Postdoc position at the Institute of Molecular Medicine: *Functional Genomics*

Overview

Functional genomics laboratory seeking talented postdoctoral researchers to work on exciting projects in regulation of protein translation and small ORF encoded peptides (SEP). The Wang laboratory works on applying and developing genomics methods to study gene regulation (https://www.uth.edu/imm/profile.htm?id=bc360c8f-2189-4ee9-8c96-55602629f14b). The advertised position is for studying potential functions of novel coding regions in the human genome. We have previously identified 7,273 novel coding regions translated in human lymphoblastoid cell lines (https://elifesciences.org/articles/13328). These novel coding regions include SEPs on lncRNA and uORFs that potentially regulate translation of the cognate coding genes. The immediate objective of the project includes a knockout screen for essential function, further proteomics study to validate peptide production, and investigating recent purifying selection at these regions by comparing to data generated from closely related primate species. The long-term goal of the project is to expand our discovery to more tissue types and more species in order to gain a full functional picture of the coding genome.

Other ongoing projects in the lab include cis-QTL mapping to identify genetic variants associated with changes in translation efficiency in response to stress; developing novel methods for inferring RNA binding protein occupancy; developing novel approaches for mutation/ variant detection; developing novel methods for identifying uORF translation. Depending on the interest level and capacity of the recruit, participation in these projects is encouraged. The Wang laboratory is located in the Institute of Molecular Medicine (IMM, https://www.uth.edu/imm/) at the University of Texas Health Science Center at Houston (UTHealth). IMM is a collaborative interdisciplinary institute that has many molecular biology and physiology labs that the Wang lab collaborates with to translate novel findings from functional genomics to more disease-oriented research. UTHealth is one of the top institutes located in Texas Medical Center, along with MD Anderson Cancer Center and Baylor College of Medicine.

Qualification

A PhD in human genetics, genomics, bioinformatics, evolutionary biology, computer science, or another relevant field. Experience in analyzing large-scale datasets and working knowledge on multiple programming languages. Experiences in designing, performing, and analyzing genome scale CRISPR screens are preferred, but not required.

Application

Qualified candidates are encouraged to contact Dr. Sidney Wang directly at sidney.wang.lab@gmail.com. In the email, please attach your CV, and a cover letter briefly describing your research interests and highlights of your research achievement. Please use subject title "postdoc application, your name". Applicants will be evaluated immediately (3/5/19) until the position is filled.

UTHealth is an Equal Opportunity Employer. All underrepresented groups including, but not limited to, minorities/women/individuals with disabilities/protected veterans are encouraged to apply.