NTU’s 20-year study to better predict, prevent chronic diseases

Nanyang Technological University (NTU) has embarked on an ambitious 20-year study to better predict and prevent chronic diseases among Singaporeans.

This will be the first large-scale, comprehensive longitudinal health study on Asians, said its lead investigator, John Chambers, with as many as 100,000 to 200,000 Singaporeans to be involved in it eventually.

"Landmark studies done in the US, UK and Germany do not represent 60 per cent of the world population which are not of European heritage," said Professor Chambers, a cardiovascular epidemiology expert at the Lee Kong Chian School of Medicine, set up jointly by NTU and Imperial College London.

"The genetics and medical predispositions are different," he added.

The Health for Life in Singapore (Helios) study is being conducted in the school’s Population and Community Health Laboratories, which were opened yesterday.

Housed in the medical school’s Clinical Sciences Building in Novena, the suite of laboratories aims to target research on obesity, diabetes and other chronic conditions that commonly afflict Singaporeans.
Dr Amy Khor, Senior Minister of State for Health, said the launch of the laboratories is timely as “Singapore earnestly prepares for its rapidly ageing population in the next one to two decades”.

“By 2030, we expect the number of seniors aged 65 and above to double to 900,000. With many living longer, chronic diseases such as cardiovascular disease and diabetes are rising sharply,” she said.

Singaporeans and permanent residents aged 30 to 84 are eligible for the Helios study, which has recruited 800 participants and hopes to have 10,000 participants by the end of next year.

Participants will have the structure and function of their organs measured.

A full brain and body MRI scan as well as retina and bone density scans will also be done.

Participants will be asked about their lifestyle and dietary habits and their blood, stool, and urine samples will be stored in a biobank for future molecular analysis. They will receive a report and be informed of any disease found.