

## University of Iowa Postdoctoral Fellow

Our laboratory has openings for two postdoctoral fellows, one for a computational biologist and one for an experimental biologist. The long-term objective of our research is to understand how the different processes controlling gene expression are coordinated in the cell which in turn will deepen our knowledge of organismal development and disease processes. The prospective postdoctoral fellows will have ample opportunities to collaborate with internationally recognized biomedical scientists at the University of Iowa Carver College of Medicine in the investigation of human diseases, such as hypertension and cancer.

**Computational postdoctoral fellow:** We are seeking an enthusiastic candidate who is interested in developing computational algorithms to solve problems in Systems Biology. Possible topics to work on include: i) identification of tissue-specific transcriptional enhancers; ii) modeling of the combinatorial effects of transcription factor binding, nucleosome occupancy, and chromatin modifications on gene expression; iii) network-based approach to identifying new disease genes and disease-related sub-networks.

The applicants should have a Ph.D. degree in computational biology or a related discipline (computer science, statistics, biology, physics, and mathematics). Strong computer programming (perl/python, C/C++, Java, Matlab, R) and analytical skills are essential. An established track record (as evidenced by publications in peer-viewed journals) in biological sequence and network analyses is a significant plus.

**Experimental postdoctoral fellow:** We are also seeking a talented experimental biologist who is interested in developing a Systems Biology approach to studying the transcriptional regulatory network controlling stem cell pluripotency and self-renewal. The prospective postdoctoral fellow will conduct state-of-the-art functional genomics assays coupled with computational modeling. The goal of this project is to deepen our knowledge of regulatory pathways controlling both normal normal stem cell function and reprogramming embryonic and adult somatic cells to a pluripotent state.

The applicant should have a Ph.D. degree in biological sciences, such as genetics, molecular biology, and cell biology etc. The candidate should be proficient in mammalian cell culture and modern molecular biology procedures. An established track record (as evidenced by publications in peer-viewed journals) in relevant field is required. Experience with functional genomics techniques such as ChIP-chip and DNA microarray is a significant plus.

The Carver College of Medicine of University of Iowa is among the top ten public medical schools in National Institutes of Health funding. The Department of Internal Medicine and the College of Medicine house internationally and nationally recognized centers across the biomedicine disciplines.

The University of Iowa is situated in Iowa City, Iowa, a medium-sized mid-western city of approximately 75,000 people. Iowa City is culturally very rich, maintaining outstanding communities in the arts, sciences, and literature. USA Today listed Iowa City as the third best-educated city in the nation and Forbes Magazine ranked Iowa City among the top 10 small metropolitan areas for business. Iowa City is a safe and inexpensive place in which to live with a quick and easy commute to the University from anywhere within the city.

Interested candidates please send a CV, a cover letter stating research interests and qualifications, and references to Dr.

Kai Tan, 2294 CBRB, Department of Internal Medicine, University of Iowa, Iowa City, IA, 52242, or email: [kai-tan@uiowa.edu](mailto:kai-tan@uiowa.edu).