Singapore launches 1st national brain bank to study neurological disorders

SINGAPORE, Nov. 27 (Xinhua) -- Singapore's first national brain bank was launched on Wednesday, marking the start of new research possibilities that will generate new knowledge of brain diseases.

Named Brain Bank Singapore, the joint research center was conceptualized by a joint team from the Nanyang Technological University, Singapore's Lee Kong Chian School of Medicine (LKCMedicine), the National Healthcare Group (NHG) and National Neuroscience Institute (NNI).

Located at LKCMedicine, the brain bank aims to be a research repository for brain and spinal cord tissues from donors who have passed away. Tissue donations from both healthy donors and those with neurodegenerative conditions and neurological disorders will be stored and used for ethically approved research.

This research, which falls under one of LKCMedicine's key research pillars, neuroscience and mental health, will facilitate greater understanding of the underlying mechanisms and symptoms of brain-related illnesses, so that more effective treatments and cures can be developed.

LKCMedicine's Prof. Richard Reynolds will head Brain Bank Singapore. He has over two decades of expertise as the founding director of the Multiple Sclerosis and Parkinson's Tissue Bank, an international brain tissue bank based in London.

With Singapore facing an ageing population, one in four here will turn 65 by 2030, and an increased life expectancy of 84.8 years, age-related neurological disorders are
expected to increase, accounting for a growing proportion of Singapore's disease burden.

According to the report of the Burden of Disease in Singapore, neurological disorders rose from the eighth leading cause of Disability-Adjusted Life Years in 1990 to the fifth in 2017.

Hence, this research into neurological conditions such as stroke, Parkinson’s disease and dementia is especially "timely" as Singapore's population continues to age, said Prof. Philip Choo, Group CEO of NHG.

Associate Prof. Ng Wai Hoe, Medical Director at the National Neuroscience Institute, said the "impact of neurological diseases can be long and devastating."

"With the Brain Bank Singapore, we are one step closer to understanding brain disease. With this knowledge, we can make earlier diagnosis, improve care outcomes and raise the quality of life for our patients. This will help Singaporeans live long and live well," he added.

Over the next four years, the brain bank aims to recruit about 1,000 brain donors.