



FRIDAY, SEPTEMBER 15, 2017

17:45 **Welcome reception**

SATURDAY, SEPTEMBER 16, 2017

08:30-10:15 **Session 1: Introduction - Genetics 101**

Chairs: **Simon Fishel**, UK; **Yuval Yaron**, Israel; **Antoni Borrell**, Spain

08:30-08:45 Welcome

Simon Fishel, UK and **Antoni Borrell**, Spain

08:45-09:15 Basic genetic principles for the non-geneticist

Yuval Yaron, Israel

09:15-09:45 Update on Laboratories Technologies

Vincenzo Cirigliano, Spain

09:45-10:15 The origin of aneuploidy

Eugene Pergament, USA

10:15-10:45 *Coffee Break*

10:45-11:45 **Session 2: Preimplantation Genetic Diagnosis (PGD)**

Chairs: **Darren Griffin**, UK ; **Attila Vereczkey**, Hungary

10:45-11:15 Concurrent single gene disorder and aneuploidy screening without whole genome amplification

Rebekah Zimmerman, USA

11:15-11:45 Non-inherited chromosomal and genomic abnormalities in human embryos and how to prevent them

Santiago Munne, USA

11:45-12:00 *Technical Break*

12:00-13:30 **Industry-Sponsored Lunch Symposium**

13:30-14:00 *Lunch Break*

14:00-15:30 **Session 3: Introduction to Preimplantation genetic screening (PGS)**

Chairs: **Josh Blazek**, USA ; **Ariel Horowitz**, Israel

14:00-14:30 Making sense of PGS: EBM, RCTs, mosaicism and reconciling the two sides

Darren Griffin, UK

14:30-15:00 Results of the Virtual Academy of Genetics (VAoGEN) questionnaire on mosaicism in PGS

Ariel Weismann, Israel

15:00-15:30 Evidence based scoring system for prioritizing mosaic aneuploid embryos for transfer

Francesca Grati, Italy

15:30-16:00 *Coffee Break and Poster Viewing*

16:00-16:30 **Session 4: Preimplantation genetic screening (PGS)**

Chair: **Zvi Appelman**, Israel

16:00-16:30 Rapid genomic screening of embryos using Nanopore sequencing

Dan Turner, UK

16:30-18:00 **Session 5: Debate on PGS Technology: Targeted vs. Whole genome approach**

Chair: **Alan Handyside**, UK

16:30-18:00 Targeted NGS - **Nathan Treff**, USA

qPCR - **Antonio Capalbo**, Italy

versus

aCGH - **Josh Blazek**, USA

NGS - **Francesco Fiorentino**, Italy



SUNDAY, SEPTEMBER 17, 2017

08:30-10:00 Session 6: New Genetic Technologies

Chairs: **Antoni Borrell**, Spain ; **Eugene Pergament**, USA

08:30-09:00 The importance of cell-free fetal DNA (cffDNA) pre-test counseling: an overview and 3 years of implementation experience in teaching university hospital

Vedran Stefanovic, Finland

09:00-09:30 Expanded Carrier Screening - Optimizing Panel Design

James Goldberg, USA

09:30-10:00 Genome Editing Optimizations: Implications for Pre- and Post-Implantation Genetics

Gerald Schatten, USA

10:00-10:30 Coffee Break & Poster Viewing

10:30-12:00 Session 7: Prenatal diagnosis

Chairs: **The-Hung Bui**, Sweden ; **Francesca Grati**, Italy

10:30-11:00 Prenatal application of whole exome sequencing (WES)

Mark Kilby, UK

11:00-11:30 Counseling issues for fetal whole exome sequencing (WES)

Mark Kilby, UK

11:30-12:00 Lessons learned from postnatal diagnostics: phenotype-driven penetrance analysis in the assignment of disease liability of genetic variants

Milan Macek, Czech Republic

12:00-13:15 Session 8: Prenatal diagnosis – non-invasive prenatal screening (NIPS)

Chairs: **Antoni Borrell**, Spain ; **Vincenzo Cirigliano**, Spain

12:00-12:25 Noninvasive Prenatal Diagnosis (NIPD) for single-gene disorders

Fiona McKay, UK

12:25-12:50 Cell based non-invasive prenatal screening

Ripudaman Singh, Denmark

12:50-13:15 Noninvasive Prenatal Screening (NIPS) for microdeletions; an update

Peter Benn, UK

13:15-14:00 Lunch Break

14:00-15:45 Session 9: Prenatal diagnosis

Chairs: **Peter Benn**, UK ; **Howard Cuckle**, Israel

14:00-14:25 What is known about the health of Children Born after PGD/PGS –evidence from research

Alastair Sutcliffe, UK

14:25-14:50 Genetic workup of recurrent miscarriages

The-Hung Bui, Sweden

14:50-15:15 A comprehensive new paradigm for Prenatal Diagnosis

Antoni Borrell, Spain

15:15-15:45 Best Practice for Prenatal Genomics

Javier Garcia-Planells, Spain

15:45-16:15 Coffee Break & Poster Viewing



The 3rd World Congress on Controversies in
**PRECONCEPTION, PREIMPLANTATION
AND PRENATAL GENETICS DIAGNOSIS**
How will genetic technologies drive the future?
September 16-17, 2017 | Barcelona, Spain

16:15-17:05 **Session 10: Genetics in reproduction**
Chairs: **Simon Fishel**, UK ; **Yuval Yaron**, Israel

16:15-16:40 Genetics of primary ovarian insufficiency
Micheline Misrahi, France

16:40-17:05 Experiences with laboratory implementation of a microarray based cell-free DNA testing system
Francesca Grati, Italy

17:05-17:20 Closing remarks
Yuval Yaron, Israel