This seminar will provide an overview of the COVID-19 pandemic. In addition, to a brief overview to SARS-CoV-2, the panel of speakers will address the following: (1) Response plans to ensure COVID-19 cases do not overwhelm resources, (2) Infrastructure needs to support clinical research during the pandemic, (3) Inpatient and Outpatient Clinical Trials and National Strategies, (4) Response from Bioengineering during the pandemic, and (5) Innovation and Adaptation. This seminar will provide a framework for the Bioengineering Fall seminar series that will dive deeper into selected topics that will highlight the opportunities across medicine and engineering to engage in meaningful and accelerated research and development from prevention to testing to contact tracing to treatment to recovery.