

Session title: Bulmer session: the biology and genetics of twinning

Description

This symposium deals with the biology and genetics of the twinning phenomenon and is named after Michael Bulmer, who wrote in 1970 this fascinating book “the Biology of Twinning in Man”. This session deals with every aspects of twinning from the frequency of twinning in humans, the genetics of DZ and MZ twinning, the development of the human embryo and how normal embryogenesis takes place...

Co-Chairs:

Prof Cornelis Lambalk, MD PhD

Division of Reproductive Medicine, Department of Obstetrics/Gynecology
VU University Medical Center, Amsterdam

Catherine Derom, PhD

Department of Obstetrics and Gynecology, Ghent University Hospitals, Ghent, Belgium

Speakers

1. Jenny van Dongen, PhD (online)

Identical twins carry a persistent epigenetic signature of early genome programming

Assistant professor at the Vrije Universiteit Amsterdam, department of Biological Psychology, specialized in epigenetics

Vrije Universiteit Amsterdam, department of Biological Psychology, the Netherlands

Email : j.van.dongen@vu.nl

Dr. van Dongen studies epigenetic mechanisms in twins. Dr. van Dongen is an expert in bioinformatic analyses of epigenetic data (especially DNA methylation) and maintains fruitful collaborations with twin registers and cohorts from around the world. In the past years, she has led large epigenome-wide association study meta-analyses for several traits.



2. Hamdi Mbarek, PhD

The Netherlands

Update on the genetics of DZ twinning

3. Prof. Anja Pinborg, MD, DMSc (online)

Determinants of MZ twinning in ART

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Anja Pinborg is professor and medical director at Fertility Department, Rigshospitalet. She has published 236 original papers with an h-index of 47. She is former ESHRE EXCO member and president of Nordic Fertility Society. Her main scientific focus areas are safety and quality aspects of ART with focus on child health and clinical research on optimizing ART and minimizing risks.



4. Brandon Johnson, PhD candidate (online)

Study of twin pedigrees to investigate mechanisms of male microchimerism in females

Avera Institute for Human Genetics, Avera McKennan Hospital & University Health Center, Sioux Falls, SD, USA & Department of Biological Psychology, Vrije Universiteit, Amsterdam, The Netherlands
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Brandon Johnson is a PhD candidate at the Avera Institute for Human Genetics in Sioux Falls, South Dakota, pursuing a joint PhD at the University of South Dakota and Vrije Universiteit Amsterdam. Brandon has interests in studying natural chimerism with additional translational research interests in applications of molecular diagnostic techniques.



Introduction (if needed): Brandon Johnson is from the United States where he earned a bachelor's degree and board certification as a Medical Laboratory Scientist, which he applied working in a clinical laboratory setting before pursuing a joint PhD at the University of South Dakota and Vrije Universiteit Amsterdam. Now he is a PhD candidate studying natural chimerism at the Avera Institute for Human Genetics under the mentorship of Dr. Erik Ehli and Dr. Dorret Boomsma.

5. To be selected from abstracts