



Antara Chakravarty

Postdoctoral Scholar, Microbiology and Immunology

Bio

BIO

Antara is a Postdoc in Dr. Priscilla Yang's Lab, where she is exploring small molecule-based targeted protein degradation as an antiviral strategy against structural proteins of flaviviruses. She is also keenly interested in understanding the mechanistic details of virus-induced changes in membrane lipid composition of infected cells, for which she is using hepatitis C virus replicase complex as a model system. Antara received training in molecular virology during her doctoral work in Dr. ALN Rao's Lab at the University of California-Riverside. There she discovered key implications of viral capsid dynamics in the pathogenicity and infectivity of multipartite bromoviruses.

HONORS AND AWARDS

- Postdoc Travel Award, American Society for Virology (2024, 2023)
- Calavan Award in Recognition of Excellence and Creative, Forward Thinking in Research, University of California, Riverside (2021)
- Charles W. Coggins Jr. Endowed Scholarship Award, University of California, Riverside (2021)
- CEPCEB Graduate Student Award for Outstanding Research, Center for Plant Cell Biology, University of California, Riverside (2020)
- Dissertation Year Program Award, University of California, Riverside (2019)
- Graduate Student Travel Award, American Society for Virology (2019)
- Klotz Memorial Fund Travel Award, University of California, Riverside (2019)
- NSF Innovation-Corps Fellowship, National Science Foundation (NSF) Innovat'R Program (2019)
- APS Foundation Mathre Education Endowment Award, American Phytopathological Society (2018)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California, Riverside (2021)
- Master of Science, University of Hyderabad (2013)
- Bachelor of Science, Presidency College, University of Calcutta (2011)

STANFORD ADVISORS

- Priscilla Yang, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Modulation of Capsid Dynamics in Bromoviruses by the Host and Heterologous Viral Replicase.** *Journal of virology*
Chakravarty, A., Rao, A. L.

2023: e0128422

- **Unravelling the Stability and Capsid Dynamics of the Three Virions of Brome Mosaic Virus Assembled Autonomously In Vivo** *JOURNAL OF VIROLOGY*
Chakravarty, A., Reddy, V. S., Rao, A. N.
2020; 94 (8)
- **Discovery of Potent Degradors of the Dengue Virus Envelope Protein.** *Advanced science (Weinheim, Baden-Wuerttemberg, Germany)*
Li, Z., Liu, H. Y., He, Z., Chakravarty, A., Golden, R. P., Jiang, Z., You, I., Yue, H., Donovan, K. A., Du, G., Che, J., Tse, J., Che, et al
2024: e2405829
- **Targeted protein degradation as an antiviral approach.** *Antiviral research*
Chakravarty, A., Yang, P. L.
2022: 105480
- **Zebrafish twist2/dermo1 regulates scale shape and scale organization during skin development and regeneration** *CELLS & DEVELOPMENT*
Jacob, T., Chakravarty, A., Panchal, A., Patil, M., Ghodadra, G., Sudhakaran, J., Nuesslein-Volhard, C.
2021; 166: 203684
- **The interplay between capsid dynamics and pathogenesis in tripartite bromoviruses** *CURRENT OPINION IN VIROLOGY*
Chakravarty, A., Rao, A. N.
2021; 47: 45-51
- **Bromoviridae: A Family of Plant Viruses with Tripartite Genomes** *eLS*
Chakravarty, A., Rao, A.
2021; 2.2021 (2)
- **Genome organization and interaction with capsid protein in a multipartite RNA virus** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Beren, C., Cui, Y., Chakravarty, A., Yang, X., Rao, A. N., Knobler, C. M., Zhou, Z., Gelbart, W. M.
2020; 117 (20): 10673-10680