



2015 Postdoctoral Fellow Job Description

Job Title: Postdoctoral Fellow – Molecular Engineering

Location: Cambridge, Massachusetts

Requisition: R-12907

Job Summary

The Amgen Postdoctoral program is committed to providing future scientists with an enriching environment to inspire innovation that will contribute to the development of human therapeutics.

Dr. Xin Huang in the Molecular Engineering department at Amgen, Inc. is seeking a highly motivated Postdoctoral Fellow to join the Structural Biology group at Cambridge, Massachusetts to study the structures of a human membrane protein with allosteric agonists and antagonists. This laboratory provides comprehensive molecular insight and structure-based design for drug target assessment, mechanism of action, protein-protein and protein-ligand interactions, as well as protein engineering to facilitate drug discovery across various important therapeutic areas. In particular, we have had some great success in structural studies of membrane proteins as drug targets. For example, our crystal structure of human GlyRa3 with an antagonist (strychnine) determined at high resolution (3.0 Å) is the first antagonist-bound structure of any Cys-loop family members and the manuscript has recently been published in *Nature*.

(<http://www.nature.com/nature/journal/v526/n7572/full/nature14972.html>). The postdoctoral candidate will be responsible for leading this project through the entire structure elucidation process, including construct design and generation, protein expression, purification, characterization, crystallization, data collection, structure determination and analysis. This postdoctoral position offers flexibility and independence in selecting the course of action and permits exploration of emerging technologies, including but not limited to X-ray free electron laser and cryo-EM. The postdoctoral fellow will gain valuable expertise in all aspects of membrane protein structural biology and exposure to structural based drug discovery. In addition, the postdoctoral structural studies represent opportunities for multiple publications in top tier journals.

The assignment length is expected to be 3 years.

Basic Qualifications

PhD at the time of appointment

Preferred Qualifications

- PhD in protein biochemistry, crystallography, or related discipline with significant postdoctoral research experience
- Knowledge of state-of-the-art membrane protein structural biology techniques including all aspects of construct design, cloning, expression, purification, characterization, crystallization screening/optimization (including LCP and LCP-FRAP)
- Excellent written and verbal communication skills

Amgen is an Equal Opportunity employer and will consider all qualified applicants for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, or disability status.

Only candidates who apply via www.careers.amgen.com will be considered. Please search the database via career category – College Job, requisition R-12907.