

Post Doctoral Research Fellow (Computational Biologist)

The Agency for Science, Technology and Research (A*STAR) is the lead agency for fostering world-class scientific research and talent for Singapore. A*STAR also supports extramural research in the universities, hospitals, research centres, and with other local and international partners. A*STAR oversees 14 biomedical sciences and physical sciences and engineering research institutes. The Bioinformatics Institute founded in 2001, is on its way to becoming a notable contributor of biologically relevant results and new, efficient computational biology methods to the world-wide scientific effort in the search for yet unknown biomolecular mechanisms, an effort with the goal of applications in medicine and biotechnology.

2 post doctoral positions are available from February 15th 2014 in the Structure-based Ligand Discovery and Design group led by Dr. Hao Fan at the Bioinformatics Institute, A*STAR Singapore. For more details please visit Dr. Hao Fan's web page: <http://web.bii.a-star.edu.sg/~fanh/>

Molecular recognitions between proteins and small molecule ligands are involved in most biological processes. We aim to improve and apply computational methods to ligand discovery for proteins in the pathway/superfamily/genome scale. The computational predictions are tested experimentally through collaborations. Research projects include but not limit to:

- 1) Enzyme function annotation
- 2) Ligand discovery for membrane proteins such as GPCRs
- 3) Allosteric regulation of protein kinases

We are seeking candidates with:

- 1) PhDs in Computational Biology, broadly defined
- 2) Preference will be given to candidates who possess experience in development and application of computational methodologies associated with -
 - Protein structure prediction, modeling, and design
 - Structure-based virtual ligand screening
 - Molecular dynamics simulation of biomolecules.
- 3) Applicants should possess strong programming/scripting skills such as C/C++, Fortran, Python and Perl.

Interested applicants should arrange two to three letters of reference and send a recent CV to :

Dr. Hao Fan

Bioinformatics Institute

Email: fanh@bii.a-star.edu.sg