

Faculty of the Built Environment

Knowledge hub and Livability Design Lab

DESCRIPTION of YOUR TECHNOLOGIES

Evidence based design information that support for making changes to a city, building, public space or home, for comfort, safety and easier living. Effective design interventions have been shown to have the capacity to improve wellbeing and reduce the need for waged care services.

SPECIALISTS IN Enabling Built Environments for Ageing, Disability and Care

The Enabling Built Environments Program (EBEP) is an initiative of the Built Environment faculty at UNSW. EBEP's research is concerned with how the built environment, from home to town centre design level, impacts human function, quality of life and health/care costs for older people, young people with disability, and carers. Funded projects range from the macro level e.g. the performance of town centres and housing supply, to the micro level e.g. temperature regulation valves, smoke detectors. EBEP currently comprises three research streams:

1. Home Modification Information Clearinghouse (HMinfo)
2. Housing
3. Liveable Neighbourhoods.

THE TOOLS OF OUR TRADE

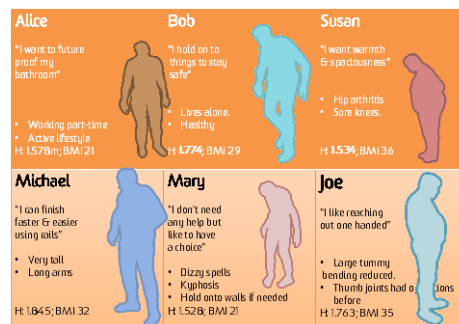
Livability Design lab

- Full anthropometric measurement including 3D scanning
- Optitrack 15 camera marker based motion capture system (120Hz sampling)
- Visual 3D biomechanical analysis software
- Novel Pressure sensing mat system with analysis software (1 large floor mat and 4 flexible product interface mats)
- Adjustable, configurable test rig system
- Full body motion capture and biomechanical analysis
- High resolution pressure recording at floor and product interfaces

COMPETITIVE ADVANTAGES OF YOUR TECHNOLOGIES

Our group are innovators and pioneers in the development of:

- Built Environment Systematic Review specialists
- Design Block development for BIM and PIM modelling
- Persona development for product and architectural testing.
- Accessible Apps using participatory design



SELECTED RECENT PROJECTS and TRACK RECORD

Current research projects include:

- [Home Modification Information Clearinghouse](#) ([My Aged Care](#) - Commonwealth Health Department)
- Washbasin clearances ([Caroma](#) a division of GWA Int.)
- National Construction Code verification of method for stair traversability ([Australian Building Codes Board](#))
- National Construction Code verification of method for ramps ([Australian Building Codes Board](#))
- Do It Yourself Home Modifications – [DIYmodify App](#) ([Family and Community Services, Ageing, Disability and Home Care](#))

OUR EXPERTS

Director: Assoc/ Professor
Catherine Bridge

List of key personnel can be found at <https://www.be.unsw.edu.au/research/research-initiatives/enabling-built-environments-program>

