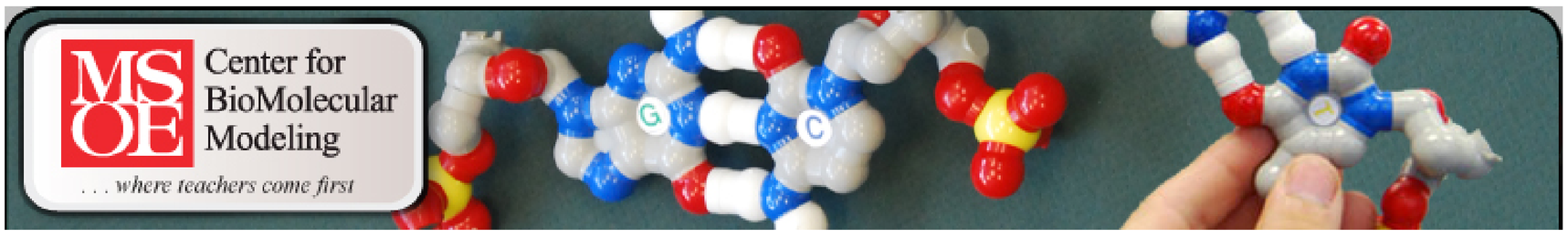


CREST
Connecting Researchers, Educators and Students

CREST PROJECT
Protein Modeling Intership

What is the CREST Program?

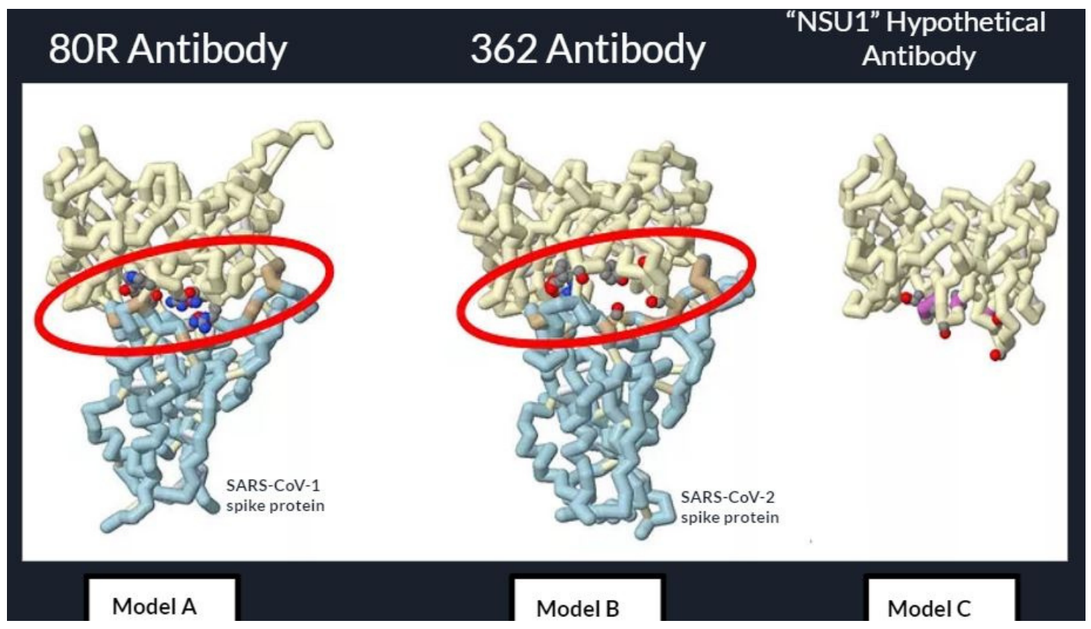
The CREST (Connecting Researchers, Educators, and STudents) program was a part of the Center for Biomolecular Modeling and aimed at engaging undergraduate students around the country to participate in protein modeling. In the 2020-2021 CREST Project, 8 national teams, including a NSU team, from various different universities participated.

What Skills Are Gained?

- How to work in a team setting, collaborate with renowned researchers directly working in the field of protein structure and function, and network with other CREST teams
- How to create posters and presentations to present at conferences such as ASBMB, PDB50, ACS, and USS
- How to write a research paper with abstract, methods, results, and discussion
- How to use protein modeling softwares (Jmol and PyMOL)

The Focus

The 2020-2021 NSU team focused on predicting a more universally effective antibody against SARS-CoV1 and SARS-CoV2 as well as future variations. The protein modeling softwares Jmol and PyMOL were used to model the spike proteins and their existing corresponding antibodies. Using the trends identified in the binding domains of the antibodies, changes to amino acids residues in the binding domain were proposed to make a universal antibody for SARS-CoV.



How to Get Involved

- Talk to your professors, understand their research, and express your interest in joining their team
  - Many professors are more than willing to give you a chance if you just ask
- Take advantage of events promoting undergraduate research and network
- Talk to other students already engaged in research