

## **ANNEX A**

### **About the Healthy Longevity Institute (HELI)**

HELI's research explores why some people stay mentally, physically, and socially well into old age while others decline, and how to change that path early.

Rather than treating ageing as a collection of separate diseases, HELI sees it as a gradual loss of resilience shaped by biology, behaviour and a person's social and physical environment. By combining molecular, clinical, cognitive, physical, behavioural and social data, HELI aims to identify the turning points where timely interventions can preserve or restore function.

HELI will be organised along three major pillars:

- (a) **Cognitive and Mental Health**, which focuses on cognitive and neurological ageing, dementia prevention and mental wellbeing. This could include novel biomarkers for early detection and risk stratification of dementia, or personalised digital coaching to reduce cognitive decline.
- (b) **Physical Health**, which focuses on musculoskeletal ageing, sarcopenia, and frailty, to preserve strength, mobility and independence. Plans include establishing study populations to track physical ageing trajectories and developing wearables and robotic solutions to support fall prevention and rehabilitation.
- (c) **Clinical and Policy Research**, which determines how care systems, families, community factors and public policy shape health outcomes and enable effective interventions to be adopted and sustained. The aim is to create real-world testbeds across the acute healthcare, community healthcare and home settings to allow accurate evaluation of the impact of interventions.

To start, HELI will be established as a partnership between NTU Singapore, NHG Health, and GERI, with plans to include more partners from across the Singapore ecosystem. Through NHG Health, HELI researchers will be able to access longitudinal health cohorts, clinical trial infrastructure and community health networks for development and clinical validation of solutions. HELI will also partner GERI, a national institute set up by the Ministry of Health, Singapore, to conduct translational research on healthy ageing, to support the translation of scientific discoveries into Singapore's healthcare system.

HELI will support initiatives across three workstreams:

- (a) **Research:** HELI will develop a joint roadmap on healthy longevity research to help guide efforts on this front. Funding will be directed to support small seed projects that could lead to transformative discoveries, as well as larger multidisciplinary programmes to scale up promising results.
- (b) **Talent development:** HELI will leverage a unique training model where PhD students will be paired with and mentored by academic faculty and clinicians, giving them a deep understanding of both research and clinical needs.

- (c) **Translation:** HELI will provide funding to support prototyping, pilot deployment and regulatory readiness studies. This will be done in close collaboration with government and industry partners to support implementation.

HELI will be led by an executive team comprising:

- Prof Chen Xiaodong, Distinguished University Professor, NTU;
- Prof Lim Kah Leong, Associate Vice President – Biomedical and Life Sciences and President's Chair in Translational Neuroscience, NTU;
- Assoc Prof Lim Wee Shiong, Senior Consultant and Director, Institute of Geriatrics and Active Ageing, Tan Tock Seng Hospital (TTSH), NHG Health;
- Assoc Prof Ding Yew Yoong, Executive Director and Lead Scientist, GERI.