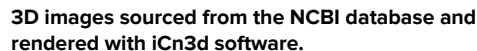




**PURM**  
Penn Undergraduate Research  
Mentoring Program

**Hansell Stedman, M.D., Perelman School of Medicine Department of Surgery**

## Human coronavirus Spike protein



**Acknowledgements:** Penn Charter,  
Dr. Timothy Lynch and the Hassman Program

"This journal club was an experiment in how a group of talented and bright students from diverse backgrounds and at different ages and experiences could tackle an evolving, deeply challenging topic that affects us all: SARS-CoV-2. The experiment was an unequivocal success, demonstrating the power of a shared mission and the ability of these brilliant individuals to push the limits." – **Jean Bennett, M.D., Ph.D.**



**The lab** benefits from turning 1-2 hours of reading into 10 minutes by synthesizing new papers each week. Journal club streamlines the relevant literature and allows the work happening in lab to move quickly.

"The proximal origin of SARS-CoV-2" Anderson et al., 2020.

"Immunodominant SARS Coronavirus Epitopes in Humans Elicit both Enhancing and Neutralizing Effects on Infection in Non-Human Primates" Wang et al., 2016.

"The potential danger of suboptimal antibody responses in COVID-19" Iwasaki et al., 2020.

"Constitutive resistance to viral infection in human CD141+ dendritic cells" Silvin et al., 2017.

"T-cell Responses in Patients with COVID-19" Chen and Wherry, 2020.

"Impact of Obesity on Influenza A Pathogenesis, Immune Response, and Evolution" Honce et al., 2019.

"Tailoring Subunit Vaccine Immunity with Adjuvant Combinations and Delivery Routes Using the MERS-CoV Receptor-Binding Domain as an Antigen" Lan et al., 2014.

"The role of non-viral antigens in the cotton rat model of respiratory syncytial virus vaccine-enhanced disease." Shaw et al., 2013.

"Immunization with SARS Coronavirus Vaccines Leads to Pulmonary Immunopathology on Challenge with the SARS Virus." Tseng et al., 2012.

"Severe Acute Respiratory Syndrome-Associated Coronavirus Vaccines Formulated with Delta Inulin Adjuvants..." Honda-Okubo et al., 2015.

