Postdoctoral Research Fellow - Structural Biology

Job ID: 201904-110630

The Position

We have an exciting opportunity for a highly motivated Postdoctoral Fellow to join the Membrane Protein group in the Structural Biology department at Genentech. The successful postdoctoral candidate will focus their research on the structural analysis of membrane proteins of therapeutic interest, with an emphasis on understanding mechanisms of regulation and/or pharmacological modulation. The interaction of these membrane proteins with potent and selective antibodies, peptides and/or small molecule inhibitors will also be examined. Progress on the expression, purification and/or modulator discovery of potential membrane targets has been achieved, but the opportunity to drive new projects, technology, and/or modulator discovery also exists. The successful postdoctoral candidate will work closely with a highly collaborative group of scientists whose expertise includes protein production, assay development, antibody and macrocycle discovery, NMR spectroscopy, X-ray crystallography, and cryo-electron microscopy (cryo-EM).

This postdoctoral scientist will be responsible for the production of high-quality membrane protein samples to enable structural and functional characterization. A proven track-record in optimizing the expression and purification of challenging proteins is therefore highly desirable. Proficiency in X-ray crystallography and/or cryo-EM methods is strongly preferred. A drive to succeed on challenging research projects that aim to explore the structural basis of membrane protein pharmacology is essential.

Who You Are:
Required qualifications: Ph.D. in biochemistry, biophysics, and/or structural biology with strong experience in protein biochemistry. Productive doctoral training is expected and should be reflected through a record of high-impact publications.

Additional qualifications:

- hands-on experience optimizing the production of challenging proteins for structural studies
- experience characterizing proteins, enzymes, and ligands using analytical biochemical
and biophysical methods is preferred
- proficient in structure determination using X-ray crystallography and/or cryo-EM
- excellent communication, interpersonal and organizational skills

Postdoctoral fellow alumni publications:
Clairfeuille et al. Structural basis of a-scorpion toxin action on Nav channels.
Science. 2019 Mar 22;363(6433).

Xu et al. Structural Basis of Nav1.7 Inhibition by a gating-modifier spider toxin.

Ahuja S et al. Structural basis of Nav1.7 inhibition by an isoform-selective small-molecule antagonist.
Science. 2015 Dec 18;350(6267):aac5464.

https://www.gene.com/scientists/our-scientists/jian-payandeh
The Genentech Postdoctoral Program is unique in the annals of the pharmaceutical industry as it emphasizes basic and fundamental discovery research. It is judged by the quality and impact of its publications, as well as the outstanding careers of many former fellows in academia and industry.

Genentech’s postdoctoral fellows form a vibrant community with their own external speaker seminar program, off-site, and internal research meetings. In this regard, they are aided by a dynamic committee composed of present fellows and an advisory committee composed of former fellows who are scientists at the company. Postdoctoral fellows are typically funded for four years. The resources available are second to none in areas ranging from structure determination to mouse genetics and make for an exceptional environment. The mission of the program is to conduct first-rate science and publish in top-tier journals.

Who We Are

A member of the Roche Group, Genentech has been at the forefront of the biotechnology industry for more than 40 years, using human genetic information to develop novel medicines for serious and life-threatening diseases. Genentech has multiple therapies on the market for cancer & other serious illnesses. Please take this opportunity to learn about Genentech where we believe that our employees are our most important asset & are dedicated to remaining a great place to work.

Genentech is an equal opportunity employer & prohibits unlawful discrimination based on race, color, religion, gender, sexual orientation, gender identity/expression, national origin/ancestry, age, disability, marital & veteran status. For more information about equal employment opportunity, visit our Genentech Careers page.