Job Title: **Sustaining Innovation Postdoctoral Research Associate**

Project Title: **X-ray Crystallography Software Development**

Job Type: **3 Year Fixed Term Contract, Full Time**

Location: **Cambridge, UK**

Astex Pharmaceuticals is a world leader in innovative drug discovery and development. The company has successfully applied its proprietary Fragment-Based Drug Discovery platform to generate multiple new drug candidates that are progressing in clinical development. Successful collaborations have led to two launched oncology drugs (Kisqali® partnered with Novartis and Balversa™ partnered with Janssen). Astex continues to grow and focuses on Oncology and Neurological Disorders.

CURIOSITY, CREATIVITY AND INNOVATIVE SCIENCE FOR DRUG DISCOVERY

...UNLOCK YOUR POTENTIAL

The Astex Sustaining Innovation Postdoctoral research program has a track record of performing cutting-edge research and development and is a key element of our excellent scientific culture. During your SI Postdoc project you will be exposed to a multi-disciplinary pharma environment. You'll benefit from our internal training seminars that will enhance your understanding of the drug discovery process. As part of your career development, you will have the opportunity to present your work within the company and at external meetings and you'll be expected to publish your findings in high-impact journals.

A postdoctoral position is available within the Molecular Sciences department to develop automated ligand docking guided by experimental electron density maps. The project will focus on improving the sensitivity, accuracy and scope of the methods and pipelines that we have available in-house for automated small molecule ligand fitting into protein structures using electron density maps determined by X-ray crystallography. This will include developing new algorithms (potentially including AI), improving methods for fitting complex ligands and exploring the potential utility of methods for use with cryo-electron microscopy. Any new methods and/or pipeline will be benchmarked using publicly available datasets and a proprietary Astex data repository containing over 10000 protein-ligand complexes.

Candidate Requirements

- PhD in crystallography, structural biology, computing, or a related discipline
- Good understanding of protein-ligand interactions
- Familiarity with ligand docking
- Experience with crystallographic computing is a plus
- Expert knowledge in Python
- Experience with artificial intelligence and cheminformatics is a plus
- Familiarity with common software development tools and practices (version control, testing, etc.)
- Excellent team working, written and verbal communication skills

We offer excellent training and career development opportunities as well as competitive salary and benefits package.

Closing Date: 18th November 2019

To apply please send your CV and a cover letter, quoting the job reference: **SI-M003** to hr.uk@astx.com

For information on Astex Pharmaceuticals please visit: www.astx.com
and for information on Otsuka Pharmaceuticals please visit: www.otsuka.co.jp