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# Singapore receives grants to research healthy ageing

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**Awarded up to $50,000 each, to initiate research into bold, innovative ideas that could extend the human healthspan**



In the first round of the competition, the Catalyst Phase of the Healthy Longevity Global Grand Challenge founded by the US National Academy of Medicine (NAM), 10 projects from the National University of Singapore (NUS) have been awarded up to $50,000 each, to initiate research into bold, innovative ideas that could extend the human healthspan through disease prevention, mobility, functionality, social connectedness and longevity.

Singapore, like much of the world, faces a rapidly ageing population. Globally, increasing life expectancy paired with decreasing birth rates will see the number of elderly exceed the number of children aged below 10, by 2030.

With this in mind, one NUS awardee, Dr Goh Jor Ming, NUS Department of Physiology, will explore the impact of exercise, and in particular, its frequency, intensity, and duration, on healthspan. Dr Goh, together with Professor Brian Kennedy from NUS Biochemistry and NUS Physiology, and Professor Dean Ho from NUS Biomedical Engineering and the N.1 Institute for Health (N.1), will utilise an artificial intelligence platform known as CURATE.AI, to correlate exercise to treatment efficacy or training-induced adaptations.

After each week of exercise, CURATE.AI will optimise the subsequent week's training session to either increase, maintain or decrease exercise intensity, based on the individual's maximum oxygen utilisation, heart rate and lactate concentrations during exercise. To maximise public health efforts for primary prevention and healthspan, Dr Goh believes that exercise ought to be personalised. This project aims to encourage people to remain active and engage in regular exercise through routines that are personalised to their physiological characteristics.

From mid-2021, Catalyst Award winners will be able to share their work with policymakers, researchers, potential investors, and fellow innovators from around the world at the annual public Innovator Summit.