PhD Expression of Interest – [Camera 2 Study](#)

We are looking for EOI for an ID / microbiology fellow to conduct follow-on studies from CAMERA2 as part of a PhD. CAMERA2 was a randomised controlled trial that compared standard therapy with standard therapy plus an anti-staphylococcal β-lactam for MRSA bacteraemia. Results were presented at ECCMID 2019 (see https://www.youtube.com/watch?v=Scxg8yAuhRQ). There are several planned sub-studies and new studies that the PhD candidate could take on – some examples are below, but the candidate would have the chance to shape the proposal according to their interests. We have funded statistician support for these studies. Please direct enquiries to Steven Tong (steven.tong@mh.org.au) or Joshua Davis (joshua.davis@menzies.edu.au).

This would suit a medical doctor who is interested in clinical research and who is training in infectious diseases, microbiology, renal medicine or related fields. The PhD position could be based in Melbourne, Newcastle or Darwin. A full-time candidate is preferred. Supervision would be by Steven Tong (see https://www.doherty.edu.au/people/associate-professor-steven-tong, and https://scholar.google.com.au/citations?user=ZTj3C7kAAAAJ&hl=en) and Josh Davis (https://www.menzies.edu.au/page/Our_People/Researchers/Josh_Davis/, and https://scholar.google.com/citations?user=F4soxgEAAAAJ&hl=en)

Renal toxicity related questions:
1. Literature review +/- systematic review of renal toxicity of β-lactam agents
2. CAMERA2 sub-studies
    a. Correlates of AKI in CAMERA2 patients
    b. Long term renal and general outcomes of CAMERA2 patients with and without AKI
3. Prospective observational studies of renal function
    a. novel markers of renal injury in a cohort of patients with SAB
    b. novel markers of renal injury in a cohort of patients receiving β-lactam agents
4. Studies of animal models of β-lactam related nephrotoxicity

***Staphylococcus aureus* bacteraemia related questions:**
1. CAMERA2 sub-studies
    a. Predictors of mortality
    b. Validation of prediction scores for SAB such as PREDICT (https://www.ncbi.nlm.nih.gov/pubmed/25810284), VIRSTA (https://www.ncbi.nlm.nih.gov/pubmed/26916042), Holmes (https://academic.oup.com/ofid/article/3/suppl_1/1088/2637335), Pitt Bacteraemia Score (https://smw.ch/article/doi/smw.2017.14482)
    c. Applying Desirability of Outcome Ranking endpoints (https://www.ncbi.nlm.nih.gov/pubmed/30321315)
    d. Outcomes and responses to therapy stratified by *S. aureus* genotype
2. Methodologies and design of domains for the *Staphylococcus aureus* Network Adaptive Platform (SNAP) trial
    a. Develop surveys for prioritisation of questions and acceptable non-inferiority margins for specific treatment domains
    b. PK/PD sub-studies for β-lactam agents (IV and oral)

Menzies School of Health Research
Menzies School of Health Research is one of Australia's leading medical research institutes dedicated to improving Indigenous, global and tropical health. Menzies has a history of over 30 years of scientific discovery and public health achievement. Menzies works at the frontline, joining with partners across the Asia-Pacific as well as Indigenous communities across northern and central Australia. Menzies collaborates to create new knowledge, grow local skills and find enduring solutions to problems that matter.