



Susana Vaz Nery, MSc PhD A/Prof | e: snery@kirby.unsw.edu.au

Susana joined the Kirby Institute in early 2018 and is the leader of the NTD research group. She has a multidisciplinary background, combining degrees and experience in biochemistry, neurosciences, molecular parasitology, health policy and international development, and field epidemiology in tropical diseases. Her NTD research program uses intervention studies to generate evidence to inform health policy changes for more effective and sustainable disease control strategies



Carleigh Cowling, BNurs MPHTM Snr Surveillance Officer | e: ccowling@kirby.unsw.edu.au

Carleigh is the senior surveillance officer for the National Trachoma Surveillance and Reporting unit at UNSW, joining the Kirby Institute in early 2011. She has a background in nursing (BNurs) and public health (MPHTM), working in Indigenous communities and low income countries with a public health, disease surveillance and research focus. Carleigh's focus now is on the surveillance, reporting and assisting Australia in eliminating trachoma as a public health problem.



Clare Dyer, MPH MPH PhD Research Fellow | e: cdyer@kirby.unsw.edu.au

Clare is a postdoctoral Research Fellow in the NTD research group at the Kirby Institute. Her main research focus is soil-transmitted helminths and trachoma. Clare's background is in molecular cell biology, where she holds a PhD, and she recently completed her dual Master's degree in Public Health and International Public Health at UNSW.



Adam Bartlett, FRACP PhD Research Fellow | e: abartlett@kirby.unsw.edu.au

Adam is a Paediatric Infectious Diseases Physician at Sydney Children's Hospital and a Research Fellow in the NTD research group at Kirby Institute. His current focus is on NTD control programs in Asia-Pacific and Africa.



Lucia Romani, MDS MPH PhD Senior Research Officer | e: lromani@kirby.unsw.edu.au

Lucia is a postdoctoral Research Fellow with extensive epidemiologic research experience in a diverse range of areas, including large-scale clinical trials and observational studies, mass drug administration for NTDs and sexually transmitted infections in resource-poor settings. Over the past 15 years she has focused on the epidemiology and control of several NTDs the Pacific and has become recognised internationally as an expert in this field.

Available projects

Barriers to facial cleanliness in marginalised communities – Carleigh Cowling / Susana Vaz Nery

- **Background:** Trachoma, an infectious disease of the eye, is endemic in 43 countries globally, including in Australia which is the only high-income country. The elimination of trachoma is undertaken by adopting SAFE strategy for trachoma control. The SAFE acronym highlights the key components of the strategy, which are Surgery for trichiasis, Antibiotic treatment regimens via the use of azithromycin at the individual, household or community levels, the promotion of Facial cleanliness and Environmental improvements. Since the National Trachoma Management Program was initiated in 2006 facial cleanliness rates have remained stable, despite significant health promotion activities.
- **Aim:** To better understand barriers to individuals maintaining facial cleanliness in marginalised areas/communities.
- **Methods:** Literature review/ systematic review

A risk factor analysis for trachoma in the Solomon Islands – Susana Vaz Nery / Clare Dyer

- **Background:** Trachoma is the leading cause of infectious blindness worldwide caused by the bacteria *Chlamydia trachomatis*. Communities in Choiseul, Solomon Islands received the antibiotic azithromycin to treat trachoma infection in 2015. An impact assessment carried out 12 months later found prevalence of active trachoma (measured by eye examination and presence of trachomatous inflammation follicles (TF)) was below 5% and considered eliminated according to WHO guidelines. However, a 2019 surveillance study found an unexpected result of TF prevalence >10%. A resurvey was carried out in 2020 using the standardised Tropical Data methodology, which includes gathering data on water, sanitation, and hygiene access.
- **Aim:** The aim of this project will be to assess whether WASH factors are associated with presence of TF.
- **Methods:** The student will use a logistic regression analysis to assess if WASH factors are associated with presence of TF.

Comparison between microscopy and qPCR for soil-transmitted helminths (STHs) – Adam Bartlett / Susana Vaz Nery

- **Background:** STHs contribute the greatest burden of disease of the NTDs and has been targeted for elimination as a public health issue by the WHO by 2030. Standard field diagnostics via microscopy (Kato-Katz) has been shown to have low sensitivity, particularly in low prevalence settings and with low intensity infections. Quantitative PCR is becoming an increasingly recognised sensitive method for detecting STH infection, but correlates of infection intensity remain uncertain.
- **Aim:** To compare the diagnostic performance of Kato-Katz microscopy and quantitative PCR in detecting and determining intensity of STH infections.
- **Methods:** Data from a school-based impact assessment of a STH preventive chemotherapy program in Angola will be used to conduct a comparative analysis on the diagnostic performance of Kato-Katz and quantitative PCR.

Acceptability & community perceptions towards mass drug administration for STIs in Fiji – Lucia Romani/Susana Vaz Nery

- **Background:** STIs are a significant cause of pelvic inflammatory disease, infertility, ectopic pregnancy and adverse birth outcomes. A recent research by our team in Fiji, has found a 34% CT and 9.4% NG prevalence respectively, among 1002 pregnant women attending antenatal clinics. Mass drug administration (MDA) has been investigated to a limited degree as a strategy for control of STIs but a number of issues have not been well explored, including duration of benefit and the impact in general population settings as well as feasibility and acceptability of the intervention.
- **Aim:** To conduct focus groups and interviews with key leaders and community members to determine the understanding of STIs and the feasibility and acceptability of a potential MDA for STIs in Fiji for all people aged 16 – 49 years.
- **Methods:** This is a qualitative and mixed methods research to ascertain community attitudes towards MDA for STIs in Fiji.