

Ang Qing

Institutions to recruit 30,000 people over next 2 years

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genomes of 100,000 Singaporeans aged 30 to 84, and other health data, to understand the social, environmental, lifestyle and genetic factors associated with diseases prevalent in Singapore and Asia.

Most knowledge of human health and diseases stems from the West, and special features of the Asian genome, lifestyle, environmental issues and predisposition to diseases are not entirely clear, said NTU's senior vice-president of health and life sciences and LKCMedicine's dean Joseph Sung.

With Malays and Indians comprising 40 per cent of participants, the project is slated to become one of Asia's leading reference genome databases because Singapore's ethnic diversity captures more than 80 per cent of Asia's diversity.

Over the next two years, the institutions will work to recruit about 30,000 people, NTU said in a statement. Participants will go for a health check-up that involves collecting blood samples, measuring blood pressure, and collecting information on physical fitness, lung function, body composition, skeletal health and cognitive per-

Men aged 30 to 40 are needed for Singapore's quest to map the DNA of 100,000 Singaporeans as part of research to find new ways of predicting and preventing diseases here and in Asia.

Making this call on Friday after the official launch of the study, its lead investigator, Professor John Chambers of Nanyang Technological University's (NTU) Lee Kong Chian School of Medicine (LKCMedicine), said he has observed that working adults below 40, particularly men, find it difficult to make time for the study. It involves a check-up that lasts an average of about five hours.

When completed, the SG100K study will create one of the Republic's biggest research data sets, which will yield insights over the next three decades into the genetic basis for diseases in Singaporeans.

Since recruitment for the study began in January, nearly 20,000 people have signed up, said Prof Chambers, who is also chief scientific officer at Precision Health Research, Singapore.

Another 50,000 participants have been drawn from four existing cohort studies under LKCMedicine, National University of Singapore's Saw Swee Hock School of Public Health, the Singapore Eye Research Institute, the Singapore National Eye Centre and the National Heart Centre Singapore.

Prof Chambers said: "So, for this work to be relevant to everyone in Singapore, it is very important that we reach out and include all segments of Singapore society – the rich, the poor, the young, the old, men and women and also people of different social and cultural backgrounds."

Over the next three years, researchers will analyse the whole



LKCMedicine research assistant Halimah Ibrahim taking a blood sample from Health Minister Ong Ye Kung for the SG100K study. ST PHOTO: KEVIN LIM

formance, as well as glucose and cholesterol levels.

The study is open to Singaporeans and permanent residents of all ethnicities, aged 30 to 84, including people with pre-existing conditions. Each participant will receive a \$50 token of appreciation after the check-up.

SG100K participants will be monitored for long-term health outcomes through a combination of approaches, including electronic medical records, disease registries and invitations for follow-up.

Among those who have volunteered are Health Minister Ong Ye Kung and Senior Parliamentary Secretary for Health Rahayu Mahzam, who had their blood and skin samples taken on Friday.

Speaking at the launch, Mr Ong said knowledge from the multi-

ethnic study will enable and turbocharge the development of precision medicine in Singapore.

This will enable clinicians to customise medication and treatment according to the genetic make-up of patients and identify those at higher risk of developing diseases, he said.

At the same time, the profound and potentially revolutionary implications of precision medicine mean that Singapore will need to take action now, he added, citing the need to make preventive care accessible to all and finance healthcare.

"Hence, for us to fully benefit from precision medicine, much work needs to be done in clinical development, ascertainment of cost and medical effectiveness, healthcare financing policies, leg-

Study finds he is at risk of hip issues, high cholesterol

Since getting his first bone scan in August as part of a national study to map the DNA of 100,000 Singaporeans, Mr J.K. Saravana, 41, has made it a habit to clock 2½ hours of exercise daily after learning that he was at risk of hip issues and high cholesterol.

He was speaking on the sidelines of the official launch of the SG100K study at Nanyang Technological University's (NTU) Lee Kong Chian School of Medicine (LKCMedicine) on Friday.

Mr Saravana and his wife are among nearly 70,000 Singaporeans so far who have had their health screened as part of the study's quest to identify factors associated with diseases prevalent in Singapore, such as diabetes and cancer.

Since receiving his health report, the media business chairman now wakes up at 6am to do yoga, cycles 5km to 10km every morning, eats lighter meals, and has since lost about 5kg over two months.

"As I have a daughter, I hope my data will benefit her, generations to come and my family as well," said Mr Saravana.

Some, like Madam Norhayati Sukaimi, 55, have taken the national study as an opportunity to get a free health assessment.

Singaporeans and permanent



Mr J.K. Saravana getting his hand grip strength recorded at the launch of the SG100K study on Friday. ST PHOTO: KEVIN LIM

residents of all ethnicities, aged 30 to 84, including those with pre-existing conditions, can take part in the study.

Blood and tissue samples are collected from participants, and other data, such as lung function, cognitive performance and physical health, is recorded.

Participants will be given a detailed health report at no charge, and they can use it for discussion with their doctors.

Said Madam Norhayati: "Because I have never been to a doctor for a full check-up, this was my opportunity to know about myself and what is actually happening in my body."

Upon learning that she has high cholesterol, the housewife, whose mother died of a heart attack in 2004, has cut down on

oily and fatty foods, as well as stopped snacking after midnight.

The SG100K study comes as Singapore's ageing population has led to an increasing number of people with long-term health problems such as diabetes, cardiovascular disease and cancer amid rising healthcare costs.

At the launch, NTU's senior vice-president of health and life sciences and dean of LKCMedicine, Professor Joseph Sung, said:

"The potential benefits (of the study) include better tools for prediction and prevention of chronic diseases, pre-emptive measures to avoid complications and so on. This is in line with the Healthier SG strategy, which places a strong emphasis on proactive and preventive care."

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isolation and determining what is encouraged, allowed and proscribed.

"And these issues will cut across clinical, economic and moral con-

siderations. We will need a great deal of study, consultation and engagement with policymakers, physicians, economists, regulatory bodies, bioethicists, the public and

also the patients."

Those keen to sign up can visit <https://www.ntu.edu.sg/helios/>

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