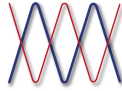




FONDAZIONE  
INTERNAZIONALE  
MENARINI



Co-Organized by:



החברה הישראלית לרפואה מודעת סין ומגדר  
The Israel Society for Gender-  
and Sex Conscious Medicine

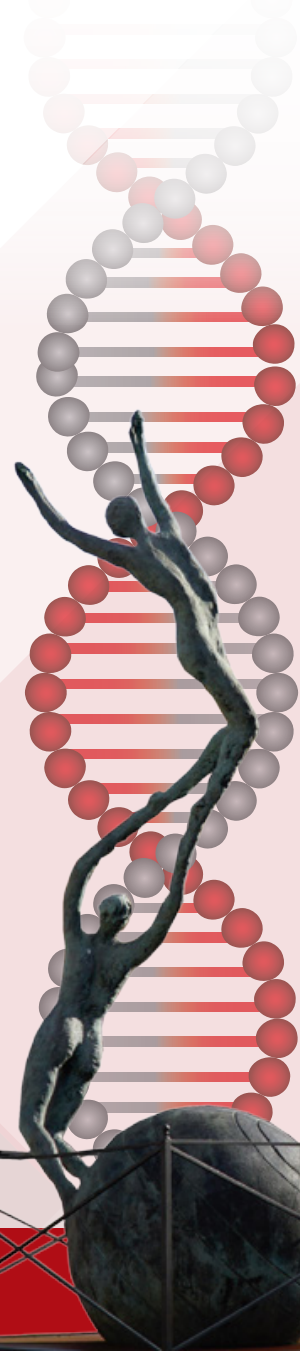


THE FOUNDATION FOR  
GENDER-SPECIFIC MEDICINE

CONFERENCE ON

# SEX, GENDER AND EPIGENETICS: FROM MOLECULE TO BEDSIDE

12-14 May 2022 | Florence, Italy



VENUE:  
Fortezza da Basso – Sala della Scherma

## **CHAIRPERSON:**

**Marianne J. Legato**

The Foundation for Gender Specific Medicine, Columbia University,  
and Johns Hopkins University  
New York, US

## **CO-CHAIRPERSONS:**

**Marek Glezerman**

Tel Aviv University, Rabin Medical Center and the Israel Society for Gender-  
and Sex Conscious Medicine  
Tel Aviv, IL

**Dov Feldberg**

Helen Schneider Hospital for Women  
Rabin Medical Center and Tel Aviv University School of Medicine  
Tel Aviv, IL

## **CO-ORGANIZED BY:**



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# PROGRAMME

THURSDAY, 12 MAY 2022 - MORNING

08.45 a.m. 09.30 a.m.	<b>M. J. Legato</b> (USA) Opening Remarks and Introduction: Epigenetics: Many Questions, Some Answers
09.30 a.m. 10.15 a.m.	<b>A. Ciechanover</b> (Israel) <i>Keynote Lecture: Introduction: M. J. Legato</i> (USA) <i>Special Guest Lecture:</i> Personalized medicine: are we going to cure all diseases and at what cost?

## SESSION I - EPIGENETICS AND DISEASE

Chairperson:	<b>M. J. Legato</b> (USA)
10.15 a.m. 10.30 a.m.	<i>Coffee break</i>
10.30 a.m. 11.05 a.m.	<b>M. Anguera</b> (USA) Dysregulation of inactive X chromosomes in healthy human B cells in lupus patients
11.05 a.m. 11.40 a.m.	<b>F. Vaura</b> (Finland) Genetic, Molecular and Cellular Determinations of Sex-Specific cardiovascular traits

## THURSDAY, 12 MAY 2022 - AFTERNOON

### SESSION II - EPIGENETICS AND ART

Chairperson:	<b>D. Feldberg</b> (Israel)
11.40 a.m. 12.15 p.m.	<b>D. Feldberg</b> (Israel) Epigenetics and Mental and Physical Health of Children Born after ART
12.15 p.m. 01.15 p.m.	<i>Lunch</i>
01.15 p.m. 02.00 p.m.	<b>G. Palermo</b> (USA) VIRTUAL Epigenetics of Male Infertility: Epigenetic Competence of Mammalian Gametes and its Effect on Embryogenesis
02.00 p.m. 02.35 p.m.	<b>Q. Chen</b> (USA) Epigenetic Inheritance of Acquired Traits Through Sperm RNAs & RNA Modifications
02.35 p.m. 03.10 p.m.	<b>B. Novakovic</b> (Australia) ART Associated with Limited Epigenetic Variation at Birth that Largely Resolves by adulthood
03.10 p.m. 03.25 p.m.	<i>Coffee break</i>
03.25 p.m. 04.00 p.m.	Round Table
04.00 p.m. 04.15 p.m.	Final Discussion

# PROGRAMME

FRIDAY, 13 MAY 2022 - MORNING

09.00 a.m.  
09.45 a.m.

