



# 2021-2022 STUDENT PROJECT OPPORTUNITY

MASTER BY RESEARCH



# Epidemiology and clinical management of non-tuberculous mycobacteria in the Northern Territory: a cohort study

GLOBAL AND TROPICAL HEALTH

MASTER BY RESEARCH

A range of mycobacteria other than *Mycobacterium tuberculosis* complex (tuberculosis) and *Mycobacterium leprae* (leprosy) are known to cause disease in humans – these are collectively known as non-tuberculous mycobacteria (NTM). Previous reports have suggested that the incidence of NTM disease is increasing, however our understanding of the epidemiology of NTMs is limited. The clinical management of NTM disease is complex, requiring prolonged treatment with several anti-mycobacterial agents. There is limited evidence available to guide decisions on when to initiate treatment, when to cease it, and which agents to include in the treatment regimen.

The aim of this study is to:

- Describe the current epidemiology of NTM disease in the Northern Territory, and
- Describe the clinical management of NTM disease in the Northern Territory, including duration of treatment, anti-mycobacterial agents used and treatment outcomes

Laboratory data will be used to identify the cohort of cases of NTM disease in the Northern Territory between 2010 and 2017. Demographic, clinical, treatment and outcome data will then be obtained from the patients' medical records. A descriptive analysis of the epidemiological features of NTM disease and clinical management of patients will then be undertaken.

This project will provide an opportunity for the student to develop skills in management of complex clinical data and descriptive data analysis using their choice of statistical software (SPSS, Stata or R, +/- Q-GIS). We anticipate that the student would undertake data collection, cleaning and analysis and prepare a manuscript for publication in a peer reviewed journal.

**Dr Chris Lowbridge**

[chris.lowbridge@menzies.edu.au](mailto:chris.lowbridge@menzies.edu.au)

**Eligibility:** The successful applicant will meet the eligibility criteria for admission to a Master by Research or Doctor of Philosophy degree at Charles Darwin University.

**Scholarship Provisions:**

Candidates will be encouraged to seek Research Training Program (RTP) scholarship funding through Charles Darwin University. Further information about RTP scholarship application process, eligibility criteria and key dates can be found on this [CDU webpage](#)

A successful candidate who is a recipient of a primary scholarship such as RTP will be eligible to apply for a Menzies top-up scholarship to the value of \$10,000 per annum for up to 3.5 years. Successful candidates will receive \$3,500 per annum for up to 3.5 years to cover direct costs of the research.

**Application Process**

Applicants should submit the following:

- Brief summary of why they want to complete the project
- Current CV
- Copies of certified academic transcripts
- Proof of Residency (not required for Australian citizens)

All applications should be submitted to Dr Chris Lowbridge [chris.lowbridge@menzies.edu.au](mailto:chris.lowbridge@menzies.edu.au) by 30<sup>th</sup> September 2021.