SUDORE

Leading the movement towards proactive healthcare.

Problem

Over 27 million people are diagnosed with cancer yearly, many of which are diagnosed too late. We can all agree that cancer is not something that we want in our lives, so why do we accept a healthcare system that doesn't help us when we need it? Across the globe, people suffer from sicknesses like cancer without even knowing it. We need to have infrastructure in place that leads to a **proactive** healthcare system for all.

VOC Detection

Volatile organic compounds (VOC) are a diverse group of carbon based chemicals that are present in exhaled breath and biofluids such as sweat. Different patterns of VOC level changes have been **correlated with diseases such as cancer**. Detecting these patterns, allows for detection of tumour development in the body, providing a new medium of cancer diagnosis.

Sudore

Using sensor technology to non invasively detect and measure VOC biomarkers within sweat to diagnose cancer.

The Science Behind Sudore:

Why Sweat?

Current cancer detection ivolves working with biomarkers in blood. Sweat is a biofluid that reflects similar biomarkers to blood, presenting an opportunity to detect cancer development non invasively through sweat.

Sensor Technology

Sudore utlizes freestanding triboelectric nanogenerators (FTENG) designed to detect and measure biomarkers in sweat. These sensors are powered by human motion, and are made of a flexible circuit board and microfluidic sweat patch, making it relatively cheap to develop

The Future

There are over 900 unique proteins and 32,000 peptides in our sweat, all of which tell a different story of our health. Sudore aims to create a future where we can non ivasively detect a huge variety of illness and act proactively to protect our health.