



2013 - 2018

People who live by the character ethic have strong roots, deep roots. They withstand the stresses of life, and they keep growing and progressing.

- Stephen R. Covey

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WHO WE ARE

The Institute of Geriatrics and Active Ageing (IGA) was officially established in 2013, to be at the forefront of Tan Tock Seng Hospital's expansion of research and training initiatives to serve our rapidly ageing population.



OUR VISION

To be the leader in Geriatrics Research and Education, so as to enable the delivery of holistic care, person-centric health, independence, safety and quality of life of older persons.



OUR MISSION

We strive for excellence in serving our ageing population through geriatrics research, innovation and education, underpinned by dedicated leadership, valued collaborations and strong commitment to our community.



OUR VALUES

We aim to develop better people to deliver better care and together, build a better community for our older persons.

OUR LEADERSHIP



Associate Professor Chin Jing Jih Director



Associate Professor Lim Wee Shiong Research Lead



Dr Ravinder Sachdev Singh Innovation Lead



Dr Loh Yong Joo Innovation Co-Lead



Associate Professor Wong Wei Chin Education Lead



Dr Joanne Kua Education Co-Lead



IGA'S RESEARCH

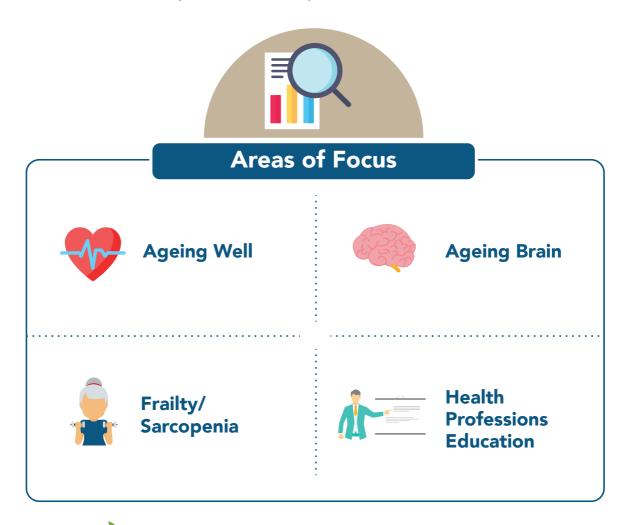


GERI-LABS Appreciation-Education Forum, October 2016.

Giving back to our participants and community is a firm belief of one of our pivotal research projects GERI-LABS, in appreciation of their generosity, trust and support for our study. Through the interactive forum, we presented project updates and findings to research participants, with supplements of educational and practical health information.

IGA's Research

Strategically nestled within the largest geriatrics practice in Singapore to serve the central population of Singapore, our interdisciplinary research aspires to build capabilities towards rigorous, relevant and evidence-based practice, to ultimately influence and improve clinical practice and care.



Learn character from trees, values from roots, and change from leaves.

