Clinical Pharmacology & Toxicology
St Vincent’s Clinical School, UNSW Medicine

OPTIMAL USE OF MEDICINES
How do we get there?

• INDIVIDUALISING DRUG THERAPY IN PATIENTS
• SUPPORTING CLINICIANS IN MEDICATION DECISION MAKING
• UNDERSTANDING DRUG USE

Current projects include:

Optimising drug dosage
• Pharmacogenomics - impact on clinical decision-making
• Impact of haemodialysis on the pharmacokinetics of antibiotics
• Evaluation of routine drug monitoring data to describe novel drug interactions

Clinical toxicology of illicit drug use
• Wastewater analysis at night time music venues
• GHB overdose management and prevention
• Management of GHB dependence
• Understanding morbidity and outcomes from opioid overdose
• Frailty assessment in people who use alcohol or other drugs

Psychedelic psychotherapy
• Designing and implementing a survey of people who regularly use psychedelics

Support for clinical decision making
• Economic analysis of the cost-benefit of therapeutic drug monitoring
• Social network analysis of therapeutic drug monitoring processes
• Observational studies of pharmacist workflow – how are they talking?
• Telepharmacy – Service adaptations for the post-COVID era?
• Evaluation of prescribing trends of antineoplastic tyrosine kinase inhibitors to inform drug monitoring strategies

How can outcomes for gout sufferers be improved?
• Studies of quality of gout management in hospital especially in transplant population
• Develop educational materials for people with gout and better understand their perception of the disease

ULTIMATE GOAL
PATIENTS RECEIVE THE BEST THERAPY FOR THEM

WHAT CAN YOU EXPECT FROM DOING HONOURS WITH US?
» Friendly atmosphere & great team environment (lots of support!)
» Access to a hospital environment (e.g. medical grand rounds)
» Real life application – how medicines are utilised in a hospital
» High probability of publication and attending a conference
» Journal Club & Research Meetings
» Social events (lunches, dinners and trivia)

WHAT RESEARCH SKILLS CAN BE GAINED?
» Interviewing skills
» Reviewing patient information
» Auditing skills
» Computer modelling
» Drug assay (HPLC)
» Pharmacokinetics
» Pharmacodynamics
» Critical analysis
» Data analysis
» Statistical analysis