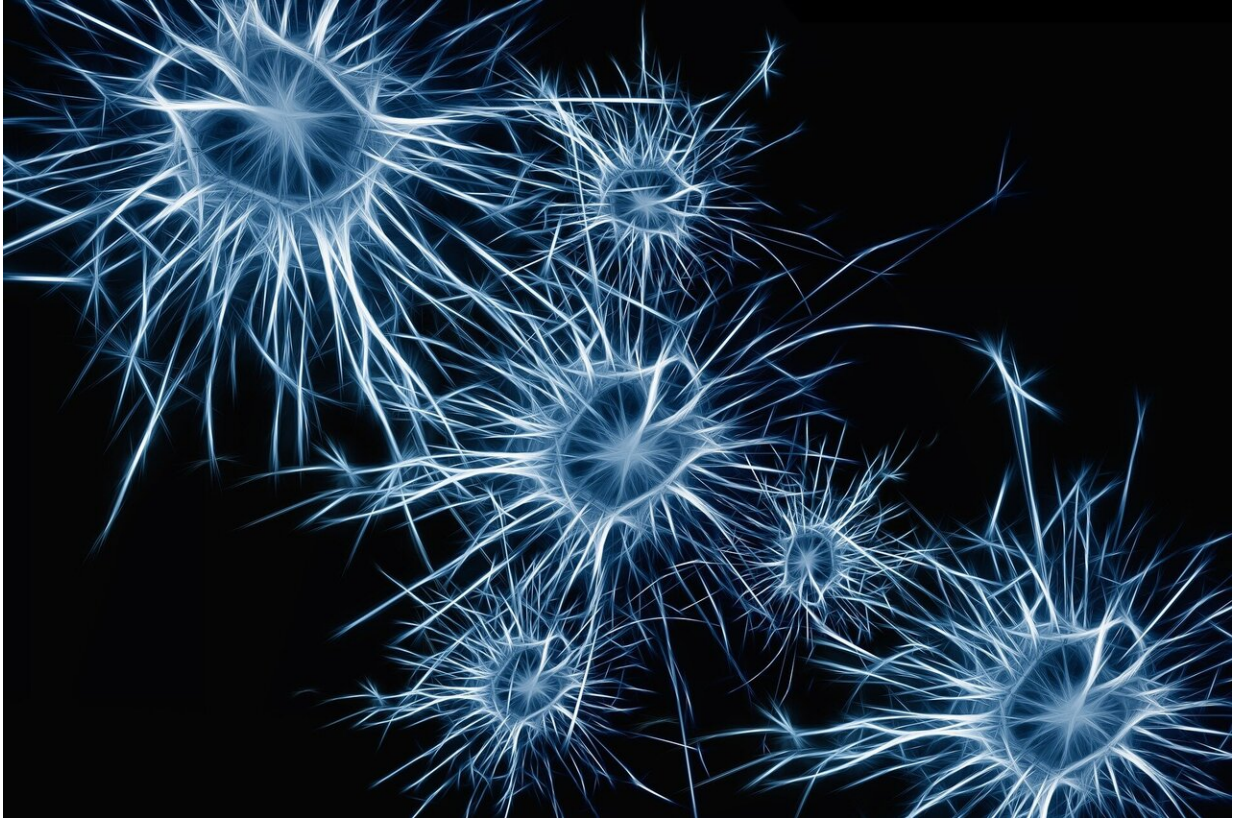


COVID-19 and the role of tissue engineering

May 8 2020



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Tissue engineering has a unique set of tools and technologies for developing preventive strategies, diagnostics, and treatments that can play an important role during the ongoing COVID-19 pandemic. Three key areas pioneered by tissue engineers that could be applied to the current COVID-19 crisis and to future viral outbreaks are highlighted in

an article published in *Tissue Engineering, Part A*.

Alexander Tatara, MD, Ph.D., Massachusetts General Hospital (Boston) is author of the article entitled "The Role of Tissue Engineering in COVID-19 and Future Viral Outbreaks." Dr. Tatara emphasizes critical strengths of the field: applying engineering principles to [biological systems](#), collaboration across disciplines, and rapid translation of technologies from the benchtop to the bedside. The three key areas of tissue engineering that could make an impact on the fight against COVID-19 are in vitro models of viral disease to better understand the mechanism of infection and to screen for potential therapeutics; drug delivery systems to better target medications and increase their bioavailability; and vaccine platforms, using biomaterials for vaccine delivery and to boost the immune response to the vaccine.

"In this timely work, Dr. Tatara brings a needed clinical perspective on the critical strategies that the [tissue engineering](#) field can provide to help stem the COVID-19 pandemic. This article should be a powerful resource for [tissue engineering](#) laboratories around the world," says *Tissue Engineering* Co-Editor-in-Chief John P. Fisher, Ph.D., Fischell Family Distinguished Professor & Department Chair, and Director of the NIH Center for Engineering Complex Tissues at the University of Maryland.

More information: Alexander M. Tatara, Role of Tissue Engineering in COVID-19 and Future Viral Outbreaks, *Tissue Engineering Part A* (2020). [DOI: 10.1089/ten.tea.2020.0094](https://doi.org/10.1089/ten.tea.2020.0094)

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