Tasneem Hameed

OUR ACHIEVEMENTS: RESEARCH GRANTS

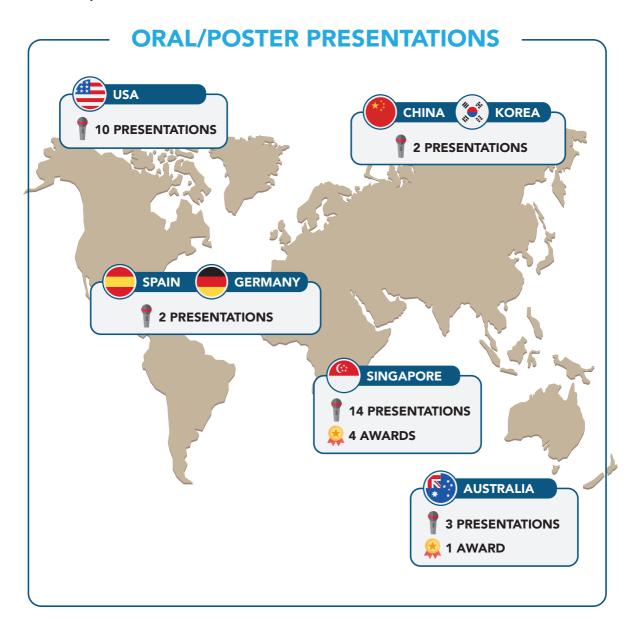
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Research Study	Awarding Agency	Grant Amount	Project Duration
SAIF: An End-to-end System for Assessment and Intervention of Frailty	Ministry of Health (MOH) National Innovation Challenge (NIC) on Active and Confident Ageing, Healthy Ageing Innovation Grant Call	\$1,409,677	3 years
Longitudinal Assessment of Biomarkers for characterisation of early Sarcopenia and Osteosarcopenic Obesity in predicting frailty and functional decline in community-dwelling Asian older adults study (GERI-LABS 2)	Philanthropic	\$2,000,000	5 years
Longitudinal Assessment of Biomarkers for characterisation of early Sarcopenia and predicting frailty and functional decline in community-dwelling Asian older adults study (GERI-LABS)			
Affordable in-situ patient weight sensor measurement system for hospital beds	Ng Teng Fong Healthcare Innovation Programme	\$75,000	2 years
Emergency Department Interventions for the Frail Elderly (EDIFY)	Ng Teng Fong Healthcare Innovation Programme	\$198,342	2 years
Development of an Immersive Dual Task Training and Assessment Platform for Older Adults	Ng Teng Fong Healthcare Innovation Programme and Nanyang Polytechnic	\$21,800	1.5 years
Investigating the Reliability of a Self-reported Mobility Assessment Tool for Purpose of Early Detection of Functional Decline in Community-dwelling Older Adults	Ministry of Health	\$21,690	1 years
ADL+: A Digital Toolkit for Cognitive Assessment and Intervention	MOH NIC, Cognition Grant Call	\$2,114,398	3 years
Modelling and Optimising Home Care and Caregiving Services for the Elderly	MOH NIC, Care-at-Home Grant Call	\$1,955,933	3 years
Developing a Mastery-centric Assessment of at-risk Caregivers of Hospitalised Frail Elderly	National Healthcare Group	\$176,900	3 years
Targeting Frailty through a Combined Nutritional Intervention and Physical Exercise Programme to Prevent Disability and Functional Decline in Community-dwelling Older Fallers: A Pilot Randomised Clinical Trial	National Healthcare Group	\$89,575	3 years



GERI-LABS: OUR LANDMARK STUDY

Our GERI-LABS 1 and 2 studies have created a strong foothold in raising awareness of sarcopenia and frailty, and more recently, osteosarcopenic obesity. Following through our Asian cohorts of community-dwelling older adults, we are excited to push the frontiers of knowledge and shape future developments in this emerging field.





GERI-LABS: AWARDS

SCIENTIFIC AWARDS



Best Allied Health Poster Award (Gold)

Ms Audrey Yeo

Combined impact of sarcopenia and frailty on health-related Quality of Life. *Singapore Health and Biomedical Congress 2018.*

Best Oral Presentation – Clinical Services A/Prof Lim Wee Shiong

Construct and predictive validity of SARC-F as a risk assessment community screening tool for sarcopenia. *Australian and New Zealand Society for Sarcopenia and Frailty Research 2017.*

Young Investigator Award

Dr Yang Yuxin

MRI estimation of intermuscular fat density in thigh in a sarcopenia population correlation with physical performance. *RadiologyAsia 2017.*



Best Poster Award (Bronze)

Ms Suzanne Yew

Examining the impact of nutrition on physical performance and sarcopenia in functionally independent community-dwelling older adults. *Asia Pacific Geriatrics Conference 2017.*



Young Investigator Award – Clinical Research (Gold)

Dr Laura Tay

Inflammation and the interaction between anabolic-catabolic pathways in sarcopenia.

Singapore Health and Biomedical Congress 2014.



