

# Tuesday, October 2, 2018

Get-together Reception, Dan Carmel Hotel

## Wednesday, October 3, 2018

**Opening Session - Plenary** 8:30-Chair: Gad Rennert, Israel 9:20

**OPENING REMARKS** 

Gad Rennert, Director, Clalit National Cancer Control Center and National Personalized Medicine Program

Boaz Golany, Vice President For External Relations & Resource Development, Technion - Israel Institute of Technology 08:30

Avi Goldberg, Director, Carmel Medical Center, Clalit Health Services

Miri Ziv, CEO, Israel Cancer Society

**Keynote Lecture 1** 

APPROACHES TO COMPLEX TRAIT ANALYSIS 08:50

Walter Bodmer, UK

Coffee, poster viewing and visit the exhibition 09:20

05.20	copy control from the time time time to the community of				
	Hall A		Hall B		
9:40- 13:00	Parallel Session 1A - Clinical Genetics Chairs: Lina Basel Salmon & Tzippora Falik Zaccai, Israel	9:40- 13:00	Parallel Session 1B - Population Genetics Chairs: Harry Ostrer, USA & Shalom Wald, Israel		
09:40	OLIGOGENIC, MULTIGENIC AND BURDEN OF MUTATIONS IN NEURODEGENERATIVE DISORDERS EVEN IN FOUNDER POPULATIONS Avi Orr-Urtreger, Israel	09:40	SOURCES OF THE GENETIC DIVERSITY IN CONTEMPORARY JEWISH POPULATIONS  Alexander Rouen, France		
10:00	THE ROLE OF MEDICAL GENETICIST'S IN INTERPRETATION OF WES OF HIS PATIENTS: RABIN MEDICAL CENTER EXPERIENCE  Lina Basel Salmon, Israel	10:00	THE GENETICS OF BRONZE AND IRON AGES POPULATIONS OF THE LEVANT Liran Carmel, Israel		
10:20	GENETIC VARIATION AND DISEASE RISK OF THE QATARI POPULATION Ronald G. Crystal, USA	10:20	HAPLOTYPE SHARING IN FOUNDER POPULATIONS  Shai Carmi, Israel		
10:40	MONOGENIC DISEASES: FROM PHENOTYPES TO GENES, DISEASE PREVENTION AND NOVEL MOLECULAR PATHWAYS  Ohad Birk, Israel	10:40	JEWISH DIASPORA SITES FROM CLASSICAL ANTIQUITY AND MIDDLE AGES <b>Leonard Rutgers</b> , The Netherlands		
	THE "MAGIC IN THE WEB OF IT": HOW A RARE DISORDER IS UNTANGLING		HADLOCDOLID LIZEAO CENETIC INCICHT INTO THE LEVANTINE PRONZE ACE		

11:00

POPULATION HETEROGENEITY OF NONSYNDROMIC CLEFT LIP AND PALATE 11:20

Rajiva Raman, India

Ellen Sidransky, USA

THE KEY ROLE OF THE ZINC TRANSPORTER SLC30A2/ZNT2 IN TRANSIENT

11:40 **NEONATAL ZINC DEFICIENCY (TNZD)** 

THE MYSTERIES OF PARKINSON DISEASE

Yehuda Assaraf, Israel

EXPANDING THE FOUNDER MUTATION SPECTRUM OF THE ISRAELI

12:00 **POPULATION** 

11:00

Claudia Gonzaga Jauregui, USA

B4GALT1: A NOVEL GENE FOR CVD RISK FACTORS DISCOVERED IN THE OLD

12:15 ORDER AMISH Cristopher Van Hout, USA

ASSOCIATION BETWEEN THE RISK OF MONOCLONAL B-CELL

LYMPHOCYTOSIS (MBL) AND THE CHRONIC LYMPHOCYTIC LEUKEMIA (CLL) 12:30

POLYGENIC RISK SCORE (PRS)

