

NUSMed Healthy Longevity Translational

Research Program **41 Primary faculties, 22 Secondary faculties**

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Program Overview

Theme 1: Biology of Ageing	Theme 2: Muscle Ageing	Theme 3: Brain Ageing	Theme 4: Vascular Ageing	SUB-THEMES				
1. Ageing models, Health & reproductive longevity	1. Age-related changes in ageing skeletal muscle	1. Neural plasticity/Connectivity	1. Stroke: Biomarkers, Anti-stroke/inflammatory agents					
2. Stress resistance, senescence & inflammation	2. Biomarkers of frailty and sarcopenia in humans	2. Cellular & Mol. neuroscience	2. Vascular cognitive Impairment: Dementia neurochemistry, biomarkers, AD, mild cognitive, neuroimaging					
3. Mitochondria, metabolism & microbiome	3. Interventions on frailty and sarcopenia in humans	3. Healthy brain ageing						
		4. Neurodegeneration & neurological disorders						
Ageing mice intervention	Stem cells	Histology	Brain Connectome	Electro-physiology	Proteomics	Gene therapy	Bioinformatics	PLATFORMS/ TRANSLATION
Clinical Studies: Ageing				Clinical studies: Diseases				

Mission

Facilitate close collaboration between basic scientists & clinicians to create a new “Health” care-based strategy to ameliorate the ageing process and increase health as people increase in years.

What we do

We aim to accomplish this through developing biomarkers to measure ageing, understand and manipulate common pathways that modulate ageing, test interventions to slow ageing and creating personalized implementation strategies to extend healthy life expectancy in Singapore.

Training

This program aims to train future scientists to engage in high calibre research in ageing and age-related diseases for development of novel interventions in humans that promote healthy ageing.