

POSTDOCTORAL ASSOCIATE OPPORTUNITY

The Division of Structural Biology at the Duke Human Vaccine Institute (DHVI), is currently recruiting for a Postdoctoral Associate to join our team. DHVI is an interdisciplinary, interdepartmental institute dedicated to the study of basic and translational science required to understand host-pathogen interactions that can be translated to vaccines against human diseases. We are a team of highly interactive investigators that have expertise in immunology, molecular biology, virology, microbiology, structural biology, computational biology, and vaccine science.

The Division of Structural Biology, led by Dr. Priyamvada Acharya, applies structural biology to study the structures of viral glycoproteins, their interactions with host molecules and role in viral entry. Working at the interface of basic and translational research, we collaborate with multiple labs in DHVI and beyond to apply insights from structural biology to vaccine design. We have state-of-the-art facilities that include a tissue culture lab and FPLCs, robots for X-ray crystallography, Biacore T200 for measurement of intermolecular interactions, and a Leica EM GP2 for cryo-EM grid preparation. We have regular access to the 22-ID beamline at the Argonne Photon Source for X-ray data collection, as well as to a Titan Krios microscope equipped with a Gatan K3 camera at Duke University for cryo-EM. This position will involve research projects using high-resolution cryo-EM and X-ray crystallography to determine structures of HIV-1 Envelope complexes with host receptors and antibodies, biophysical and biochemical analyses to complement structural results, and collaborations with virology and immunology labs to understand the functional implications of the structural findings.

At DHVI our postdoctoral associates work in concert with Duke faculty and staff in an invigorating research training environment. One of our primary scientific missions is to support and train early stage investigators to be the next generation of scientific leaders equipped to identify and implement solutions for improving human health worldwide. DHVI functions as a vaccine development biotechnology enterprise, embedded within a top university. As a trainee within our mentoring program, you will interact with highly innovative and collaborative investigators and have the opportunity to master state of the art technologies. We are committed to providing an outstanding training environment and research experiences that will enhance your career and provide you an avenue to incorporate your education, expertise, initiative and dedication to the success of the studies. This is an opportunity to become part of a winning team that is working to discover novel ways to prevent infectious diseases.

The successful candidate will have a Ph.D. degree, with a strong background in biochemistry and structural biology. Experience with basic molecular biology, protein expression, purification, and either X-ray crystallography or cryo-EM is required. The ideal candidate will be creative, motivated, and have the ability to work independently, as well as part of a team.

To be considered for the position, candidates must apply to requisition number 401541341 on the Duke postdoctoral and senior researcher employment site - (<https://hr.duke.edu/careers/apply>). The application materials should include a CV and cover letter with a half page summary explaining your past research, a summary explaining your interest and how joining the Division of Structural Biology at DHVI fits within your overall career objectives, and the contact information for 3 references. You will be contacted if we are interested in exploring your credentials in more detail.

Duke University is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual's age, color, disability, gender, gender expression, gender identity, genetic information, national origin, race, religion, sex, sexual orientation, or veteran status.