

## **Tobias Sjöblom - Summary**

Originally from Northern Sweden, Professor Tobias Sjöblom trained as a medical doctor at Uppsala University before transitioning into translational cancer research. He did his PhD at the Ludwig Institute for Cancer Research at Uppsala University before working at Johns Hopkins in the United States for 4 years, where he did the first cancer genome sequencing between 2003 and 2007.

About 10 years ago, a systematic collection of samples from adults with cancer in Uppsala and Umeå was initiated. Over the years, the scope has widened from four different cancers to twelve, including ovarian cancers. Currently over 20,000 patients have donated blood and tissue samples for research. A key question that comes to mind is how can we best use all these samples and data that these patients have provided us to develop blood tests that would determine whether an individual has cancer or not before it is clinically apparent? Professor Sjöblom goes on to say, “the best cure for cancer has already been discovered: early detection followed by surgery”.

His aim is to find simple ways of detecting cancer to enable more efficient cures, especially globally, where cancer care opportunities are less available in some regions of the world.

While we can analyze thousands of proteins in blood, few cancer tests make it into clinical use. Many new tests appear promising, but when tested on a different population, they do not work as effectively. As a result, he and his team have spent time to find the root cause of this problem. His team is researching the underlying statistics of this research to ensure success in development of cancer biomarkers. From there, they design their research to increase the chances of producing meaningful tests. They are now producing a large amount of data from a large number of patients in collaboration with the Royal Institute of Technology in Stockholm. With this funding, they are able to analyze more than 1500 proteins in the blood of diagnosed patients with ovarian cancer as well as healthy individuals. This data production phase is costly, and with the research grant from the Lena Wappling Foundation along with other grants, they plan to complete production by September/October 2021. Professor Tobias Sjöblom concludes by saying, “I am very thankful for the

support from the foundation and we will be making good use of it”. We certainly look forward to hearing more about his progress!

Professor Tobias Sjöblom was interviewed by Sasha Biniwale.