

2nd International Meeting on Cell-Free DNA, cfDNA2015

Moltke's Palace, Copenhagen, 28-29 May, 2015 – Preliminary Scientific Program, 6 March, 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

Cell-Free DNA – from the Placenta to the Immune System

Professor Dr. Sinuhe Hahn (Basel, Switzerland)

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)

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, UK)

Implementation of Whole Genome NIPT for Aneuploidies in Nijmegen

Dr. Brigitte Faas (Nijmegen, The Netherlands)

10.15 – Coffee Break

10.30 – NIPT SESSION CONTINUED

What Do Discordant NIPT Cases Teach Us About Perinatal Biology?

Professor Diana Bianchi (Boston, USA)

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

Dr. Thomas J Musci (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)

On Genome Editing

Dr. Andrew May (Berkeley, USA)

14.00 – Coffee Break

14.30 – FUTURE APPLICATIONS OF CELL-FREE DNA

Plasma DNA Sequencing in Cancer and Autoimmune Disease

Professor Dennis Lo (Hong Kong, China)

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