

Israel Stem Cell Society (ISCS) Meeting

STUDENTS IN FOCUS

July 5, 2023

Bar-Ilan University
Nanotechnology Building, Building 206, Auditorium

Program:

08:55 - 09:00 Opening remarks: **Eran Meshorer**, Head, Israel Stem Cell Society

09:00 Opening Lecture. Chair: **Nitzan Gonen**, Bar-Ilan University
Cédric Blanpain, Université Libre de Bruxelles
Stem cell plasticity and oncology induced reprogramming

9:30 - 10:55 **Session I: Organoids and disease modelling**

Chairs: **Ruthie Ashery-Padan**, Tel-Aviv University
Gad Vatine, Ben-Gurion University

Daniel Steinberg, Aqeilan lab, Hebrew University

Epilepsy in a dish: using brain organoids to study WWOX-related neurological disorders

Noam Kazma, Caspi lab, Technion

Strategies for maturation of cardiovascular organoids for modeling acquire and inherited cardiomyopathy

Uria Aviel, Eiges lab, Shaare Zedek

Deciphering the role of SMCHD1 in disease and development

Walaa Oweis, Meshorer lab, Hebrew University

Cellular systems for the identification of pathological pathways in Huntington's disease

Ashwani Choudhary, Stern lab, Haifa

Early hyperexcitability phenotype in cortical neurons derived from patients with ASD-related mutation can be transferred via exosomes

Yam Ben-Haim, Urbach lab, Bar-Ilan University

Modeling multisystemic nuclear envelopathies caused by LAP1 mutations using hPSCs

Aline Habib, Ben-Yosef lab, Ichilov

Reversing the cancer phenotype of colon organoids by correcting the heterozygote APC mutation

10:55 – 11:20 Coffee break

11:20 – 12:55

Session II: Stem cells, tissues & organisms

Chairs: **Shani Stern**, Haifa University
Nadav Sharon, Technion

Shalini Dimri-Wagh, Shalom-Feuerstein lab, Technion

Repair of total stem cell loss: a lesson from the cornea

Sacha Lebon, Biton lab, Weizmann Institute

Dissecting a novel stem-cell defense mechanism in early epithelial-specific responses to an enteric bacterial pathogen

Marco Canella, Shoshkes-Carmel lab, Hebrew University

Telocytes are an essential component of the hair follicle stem cell niche

Tamar Frankovits, Omri Wurtzel, Tel-Aviv University

Planarian stem cell identity is maintained during cell cycle

Shani Talice, Rosental lab, Ben-Gurion University

Candidate stem cell isolation and transplantation in Hexacorallia

Neta Hart, Elkouby lab, Hebrew University

Decoding mechanisms and lineages of germline stem cells in the Zebrafish ovary

Erez Elfassy, Gazit lab, Ben-Gurion University

Chronic Salmonella infection impairs the transplantation ability of Hematopoietic Stem Cells, but the potential for recovery exists

Gisele Schudy, Schlesinger lab, Hebrew University

Toward the development of potency index for mesenchymal stem cells

12:55 – 13:55

Lunch break/Round table discussion with **Cédric & Maria Elena**

14:00 – 15:25

Session III: Pluripotency, differentiation & tissue modelling

Chairs: [Sharon Schlesinger](#), Hebrew University Faculty of Agriculture
[Yonatan Stelzer](#), Weizmann Institute

[Mazal Cohen-Gulkar](#), Ashery-Padan Lab, Tel-Aviv University

Identification of mechanisms of tissue differentiation reveals new genetic risk factors for age-related blindness

[Naama Farag](#), Nachman lab, Tel-Aviv University

Prediction and control of Definitive Endoderm morphologies in an embryo-like in-vitro models

[Guy Haim-Abadi](#), Benvenisty lab, Hebrew University

Generation, Genomic Characterization and Differentiation of Triploid Human Embryonic Stem Cells

[Shir Liya Dadon](#), Ram lab, Hebrew University

Characterizing cell cycle effect on early differentiation in embryonic stem cells

[Aviya Stopel](#), Gonen lab, Bar-Ilan University

'Testis in a dish': establishing an in vitro system to model the testis

[Shlomit Edri](#), Levenberg lab, Technion

In vitro formation of tissue-like pancreas from murine pluripotent stem cell using organoid culture and 3D bioprinting

[Meshi Zorsky](#), Vatine lab, Ben-Gurion University

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

15:25

[Maria-Elena Torres-Padilla](#), Helmholtz Center Munich

Epigenetic mechanisms of cellular plasticity and reprogramming to totipotency

Chair: [Ruby Shalom-F Feuerstein](#) (TEC)

15:55

Concluding Remarks: [Nitzan Gonen](#), ISCS Board