



GERONTECHNOLOGY LABORATORY

Monash University Malaysia's Gerontechnology Laboratory is a research platform that undertakes interdisciplinary research focused on developing technology for the ageing population. The platform aims to translate research into new products and services as well as shape public policies to improve the health and well-being of older people.

Researchers apply scientific approaches to understand the challenges and opportunities of longevity. They provide in-depth and comprehensive insights into the real needs of the ageing population, design age-friendly products and services, and promote an active and independent lifestyle.

EXPERTISE

- Artificial intelligence and data science
- Better governance and policy for longevity economy
- Sustainable development for healthy ageing

KEY INSTRUMENTATION

- **Age simulation suit:** The suit allows young adults to understand mobility challenges, reduced dexterity, and sensory impairments, fostering empathy and experiential learning.
- **Human exoskeleton:** The human exoskeletons are advanced mobility machines, powered by electric motors, assist in movement and reduce physical strain. Featured models include Laevo and EksoWorks exoskeletons.
- **Robotics:** The ZERO 6-axis Vertical Articulated Robot by Zeus offers precision, compact design, and easy installation.
- **Brain Rehabilitation Science:** This non-invasive device monitors brainwaves, generates personalised reports, and supports neurofeedback therapy.
- **Monash HEARTS Volunteer Community:** We have established a network to recruit subjects for experiments and participants for survey research on ageing.

WORKING WITH US

- Collaborative research
- Consultancies
- Training
- Fee for service

SPECIALIST SERVICES

We engage students and researchers across Monash and partners in universities, business and government, locally and internationally. We have a pool of multidisciplinary research capabilities in engineering, robotics, information technology, usability, social science, psychology, health and medical fields that are of relevance to older adults.

Specialist Service #1: Research And Development

Conduct translational research and infuse human element into research and development for people to live well and age well in their last third of their adults' lives.

Specialist Service #2: Education And Training

Provide education and training, assessment and consultation concerning gerontechnology, home safety and independent living environment.

Specialist Service #3: Research Network

Expand the research network and foster the multidisciplinary research collaborations in Monash and beyond.

Specialist Service #4: Engagement And Impact

Develop innovative social engagement and community outreach as well as forward-looking policies to support ageing communities.

Specialist Service #5: Open Platform

Serve as an open platform that engages the general public with various technologies and provides trials for the visitors.

GERONTECHNOLOGY LAB

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