2. Scientific Annual Report 2022 DNRF Chair Ruth Loos

2.1 Annual Highlights

Over the past few months, a core team of four scientists, in close collaboration with other experts in the field, designed the Danish Precision Health Cohort.

For this cohort, we aim to recruit 10,000 individuals for deep-phenotyping in a clinical setting. Participants will then wear a continuous glucose monitor and accelerometer for the following 10 days during which they do an OGTT test on one morning and a mixed-meal test on another morning. They will also carefully log food intake during these days. We will also collect blood, urine, hair, and feces for multi-omics analyses.

Participants will be between ages 20 and 65 years, with an oversampling of those age 40 and above. Participants will in the first place be recruited from previous studies, allowing access to historical data. Participants will return every two years for deep-phenotyping if older than 40 years, and every five years, if between 20-40 years. A first draft of the extensive protocol has been finalized and submitted for ethical approval.

We are also in the process of purchasing the most sustainable, state-of-the-art equipment to perform the tests, and tender procedures have been started for all.

The digital platform that guides participants through their journey at the testing center and at home is crucial for the success of the study. After a thorough market analysis, we initiated a collaboration with Unikk.me.to develop the digital platform. This entails the development of a webpage, and a project mobile application, making digital consent and recruitment possible.

We have established several research collaborations with principal investigators of other Danish cohort studies and with researchers for specialized research topics, such as cognitive testing.

We have started to define the profiles of positions for which we plan on hiring personnel in the coming years. Furthermore, we have started to map out the circuit participants follow in-clinic for the deep-phenotyping, so that the data collection can be efficient and follow standardized operating procedures.

2.2 Publications

There are no publications yet, as the grant started September 1, 2022.