Postgraduate Research Scholarship Opportunity (PhD)

James Cook University’s Centre for Chronic Disease Prevention (CCDP) undertakes research related to the prevention of chronic diseases in the community and improving primary health care practice and care pathways for chronic disease. The CCDP is committed to working with health services and communities in Far North Queensland to improve the management of chronic disease, particularly diabetes, heart and renal disease. The CCDP is based at James Cook University’s Cairns campus.

The opportunity

The CCDP is seeking expressions of interest for PhD student candidature, with a 3-year $45,000 per annum tax exempt scholarship, to carry out research as part of an NHMRC Project Grant ‘Building a simulation model to improve cardiovascular disease risk prediction and treatment for Indigenous Australians’.

The role

In Queensland, the life expectancy gap between Indigenous and non-Indigenous Australians is currently estimated at 10.4 years for males and 8.9 years for females. Cardiovascular disease was the leading cause of death for Indigenous Australians in 2012, and is estimated to account for 28% of the health gap. This project aims to address a significant knowledge and practice gap, by developing a cardiovascular disease risk prediction equation and simulation model specifically for Aboriginal and Torres Strait Islander peoples using up to 14 years of follow-up data on approximately 2800 Indigenous participants from the Well Person’s Health Check study. This will facilitate the assessment of absolute risk of CVD among Indigenous Australians and thereby facilitate the appropriate targeting of prevention and treatment interventions to help reduce the gap in life expectancy.

The specific aims of the project are to:
1. Develop a primary CVD risk equation equivalent to Framingham risk score [3] for Indigenous adults using data from the Well Person’s Health Check study (WPHC).
2. Assess the increased predictive power of an enhanced model which uses data on non-traditional risk factors (e.g. urinary albumin-to-creatinine ratio) to further stratify risk of CVD among Indigenous Australians.
3. Develop clinical risk assessment tool such as a 10 year CVD risk calculator that will improve the targeting of treatment and prevention strategies among Indigenous Australians.

4. Develop an Indigenous health policy simulation model that is based on an integrated set of cardiovascular risk equations and administrative hospital data from Queensland Health to quantify the cost and outcomes (e.g. reduced life expectancy) of cardiovascular disease.

5. Build Indigenous research capacity in both the development and implementation phases of the project, including employing Indigenous researchers and providing the tools for other researchers throughout Australia.

The PhD student will work with the chief investigators to develop a primary CVD and all-cause mortality risk equation utilising a linked dataset from north Queensland Aboriginal and Torres Strait Islander communities. The research process will include consultation with relevant community members, health stakeholders, clinicians and others, to understand how CVD risk is currently used in primary clinical practice and health services planning (including workforce planning) by community controlled organisations and government providers. It is expected that one of the outcomes of this project will be a better CVD risk equation for Indigenous Australians, with better uptake by service providers, leading to more targeted prevention of CVD in remote and rural populations.

Further Information

For further information please contact Professor Robyn McDermott, Director, Chronic Disease Prevention, Robyn.McDermott@jcu.edu.au

Applications

Applicants must demonstrate an appropriate academic record to be competitive for a PhD scholarship at JCU. Visit http://www.jcu.edu.au/grs/prospective/index.htm for prerequisites and application information.

The student will have a health-related primary qualification, experience in the health care sector, well developed quantitative skills, good verbal and written communication abilities and an interest in chronic disease prevention. Applications from individuals from an Aboriginal or Torres Strait Islander background are especially encouraged.

Interested applicants should send their CV (including description of any previous experience relevant to this project) and application materials (including: a publication list, if any; academic record; and the names, addresses, emails and phone and fax numbers of two referees) to the Centre for Chronic Disease Prevention at the address below, by no later than 5pm Wednesday 30 November 2016.

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Further Information is available at: http://www.aithm.jcu.edu.au/careers/research-scholarships/ccdp-scholarship/