

47-2020-10877 | Fooling the Virus: A Fusion Protein as Virus-Specific Therapeutic  
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- Our laboratory has previously generated fusion proteins of a wide range of viral entry receptors. Among these is ACE2, a membrane-bound enzyme which also serves as the entry receptor for the SARS virus. Study of the novel coronavirus discovered in Wuhan, China has shown striking similarities to the known strains of SARS. This includes work which has suggested that the two viruses share an entry receptor, namely ACE2.
- Given the immense burden of the novel coronavirus due to its public health threat, development of therapies is critical, we propose use of our fusion protein, which can serve as a decoy receptor for the virus. Attachment of the fusion protein will not only limit its entry into host cells - thereby hampering spread of disease, and acting as a complement-inducing opsinogen for direct viral lysis.
- We therefore suggest that our fusion protein is not only a useful research tool for studying this deadly virus, but may also hold promise as a virus-specific therapeutic

#### Patent Status

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