

PEARL PROJECT

The Australian Respiratory Council partners in the Pathway to the Elimination of Antibiotic Resistant and Latent Tuberculosis in the Pacific (PEARL) Study



The Australian Government through the Medical Research Futures Fund Global Health Initiatives Grant Scheme awarded \$ 4.25 million in funding over four years (commencing in 2020) to support research around the diagnosis, prevention and treatment of drug resistant tuberculosis (DR-TB) in Pacific Island Countries.

The funding is for research that will enhance knowledge and develop tools to combat threats to national health security posed by the regional and global challenges of DR TB. The research is to be undertaken in collaboration with researchers from Pacific countries to promote capacity building to ensure the risks associated with TB can be managed on both sides of the border, in Australia and overseas.

The ARC will partner in the project with a team of translation-oriented researchers and capacity building experts led by Professor Ben Marais. The project team includes: the NHMRC TB Centre of Research Excellence, Sydney University, Monash University, the World Health Organisation (WHO) Collaborating Centre for Nursing, Midwifery and Health Development and the South Pacific Chief Nursing & Midwifery Officers Alliance at the University of Technology Sydney, the Australian National University, and the WHO Western Pacific Region Office END TB & Leprosy Unit. The people of Kiribati have expressed a political and societal commitment for efforts that contribute to the control and progression towards elimination for TB and Leprosy within their country.

Background

The emergence and spread of antibiotic resistant strains of TB is a major concern globally. Within the Pacific, TB and Leprosy hotspots such as Kiribati pose a particular challenge and threat. The incidence of TB and Leprosy in Tarawa (the main population centre in Kiribati) is amongst the highest globally, combined with the dominance of TB disease in young adults, the population density and ongoing transmission of TB and Leprosy, the potential for amplification of TB, DR TB and Leprosy is a public health concern.

The overarching objective of the study is to mitigate the threat posed by DR-TB in the Pacific, by enhancing knowledge and testing new strategies to combat both diseases. The Pathway to the Elimination of Antibiotic Resistant and Latent tuberculosis in the Pacific (PEARL) study, proposes an integrated body of work that will provide a pathway towards DR-TB prevention, TB and Leprosy elimination in the Pacific.

Every person aged 3 & older in a population of more than 60,000 people in South Tarawa, Kiribati will be offered screening for TB & Leprosy. A series of mobile clinics will be set up in the community for people to access. The screening sites will move around Tarawa over a three-year period to reach maximum numbers of people. A team of local staff will be employed to work in collaboration with the study team to undertake the screening activities.





People with active TB will be referred for TB treatment, and those with TB infection will be treated with preventative therapy to diminish the pool of people at risk of developing active TB in the future. Single dose preventive therapy will be given to people to prevent people developing Leprosy.

Community engagement and participation in the screening is critical to the success of the program and the goal TB and leprosy elimination. Activities to engage the government, community leaders, health services and population will be undertaken throughout the study.

The ARC will lead the component of the study relating to building workforce capability through training and education for TB/DR-TB control and elimination in Kiribati, and more broadly within the Pacific. This will be achieved through a program of training and mentoring. The work undertaken by ARC will build on existing expertise and activities within the Pacific to deliver in-country training and clinical mentoring in Kiribati and the Pacific more broadly.

ARC will develop and deliver training for the National TB & Leprosy Program to build knowledge, skills and capacity in the care and management of both TB and Leprosy. A specialised training program, resources, tools and protocols will also be developed and implemented for the Study Team.

The ARC will work with the UTS WHO Collaborating Centre of Nursing and Midwifery to develop a pipeline and pathway for nursing education for the Pacific in the specialty area of TB Nursing.

The project will strengthen collaborative partnerships between Australia and Pacific Island Countries. The training and mentoring program will establish better surveillance and care networks across the Pacific to prevent the emergence and spread of DR-TB, while the intervention and modelling data will have direct impact on practice and policy. Overall, the project will strengthen regional Health Security by reducing the threat of DR-TB and Leprosy in the Pacific and play a catalytic role in regional TB and Leprosy elimination efforts.