Geffen Kleinstern, USA

CREATION OF ISRAEL'S FIRST NATIONAL POPULATION BASED BIOBANK -

12:40 FROM PATIENT ENGAGEMENT TO EXECUTION

Varda Shalev, Israel

A NOVEL PATHWAY IS RESPONSIBLE FOR A LETHAL CARDIOMYOPATHY

AMONG ARAB CHRISTIANS 12:50

Tzipora Falik Zaccai, Israel

Lunch, poster viewing and visit the exhibition 13:00

**ROUND TABLE DISCUSSION - GENETIC ARCHEOLOGY:** 

HAPLOGROUP J-Z640 - GENETIC INSIGHT INTO THE LEVANTINE BRONZE AGE

Moderator: Harry Ostrer, USA

PREHISTORY IN ISRAEL Israel Hershkovitz, Israel **MEGIDDO** 

Michael Waas, Israel

11:20

Israel Finkelstein, Israel

**QUMRAN** 

Yossi Naggar, Israel **BEIT SHEARIM** Gideon Avni, Israel





# Wednesday, October 3, 2018 (cont.)

14:00- 15:50		Chair: Avi Orr-Urtreger & Ohad Birk, Israel				
14:	00	Keynote Lecture 2  MOLECULAR INTERPRETATION IN GENETICS AND GENOMICS OF PSYCHIATRIC DISORDERS				
		Elliot Gershon, USA				
14:	20	THE GENETICS OF HYPERLIPIDEMIA				

Ronen Durst, Israel

MOLECULAR AND PRENATAL DIAGNOSIS FOR SOME OF THE INHERITED EYE DISEASES AND GENE DISCOVERIES 14:40

Sundaresan Periasamy, India

GENETIC VARIANTS IN THE METABOLISM OF OMEGA-6 AND OMEGA-3 FATTY ACIDS: THEIR ROLE IN THE DETERMINATION OF NUTRITIONAL REQUIREMENTS AND CHRONIC DISEASE RISK 15:00

Artemis P. Simopoulos, USA

GENOMIC BIOMARKERS PREDICTING ALZHEIMER'S DISEASE 15:20

David Gurwitz. Israel

IDENTIFICATION OF CLUSTERS FOR A GROUP OF RARE DISEASES (MUCOPOLYSACCHARIDOSES) IN BRAZIL AND ECUADOR

15:40 Sandra Leistner Segal, Brazil

Coffee, poster viewing and visit the exhibition 15:50

Plenary Session 3 - Genetic Screening 16:20-NDORSED BY THE ISRAEL CANCER ASSOCIATION

18:10 Chairs: Ephrat Levy-Lahad & Eliezer Robinson, Israel

POLYGENIC RISK SCORES AND LONGITUDINAL HEALTH STUDIES AT 23ANDME 16:20

Nicholas Eriksson, USA

POPULATION BASED GENETIC TESTING FOR PRIMARY PREVENTION 16:40

Ranjit Manchanda, UK

POPULATION SCREENING FOR BRCA1 AND BRCA2 MUTATIONS 17:00

Ephrat Levy-Lahad, Israel

GENETIC TESTING FOR BRCA1 AND BRCA2 IN THE CANADIAN POPULATION 17:20

Steven Narod, Canada

UNIVERSAL SCREENING FOR THE CDC TIER 1 GENOMIC CONDITIONS: OPPORTUNITIES FOR HEALTH SYSTEMS, GOVERNMENT HEALTH AGENCIES, AND SEQUENCING

**INITIATIVES** 17:40

8:00-

10:40

Jill Hagenkord, USA

BEFRIEND YOUR BOOBS (BYB), A BREAST CANCER HIGH-GRADE SCHOOLS INTERVENTION: GENETICS, LIFESTYLE AND EARLY DIAGNOSIS

18:00 Michelle Ferris, UK

18:10 End of day's sessions

# Thursday, October 4, 2018

### Hall A

#### Parallel Session 4A - Genetics Methods Chairs: Gil Atzmon & Yehuda Assaraf, Israel

EPIGENETIC STRESS RESPONSES AND STEM CELL AGING 08:00

Karl Lenhard Rudolph, Germany

ERRORS AND EDITS IN THE CENTRAL DOGMA 08:20

Itzhak Pilpel, israel

RNA AND DNA EDITING MEDIATED BY ADARS AND APOBECS PROTEINS 08:40

Erez Levanon, Israel

FUNCTIONAL APPROACHES FOR UNDERSTANDING THE CONSEQUENCES OF

09:00 **GENETIC VARIATION** Harry Ostrer, USA

CRISPR BASED FUNCTIONAL GENOMICS FOR STUDYING THE CELL BIOLOGY

09:20 OF NEURODEGENERATIVE DISEASES

Ophir Shalem, USA

#### Hall B

Parallel Session 4B - Cancer Genetics Risk Identification ENDORSED BY ECP: EUROPEAN CANCER PREVENTION