GERI-LABS: PUBLICATIONS

- 1. Lim WS, Tay L, Yeo A, Yew S, Hafizah N, Ding YY. Modulating Effect of Contextual Factors on Factor Structure and Reliability of SARC-F. Journal of the American Medical Directors Association. 2018;19(6):551-3.
- Yang YX, Chong MS, Lim WS, Tay L, Yew S, Yeo A and Tan CH. Validity of estimating muscle and fat volume from a single MRI section in older adults with sarcopenia and sarcopenic obesity. *Clinical Radiology*. 2017;72(5):427.e9-.e14.
- Yang YX, Chong MS, Tay L, Yew S, Yeo A and Tan CH. Automated assessment of thigh composition using machine learning for Dixon magnetic resonance images. Magnetic Resonance Materials in Physics, Biology and Medicine. 2016;29(5):723-31.

17 other articles related to GERI-LABS have also been published in respected international journals.

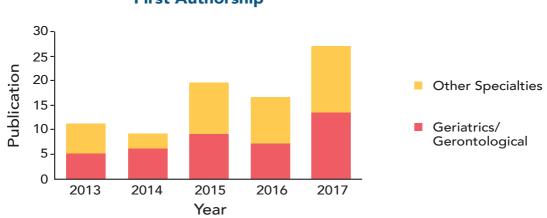
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- 6. Lim JP, Leung BP, Ding YY, Tay L, Ismail NH, Yeo A, Yew S and Chong MS. Monocyte chemoattractant protein-1: a proinflammatory cytokine elevated in sarcopenic obesity. *Clinical Interventions in Aging.* 2015;10:605-9.
- 7. Chong MS, Tay L, Ismail NH, Tan CH, Yew S, Yeo A, Ye R, Leung B and Ding YY. The Case for Stage-Specific Frailty Interventions Spanning Community Aging to Cognitive Impairment. *Journal* of the American Medical Directors Association. 2015;16(11):1003.e13–.e19.

OUR RESEARCH PUBLICATIONS

Amidst competing demands of clinical care, educator and administrator roles, our research output displays a steady increase in the number of publications, in many top-ranked geriatrics and gerontology journals.



Aligned with IGA's strategic growth, valuable collaborations with local and international partners pave the way for multidisciplinary and interdisciplinary research, striking a positive balance of publications from geriatrics/gerontological field and other specialties.



First Authorship

OUR RESEARCH PUBLICATIONS

2018

Chan EY, Glass G, Chua KC, Ali N, Lim WS. Relationship between Mastery and Caregiving Competence in Protecting against Burden, Anxiety and Depression among Caregivers of Frail Older Adults. The Journal of Nutrition, Health and Aging. 2018;22(10):1238-45.

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MOU Signing Ceremony, July 2014.

A Memorandum of Understanding (MOU) was inked between IGA and one of our key collaborators, Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderly (LILY). Merging clinical and technical expertise and steered by strong leadership, we sealed this harmonious partnership in the many years to come.

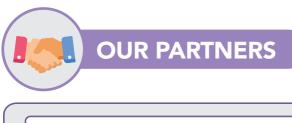
IGA's Innovation

Harnessing on the strengths and synergy of respected collaborations with like-minded scientists, academia, engineers and industry partners, we drive innovation through gerontechnology to enhance opportunities for and aspirations of older persons.





Alexander Pope





The Joint NTU-UBC Research Centre of Excellence in Active Living for the Elderly (LILY) is a world-class research centre focused in the design of computing technologies that help older adults enjoy an active and independent lifestyle.

Together with LILY, IGA has been awarded two national grants under the Ministry of Health (MOH) National Innovation Challenge (NIC) on Active and Confident Ageing, on cognition and frailty respectively.



Supporting multidisciplinary and interdisciplinary ageing-related research, programmes and activities, Ageing Research Institute for Society & Education (ARISE) is a pan-university institute that coordinates and synergises efforts across NTU, towards empowering the ageing community.



