



COVID-19 Task Force @ ASDRP

In late 2019, a novel coronavirus (SARS-CoV-2) was identified from Wuhan, China, and in the following months, the virus quickly spread around the world. With the unprecedented global crisis that quickly ensued and the biomedical, societal, and economic impact that soon followed, researchers are quickly developing vaccines and treatments to tackle this healthcare crisis. This collaborative effort of researchers from different backgrounds for the sharing of data and perspectives to shed light on cross-disciplinary approaches to this problem.

Here at ASDRP, the COVID-19 Task Force is a consortium of research advisors and groups from a broad range of disciplines - biochemistry, data science, organic chemistry, molecular biology, and more. The consortium's main goal is to generate high-level discussions between interdisciplinary groups to collectively formulate new solutions, spanning biology, chemistry, and computer science. With advisors utilizing their different areas of expertise, students will find this experience to be both informative and meaningful, giving them a chance to be a part of a team that is dedicated to making an immediate change.

Sponsored projects at ASDRP include efforts in *de novo* drug design, computational modeling and high-throughput screening of compounds as potential therapeutics against SARS-CoV-2; development of siRNA gene silencing technologies to suppress viral replication; and utilization of data science and machine learning to perform analysis of the impact of the novel coronavirus on science and on society. Our researchers will be exposed to varying perspectives in our cohort meetings and will utilize these different viewpoints in pioneering cutting-edge research on the novel coronavirus. A collaboration of research advisors are collectively using virtual screening means and molecular biology tools to identify and develop biologics such as siRNA therapies as well as antiretroviral drug repurposing in efforts of accelerating preclinical drug discovery against SARS-CoV2. **Since ASDRP operates at a Biosafety Level 1, no live/viable SARS-CoV-2 specimens will be handled in our laboratory.*

Questions? Email Ankur Gupta, Director of Biomedical Research at ASDRP.