

Clinical Research Strength 05: Healthy ageing

Healthy ageing is a growing field of excellence in the Melbourne Biomedical Precinct. The doubling of Australia's older population to 5.7 million adults aged 65 years and older by 2031 presents major challenges and opportunities for innovative research. The work of the Melbourne Biomedical Precinct represents internationally recognised themes that improve quality of life, prevent disease and manage cardiovascular, hearing, vision and musculoskeletal health into later life.

Main players

- Bionics Institute
- Centre for Eye Research Australia (CERA)
- Faculty of Architecture, The University of Melbourne
- Faculty of Engineering, The University of Melbourne
- National Ageing Research Institute (NARI)
- The Royal Melbourne Hospital
- The Royal Victorian Eye and Ear Hospital
- The Royal Women's Hospital
- School of Medicine, The University of Melbourne
- School of Population and Global Health, The University of Melbourne
- St Vincent's Hospital Melbourne

Advancing areas of strength

- Prevent age-related diseases – unravelling the mechanisms behind our ageing process to minimise the negative effects during a lifetime, including a focus on behaviour modification and social determinants of disease.
- Vision and hearing – expertise in age-related vision and hearing loss associated with ageing.
- Cognitive ageing – conducting high-quality studies on healthy cognitive ageing and behavioural interventions, including use of cutting-edge virtual reality treatments for adults at risk of dementia.
- Physical ageing – including musculoskeletal disorders such as osteoporosis and falls prevention in the community.
- Menopause research – including after cancer.
- Prevention of hospital admissions and understanding of the accumulation of diseases in ageing people (multi-morbidity) – developing predictive tools to improve patient outcomes both in and out of hospital.
- Healthy environment for healthy ageing – exploring how the design of the physical environment (including roads, parks, housing and retirement communities) can incorporate age-friendly design principles.
- Clinical and social healthy ageing research – NARI has a 40-year track record of research that promotes healthy ageing behaviours in areas such as cultural diversity, end of life care, social isolation and indigenous health and ageing.

In collaboration with international researchers, CERA has found a way to slow the progression of dry age-related macular degeneration (AMD) – one of the most common causes of vision loss in people over the age of 50.