Harnessing on the close relationship TTSH has forged with Nanyang Polytechnic (NYP) over the years, the TTSH-NYP Joint Grant Programme was established in FY2016 to drive innovation targeting our ageing population.

Since inception with funding and support from both institutions, the Joint Grant has awarded several noteworthy projects through IGA as grant secretariat, succeeding numerous collaborative opportunities across TTSH clinical departments and NYP schools.

IGA'S EDUCATION

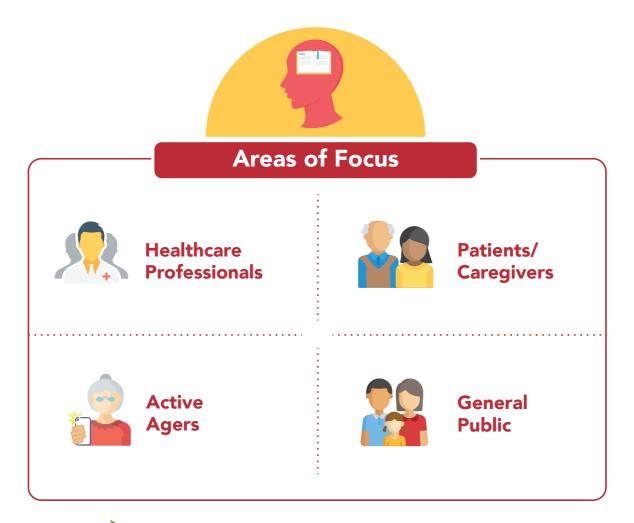
Active Ageing Day, September 2018.

From infants to 80 year olds, more than 300 participants and volunteers got moving in our walkathon and mass exercise during our inaugural Active Ageing Day event at Marina Barrage. Intergenerational bonding was encouraged and exhibited through our photo contest, against the scenic backdrop.

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IGA's Education

From the development of infrastructure and expertise to propagation of evidence-based practices, our educational efforts strive to equip, engage, enable and empower different stakeholders towards our unified vision of improving the quality of life of older persons.



Education forms the common mind. Just as the twig is bent, the tree's inclined.

Everett Mamor



OUR REACH: HEALTHCARE PROFESSIONALS

INTENSIVE PRACTICAL COURSE IN DELIRIUM AND DEMENTIA CARE

7 RUNS 202 PARTICIPANTS

Delivered by our multidisciplinary local experts, our Intensive Practical Course in Delirium and Dementia Care aims to build capabilities in healthcare professionals with skills and knowledge necessary to care for our dementia/delirium population.







MEDICINE IN THE OLDER ADULTS MASTERCLASS

й 5 RUNS

209 PARTICIPANTS

Focusing on topics pertinent to older adults, our Medicine in the Older Adults Masterclass workshop is designed to equip doctors with current and best practices in geriatric medicine, inculcating better appreciation and care delivery for older patients.







OUR REACH: PATIENTS & CAREGIVERS

AGECARE VORKSHOPS 505 PARTICIPANTS

Our series of AgeCare workshops strive to provide older patients with practical tips on taking charge of their health, and equip family caregivers of older adults with competence and confidence in optimising support for their loved ones.





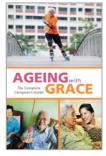


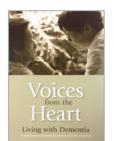


OUR EDUCATIONAL RESOURCES

In collaboration with our clinicians and partners, IGA has developed multiple educational resources beneficial to patients and caregivers.

Putting together the minds and hearts of healthcare professionals intimately involved in the care of older adults, it is with confidence the resources function as practical tools in a local context, towards betterment of quality of life for our older persons.













GRACEImage: 3 RUNSPROGRAMMEImage: 3 RUNSImage: 3 RUNSImage: 3 RUNS

Befitting IGA's name and mission, we develop the Ageing with Meaning: Gradual Retirement Activities for the Community Elderly (GRACE) programme, in challenging and empowering participants to attain mastery of active ageing concepts towards becoming ambassadors of active ageing.

