



The 19th BIENNIAL CANCER BIOLOGY RESEARCH CENTER MEETING

May 2023

SCIENTIFIC PROGRAM











Wednesday May 10th

13:30-14:30 Registration, Reception, and Exhibition

14:45-15:25 Session I

Sponsored by MERCK

KEYNOTE LECTURE

Chair: Ronit Satchi-Fainaro

Sackler Faculty of Medicine

14:45-15:25 Gabriele Bergers

VIB KU Leuven, Belgium

A vascular perspective to aid anti-tumor immunity

14:30-14:45 **Opening Session**

OPENING AND GREETINGS

Prof. Ronit Satchi-Fainaro

Director, Cancer Biology Research Center

Prof. Karen Avraham

Dean, Sackler Faculty of Medicine

Prof. Abdussalam Azem

Dean, George S. Wise Faculty of Life Sciences

Mr. Moshe Bar-Haim

Director, Israel Cancer Association

Wednesday May 10th

15:30-16:15 Session II

ANTIBODY-BASED CANCER THERAPEUTICS

Chairs: Uri Rozovski, Rabin Medical Center & Yoni Haitin, Sackler Faculty of Medicine

15:30-15:45 Adi Barzel

George S. Wise Faculty of Life Sciences In Vivo engineering of T cells and B cells

15:45-16:00 Itai Benhar

George S. Wise Faculty of Life Sciences
Antibody-targeted lipid-nanoparticle
mediated inhibition of the GPCR RXFP1
signaling pathway as a therapeutic
approach for ovarian cancer

16:00-16:15 Gal Markel

Rabin Medical Center

Inherent immune resistance mechanisms in melanoma

16:15-17:15 Session III

THERAPEUTICS AND DIAGNOSTICS

Sponsored by AstraZeneca

Chairs: Annat Raiter, Rabin Medical Center & Dan Grisaru, Tel Aviv Sourasky Medical Center

16:15-16:30 Marcelo Ehrlich

George S. Wise Faculty of Life Sciences
Exploiting cancer-induced and therapyaugmented defects to antiviral responses
for virus-mediated killing of cancer cells

16:30-16:45 **Dov Hershkovitz**

Tel Aviv Sourasky Medical Center
Liquid biopsy for cancer diagnosis and
monitoring

16:45-17:00 Shamgar Ben-Eliyahu

Sagol School of Neuroscience

Improving the odds for colorectal cancer patients: Perioperative inhibition of COX-2 and B-adrenergic signaling improves tumor biomarkers of metastasis and 5-year disease-free-survival

17:00-17:15 Ilan Tsarfaty

Sackler Faculty of Medicine

Multi-omics systems biology as a novel tool for precision medicine: MET/p53/BRCA1 as models

17:15–17:45 Coffee break and visit the exhibition



17:45-18:15 Session IV

FLASH TALKS

Sponsored by Merck

Chairs: Shelly Loewenstein, Tel Aviv Sourasky Medical Center & Guy Lahat, Tel Aviv Sourasky Medical Center

17:45-17:48 Nofar Erlichman

George S. Wise Faculty of Life Sciences
Tumor cell-autonomous and PD-1induced activities of PD-L1 in breast
cancer

Wednesday May 10th

17:48-17:51 **Eilam Yeini**

Sackler Faculty of Medicine

P-Selectin axis plays a key role in microglia immunophenotype and glioblastoma progression

17:51-17:54 **Emily Boxer**

George S. Wise Faculty of Life Sciences

Boosting CAR T cell responses in glioblastoma by remodeling the extracellular matrix

17:54-17:57 Inbal Reuveni

George S. Wise Faculty of Life Sciences
Site-specific in vivo T cell engineering to
express chimeric antigen receptors

17:57-18:00 Rana Masri

Sackler Faculty of Medicine

Studying the effect of fusobacterium nucleatum bacteria on the Wnt signaling pathway

18:00-18:03 George Abu Khadra

Sackler Faculty of Medicine

The interplay between MET, Wnt and their signaling modifiers control cell motility and metastasis

