof. Mahmud Huleihel (BGU)

The use of 3-dimension systems to induce the development of spermatogenesis in vitro

09:50 Dr. Ofra Benny (HUJI)

Towards drug delivery and tumor-on-chip

10:10 Dr. Muneef Ayyash (Koby Nahmias lab, HUJI)

Next generation of organ-on-chip / Smart micro-physiological flux analyzer

10:30-11:00 Coffee break

11:00 - 12:00 Session II: Vasculature

Chair: Ofra Benny

11:00 Dr. Gad Vatine (BGU)

Organ-Chip and patient specific iPSCs-based BBB platform can predict inter-individual differences

11:20 Dr. Ben Maoz (TAU)

Organs-On-a-Chip: A new tool for the study of human physiology

11:40 Prof. Shulamit Levenberg (Technion)

Microfluidics device for rapid antimicrobial susceptibility testing

12:00-12:45 Lunch break

12:45-14:30 Session III: Technologies

Chair: Josue Sznitman

12:45 Plenary Talk

Prof. Albert Van den Berg (University of Twente, The Netherlands)

From Lab on Chip to Organ on Chip

13:30 Prof. Esti Meyron Holtz (Technion)

Development of a three dimensional gut platform from human cell-lines to study the effects of complex foods and intestinal inflammatory processes in vitro

13:50 Dr. Joshua Owen (HISENTS team at Leeds)

High-throughput electrochemical sensing platform for screening biomembrane interactions

14:10 Dr. Arbel Artzy-Schnirman (Josue Sznitman lab, Technion)

Advanced airway-on-chip platforms: Bridging in vivo and in vitro pulmonary interfaces

14:30-15:00 Coffee break

15:00-16:15 Session IV: Lab-on-Chip

Chair: Shulamit Levenberg

15:00 Prof. Gilad Yossifon (Technion)

Electrokinetics based lab-on-a-chip/particle platforms

15:20 Prof. Doron Gerber (BIU)

An integrated microfluidic array approach for personalized cancer drug sensitivity and resistance assay

15:40 Dr. Hadar Ben Yoav (BGU)

Intelligent multi-electrode arrays for in situ analysis of biomolecules

16:00 Tatyana Kuperman (David Elad lab, TAU)

Tissue-engineered endometrial barrier for mechanobiology studies

16:15 Concluding remarks

Register to attend | For questions contact alanarhassan@tauex.tau.ac.il

