

The Center for Clinical and Translational Science proudly presents...

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.

[LEARN MORE](#)[REGISTER NOW](#)

Inventor Team

Chunxi Zeng, PhD

Pharmaceutics and Pharmacology
College of Pharmacy

Yizhou Dong, PhD

Pharmaceutics and Pharmacology
College of Pharmacy

Innovation Resource Team

Paul Stoodley, PhD

Campus Microscopy and Imaging Facility

Jeffrey Chalmers, PhD

Flow Cytometry Shared Resource

Richard K. Wilson, PhD

& Amanda Ewart Toland, PhD, FACMG

Genomics Shared Resource



Co-presented by:

Ohio State's Corporate Engagement Office

Nationwide Children's Hospital Office of Technology Commercialization



THE OHIO STATE UNIVERSITY

CENTER FOR CLINICAL AND
TRANSLATIONAL SCIENCE