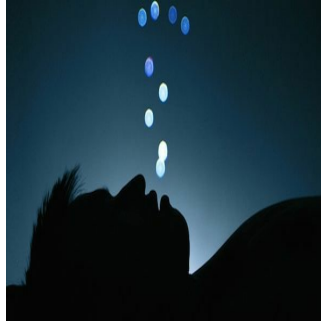## Smartphone App Screens Breath for Disease Detection

Researchers at the Technion-Israel Institute of Technology are working on a project which will enable smartphones to screen exhaled breath for the presence of disease. When linked with a mobile phone, the breathalyser screening technology developed by Professor Hossam Haick and colleagues will provide a non-invasive, inexpensive and rapid method for the early detection of some life-threatening illnesses.

The SNIFFPHONE project, which is being funded by a €6 million (US$6.8 million) European Commission grant, employs nano-sensors that can "read" breath and, using an attached mobile phone, transfer the data for interpretation by an information-processing system. This allows for the identification of individuals from the general population who are more likely to contract a specific disease, so that they may begin treatment at earlier stages.

"The SNIFFPHONE is a winning solution. It will be made tinier and cheaper than disease detection solutions currently, consume little power, and most importantly, it will enable immediate and early diagnosis that is both accurate and non-invasive," says Prof. Haick. "Early diagnosis can save lives, particularly in life-threatening diseases such as cancer."

A consortium of European partners are participating in the SNIFFPHONE project. They include Siemens and Israeli company NanoVation-GS Israel, as well as universities and research institutes in Austria, Finland, Germany, Ireland and Latvia.

Prof. Haick, who joined Technion in 2006, has been working on the "electric nose" technology for nearly a decade. A member of the Technion Faculty of Chemical Engineering, he is also a researcher at the Technion's Russell Berrie Nanotechnology Institute. He is the Chief Scientific Officer of NanoVation-GS, a Technion spinoff led by Dr. Gregory Shuster and Sagi Gliksman, two graduates of Prof. Haick's laboratory.

Source: American Technion Society

Image Credit: Google Images

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