

Academic Staff Scientist in Stanford's SyneRx Center's Structural Biology Core

Job Description:

The SyneRx Center at Stanford University is one of nine National Antiviral Drug Discovery Centers for Pathogens of Pandemic Concern (AViDD) recently funded by the National Institute for Allergy and Infectious Diseases. We are seeking to appoint two Ph.D. level scientists that will bring complementary research experience in cryoEM/ET and synchrotron-enabled x-ray techniques, primarily macromolecular crystallography. Stanford's SyneRx Center includes a Structural Biology Core (SBC) to provide state-of-the-art tools and capabilities for structural determinations from RNA and proteins to virus and virus infected cells. This SBC is comprised of three Subcores including protein production (at Stanford University campus facilities and labs), x-ray crystallography and scattering (at the Stanford Synchrotron Radiation Lightsource), and cryogenic electron microscopy and tomography (cryoEM/ET at facilities located at SLAC National Accelerator Laboratory).

As a staff scientist, you would work collaboratively to drive all aspects of the three Subcores in the SBC, specifically through interacting with scientists in the research teams and providing coordination in areas that include sample preparation and characterization, data acquisition, modeling and structure determination and validation, pipe-line organization and feedback. You would also assist and train the SyneRx Center's Project scientists in performing the structure characterizations to facilitate and accelerate the design of novel and effective antivirals against SARS-CoV-2 and other RNA viruses of pandemic potential. Driving new developments in innovative approaches to obtaining and applying high throughput structure-based cryoEM/ET and x-ray methods would also be a goal of your research. You would be interacting with other staff scientists in the vibrant research organization that comprises the structural biology programs for x-rays (SSRL) and cryoEM at SLAC and Stanford, and also have a strong role within the SyneRx Center to provide knowledge and services as well as bridge and coordinate between the many entities. You would be cross-trained in the structural methods. The work will require being accessible occasionally outside of regular working hours.

Qualifications:

A Ph.D. degree in biophysics, structural biology, biochemistry or a related field and post-doctoral experience in the use of x-ray macromolecular crystallography, and/or cryoEM/ET. Other required qualifications include:

- Experience in biochemical purification and sample preparation.
- Experience in data collection, processing and analysis of macromolecular crystallography and/or cryoEM data up to structural solutions and validation of results.
- Excellent communications and organizational skills.
- The ability to work both independently and collaboratively in a team.

Desired Qualifications/Skills:

- Experience with biological small angle x-ray scattering/diffraction is desirable as applicable.
- A track record of scientific productivity through publications in relevant fields.
- Experience with computer tools in data management and image analysis.
- Strong communication skills demonstrated through teaching roles and/or invited lectures at conferences.

Stanford University is an equal opportunity employer and is committed to increasing the diversity of its faculty and academic staff. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the University's research, teaching and clinical missions.

For additional information on our research activities, please visit

<https://www.nih.gov/news-events/news-releases/nih-announces-antiviral-drug-development-awards>

<https://med.stanford.edu/news/all-news/2022/06/jeffrey-glenn-grant.html>

<https://cryoem.slac.stanford.edu/>

<http://smb.slac.stanford.edu/>

Please send your application, CV and the names of three references with contact information to Ms. Evelyn Castaneda, evelync@slac.stanford.edu.