

## Improving the health of the individual and society



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## **Research** Activities

Following my medical degree and practice of medicine in both the UK and Sweden, I started research in epidemiology where I have been investigating sleep and stress as determinants of health. Over the past couple of years, my research has gradually shifted to the field of precision health, a relatively new discipline which has been made possible owing to the rapid development of digital health with new technologies ranging from medical devices to consumer wearables, as well as the advancement of novel biomarkers. The possibility to collect vast amounts of health-related data allows me to identify factors which could be key to prevent diseases on an individual level. My current work thus focuses on personalized risk prediction and individualized prevention of non-communicable diseases with a specific emphasis on sleep and stress. Ultimately, the goal is to prevent diseases before they start, and contribute to a long life of good health and well-being.

My current research activities are in Japan with the University of Tokyo and the National Cancer Center, and in Sweden with Lund University. My research has so far identified that:

- 1. Those who deal with daily problems in a proactive way may have a lower risk of death from cardiovascular diseases and cancer
- 2. Newly developed diabetes may be the reason why short and long sleep durations are associated with an increased risk of heart attacks
- 3. Plasma concentration of Caspase-8, a novel biomarker, is elevated in short sleepers and is associated with the risk of developing diabetes many years into the future

The overall aim of my research is to contribute to a healthy society where good health and longevity are attainable for all. Whether you are representing a company interested in improving the health of your employees, a researcher interested in collaboration, or an aspiring researcher who wishes to learn more, I am very much looking forward to hear from you.

## Message

Please feel free to contact me if you are interested in precision health or population health. Our research utilizes large datasets from both wearables devices as well as validated questionnaires to analyze lifestyle behaviors such as sleep, stress, and physical activity and their association with health outcomes.