



Editorial: Proteins of SARS CoV-2, the Cause of COVID-19, and the Proteins that Interact with Them

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This special issue entitled, *Proteins of SARS CoV-2, the Cause of COVID-19, and the Proteins that Interact with Them*, contains a collection of articles dedicated to enhancing our understanding of the proteins found in SARS CoV-2.

First appearing in December 2019, severe acute respiratory syndrome coronavirus-2 (SARS CoV-2) is the virus that caused the global pandemic called “coronavirus disease-2019” (COVID-19) throughout 2020. This pandemic has moved researchers spanning many fields around the world to tackle this global health problem. Searches for “SARS CoV-2” and “COVID-19” (November 24, 2020) in the NIH National Library of Medicine website¹ result in 45,830 and 76,744 references, respectively, in 2020.

Lives have universally changed due to the global pandemic to maximize the safety of humankind. As of November 24, 2020, over 59 million cases of SARS CoV-2 infection have been reported leading to over 1.4 million deaths.² Due to this dangerous virus, stay-at-home orders and mask-wearing mandates have been implemented to prevent the spread of this disease. The news media have mainly covered COVID-19 related stories on a daily basis throughout the year 2020 to highlight the importance of staying safe during this unprecedented time. Education has transitioned to an online system. SARS CoV-2 has reminded us how delicate human life is.

Considering this massive public health impact that SARS CoV-2 has made around the world, many biomedical researchers have come up with creative solutions to

interrogate this virus and to lead to finally resolving this problem. With hopes of new possible vaccines, the light at the end of the tunnel is in sight.

We hope that these topics will be informative and helpful to researchers in this field. The articles that follow cover:

- (i) an overview of the structures of SARS CoV-2 proteins,
- (ii) a computational study on the docking of small molecules on the papain-like protease of SARS CoV-2 (i.e. NSP3),
- (iii) a perspective on the antibodies that recognize SARS CoV-2 proteins,
- (iv) a review on oxidative stress on SARS CoV-2 infection,
- (v) a computational study on the docking of small molecule drugs on the main protease protein of SARS CoV-2 (i.e. NSP5).

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¹ <https://pubmed.ncbi.nlm.nih.gov/>, date accessed: November 24, 2020.

² <https://www.worldometers.info/coronavirus/>, date accessed: November 24, 2020.