18:03-18:06 Tal Caller

Sheba Medical Center

Small extracellular vesicles from failing hearts accelerate tumor growth

18:06-18:09 Nahida Sakis

Sagol School of Neuroscience and School of Psychological Sciences

Perioperative psychological stress role in facilitating pro-metastatic processes

18:09-18:12 **Johanna Zerbib**

Sackler Faculty of Medicine

Aneuploid cells depend on multiple RNA and protein degradation pathways to compensate for their karyotype

Wednesday May 10th

18:12-18:15 Rakefet Ben-Yishay

Sheba medical center

Modeling cancer cell plasticity and transdifferentiation therapy using patientderived organoids

18:15-19:00 Session V

TUMOR MICROENVIRONMENT

Chairs: Orit Uziel, Rabin Medical Center & Tami Rubinek, Tel Aviv Sourasky Medical Center

18:15-18:30 Neta Erez

Sacker Faculty of Medicine

Stromal and immune plasticity shape the metastatic microenvironment

18:30-18:45 Adit Ben-Baruch

George S. Wise Faculty of Life Sciences

TME-driven generation of cancer stem cells in breast cancer: Unconventional roles for STAT3 and p65

Issac Witz 18:45-19:00

George S. Wise Faculty of Life Sciences

Hemoglobin-derived proteins/peptides function as an innate defense mechanism against cancer cells

19:00-19:40 Poster Session

18:30-20:30 Dinner



21:00 LIOR SUCHARD



Thursday May 11th

05:00-07:45 Sunrise guided birding tour in a Safari wagon







08:45-10:30 Session VI

EMERGING THERAPIES

Sponsored by AstraZeneca 2



Medical Center & Ido Wolf, Tel Aviv Sourasky Medical Center

Yaron Carmi 09:00-09:15

Sackler Faculty of Medicine

From basic discovery to cell engineeringendowing T cells with ADCC abilities to treat cancer

09:15-09:30 Tali llovitsh

> The Iby and Aladar Fleischman Faculty of Engineering

Bubbles-enhanced ultrasound mechanotherapy for noninvasive cancer surgery

09:30-09:45 Talia Golan

Sheba Medical Center

Spectrum of response to platinum and PARPi in HR-deficient pancreatic cancer

09:45-10:00 Ra'anan Berger

Sheba Medical Center

Enabling new technologies in precision and individualized oncology

10:00-10:15 Ido Wolf

Tel Aviv Sourasky Medical Center

From genomic alteration to metastases formation, or how did these cancer cell get to the brain?

10:15-10:30 Michal Besser

Rabin medical Center
Cell and gene therapy

10:30–11:00 Coffee break and visit the exhibition



Thursday May 11th

11:00-12:30 Session VII

PEDIATRIC ONCOLOGY

Sponsored by U NOVARTIS

Chairs: Dinorah Friedmann-Morvinski, George S. Wise Faculty of Life Sciences & Helen Toledano, Schneider Children's Medical Center

11:00-11:15 Dinorah Friedmann-Morvinski

George S. Wise Faculty of Life Sciences
Utilizing preclinical models to develop
targeted therapies for pediatric brain
tumors

11:15-11:30 Ronit Elhasid

Dana Medical Center, Tel Aviv Medical Center

Suggested role for NETs formation in Ewing sarcoma immune microenvironment and response to chemotherapy

11:30-11:45 **Benny Dekel**

Sheba Medical Center

Repurposing Alzheimer's drugs to pediatric oncology

11:45-12:00 Helen Toledano

Schneider Children's Medical Center From bench to bedside: targeted therapy

for pediatric solid/CNS tumors

12:00-12:15 Esther Berko

Schneider Children's Medical Center of Israel

Circulating tumor DNA to guide targeted therapy in neuroblastoma

12:15-12:30 Ruty Shai

Sheba Medical Center

Mastering the master regulators in pediatric brain tumors

Thursday May 11th

12:30-13:30 Session VIII

FROM BIG DATA TO GENETIC ANALYSIS

Sponsored by



Chairs: Noam Shomron, Sackler Faculty of Medicine & Merav Cohen, Sackler Faculty of Medicine

12:30-12:45 **Noam Shomron**

Sackler Faculty of Medicine

DNA and RNA as insights for cancer development

12:45-13:00 Tamir Tuller

The Iby and Aladar Fleischman Faculty of Engineering

Deciphering and targeting silent and seemingly-silent cancer mutations using computational models

13:00-13:15 Asaf Madi

Sackler Faculty of Medicine
Immune cell interactions in GBM

Meray Cohen 13:15-13:30

Sackler Faculty of Medicine

Dissecting the immune controlled signaling networks of the tumor microenvironment

13:30-14:45 Lunch



15:00-16:30 Session IX

HEMATO-ONCOLGY

Sponsored by המרכז לחקר המטואונקולוגי

Chairs: Shai Izraeli, Schneider Children's Medical Center & Drorit Neumann, Sackler Faculty of Medicine

15:00-15:15 Adi Zoref-Lorenz

Meir Medical Center

Immune activation in hematologic malignancies- a friend or a foe?

