

Two Joint PhD positions in Bioinformatics/Computational Systems Biology at TU Dresden, Germany and Zhejiang University, China

The chair of Bioinformatics, BIOTEC, Technical University of Dresden and Systems Biology Division, Zhejiang-California NanoSystems Institute (ZCNI), Zhejiang University are looking for highly motivated candidates for joint PhD positions in Bioinformatics/ Computational Systems Biology. The candidates will be half involved in TU Dresden and half in ZCNI and will be provided an attractive fellowship. The traveling cost will be also covered.

The candidates will be involved in an EU funded project to identify and establish novel biomarkers and therapeutics targets for cancer based on the understanding of the protein interaction network of key proteins and gene regulatory networks of key transcription factors in cancers. The candidates will mainly develop computational tools/software for proteomics analysis, sequencing analysis and network modeling.

The candidates must have a master's degree in bioinformatics, computational biology, biophysics, or computational sciences. The candidates should also possess strong quantitative skills and be highly proficient in at least one of the following major programming languages: C/C++, Python or Perl. The PhD students will enter an approved program leading to the degree of PhD in TU Dresden and the degree will be awarded by TU Dresden.

The bioinformatics group at Technical University of Dresden is located within the Biotechnology Center (BIOTEC). The BIOTEC is a unique interdisciplinary center hosting international research groups dedicated to genomics, proteomics, biophysics, cellular machines, tissue engineering and bioinformatics. The bioinformatics group has a track record in protein interaction networks and functional annotation with text mining and ontologies. The group has access to a 40 CPU cluster and a super computing facility, which ranks among the top 100 in the world and comprises (SGI Altrix 4700 with 2048 cores and 6.5TB main memory and a PC farm with 2576 cores and 1.5TB distributed memory)

Zhejiang-California Nanoscience Institute is a new and independent research institute, located in Hangzhou and affiliated with Zhejiang University. Systems biology division is applying systems biology's approach integrating various -omics technologies (proteomics, transcriptomics etc.) and computation for novel drug target discovery and biomarker identification for cancer. ZCNI has the state-of-the-art core facilities that offer high-throughput sequencing (Illumina's genome analyzer), microarray (Affymetrix) and proteomics technologies (with Thermo's LTQ-Orbitrap, and GE's MDLC), ArcturusXT™ Microdissection System, BD flow cytometer, micro-positron emission tomography (PET) and optical imaging, and transgenic mouse production. A computer cluster of 32 nodes is also in house.

Applications containing • a letter of motivation with statement of research interests • curriculum vitae • copies of relevant university-level diplomas with grade transcripts • 2-3 reference letters should be sent by e-mail to Dr. Bingding Huang (bhuang@biotec.tu-dresden.de). The deadline is 15th December 2009.