

SUMAN POKHREL

Ph.D. Student in Chemical and Systems Biology, admitted Autumn 2020

Publications

PUBLICATIONS

- **Natural variants in SARS-CoV-2 Spike protein pinpoint structural and functional hotspots with implications for prophylaxis and therapeutic strategies.** *Scientific reports*
Pokhrel, S., Kraemer, B. R., Burkholz, S., Mochly-Rosen, D.
2021; 11 (1): 13120
- **Paired SARS-CoV-2 spike protein mutations observed during ongoing SARS-CoV-2 viral transfer from humans to minks and Back to humans.** *Infection, genetics and evolution : journal of molecular epidemiology and evolutionary genetics in infectious diseases*
Burkholz, S., Pokhrel, S., Kraemer, B. R., Mochly-Rosen, D., Carback, R. T., Hodge, T., Harris, P., Ciotlos, S., Wang, L., Herst, C. V., Rubsamen, R.
2021: 104897
- **Molecular bases of an alternative dual-enzyme system for light color acclimation of marine *Synechococcus cyanobacteria*** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Grebert, T., Nguyen, A. A., Pokhrel, S., Joseph, K., Ratin, M., Dufour, L., Chen, B., Haney, A. M., Karty, J. A., Trinidad, J. C., Garczarek, L., Schluchter, W. M., Kehoe, et al
2021; 118 (9)
- **Increased elastase sensitivity and decreased intramolecular interactions in the more transmissible 501Y.V1 and 501Y.V2 SARS-CoV-2 variants' spike protein-an in silico analysis.** *PloS one*
Pokhrel, S., Kraemer, B. R., Lee, L., Samardzic, K., Mochly-Rosen, D.
2021; 16 (5): e0251426
- **CpeT is the phycoerythrobilin lyase for Cys-165 on beta-phycoerythrin from *Fremyella diplosiphon* and the chaperone-like protein CpeZ greatly improves its activity** *BIOCHIMICA ET BIOPHYSICA ACTA-BIOENERGETICS*
Nguyen, A. A., Joseph, K., Bussell, A. N., Pokhrel, S., Karty, J. A., Kronfel, C. M., Kehoe, D. M., Schluchter, W. M.
2020; 1861 (12): 148284
- **Interplay between differentially expressed enzymes contributes to light color acclimation in marine *Synechococcus*** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Sanfilippo, J. E., Nguyen, A. A., Garczarek, L., Karty, J. A., Pokhrel, S., Strnat, J. A., Partensky, F., Schluchter, W. M., Kehoe, D. M.
2019; 116 (13): 6457-6462