**M. Glezerman** (Israel)  
*Keynote Lecture: Introduction: D. Feldberg* (Israel)  
Fetal Programming – A Clinician’s Perspective

## SESSION III - EPIGENETICS AND MENTAL HEALTH

Chairperson:

**M. Glezerman** (Israel)

09.45 a.m.  
10.00 a.m.

*Coffee break*

10.00 a.m.  
10.35 a.m.

**J. Lahti** (Finland)  
Maternal Anxiety During Pregnancy and the Lack of Fetal DNA Methylation in Cord Blood

10.35 a.m.  
11.10 a.m.

**A. Hannan** (Australia)  
Impact of Paternal Environmental Exposures on Brain Function and Psychiatric Disorders

11.10 a.m.  
11.45 a.m.

**J. Peedicayil** (India)  
Epigenetics and Psychiatry

11.45 a.m.  
12.20 p.m.

**H. Soreq** (Israel)  
Integrative Transcriptomics Reveals Sexually Dimorphic Control of the Cholinergic/Neurokine Interface in Schizophrenia and Bipolar Disorder

12.20 p.m.  
01.15 p.m.

*Lunch*

## FRIDAY, 13 MAY 2022 - AFTERNOON

### SESSION IV - EPIGENETICS AND NEUROLOGY

Chairperson:	<b>M. J. Legato</b> (USA)
01.15 p.m. 01.50 p.m.	<b>A. Ornoy</b> (Israel) Gender-Specific Gene Expression and Autism in Mice
01.50 p.m. 02.25 p.m.	<b>D. Gemmati</b> (Italy) Genetics/Epigenetics of the One-Carbon Metabolism Pathway in Autism Spectrum Disorder with Emphasis on the Role of a Sex-Specific Brain Epigenome
02.25 p.m. 03.10 p.m.	<b>I. Anreiter</b> (Canada) Less Studied Epigenetic Mechanisms: chemical tags on RNA Molecules
03.10 p.m. 03.30 p.m.	<i>Coffee Break</i>

### SESSION V - EPIGENETICS AND NUTRITION

Chairperson:	<b>D. Feldberg</b> (Israel)
03.30 p.m. 04.05 p.m.	<b>M. Sokolowski</b> (Canada) Individual Differences: Gene-Environment Interplay and Epigenetics
04.05 p.m. 04.40 p.m.	<b>S. Ozanne</b> (UK) Epigenetic Mechanisms Linking Poor Maternal Nutrition During Pregnancy to Offspring Cardio-Metabolic Health

# PROGRAMME

SATURDAY, 14 MAY 2022 - MORNING

08.45 a.m.  
09.45 a.m.

**D. Feldberg** (Israel)  
*Keynote Lecture: Introduction: M. Glezerman* (Israel)  
Epigenetic Aspects of Human Reproduction and Early Pregnancy

## SESSION V - EPIGENETICS AND GENE ENVIRONMENT INTERPLAY

Chairperson:

**M. Glezerman** (Israel)

09.45 a.m.  
10.20 a.m.

**A. Gabory** (France)  
Impact of Maternal and Paternal Environment on the Development of the Child from Gametogenesis to Infancy and Beyond

10.20 a.m.  
10.55 a.m.

**K. Singh** (USA)  
Mitochondrial genetics and their impact on the epigenetic changes on ovarian aging

10.55 a.m.  
11.30 a.m.

**M. Syzf** (Canada)  
Deconvoluting the functional role of DNA methylation in trauma; implications for epigenetic therapy and prospects of either general or targeted “epi\_gene therapy”

11.30 a.m.  
12.05 p.m.

**S. Entriinger** (Germany)  
The Fetal Programming of Telomere Biology Hypothesis

12.05 p.m.  
12.40 p.m.

**N. Caporale** (Italy)  
Brain organoids modelling of genetic and environmental impact on neurodevelopmental traits

12.40 p.m.  
01.00 p.m.

**M. J. Legato** (USA)  
*Concluding remarks*

01.00 p.m.

*Lunch Break*