

Biography Marc Vaudel

Marc Vaudel's research group conducts multidisciplinary research on large cohorts and registries to generate new methods and knowledge for the understanding of metabolic health during pregnancy and early childhood. We are located at the Children and Youth Clinic of the Haukeland University hospital in Bergen Norway, affiliated to the University of Bergen, the Norwegian Institute of Public Health, and the Computational Biology Unit.

In our research on the Norwegian diabetes registries, we combine genetic information rich phenotypes to gain insight in the architecture of diabetes among Norwegian children. From this work, we have identified a new axis to study the emergence and progression of pediatric diabetes. We are currently using genomics, proteomics, and metabolomics, to better understand the mechanisms at play, improve tailored treatment strategies, and anticipate complications.

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. We combine the extensive information provided by families in MoBa to study how the genes of the mother and child influence the development of pregnancy and later health of the child. We have notably contributed to recent advances in the understanding of the drivers of fetal and placental growth, of the effect of smoking during pregnancy, and of pregnancy sickness. We are currently investigating how maternal health in early pregnancy can inform on later health for the mother and offspring.