

# Novel inhibitors of coronavirus Papain-like protease (PLpro)

## The Problem

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

## The Solution

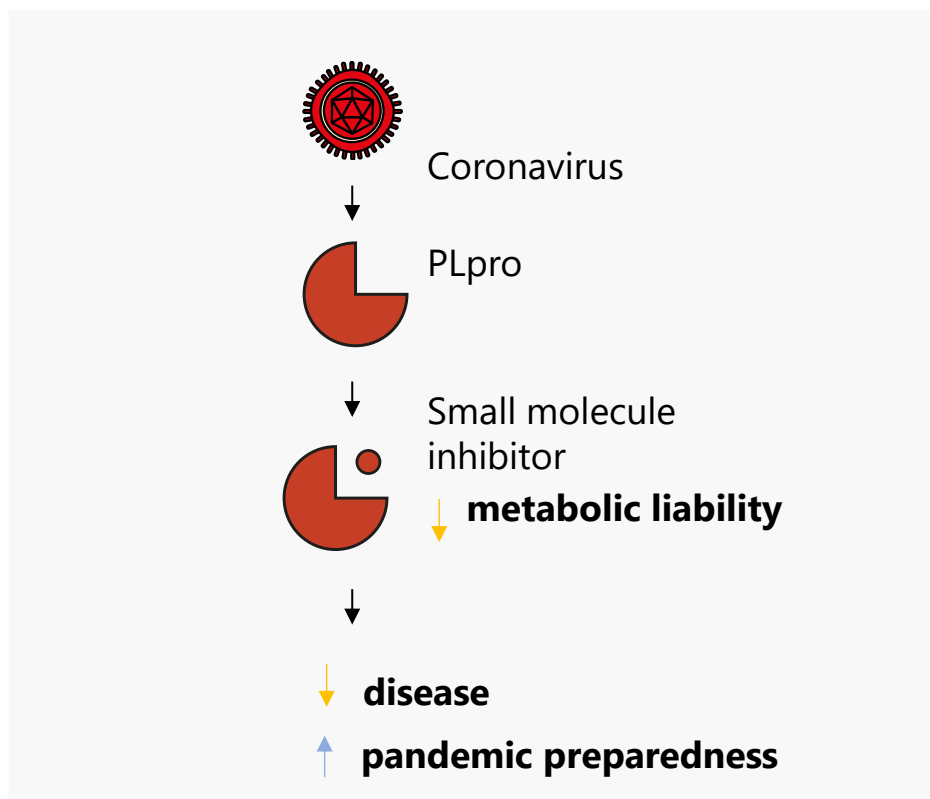
- PLpro is essential for viral replication<sup>1</sup> and is pro-inflammatory<sup>2</sup>
- Inhibition of PLpro could reduce both *viral load* and *inflammation*
- An inhibitor could be used as monotherapy or in combination to improve efficacy and reduce viral replication
- Potential for a first-in-class oral inhibitor of PLpro with no CYP inhibition

## Our Program

### Progress:

- Patented, non-peptidomimetic, non-covalent inhibitor with single digit nM activity *in vitro* and activity in a published *in vivo* model of acute SARS-CoV-2 infection<sup>3</sup>
- Broad-spectrum anti-coronavirus activity confirmed to enable pandemic preparedness
- *In vivo* efficacy demonstrated in our Long COVID animal model

*Seeking industry **partnership** to accelerate project to the clinic*



## Our Team

- Led by a multi-disciplinary team of drug discovery veterans with industry collaboration experience
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