Anchored by geriatricians and facilitated by healthcare professionals, the GRACE programme provides in-depth coverage of pertinent topics including cognition, nutrition and spirituality among others, augmented by an individualised health plan and exercise prescription.

ACTIVE AGEING DAY

Our inaugural Active Ageing Day in 2018 celebrated the positivity of ageing in a fun and safe manner whole-heartedly, in conjunction with the Active Ageing week campaigned by the International Council of Active Ageing, Canada.

Themed Go4Life, the four activation pillars of Physical Activities, Nutrition, Volunteerism and Intergenerational Activities were illustrated through a walkathon complemented by healthy showcasing food and fruits, an impossible feat without committed families volunteers and exuding intergenerational bonding! Take-home message: We can all age actively in our own creative ways!







COMMUNITY OUTREACH 5286 PARTICIPANTS

Serving as a springboard for community educational outreach, our annual Falls Awareness Day and World Alzheimer's Day aim to heighten awareness of falls and dementia among the general public, including the young.

Organised by a comprehensive multidisciplinary team of doctors, nurses and allied health professionals, these events offer a holistic perspective of preventive strategies relating to falls and dementia.

Collaborations with community partners have provided valuable connections to residents in various parts of Central Singapore, as we progress collectively towards a better community for our older persons.











COMMUNITY EFFORT



Photo source: TODAY Online

In collaboration with the Ministry of Health (MOH), Health Promotion Board (HPB), National Transport Workers' Union, SBS Transit and SMRT Buses, IGA is privileged to be part of the pilot Workplace Health Programme for Bus Captains, launched on 31 July 2015 jointly by then Senior Minister of State for Health and Manpower Dr Amy Khor, and Senior Minister of State for Finance and Transport Mrs Josephine Teo.

Specially tailored for the bus captains, this programme brings healthcare to their doorstep so that this group of mature workers can better manage their health.

Bus captains undergo health and vision screenings, in addition to attending monthly health coaching sessions held at the bus interchanges. Various clinical specialties are assembled to provide domain expertise and guidance for health sessions, with topics ranging from chronic disease management and smoking cessation, nutrition and physical activity, stress management and sleep, to driving ergonomics.

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调查:半数失智症患者家属承受巨大看护压力

张佳莹 报道 jayingc@sph.com.sg

造择亲自预服失管症患者对于 配偶或成年子女而言。随之而来的 生活压力及负担相当显著。 除结土医院昨日内螺体发布一 球拍步研究调查结果。发展40%至 60%的家属在照顾病患时承受不少 压力。



40-60% of caregivers of dementia patients suffer from "significant stress": TTSH study. Channel NewsAsia, Channel 5 News, Channel 8 Hello Singapore, Channel 8 News Tonight, Channel U News Tonight, Suria Berita, Vasantham Tamil Seithi. 11 May 2016.

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^{陈笃生医院和国立键保集团合作} 综合诊所医生可看失智症病人

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Stepping up on step-down care. The Straits Times. 20 July 2015.

Stepping up on step-down care



Affordable options are available for elderly patients who need long-term medical attention after being discharged from the hospital

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Falls aren't just a part of the ageing process. Today. 29 April 2015.

Applying the brakes. The Straits Times. 16 October 2014.

Recognising burnout in caregivers. Today. 15 Oct 2014.

Guidebook gives tips on caring for seniors. The Straits Times. 29 September 2014.

Guidebook gives tips on caring for seniors

y SAMANTHA BOH

TO PREVENT falls at hose use haminous-coloured taps mark out steps, or place non-slip mat under floor roy These tips are captured in new guidebook that looks caring for a senior; and preping for and managing old ag The 300-page guide, th Ageing With Grace: The Co



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ACKNOWLEDGEMENTS

We thank all our colleagues, partners, friends and funders who have provided your valuable time and resources to IGA, and rendered us with your unwavering support. We also thank the senior management of Tan Tock Seng Hospital and National Healthcare Group for your trust and leadership in guiding our growth.

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