New Therapies for Pathogenic Bacteria
Jamie Triccas, Infectious Diseases and Immunology, Central Clinical School, FMH

Area of Research
- Identification of new antibacterial from natural products
- Screening for anti-bacterial activity against drug resistant pathogens
- Development of new vaccines for lung pathogens (*Mycobacterium tuberculosis*, *Pseudomonas aeruginosa*)
Expertise

- Screening for anti-bacterial activity against pathogens

Library screening

Time to kill

D. Quan

M. Galetta

D. Quan

SN31863

SN31927

Toxicity
*In vitro and in vivo compound efficacy*

Ellis et al, Mol Pharmocol, 2014, 85: 269-278

Drug Development Network and requirements

**Baell Lab, Monash Uni**
anti-TB activity of diphenyleneiodonium analogues

**Chan Lab, USyd**
Inhalable drug powders and anti-TB treatment

**Triccas Lab**

**AIMS, Qld**
Antibacterials from natural products

**Rutledge Lab, USyd**
anti-bacterial activity of metal cyclam complexes/ NPs

**Sadler lab, Birmingham Uni**
Sulfadoxine conjugates and antimicrobial resistance

**Kassiou Lab, USyd**
New drugs for MRSA

**Addlagatta Lab, IICT**
Mode of action of novel TB drugs

- Mode of action (target identification, enzyme inhibition assays)
- Natural product synthesis
- Drug delivery