

NEWSLETTER

HUNT Research Center

New analysis platform available at HUNT Biobank

Chronic kidney diseases occur relatively frequently but are insufficiently explored and with limited treatment options. The gold standard is a kidney biopsy, but the Kidney Research Group at NTNU/St. Olavs Hospital is now investigating whether various biomarkers in the urine can give us some of the same information.

First project completed on MesoScaleQuickPlex

- We have, together with HUNT Biobank, established a new analysis platform from Meso Scale Diagnostics, says Group Leader and professor Stein Ivar Hallan.

This is an ELISA-like technique where, instead of a secondary antibody, you label with a molecule that emits light when current is sent through the well (electrochemiluminescence). This provides very good sensitivity and a wide measurement range (0.1 - 1000 pg/mL), low background noise, simple procedure with few "washing steps" and fast reading, and you can measure up to 10 different biomarkers in the same well so that very little material is consumed. There are >600 different well-documented biomarkers in various fields such as inflammation, tissue damage, oncology, neurodegeneration, immunology, intracellular signaling, cardiovascular disease and metabolism. A number of different biological sample materials can be used, such as serum, plasma, urine, spinal fluid, tears, tissue extracts, cell lysates and so on.



Collaboration

- The method introduction has gone very well; there have been some minor problems, but the lab personnel at HUNT have solved this quickly together with the company representative from Copenhagen. The platform has shown very good quality in the analyses and we have been given opportunities to analyze a wide range of proteins in different solutions. Not least have we been given the opportunity to do the analyzes here "at home" in Trøndelag, Hallan points out. He emphasizes that close contact with the laboratory is of great importance for quality and rapid implementation. _ This could also result in lower costs than if the analysis were to be left to an external lab, and I strongly encourage other research groups to use the platform available at HUNT Biobank.

The MesoScale QuickPlex analysis instrument is a user-friendly and efficient instrument that only requires a small amount of sample. It has the ability to analyze several hundred different biomarkers, and perform several simultaneous tests on a single sample. More information about analyzes can be found here: [Assay Kits](#) | [Meso Scale Discovery](#)

Data Resource Profile: HUNT Biobank

A brand new article providing a comprehensive overview of our biobank and its content is now available as reference for all those using biological samples or other lab work from HUNT Biobank.

[Data Resource Profile: The HUNT Biobank](#) | [International Journal of Epidemiology](#)

HUNT5 - 2027-2029

Updated population data are in high demand, both by local and central health authorities, and in regards to research and community planning. Since the previous survey in 2017-2019 we have experienced major upheavals in Norway; the pandemic, the economy and other areas of societal concern, such as mental health, youth and the elderly. HUNT is therefore in the initial phase of planning our next population survey, HUNT5 (2027-2029).

Postponed: The HUNT Study celebrate 40 years of population surveys!

The seminar is postponed due to the strike, new date coming soon!

2024 marks 40 years since the first HUNT Study started collecting data from inhabitants in Trøndelag. We will be celebrating this in several ways during the year, starting off with a seminar open to everyone on Friday, June 14th in Trondheim (St. Olavs Hospital).



The program include a selection of HUNT research, a visit from Guri Rørtveit, Director General of the Norwegian Institute of Public Health (FHI), a guest lecture by Professor George Davey Smith from the University of Bristol and several other interesting posts.

Nordic Conference on Future Health

10-12 September, 2024
Trondheim, Norway

The Nordic biobanks and research communities join forces - to explore the future of biobanking and precision health. Biobank Norway invite you to beautiful, historic Trondheim for the landmark [Nordic Conference on Future Health: Biobanks, Research, Innovation and Precision Medicine](#). This special stakeholder gathering encompasses two parallel conferences—the 3rd Nordic Society of Human Genetics and Precision Medicine and the 2nd Nordic Biobank Conference - as well as joint plenary sessions for topics of interest to both communities.

