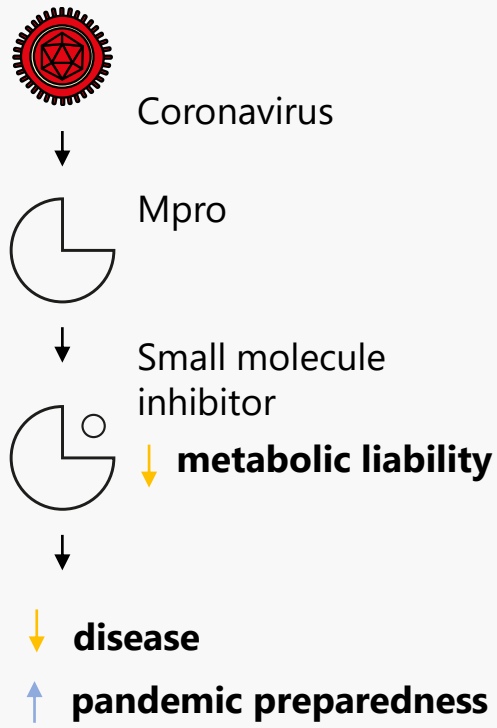
Novel inhibitors of coronavirus main protease (Mpro)

The Problem

- Three zoonotic coronavirus outbreaks since 2002
- COVID-19 persistence and likelihood of future coronaviruses with pandemic potential
- Known issues with 1st-generation antivirals prevent widespread adoption in the most vulnerable populations

The Solution

- Mpro is essential for viral replication and a validated antiviral target
- A novel, oral Mpro inhibitor with no CYP inhibition would facilitate patient uptake by reducing drug-drug interactions
- Could be used as monotherapy or in combination to improve efficacy and reduce viral replication



Our Program

- Potential for a best-in-class oral inhibitor of Mpro with no CYP inhibition
- Non-peptidomimetic, non-covalent inhibitors with single digit nM activity in *in vitro* infection models
- *In vivo* efficacy demonstrated in a mouse model of acute SARS-CoV-2 infection
- Broad-spectrum testing against other diverse CoVs is under way

Our Team

- Led by a multi-disciplinary team of drug discovery veterans with industry collaboration experience
- Victoria Jameson, PhD, Business Development Lead, jameson.v@wehi.edu.au