



## SINGAPORE

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### **\$40 million committed to 4 research projects on "Ageing"**

The National Research Foundation has committed \$40 million to four research projects dealing with various aspects of "Ageing". Recognising that a greying population is fast becoming a key concern for Singapore, the projects aim to solve the health issues that come with getting older.

*Joanne Chan* reports.

Here's the scenario - In 2020, over 25 percent of Singapore's population will be above the age of 65. Retirement age has also shifted upward to 75 years old.

To help the aged stay in the workforce longer and lead independent lives, better geriatric health management is required at home, in hospitals and in the community.

In response to this scenario, 48 proposals from the research community were submitted to the National Research Foundation; and four were picked by an International Expert Panel to receive up to 10 million dollars in funding over the next three to five years.

The winning projects aim to find solutions to medical problems faced by an elderly person. Or as one panel member puts it, to ensure that a person is able to enjoy life after retirement.

Professor Ravi Kambadur and his team from the Nanyang Technological University received the nod for their research on how to overcome sarcopenia, or the loss of muscle mass.

"What happens in sarcopenia is, the stem cells, when we are young, is able to repair the muscle loss. But when we get older, the stem cells forget how to repair the lost muscle. What we're trying to do as part of the project is to teach the stem cells to be active as though they were young. "

Professor Ravi added that if muscle loss is not treated, the elderly will face consequences such as impaired physical function that can lead to falls and fractures.

"1 percent of the total body weight is lost every year after about 60 years of age. So what's the consequence of it? The main consequence of losing that much amount of muscle is loss of strength. I have seen, what 3 out of 4 of my grandparents, when they were close to 80, 85, they all live longer, they were not even able to lift a spoon to feed themselves."

The other projects focus on solving health conditions such as a degenerating nervous system, an ageing heart and therapy for stroke patients.