BIO5 RESEARCH TEAMS
TACKLING THE COVID-19 PANDEMIC

This team will investigate the evolution of the novel coronavirus and how the evolutionary adaptation of a key viral structure may have enabled it to cause rapid worldwide disease.

Samuel Campos, associate professor, College of Medicine – Tucson
Scott Bolotin, professor, College of Medicine – Tucson
Kenneth Knox, professor, College of Medicine – Tucson

This team will use image-based screening techniques to identify compounds that may interfere with the ability of the virus to infect and cause long-lasting infections.

Curts Thorne, assistant professor, College of Medicine – Tucson
Koenraad Van Dooren, assistant professor, College of Agriculture and Life Sciences

This team will investigate the use of copper compounds in preventing infections.

Koenraad Van Dooren, assistant professor, College of Agriculture and Life Sciences
Michael Johnson, assistant professor, College of Medicine – Tucson

Two anti-malaria drugs, chloroquine and hydroxychloroquine, are currently being investigated as COVID-19 treatments, though their utility and safety is uncertain. This team will aim to improve delivery, enhance efficacy and minimize toxicity of these drugs.

Jianjun Liu, assistant professor, College of Pharmacy
Xinmin Deng, professor, College of Pharmacy

This team will investigate whether immune system activation can treat COVID-19 patients.

Jianjun Liu, assistant professor, College of Pharmacy
Yin Chen, associate professor, College of Pharmacy

This team will test novel inhibitors of the viral life cycle in treating existing infections.

Wei Wang, professor, College of Pharmacy
Stefan Ralphs, associate professor, College of Pharmacy
Jennifer Carew, associate professor, College of Medicine – Tucson

This team will address public health concerns by exploring relationships between COVID-19, preexisting health conditions and the environment. Older adults and those with existing critical health conditions seem to be at greater risk for COVID-19. This team will work to find out why.

Janko Nikolic-Zugic, professor, College of Medicine – Tucson
Deepta Bhattacharya, associate professor, College of Medicine – Tucson
Craig Weinkauf, assistant professor, College of Medicine – Tucson

The virus has been shown to be present in the feces of infected individuals, and these live viruses can become airborne in wastewater treatment plants. This team, working with the Water and Energy Sustainable Technology Center, will study the risk of the airborne virus to facility workers’ health.

Luisa Rinner, assistant research professor, College of Science
Walter Betancourt, assistant research professor, College of Science
Kelly Reynolds, professor, Mel and Enid Zuckerman College of Public Health

The pandemic affects more than just physical health; social isolation can increase anxiety and negatively impact mental health. This team will address the behavioral health consequences of the pandemic through a guided imagery app.

Judith Gordon, professor, College of Nursing
Chris Grady, associate professor, College of Science

This team will gather patient interviews and create a database cataloging risk factors and patient symptoms that can be used by all Arizona investigators addressing COVID-19.

Kristen Pogue-Browne, assistant professor, Mel and Enid Zuckerman College of Public Health
Kate Ellinger, assistant professor, Mel and Enid Zuckerman College of Public Health
Elizabeth Jacobs, professor, Mel and Enid Zuckerman College of Public Health
Kacey Ernst, associate professor, Mel and Enid Zuckerman College of Public Health
Pamela Garcia-Flett, associate research professor, College of Medicine – Phoenix

This team will lead an epidemiological study to understand the genetics of viruses that have infected Southern Arizona patients. Through these efforts, researchers will seek to understand the relationship of the Arizona outbreak to the national epidemic.

Michael Worobey, professor, College of Science
David Batalov, associate professor, College of Agriculture and Life Sciences

This team will compile characteristics of hospitalized COVID-19 patients in Arizona.

Vignesh Subbian, assistant professor, College of Engineering
Jamal Naseer, associate professor, College of Medicine – Tucson

This team will provide health conditions.

Janus Nikolic-Zugic, professor, College of Medicine – Tucson
Deepta Bhattacharya, associate professor, College of Medicine – Tucson
Craig Weinkauf, assistant professor, College of Medicine – Tucson

NOTICE: The researchers listed here may have multiple professional titles and academic credentials at the University of Arizona. For additional information about titles, visit arizona.edu.