Thursday May 11th

15:15-15:30 **Elad Jacoby**

Sheba Medical Center

Metabolic conditioning of CAR-T cells

Michael Milyavsky 15:30-15:45

Sackler Faculty of Medicine

Regulation of normal and leukemic blood stem cells survival by the bone marrow microenvironment

15:45-16:00 Shai Izraeli

Schneider Children's Medical Center Leukemia - from bedside to bench and back

16:00-16:15 Ofir Wolach

Rabin Medical Center

Casting a NET on hematological malignancies

16:15-16:30 **Drorit Neumann**

Sackler Faculty of Medicine

Erythropoietin in the osteo-hematological niche

16:30-17:00 Session X

FLASH TALKS

Sponsored by MERCK

Chairs: Moshe Giladi, Tel Aviv Sourasky Medical Center & Amir Sonnenblick, Tel Aviv Sourasky Medical Center

16:30-16:33 Itai Meir Caspit

George S. Wise Faculty of Life Sciences
The interplay of glioma-associated blood vessels with microglia and monocyte-

derive macrophages

16:33-16:36 Lea Monteran

Sackler Faculty of Medicine

Characterizing the evolving immune microenvironment during breast cancer bone metastasis progression

16:36-16:39 Hagai Levi

Raymond and Beverly Sackler Faculty of Exact Sciences

Polygenic prediction models for early breast cancer detection on diverse ethnic groups in Israel

Thursday May 11th

16:39-16:42 Sahar Israeli Dangoor

Sackler Faculty of Medicine
CCL2-CCR2/4 axis has a crucial role
in astrocyte-breast cancer interplay
promoting brain metastasis

16:42-16:45 Orit Adir

George S. Wise Faculty of Life Sciences
Microglial Junb promotes the malignant
phenotype of melanoma brain metastasis
cells

16:45-16:48 Iris Kamer

Sheba Medical Center

Establishment ex-vivo culture from pleural effusions of metastatic-NSCLC as a model to ICIs response

16:48-16:51 Dikla Atias

Sheba Medical Center

The stromal role in BRCA-associated pancreatic cancer therapeutic resistance

16:51-16:54 Daniella Vaskovich-Koubi

Sackler Faculty of Medicine

Elucidating the mechanism by which a nano-vaccine sensitizes colorectal cancer to immunotherapy

16:54-16:57 Adi Rubin

Tel Aviv Sourasky Medical Center

Obesity and gastric cancer aggressiveness – a new link

16:57-17:00 Siva Sai Muddineni

Sackler Faculty of Medicine

CREB1-MCL1 axis protects human hematopoietic stem cells from DNA-damage induced apoptosis

17:00–17:20 Coffee break and visit the exhibition



Thursday May 11th

17:20-18:00 Session XI

KEYNOTE LECTURE

Sponsored by Edmond J. Safra Center for Bioinformatics
Tel Aviv University

Chair: Elhanan Borenstein

Raymond & Beverly Sackler Faculty of Exact Sciences

Eytan Ruppin, *Center for Cancer Research, National Cancer Institute*Next generation transcriptomics-based precision oncology

18:00-18:30 Session XII

THE PATIENT'S AND INDUSTRY'S PERSPECTIVES

Chair: Ronit Satchi-FainaroSackler Faculty of Medicine

18:00-18:15 Mati Gill

CEO. AION Labs

A new model for tech and bio co-development

Friday May 12th

Thursday May 11th

18:15-18:30 Tamir Gilat

Chairman, Israel Cancer Research Fund (ICRF)

Outliving your expiration date-A human rat lab

18:30-19:30 Poster Session

18:30-20:30 Dinner

21:00

MUSIC & DANCING



07:30-08:30 Breakfast

t

08:30-10:00 Session XIII

MOLECULAR-CLINICAL TUMOR BOARD

Chair and Moderator: Raya Leibowitz,

Shamir Medical Center

08:30-09:15 **Topic 1 - Targeting signaling pathways**

in cancer

Sponsored by Ulli Bristol Myers Squibb

Ronen Brenner, *Wolfson Medical Center* BRAF & MEK inhibition – is it a real BRAF

mutated tissue agnostic treatment?

