

## 2nd International Meeting on Cell-Free DNA, cfDNA2015

Moltke's Palace, Copenhagen, 28-29 May, 2015 – Scientific Program, 11 May, 2015

### DAY 1

8.00 – REGISTRATION

8.25 – OPENING by Frederik Banch Clausen

8.30 – INTRODUCTION

#### **Obstetric and Immunological Background**

Dr. Morten H Dziegiel (Copenhagen, Denmark)

#### **The Genetics of Blood Groups – Recent Findings and Current Challenges**

Professor Martin L Olsson (Lund, Sweden)

#### **Noninvasive Typing of Fetal Antigens**

Professor Ellen van der Schoot  
(Amsterdam, The Netherlands)

9.45 – Coffee Break

10.00 – FETAL *RHD* GENOTYPING I

#### **Technical Aspects of Noninvasive Fetal *RHD* Genotyping with Real-Time PCR**

Professor Dr. Tobias J Legler (Göttingen, Germany)

#### **Clinical Experience with First Trimester Fetal *RHD* screening and Targeted Prophylaxis in Sweden**

Dr. Eleonor Tiblad (Stockholm, Sweden)

10.55 – Coffee Break

11.10 – FETAL *RHD* GENOTYPING II

#### **Noninvasive Fetal *RHD* Genotyping in England**

Dr. Kirstin Finning (Bristol, England)

#### **Clinical Perspectives from USA on Fetal *RHD* Genotyping**

Professor Ossie Geifman-Holtzman (Philadelphia, USA)

12.00 – Lunch Break

13.00 – BIOLOGY AND IMMUNOLOGY

#### **Microchimerism in Space and over Time: Our Interstellar Movie**

Professor J Lee Nelson (Seattle, USA)

#### **From Nine Usable Loci to Surveying the Genomic Landscape of Blood Cell Formation;**

#### **60 Years of Blood Cell Genomics**

Professor Willem H Ouwehand (England)

#### **Fetal DNA and Preeclampsia**

Dr. Peter Celec (Bratislava, Slovakia)

14.30 – Coffee Break

15.00 – INTRODUCTION TO NIPT

#### **New Developments in Noninvasive Prenatal Testing by Plasma DNA Sequencing**

Professor Dennis Lo (Hong Kong, China)

16.00 – 17.00 POSTER SESSION

### DAY 2

9.00 – NIPT FOR GENE DISORDERS AND CHROMOSOME ABNORMALITIES

#### **Implementation of Cell-Free DNA Testing for Aneuploidy and Monogenic Disorders**

Professor Lyn Chitty (London, England)

10.20 – Coffee Break

10.45 – NIPT SESSION CONTINUED

#### **Implementation of Whole Genome NIPT for Aneuploidies in Nijmegen**

Dr. Brigitte Faas (Nijmegen, The Netherlands)

#### **Microarray-Based Cell-Free DNA Analysis for Aneuploidy Risk Assessment**

Dr. Thomas J Musci, CMO Ariosa (San Francisco, USA)

11.45 – MAIN SPONSOR TALK

#### **Illumina**

12.00 – Lunch Break

13.00 – GENOME EDITING

#### **Identifying Candidates for Genome Editing**

Dr. Klaus Rieneck (Copenhagen, Denmark)

#### **Applications of CRISPR-Cas9 for Genome Perturbation**

Dr. David Scott (Cambridge, USA)

13.50 – Coffee Break

14.15 – FUTURE APPLICATIONS OF CELL-FREE DNA

#### **Plasma DNA Sequencing in Cancer and Autoimmune Disease**

Professor Dennis Lo (Hong Kong, China)

15.10 – Coffee Break

15.30 – ORAL PRESENTATIONS

**A.** The first year experiences of routine fetal *RHD* screening in Finland **Katri Haimila** (Finland)

**B.** Non-invasive prenatal testing of HPA\*1A in Poland **Agnieszka Orzinska** (Poland)

**C.** Cell-free DNA analysis in maternal plasma for the detection of unbalanced chromosomal abnormalities other than main aneuploidies or microdeletion syndromes: a feasibility study **Pascale Kleinfinger** (France)

**D.** Non-invasive prenatal diagnosis (NIPD) of Duchenne and Becker muscular dystrophies (DMD/BMD) by relative haplotype dosage **Michael Parks** (England)

**E.** Towards affordable NIPT - Low coverage whole genome resequencing based NIPT on small benchtop NGS systems **Micheaela Hýblová** (Slovakia)

**F.** Noninvasive prenatal detection of selected fetal aneuploidies using targeted sequencing of homologs **Taylor Jensen** (USA)

17.00 – CONFERENCE ENDS