“WHY SHOULD I ATTEND?”

The Congress focuses on Innovation in Preconception, Preimplantation and Prenatal Genetic Diagnosis, including:

- The use of Next Generation Sequencing for expanded preconception carrier screening
- Technology options for clinics with a review of strategies for evaluation of chromosome copy number in human embryos and oocytes
- Advances in Preimplantation Genetic Diagnosis (PGD) and the latest data on Preimplantation Genetic Screening (PGS)
- Non-invasive Prenatal Testing (NIPT) and Non-invasive Prenatal Diagnosis (NIPD)
- From Chromosomal Microarrays (CMA) to Whole Exome Sequencing (WES) in the evaluation of the malformed fetus
- Controversies in this burgeoning area of clinical practice

The CoGEN Congress is a part of the Virtual Academy of Genetics (VAoGEN), whose mission is to disseminate educational material on Reproductive Genetics to healthcare providers around the world and to provide a forum for the exchange of knowledge and ideas.

Sincerely,

Simon Fishel
Co-Chair

Yuval Yaron
Co-Chair

Toni Borrell
Co-Chair

SCIENTIFIC PROGRAM

Saturday, September 16, 2017

08:30-10:15	**Session 1: Introduction – Genetics 101** Chairs: **Simon Fishel**, UK; **Yuval Yaron**, Israel; **Toni Borrell**, Spain
08:30-08:45	Welcome **Simon Fishel**, UK and **Toni 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 and Poster Viewing*
10:45-11:45	**Session 2: Preimplantation Genetic Diagnosis (PGD)**
10:45-11:15	Co-screening for single gene disorders and aneuploidy screening **Rebekah S. Zimmerman**, USA
11:15-11:45	Non-inherited chromosomal and genomic abnormalities in human embryos and how to prevent them **Santiago Munne**, USA
11:45-13:15	**Industry-Sponsored Lunch Symposium** (more information below)

13:15-14:00	*Break*
14:00-15:30	**Session 3: Introduction to Preimplantation genetic screening (PGS)**
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)** Chairs: **Simon Fishel**, UK
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**
16:30-18:00	Targeted NGS – **Nathan Treff**, USA qPCR – **Antonio Capalbo**, Italy *versus* aCG – **Josh Blazek**, USA NGS – *TBA*
18:00-19:00	Informal meet & greet between Faculty and Participants

Sunday, September 17, 2017

08:30-10:00	**Session 6: New Genetic Technologies** Chair: **Toni Borrell**, Spain
08:30-09:00	Expanded Carrier Screening *TBA*
09:00-09:30	Expanded Carrier Screening **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** Chair: **The-Hung Bui**, Sweden
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)** Chair: **Toni Borrell**, Spain
12:00-12:25	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	NIPS for microdeletions; an update **Peter Benn**, UK
13:15-14:00	*Lunch Break*
14:00-15:45	**Session 9: Prenatal diagnosis** Chair: **Howard Cuckle**, UK
14:00-14:25	Follow-up of PGD pregnancies **Alastair Suthcliffe**, UK
14:25-14:50	Genetic workup of recurrent miscarriages **The-Hung Bui**, Sweden
14:50-15:15	Comprehensive and nondirective prenatal diagnosis **Toni Borell**, Spain
15:15-15:45	*TBA*

15:45-16:15	*Coffee Break & Poster Viewing*
16:15-17:45	**Session 10: Genetics in reproduction** Chairs: **Simon Fishel**, UK and **Yuval Yaron**, Israel
16:15-16:40	Genetics of primary ovarian failure **Micheline Misrahi**, France
16:40-17:05	Endometrial receptivity test for implantation failure RCT results *TBA*
17:05-17:30	*TBA*
17:30-17:45	Closing remarks **Yuval Yaron**, Israel