

Post-doctoral Fellowship at the University of Texas in Macromolecular Crystallography, Biophysics and Biochemistry

A post-doctoral fellowship position is available at the University of Texas Medical Branch (UTMB) located in the greater Houston area in the research team of Dr. Gabrielle Rudenko. We study molecules that mediate the formation, maintenance and plasticity of synapses, the contact and communication point between neurons. Our proteins of interest organize and regulate protein interaction networks in the synaptic cleft and impact how neurons communicate with each other at synapses. Many of the proteins we study are implicated in neurological and neurodevelopmental diseases and serve as potential novel therapeutic targets.

We are looking for enthusiastic individuals who are interested in combining the fields of structural biology, biochemistry, biophysics and neuroscience. Research projects involve protein over-expression and purification, x-ray crystallography, biochemical and biophysical techniques, proteomics, chemical biology and in collaboration electron microscopy and NMR.

Our laboratory is part of the endowed Sealy Center for Structural Biology and Molecular Biophysics and the Department of Pharmacology/Toxicology at UTMB. The Sealy Center provides access to exceptional facilities, training and experimental assistance. X-ray facilities include a Rigaku Ultimate Homelab (FR-E⁺ +DW superbright X-ray generator and R-AXIS⁺⁺IV crystallography system), a newly acquired Brüker D8-Venture system, a Brüker 2K CCD and a Rigaku BioSAXS-1000 2D-Kratky camera (for solution scattering data). A Rigaku Crystalmation robotics system consisting of an Alchemist-II, a PHOENIX, and a DT Minstrel/Gallery 160 is available for crystallization. Biophysics facilities include equipment for analytical ultracentrifugation, fluorescence, MALDI-TOF mass spectrometry, dynamic light scattering, surface plasmon resonance, titration micro-calorimetry, and high throughput screening with a ThermoFluor HTS. In addition, the Electron Microscopy facilities house three modern JEOL cryo-electron microscopes and the NMR facilities include three NMR spectrometers (Bruker Avance III 800, 750 and 600 MHz with cryoprobes). See <http://www.scsb.utmb.edu/resources/>

UTMB is part of the Texas Medical Center, the world's largest medical center located in greater Houston. UTMB has research facilities situated on Galveston Island offering a pleasant subtropical climate and miles of relaxing beaches. UTMB is located within commuting distance of Houston, the fourth largest city in the United States and a leader in the arts, education, and health care.

Qualifications: Applicants should have received a Ph.D. degree in a field relevant to structural biology within in the last three years and have a strong publication record. Applicants with experience in cloning, bacterial/insect cell culture, protein purification and crystallization, and macromolecular structure determination are preferred. However, recent graduates with a strong background in protein over-expression and purification, and an exceptional interest in learning crystallography are also encouraged to apply. Good written and oral communication skills in English are essential as well as the ability and desire to work as part of a highly motivated, collaborative team.

To apply please e-mail the following to garudenk@utmb.edu : CV, contact information for three references (address, phone and e-mail), a list of your experimental expertise and skills relevant to this position and a research statement describing your past research experience and future goals (1 page). Visa sponsorship is available for non-US nationals. For questions, please contact Dr. Gabrielle Rudenko at garudenk@utmb.edu For more information please visit <http://scsb.utmb.edu/labgroups/rudenko/>
The University of Texas is a non-discriminatory, affirmative action employer.

Gabrielle Rudenko, PhD
Dept of Pharmacology and Toxicology
Sealy Center for Structural Biology & Biophysics
University of Texas Medical Branch
301 University Boulevard
Basic Sciences Building Rm. 5.114B
Galveston Texas 77555

<http://scsb.utmb.edu/labgroups/rudenko/>