

COVID-19 Inventor Showcase

The CCTS Optimizing Innovation, Commercialization and Entrepreneurship of Biomedical Research program launched a monthly panel series in June 2020 to highlight experts who are working together to fight against COVID-19 on our front lines of innovation.

Tuesday, October 20 | Noon – 1 p.m. | Webinar **Constructing a COVID-19 Vaccine**

Messenger RNA (mRNA)-based vaccine is one of the leading candidates for fighting against COVID-19. In our work, we systematically investigated the untranslated regions (UTRs) of mRNAs in order to enhance antigen production. Through a comprehensive analysis and engineering of UTRs, we identified the optimal UTR sequences, termed as NASAR, which significantly enhanced the production of SARS-CoV-2 antigens. The NASAR mRNA encoding SARS-CoV-2 antigens induced strong immune responses in mice. More importantly, this novel mRNA-based platform provide broad applicability to a wide variety of therapeutic applications.

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