Chair: Jaak Janssens, Belgium

RCT OF PREVENTING OVARIAN CANCER IN BRCA CARRIERS WITH ASPIRIN

Amit Oza, Canada

**BREAST CANCER RISK GENES** 

Judy Garber, USA

IDENTIFYING CANCER WITH A MULTI-ANALYTE BLOOD TEST - CancerSEEK

Nickolas Papandopoulos, USA

THE DISASTROUS MANIA OF THINKING': WHY PANEL TESTING FOR CANCER RISK HAS BECOME BROADER AND BROADER

William Foulkes, Canada

CHARACTERIZING VARIANTS OF UNCERTAIN SIGNIFICANCE (VUS)

Fergus J. Couch, USA





IIIu	rsday, October 4, 2018 (Cont.)  Hall A		Hall B	
8:00-	Parallel Session 4A - Genetics Methods (Cont.)	Parallel Session 4B - Cancer Genetics Risk Identification (Cont.)  ENDORSED BY ECP: EUROPEAN CANCER PREVENTION		
10:40	Chair: Gil Atzmon & Yehuda Assaraf, Israel			
		Chair: Ja	aak Janssens, Belgium	
09:40	CALLING VARIANTS - WHAT IS THE GOLD STANDARD?  Gil Atzmon, Israel	09:40	A CLINICAL DECISION SUPPORT TOOL TO PREDICT CANCER RISK FOR COMMONLY TESTED CANCER-RELATED GERMLINE MUTATIONS Danielle Braun, USA	
		09:50	USE OF WHOLE TRANSCRIPTOME DATA FROM ORAL SQUAMOUS CELL CARCINOMA FOR POSSIBLE IMMUNOTHERAPEUTIC TARGETS <b>Bidyut Roy</b> , India	
10:00	EPITRANSCRIPTOMICS - A NEW LEVEL OF GENE EXPRESSION REGULATION Gidi Rechavi, Israel	10:00	A TALE OF TWO LYNCHES  Gili Reznick Levi, Israel	
		10:10	THE CENTENARIAN EPIGENOME - AN ENIGMATIC ENVIRONMENT-GENOMI CROSSTALK UNDERLYING THE LONGEVITY MECHANISM Danielle Gutman, Israel	
10:20	IDENTIFICATION OF TUMOR-SUPPRESSIVE AND ONCOGENIC REGULATORY ELEMENTS IN THE HUMAN GENOME USING CRISPR-BASED FUNCTIONAL GENOMIC SCREENS Ran Elkon, Israel	10:20	IDENTIFICATION OF TWELVE NEW SUSCEPTIBILITY LOCI FOR DIFFERENT HISTOTYPES OF EPITHELIAL OVARIAN CANCER Roberta Ness, USA	
10:30	STUDYING THE INTERPLAY BETWEEN MET-TYROSINE KINASE AND P53 SIGNALING AND MODIFIER GENES THAT DICTATE TISSUE ORIGIN OF TUMOR Nizan Cauzmer, Israel	10:30	End of Session	
10:40	Coffee, poster viewing and visit the exhibition			
11:00- 13:40	Plenary Session 5 - Cancer Genetics  JOINT SESSION WITH ASCO: AMERICAN SOCIETY OF CLINICAL ONCOLOGY  Chairs: Clifford Hudis, USA & Raphael Catane, Israel			
11:00	FOUNDER PATHOGENIC VARIANTS FOR COLORECTAL CANCER Stephen Gruber, USA			
11:20	PROSTATE CANCER GENETICS  Kathleen A. Cooney, USA			
11:40	IDENTIFYING NOVEL GENETIC SUSCEPTIBILITY LOCI FOR BREAST AND COLOREC Wei Zheng, USA	CTAL CANCE	R: RESULTS FROM LARGE CONSORTIA OF ASIANS	
12:00	THE SPECTRUM OF BRCA1 AND BRCA2 PATHOGENIC SEQUENCE VARIANTS IN MIDDLE EASTERN, NORTH AFRICAN, AND SOUTH EUROPEAN COUNTRIES Eitan Friedman, Israel			
12:20	GENETICS OF PANCREATIC CANCER  Talia Golan, Israel			
12:40	GERMLINE LYSINE-SPECIFIC DEMETHYLASE 1 MUTATIONS CONFER SUSCEPTIBI Steven Lipkin, USA	LITY TO MU	LTIPLE MYELOMA	

