

Graduate Student Opportunities

Tēnā koe, Malo e lelei, Talofa lava, Kia orana, Fakatalofa atu, Bula!

- **The University of Auckland is looking for talented and enthusiastic individuals to undertake Masters and/or PhD research.**
- **Research opportunities will support the co-design and evaluation of digital interventions for common mental health challenges in adolescence.**
- **You would be working alongside an experienced and passionate team who are keen to support the right person/s.**
- **We have a limited number of stipends for appropriately qualified students to commence research in 2017. Funding is through MBIE as part of one of 11 National Science Challenges: E Tipu e Rea – A Better Start.**
- **There is also scope for students who are already funded (through existing scholarships) to join our team. Applications for 2017 are open, so apply now.**

Digital interventions and youth mental health

Mental health problems are common in adolescence, affecting at least one in four young people. They are a major cause of disability, and a major risk factor for youth suicide. Yet most mental health problems are untreated. Māori and Pacific people are at particular risk for mental health problems and have some of the poorest access rates to services.

Digital technologies are reshaping the ways we live our lives, including healthcare technologies. Digital media can be harnessed in innovative ways to deliver services to those that would otherwise miss out. We have an opportunity to develop relevant and culturally appropriate interventions to improve mental wellbeing of New Zealand adolescents using online and smart phone technologies.

A Better Start - E Tipu e Rea (<http://www.abetterstart.nz>)

We are part of a National Science Challenge funded by the Ministry of Business, Innovation and Employment. Professor Sally Merry (Chair in Child and Adolescent Psychiatry) is the Principal Investigator and we have a large team of scientists and advisors involved in the project, who represent health and education disciplines throughout New Zealand.

Our aim is to increase detection and access to evidence based interventions by partnering with Māori and Pacific young people and their communities to facilitate a co-design approach to develop and test a digital platform of e-health interventions. The platform will consist of e-screening and effective e-health interventions using Behavioural Intervention Technologies (BITs) for common mental health concerns:

emotional health (depression, anxiety and stress) and problematic substance use. We hope, through co-funding, to expand the number of interventions to address other relevant areas of emotional health and resilience e.g. bullying, sleep disorders, social phobia, post-traumatic stress disorder and others.

Research opportunities for graduate students

We have a range of possible thesis topics available. In particular, we want to focus on important issues for Māori and Pacific youth mental health. If you're a Māori or Pacific student looking to do a postgraduate research degree, we would love to hear from you.

We are also interested in topics related to engagement in digital self-care tools, unsupported vs. supported digital interventions, telepresence, gamification and others. For a detailed list of possible thesis topics, please refer to www.findathesis.auckland.ac.nz.

If you have a background in Computer Science, Software Engineering or a related area

We are interested in graduate students to conduct computing research on ways to enhance digital mental health intervention for youth.

We are particularly interested in use of natural language processing (NLP) to create artificially intelligent counselling agents that correctly assess the affect (emotional tone) and other aspects of the semantics of user inputs. The aim is to devise AIs that provide specific guidance in psychological techniques such as Motivational Interviewing, Cognitive Behavioural Therapy (CBT) and Relaxation Training. The AI may engage the user as a life-coach, an aid to navigating existing electronic therapy tools, or in a form a gamified interaction.

Your thesis work will integrate with ongoing development of a platform for youth e-therapy with automated mental health screening and gamified online therapy tools.

Of particular interest are students who have honours-level computing qualifications (especially if related to AI and/or NLP) *and* education or experience in any of: psychology, health informatics, human-computer interaction or game design, or any area of health service delivery (social work, counselling, nursing etc.).

About the stipends

- \$27,000 PhD stipend per year for living costs (for a duration of three years).
- \$5,000 Masters stipend per year.
- Stipends are tax free.
- University tuition fees for domestic students will be covered.

Project supervision

Project supervision will depend on the chosen topic and the background of the student, but will be based at the Department of Computer Science and include at least one staff member from the HABITS research team. Māori and Pacific researchers will be involved in co-supervision of Māori and Pacific students.

Contact	Professor Jim Warren
Email:	jim@cs.auckland.ac.nz
Please submit:	Your up-to-date CV, a letter describing your relevant background and experience (including any experience working with Māori and Pacific

	<p>communities), a copy of your academic transcript and academic references (please upload as a single pdf document).</p> <p>If you're interested in the PhD stipend, please include a writing sample (first-class honours dissertation, thesis or publication).</p>
Applications:	<p>Applications will open in early 2017, via the Scholarships Office, for a 2017 start date. However, expressions of interest are being sought for preliminary discussions to take place.</p>