



Australia's
Global
University

Developing appropriate technology for managing disease and wellness

Applying engineering tools and approaches to address problems in medicine and biology

Work spans from basic science, to applied R&D, product design, clinical trials and evaluation

Experience also in translation, commercialisation and device regulatory approvals (TGA/FDA/CE)



Wearable sensors and Smartphone Apps (falls detection/prevention/activity classification)

Digital Health

Graduate School of Biomedical Engineering Competitive advantage

Fall detection/prevention

- Lightweight, comfortable and Low cost
- Lowest false alarm rate reported in literature
- Patent pending algorithms for long battery life

Clinical measurements for management of chronic disease

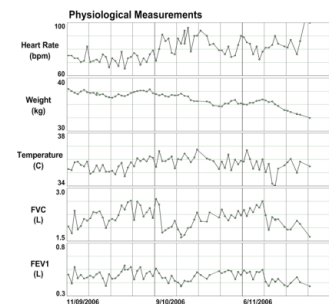
- Experience in medical device regulatory approvals (TGA/FDA/CE)
- Algorithms for health risk stratification
- Raw data captured for more accurate diagnosis

Recent research projects

- ARC Linkage funding for fall detection and prevention
- ARC Linkage funding for telehealth and telecare convergence
- ARC Linkage funding for predicting hospitalisations
- EMBC Bioaccelerator initiative in translational medical device development
- Bill and Melinda Gates Foundation Grand Challenges Explorations Phase I for malnutrition assessment from photographs taken with a smartphone

Facilities and infrastructure

- Database and file servers, and software tools for developing and hosting web and smartphone apps
- An ISO13485 compliant Quality Management System and clean room for design and manufacture of medical devices including wearable and implantable bionics
- A laser micromachining, microelectronics and 3D printing facility for electronics and mechanical design and prototyping
- A gait analysis laboratory in collaboration with NeuRA
- Animal housing and full surgical suite for acute and chronic in vivo experiments



Clinical measurements for management of chronic disease (telehealth monitoring, decision support systems)

More information

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