Nirit Yarom, Shamir Medical Center

The long and winding road towards K-ras inhibition in solid tumor

Hagit Eldar-Finkelman

Sackler Faculty of Medicine

Outsmarting cancer – developing novel TKIs as means to overcome drug resistance in leukemia

Rina Rosin-Arbesfeld

Sackler Faculty of Medicine

Targeting Wnt signaling – can we cure cancer with antibiotics?

Friday May 12th

Chair and Moderator: Raya Leibowitz,

Shamir Medical Center

09:15-10.00 **Topic 2 - Emerging immunotherapeutic** approaches

Sponsored by AstraZeneca

Ronnie Shapira-Frommer

Sheba Medical Center

Overcoming immunotherapy resistance by tyrosine kinase and checkpoint blockade combination

Jair Bar

Sheba Medical Center

Checkpoint inhibitors in cancer immunotherapy – have we neglected the B-cells so far?

Ayelet Avraham

Shamir Medical Center

Getting better with a little help from a costimulatory friend? Deciphering the spatial and cellular expression of TNFSF4 (OX40L) in melanoma tumors

Friday May 12th

10:00-10:40 Session XIV

KEYNOTE LECTURE

Chair: Yuval Ebenstein

Raymond & Beverly Sackler Faculty of Exact Sciences

10:00-10:40 Andrew P. Feinberg

Director, Center for Epigenetics, John Hopkins University

Epigenetic plasticity in cancer

10:40–11:00 Coffee break and visit the exhibition



Friday May 12th

11:00-11:45 Session XV

MECHANISMS OF CANCER BIOLOGY

Chairs: Liat Drucker
Meir Medical Center

11:00-11:15 Yaara Oren

Sackler Faculty of Medicine

Beyond Darwin: understanding cancer

persister cells

11:15-11:30 Uri Ben-David

Sackler Faculty of Medicine

Identifying vulnerabilities of aneuploid cells: Genomic and functional approaches

11:30-11:45 Yona Keisari

Sackler Faculty of Medicine

An intratumoral alpha radiation device and immunotherapy: a breakthrough in cancer treatment

Friday May 12th

11:45-12:30 Session XVI

BRAIN NEOPLASMS

Chairs: Ilan Voloviz, Tel Aviv Sourasky Medical Center & Rachel Grossman, Tel Aviv Sourasky Medical Center

11:45-12:00 **Lior Mayo**

George S. Wise Faculty of Life Science
Shutting down glioblastoma: how
astrocytes control tumor progression

12:00-12:15 Ilan Voloviz

Tel Aviv Sourasky Medical Center
Immune – cell frequencies provide the strongest survival prognosticators for qlioblastoma–an immune dessert

12:15-12:30 Reuven Stein

George S. Wise Faculty of Life Sciences

Diverse spatial distribution of microglia and monocytes-derived macrophages in different brain tumors

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Friday May 12th

12:30-13:15 Session XVII

TECHNOLOGICAL INNOVATION IN CANCER

Chairs: Leor Zach

Tel Aviv Sourasky Medical Center

12:30-12:45 Eric Shifrut, George S. Wise Faculty of
Life Sciences, Sackler Faculty of Medicine
& Tel Aviv Sourasky Medical Center
CRISPR discovery platforms for human

12:45-13:00 Vered Padler-Karavani

T cell therapies

George S. Wise Faculty of Life Science
Aiming at the sweet spot of cancer

13:00-13:15 Yuval Ebenstein

Raymond & Beverly Sackler Faculty of Exact Sciences

Epigenetic transformations precede genetic aberrations in early-stage kidney cancer

13:15-13:30 Awards ceremony and closing remarks
Prof. Ronit Satchi-Fainaro









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Exhibitors

















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