

T2 Helps NIAID Rapidly Share SARS-CoV-2 Prefusion Spike Protein for Vaccines and Therapeutic Development

2021 Excellence in T2 – National Institute of Allergy and Infectious Diseases



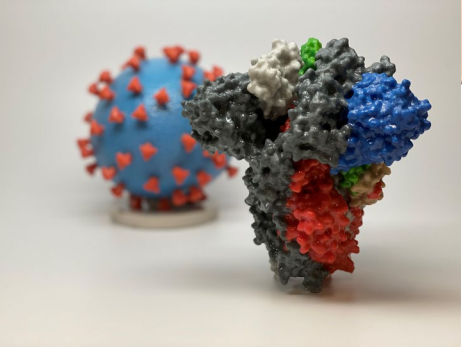
NIAID Scientists working at the Vaccine Research Center (VRC) responded rapidly to the release of the first SARS-CoV-2 genome sequence by developing an engineered “spike” protein. The NIAID Technology Transfer and Intellectual Property Office (TTIPO) negotiated a variety of agreements in record time to ensure that this vital material was distributed to the commercial and public sector. The spike protein has been used widely for vaccine development and other research, as well as additional commercial applications.

January 10, 2020

The Fudan University Shanghai Public Health Clinical Center & School of Public Health in collaboration with several other research bodies in China and Australia release the first SARS-CoV-2 genome into GenBank



February 15, 2020



NIAID VRC scientists Drs. Barney Graham and Kizzmekia Corbett, with collaborators, publish the 3D structure of the SARS-CoV-2 “Spike” protein that was engineered to hold a stable shape (prefusion stabilized spike) – a target for vaccine development

October 8, 2020



As of October 8, 2020 - The NIAID Technology Transfer and Intellectual Property Office (TTIPO) ensured the prefusion stabilized Spike was distributed rapidly for research and commercial applications, with the common goal of addressing the needs created by the COVID-19 pandemic

- 2 Agreements with Repositories to Store and Distribute Spike Protein
- 83 Material Transfer Agreements
- 21 License Agreements for Commercial Development – including delivery of the spike protein in vaccines

December 22, 2020



NIAID VRC scientists conducted research and NIAID TTIPO negotiated agreements that enabled the private sector to develop multiple SARS-CoV-2 vaccine.

The timeline associated with these activities is roughly an order of magnitude faster in comparison to similar historical precedent.