CANCER EPIGENETICS – ONCOHISTONES AND BEYOND 13:00 Jacek Majewski, Canada

MOLECULAR LANDSCAPE IN METASTATIC COLORECTAL CANCER 13:20

Heinz Josef Lenz, USA

13:40 Lunch, poster viewing and visit the exhibition

Plenary Session 6 - Socio-Economic and Cultural Aspects of Genomic Medicine 14:40-

Chair: **Dhavendra Kumar**, UK 16:30

SOCIO-CULTURAL ASPECTS OF GENETIC TESTING 14:40

**Dhavendra Kumar**, UK

CHOICE IN THE ERA OF ADVANCED GENOMIC TECHNOLOGIES 15:00

Shiri Shkedi-Rafid, Israel

ROUND TABLE DISCUSSION: RELIGIONS AND GENETIC TESTING 15:20

Father Fuad Dagher, Imam Omar Kayal, Suleman Khativ, Rabbi Shabtai A. Rappoport, Israel

THE EFFECT OF AMOUNT OF GENOMIC FEEDBACK ON WORRY, EFFICACY AND INTEREST IN FUTURE UPDATES 16:20 Efrat Neter, Israel

16:30 End of day's sessions





# Friday, October 5, 2018

12:30 CLOSING REMARKS

8:00- 9:40	Plenary Session 7 - Genomic Medicine Chair: Alan Shuldiner, USA & Yaakov Naparstek, Israel				
08:00	PHARMACOGENETICS – GENERAL CONCEPTS AND CLINICAL IMPLICATIONS  Ronen Loebstein, Israel				
08:20	PHARMACO-OMICS OF MAJOR DEPRESSIVE DISORDER  Richard Weinshilboum, USA				
08:40	FOUNDER POPULATIONS FOR DISCOVERY AND THERAPEUTIC DEVELOPMENT  Nehal Gosalia, USA				
09:00	IMPLEMENTING GENOMIC MEDICINE IN PRIMARY CARE CLINICS IN ISRAEL  Gad Rennert, Israel				
09:20	MAKING EVOLUTIONARY SENSE OF PERSONAL GENOME VARIATION  Olivier Lichtarge, USA				
09:40					
10:10- 12:30	Plenary Session 8 - Cancer Genetics: Breast Cancer  ENDORSED BY BCRF: BREAST CANCER RESEARCH FOUNDATION				
	Chairs: <b>Vered Srearns</b> , USA & <b>Bella Kaufman</b> , Israel				
10:10	VACCINE AGAINST hTERT FOR BRCA1/2 Susan Domchek, USA				
10:30	PARP INHIBITORS IN BRCA MUTATION CARRIERS WITH BREAST CANCER  Nadine Muskatel Tung, USA				
10:50	TRANSLATING GENOMICS TO PRECISION THERAPY FOR BREAST CANCER AND BRAIN METASTASIS  Sofia Merajver, USA				
11:10	GENE METHYLATION AS A MARKER OF BREAST CANCER RISK AND A TARGET FOR PREVENTION  Vered Stearns, USA				
11:30	CANCER SUSCEPTIBILITY GENE DISCOVERY AND POPULATION TESTING IN THE ASHKENAZIM  Kenneth Offit, USA				
11:50	BREAST CANCER PHARMACOGENOMICS: AN EXAMPLE OF INDIVIDUALIZED THERAPY BY REPURPOSING DNMT DEMETHYLATING AGENTS.  Liewei Wang, USA				
12:10	SELINA – CLINICAL TRIAL ON LOWERING THE RISK OF MALIGNANCIES BY OPTIMIZING SELENIUM LEVELS IN FEMALES IN FEMALES FROM FAMILIES WITH HEREDITARY BREAST CANCER*  Jan Lubinski, Poland				
12:20	INVESTIGATING A FOUNDER FRENCH CANADIAN POPULATION TO DEFINE THE GENETIC ARCHITECTURE OF MODERATE-HIGH RISK OVARIAN CANCER PREDISPOSING ALLELES Patricia Tonin, Canada				

