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