

BBB Seminar (BMED382)



Thursday, September 11. 14:30 at the BBB, Auditorium 4

New knowledge on pregnancy and its consequences thanks to the Norwegian Mother, Father and Child cohort study

Marc Vaudel

Department of Clinical Science, University of Bergen

At the turn of the 20th century, Norway instigated the Norwegian Mother, Father and Child Cohort Study (MoBa), a pregnancy-centric cohort representing over 100,000 pregnancies that has enabled major discoveries. In this presentation, I will present how the genotyping of samples in MoBa has generated new fundamental knowledge on pregnancy and beyond.

First, I will introduce how genotypes in MoBa inform on the diversity and substructure of the Norwegian population. Then, we will see how combining genetics and epidemiology helped resolve fundamental questions: Why are women sick in early pregnancy? Why is a small birth weight associated with later cardiovascular risk? Why are some babies chubbier than others? Studying the relationship between parental and fetal genes revealed intimate knowledge on human nature, like how some genes are turned *on* or *off* when inherited from the mother or the father.

Finally, I will discuss how the field is going beyond genetics, and how new data obtained from MoBa samples will help us elucidate more questions on pregnancy and its consequences on the health of mothers and children.

Chairperson: Harald Barsnes, Department of Biomedicine