



Antara Chakravarty

Postdoctoral Scholar, Microbiology and Immunology

Bio

BIO

I am a postdoctoral researcher in the lab of Prof. Priscilla Yang since September 2021. I am interested in virus-induced changes in membrane lipid composition of infected cells and my research focuses on developing experimental systems to interrogate the impact of lipid composition on membrane-associated RNA virus replication, using hepatitis C virus and brome mosaic virus as model systems.

During my doctoral studies, under the supervision of Prof. ALN Rao at the University of California-Riverside, I investigated capsid dynamics in multipartite bromoviruses, a group of icosahedral, plant-pathogenic RNA viruses belonging to the alphavirus-like super-family.

HONORS AND AWARDS

- 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, University Of Calcutta (2011)
- 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)
- **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