April 29, 2019

Postdoctoral positions are available immediately at The University of Texas Health Science Center in San Antonio (UT Health San Antonio). Interested predoctoral and MS applicants should apply to the appropriate graduate program (i.e, IBMS for predoctoral students, CSA MS for MS students) using the links provided under application procedures.

Position description

Successful candidates will be mentored by Drs. Habil Zare and Bess Frost, and will develop and apply cutting–edge machine learning techniques to analyze next–generation sequencing data from large cohorts. They will contribute to highly–collaborative studies in the areas of cancer research and neuroscience. Dr. Frost is an expert in using *Drosophila* as a model to determine fundamental processes in cell biology that drive neurodegeneration (see https://www.bessfrostlab.com). Research in her lab is complemented with comparative analyses in postmortem human brain. Dr. Habil Zare is a computational biologist and the PI of the Oncinfo Lab (see http://oncinfo.org). He is interested in cancer research, as well as neurodegenerative disorders including Alzheimer's disease. While methodological advancements is the secondary goal in his studies, his lab has developed novel tools and algorithms to improve data analysis using Bayesian networks and integrative correlation networks. The PIs have recently published a study on transposable elements in *Nature Neuroscience* (PMID: 30038280), and their research is funded by NIH–NIA and NIH–NINDS. Both PIs have joint appointments at: 1) The Department of Cell Systems and Anatomy, which consistently ranks high for NIH funding, and 2) The Glenn Biggs Institute for Alzheimer's & Neurodegenerative Diseases. Dr. Frost has also an appointment with the Sam & Ann Barshop Institute for Aging and Longevity Studies. The UT Health San Antonio is a **Tier One** research institution, and has ranked 1st in NIH funding for studies in aging, which provides a good foundation for research in neuroscience and cancer. San Antonio is a dynamic and multicultural city with an outstanding educational environment.

Qualifications

Required: While applicants with a strong background in cell biology and computer programming are preferred, exceptionally strong candidates with either background who are highly motivated for learning new concepts in biology and improving their programming skills will be considered. Ability for critical thinking and independent learning, and excellent written and oral communication skills in English are essential.

Preferred: Wet lab skills, above average knowledge in machine learning, mathematics, computational biology, bioinformatics, statistics, R, or experience in multidisciplinary research that has led to high-impact publications increases chance for acceptance.

Compensation

Salary is competitive, and in the range of **$50K-$60K** for the postdoctoral positions. Cost of living is relatively low in San Antonio and there is no state income tax.

Application procedures

All interested candidates are encouraged to email a current CV and a cover letter to Dr. Habil Zare at zare@uthscsa.edu. Potential graduate students should apply to the following programs. Detailed description and additional admission requirements are available at:

- The postdoctoral positions require PhD degrees in a related field, and are open until filled. All postdoctoral appointments are designated as security sensitive positions. UT Health San Antonio is an Equal Employment Opportunity/Affirmative Act on Employer including protected veterans and persons with disabilities.

- PhD: See The Integrated Multidisciplinary Graduate Program (IMGP) (deadline: 1 January 2020).
  http://gsbs.uthscsa.edu/graduate_programs

- MS: See Master of Science in Biotechnology (deadline: 15 February 2020).
  http://uthscsa.edu/csa/grad-ms.asp