

Pregnancy exposures, genetics and epigenetics - short and long-term health outcomes for women and child

Location: Stort møterom, Georg Sverdrups hus, University of Oslo, Molkte Moes vei 39 0851 Oslo

Date: 6th and 7th of September

September 6th:

10:00 – 10:30 Coffee/ Arrivals

10:30 – 10:40 Welcome to Oslo

Gunn-Helen Moen & Kåre Birkeland

10:40 – 11:40 The effects of Assisted Reproductive Technologies on offspring health

Deborah Lawlor, Professor at the University of Bristol

11:40 – 12:00 Break

12:00– 12:30 Introduction to EPIPREG – Epigenetics in pregnancy

Christine Sommer, Researcher at Oslo University Hospital

12.30 – 13.15 Epigenome-wide Association Study of objectively measured moderate physical activity in pregnancy

Nicolas Frago Bargas, PhD student at Oslo University Hospital

13:15 – 14:15 Lunch

14:15 – 14:45 Fetal and early childhood growth in a multi-ethnic population--lessons learnt from the STORK-Groruddalen study

Line Sletner, Postdoc researcher at Akershus University Hospital

14:45 – 15:30 Using two sample Mendelian randomization to test whether parental obesity causes offspring cardiometabolic risk factors

Tom Bond, Senior Research Associate at the University of Bristol

15:30 – 16:00 Mendelian Randomization analysis of the effect of the intrauterine environment on offspring neurodevelopmental traits

Shannon D'Urso, PhD student at University of Queensland

16:15 – 16:45 Break

16:45 – 17:15 Comprehensive metabolic profiling of healthy pregnancies vs. pregnancies complicated by preeclampsia: A longitudinal study

Hege Skytte, PhD student at Oslo University Hospital

17:15 – 17:45 The 4 vessel-sampling method: Placenta-derived proteins in health and disease

Ane Cecilie Westerberg, Postdoc researcher at Oslo University Hospital

September 7th:

9:00 – 9:15 Welcome day 2

9:15 – 10:15 Using Genome-Wide Association Studies and Mendelian Randomization to Investigate the Developmental Origins of Health and Disease (DOHaD)

David Evans, Professor at the University of Queensland

10:15- 10:45 Why does low birthweight increase the risk of type 2 diabetes and other cardiometabolic diseases?

Gunn-Helen Moen, Postdoc researcher at the University of Oslo

10:45 – 11:15 Break

11:15 – 12:00 Fertility and Diabetes

Elisabeth Qvigstad, Associate Professor at University of Oslo

12:00 – 13:00 Lunch

13:00 – 13:30 Results from the STORK 5-year follow-up project: focusing on gestational diabetes and prediabetes

Tove Lekva, Researcher at Oslo University Hospital

13:30 – 14:00 Causal effect of maternal and paternal glucose level on offspring birthweight, gestational age, and later life cardiometabolic traits: a Mendelian randomization analysis

Laxmi Bhatta, Postdoc researcher at NTNU

14:00 – 14:15 Break

14:15 – 15:15 Developmental programming of type 2 diabetes – molecular mechanisms and clinical implications

Allan Vaag, Professor at the University of Copenhagen

15:15– 15:45 Seminar summary and farewells

Kåre Birkeland, Professor at the University of Oslo