## **Theme: Health Technology**

## - Sub Theme: Non-invasive Health Sensor

There has been a rapidly growing need for non-invasive mobile healthcare technology which allows individuals to manage their own health conditions and prevent chronic diseases such as metabolic syndrome. We are aiming to find innovative and enabling technologies that will allow continuous, non-invasive sensing of bio-signals and health conditions that can be easily integrated into our daily lives.

Novel sensor solutions for continuous, non-invasive measurements of human health conditions with high accuracy, low power consumption, and small form factor for mobile applications. Solutions may include sensors, algorithms based on big data analysis, and applications.

- New innovative non-invasive multi-sensor fusion solution that can enhance sensitivity and detectability of biomarkers related to obesity, hypertension, diabetes, and hyperlipidemia with a small form factor for mobile applications. (new sensors, data processing and algorithms)
- Ultratrace measurement and analysis of VOCs emanated from human body in daily environments for monitoring of daily health and disease (under sub ppm) and new applications using VOCs from human body.

Funding: Up to USD \$150,000 per year

<sup>\*</sup> The topics are not limited to the above examples and the participants are encouraged to propose original idea.