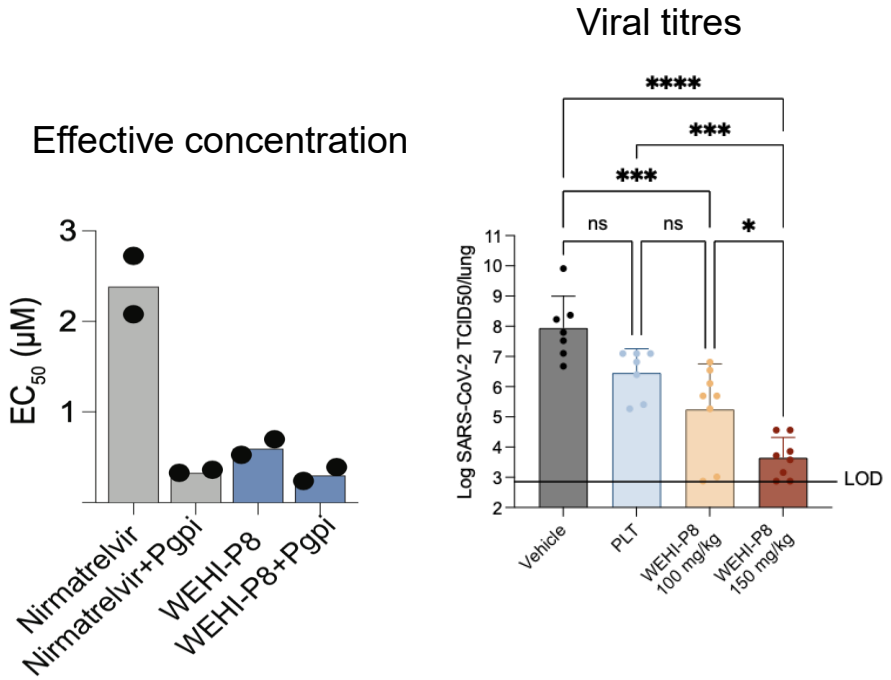
Novel inhibitors of coronavirus Papain-like protease (PLpro)

The Problem

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

The Solution

- PLpro is essential for viral replication and is pro-inflammatory.
- 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.
- 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

Dr. Shane Devine, Medicinal chemist
Prof. David Komander, Deubiquitinase biology
Supported by a multi-disciplinary team of drug discovery veterans with industry collaboration experience.

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