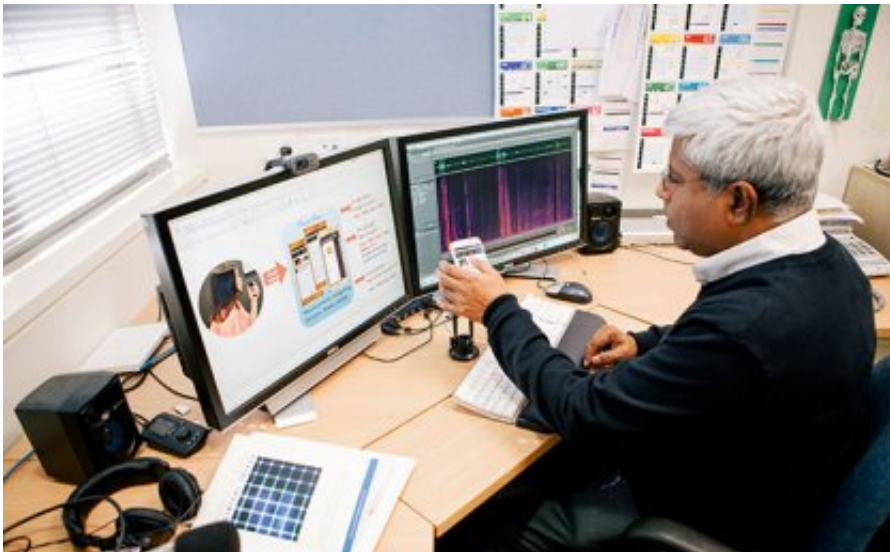


Mobile app uses sound alone to diagnose respiratory conditions

July 22 2015, by Madelene Flanagan



The cough is the single most common reason for a trip to the doctor, placing enormous strain on Australia's healthcare system, but a new mobile health tool being developed by The University of Queensland could ease pressure on doctors and lower consumers' health bills.

UQ's Associate Professor Udantha Abeyratne said the [mobile application](#) was based on an automated algorithm that could use sound alone to diagnose [respiratory conditions](#) such as pneumonia and asthma, without the need for additional hardware.

"The technology is based on the premise that cough and breathing sounds carry vital information on the state of the respiratory tract," Dr Abeyrante said.

Recently commercialised by spin-off company ResApp, the new diagnostic tool will allow doctors to diagnose and monitor [respiratory diseases](#) via a smartphone application.

ResApp has already secured more than \$4 million to develop the technology and launch it into the marketplace.

"I initially started developing this technology with the assistance of funding from the Bill and Melinda Gates Foundation in 2009," Dr Abeyratne said.

"So it's incredibly pleasing to see it go beyond the initial conception stage, right through to UQ signing commercialisation agreements with external companies."

Launched on the Australian Stock Exchange this month, ResApp is one of only a handful of UQ companies to be publicly listed.

Licensed with the assistance of UQ commercialisation arm UniQuest, ResApp is expected to lead to cost savings for consumers, insurers and governments through shorter consultation times, the ability to use telehealth solutions and a reduced use of antibiotics.

With the capability to function over multiple platforms such as smartphones, web, wearable and medical devices, potential markets for this technology range from smart-phone users to telehealth providers and organisations such as the World Health Organisation.

ResApp CEO Tony Keating, said the application was expected to be

available in 2016.

"ResApp is excited to be working closely with Associate Professor Abeyratne's team at The University of Queensland to commercialise technology that brings the power of a true medical diagnostic tool to everybody who owns a smartphone," Mr Keating said.

Dr Abeyratne said he would like to see the technology clinically verified and FDA approved.

"My aim is for it to be implemented on mobile phones and other ubiquitous computing devices, empowering and enhancing patient participation in managing respiratory diseases such as pneumonia, asthma and whooping cough," Dr Abeyratne said.

"Pneumonia alone kills about one million children every year, largely in remote resource-poor regions of the world."

Provided by University of Queensland

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