

# 4th International Meeting on Cell-Free DNA, cfDNA2019

## Scientific program

### DAY 1

8.00 – REGISTRATION

8.25 – OPENING by Frederik Banch Clausen

8.30 – NON-INVASIVE PRENATAL TESTING OF FETAL ANTIGENS

#### **Non-Invasive Prenatal Testing of Fetal Antigens**

Prof. Ellen van der Schoot (Amsterdam, The Netherlands)

#### **Non-Invasive Prenatal Testing and Fetal Genotyping for Atypical Blood Group Antigens in Alloimmunised Women: Partitioning Power of Droplet Digital PCR**

Ass. Prof. Catherine Hyland (Brisbane, Australia)

#### **Non-Invasive Prenatal Testing of Fetal Antigens by NGS**

Dr. Agnieszka Orzinska (Warsaw, Poland)

*Chairs: Prof. Dr. Tobias J Legler (Germany) and Dr. Åsa Hellberg (Sweden)*

10.20 – Coffee Break

10.50 – NON-INVASIVE PRENATAL TESTING OF FETAL ANTIGENS

(continued)

#### **Recommendations for the Validation of any Novel NIPD RhD Assay**

Prof. Dr. Tobias J Legler (Göttingen, Germany)

#### *Oral Presentations*

**A.** A New Biosensor for Noninvasive Determination of Fetal *RHD* Status in Maternal

Blood of RhD Negative Pregnant Women **Ebru DüNDAR Yenilmez** (Turkey)

**B.** A National Fetal *RHD* Screening Test to Guide Antenatal Rhlg Prophylaxis in the UK

**Kirstin Finning** (England)

*Chairs: Dr. Åsa Hellberg (Sweden) and Prof. Ellen van der Schoot (The Netherlands)*

12.00 – Lunch Break

13.00 – CELL-FREE DNA AND CANCER

#### **Circulating Tumor DNA**

Dr. Ekaterina Pisareva (Montpellier, France)

#### **Blood Biopsy for Routine Monitoring of Cancer Progression**

Dr. Viktor Adalsteinsson (Cambridge, USA)

#### **Enhancing ctDNA Detection by Size Selection and Signal Integration**

Katrin Heider (Cambridge, England)

#### *Oral Presentations*

**C.** Application of Cell-Free DNA for Genomic Tumor Profiling – Optimizing Tumor

Detection Using Gene-Panel Sequencing and *in silico* Size Selection **Lise B Ahlborn**

(Denmark)

**D.** Longitudinal Analysis of Plasma Cell-Free DNA by Ultra-Deep Sequencing in Stage

I-III Colorectal Cancer Patients: A Prospective Observational Study **Thomas Reinert**

(Denmark)

*Chairs: Dr. Klaus Rieneck (Denmark) and Dr. Morten Hanefeld Dziegiel (Denmark)*

15.00 – Coffee Break

15.30 – BIOLOGICAL PROPERTIES OF CELL-FREE DNA

#### *Oral Presentations*

**E.** Extracellular DNA in Plasma is Hidden in Exosomes **Barbora Konečná** (Slovakia)

**F.** Northern Lights Assay Reveals Various Structural Damage in cfDNA in Body Fluids

**Jon J Jonsson** (Iceland)

#### **Deciphering Biological Properties of Plasma DNA and its Impact on Noninvasive Diagnostics**

Dr. Peiyong Jiang (Hong Kong)

*Chairs: Dr. Morten Hanefeld Dziegiel (Denmark) and Dr. Klaus Rieneck (Denmark)*

16.30-17.00 – END OF DAY 1

19.00 – CONFERENCE DINNER

### DAY 2

8.45 – NON-INVASIVE PRENATAL TESTING AND DIAGNOSIS

#### **Non-Invasive Prenatal Diagnosis for Single Gene Disorders**

Dr. Natalie Chandler (London, England)

#### **NIPT Beyond the Common Trisomies: Experience from the Netherlands**

Dr. Erik A Sistermans (Amsterdam, The Netherlands)

#### *Oral Presentation*

**G.** The Importance of Assessing for Triploidy Beyond the First Trimester of Pregnancy

**Samantha Leonard** (USA)

*Chairs: Dr. Peter Johansen (Denmark) and Dr. Sofie Lindgren Christiansen (Denmark)*

10.00 – Coffee Break

10.30 – NONINVASIVE PRENATAL TESTING AND DIAGNOSIS (continued)

#### **Current Advances in the Application of Genome-Wide NIPT**

Dr. Mark D Pertile (Melbourne, Australia)

#### **Clinical Utility of Genome-Wide cfDNA Test for RATs**

Dr. Francesca R Grati (Busto Arsizio, Italy)

#### *Oral Presentations*

**H.** Non-Invasive Prenatal Diagnosis (NIPD) of Single Gene Disorders by Relative

Haplotype Dosage (RHDO): Review of over 100 Clinical Cases **Benjamin Bowns**

(England)

**I.** Collective Utility of NIPT Zygosity Determination and Chorionicity Assignment

**Samantha Leonard** (USA)

*Chairs: Dr. Peter Johansen (Denmark) and Dr. Sofie Lindgren Christiansen (Denmark)*

12.00 – Lunch Break

13.00 – POSTER SESSION

14.00 – CELL-FREE DNA AND TRANSPLANTATION

#### **Cell-Free DNA as Marker for Kidney Transplant Rejection**

Dr. Els Gielis (Antwerpen, Belgium)

#### **Cell-Free DNA after Heart Transplantation: Technical Issues and**

#### **Clinical Pitfalls**

Dr. Jens Böhmer (Gothenburg, Sweden)

#### *Oral Presentations*

**J.** Increased Total Urinary Cell-Free DNA Predicts Renal Transplant Rejection **Joshua**

**YC Yang** (USA)

**K.** Analytical and Clinical Validation of a Donor-Derived Cell-Free DNA (dd-cfDNA)

Assay for Renal Allograft Rejection **Trudy McKanna** (USA)

*Chairs: Dr. Morten Hanefeld Dziegiel (Denmark) and Dr. Frederik Banch Clausen*

*(Denmark)*

15.30 – Coffee Break

16.00 – POSTER AND GRANT AWARDS

*Chair: Anne Todsén Hansen (Denmark)*

16.30 – CONFERENCE ENDS

The conference is compliant with the Euromed Code of Ethical Business Practice.

The program may be amended.

cfDNA2019 Web: [www.cfDNA2019.eu](http://www.cfDNA2019.eu)