

Post-doctoral Position for Crystallographer to Support Drug Discovery Research

The laboratory of Dr. Daniel Flaherty in the Department of Medicinal Chemistry and Molecular Pharmacology at Purdue University is seeking a post-doctoral research associate in the field of protein X-ray crystallography to support drug discovery efforts against a novel antibacterial target of interest in our laboratory. Required degree/skills: PhD (or expected PhD) with experience in protein crystallography and biophysical techniques with a proven track record of successfully solving ligand-bound crystal structures. Required experience includes designing plasmids, cloning, mutagenesis, protein preparation, protein purification, and a strong background in utilizing *PHENIX* and *COOT* or other comparable software for structure determination. Desired Skills: Experience designing and executing biochemical assays for quantifying protein interactions with small molecules, such as with surface plasmon resonance (SPR) or isothermal titration calorimetry (ITC). Experience working with bacteria including *E. faecium*, *E. faecalis*, *N. gonorrhoeae* and *M. smegmatis* is a plus.

The candidate would have access to world-class facilities and instrumentation to support their work (crystallization drop-setting robots, screen optimization robots, plate imaging robots/hotel, walk-in plate incubator rooms, and rotating-anode home X-ray sources) within the Crystallography Core located in the Hockmeyer Hall of Structural Biology. Synchrotron data collection is also a 2-hour drive from our laboratory at the Advanced Photon Source (APS) at Argonne National Laboratory with remote data collection capabilities. Other responsibilities include managing data collection time/trips, maintaining a laboratory notebook, assisting graduate students in crystallography, and manuscript preparation. This position is funded by a grant from the National Institutes of Health in search of novel inhibitors for a new antibacterial target. The position offers a competitive salary commensurate upon experience plus benefits and is contingent upon meeting progress milestones. The successful applicant will be assessed for productivity on a bi-annual basis with the option of yearly renewal if agreed upon by both parties.

Interested candidates should submit a cover letter, CV and at least 3 references that are familiar with the candidate's experience and research potential to https://careers.purdue.edu/job/West-Lafayette-Post-Doc-Research-Associate-IN-47906/814628700/?locale=en_US. The position is open immediately, however, start date is flexible and negotiable depending on the availability of the candidate. For more information please visit <https://www.flahertylab.com/positions>

