Study of Mass Spectrometry/Proteomics /Cancer Biology/Immunology

Two postdoctoral positions are available in the laboratory of Yonghao Yu, in the Department of Biochemistry of UT Southwestern Medical Center to study Mass Spectrometry/Proteomics /Signal Transduction/Cancer Biology/Immunology. By utilizing integrative mass spectrometry-based proteomic, and more traditional biochemical/molecular biochemical approaches, the focuses of our group are to decipher the fundamental mechanisms of tumorigenesis. We are also interested in the study of the interplay between cancer and the immune system.

On the proteomic side, we are particularly interested in developing next generation large-scale quantitative mass spec technologies, including those relevant to sample preparation, instrumentation and computation. We then use these methods to characterize protein expression, as well as protein modifications, including phosphorylation, ubiquitination, and ADP-ribosylation, etc. Several representative recent publications include:

2. Xiang et al., Cell, 163, 829-839 (2015).

On the cancer biology side, our group aims to translate the discoveries made by the large scale proteomic experiments to understand the role of several important signaling molecules in the oncogenesis of human malignancies, including mTOR and PARP. Several representative recent publications include:


On the translational research side, the group aims at identifying protein expression/modification patterns that may serve as diagnostic, prognostic or predictive biomarkers, and developing small molecule-based therapeutics for treating cancer. In addition to the research projects within the group, our group is actively engaged in numerous collaborations with many basic and physician scientists at both UTSW as well as other world-class institutions. The interdisciplinary and collaborative environment of our group provides highly unique career development opportunities for the postdoc trainees.

Requirements:
Candidates must hold a Ph.D. and/or M.D. degree and have experience in:

i) biochemistry,
iid) molecular biology
iii) mammalian cell biology,
iv) cancer biology or immunology
v) Proteomics

leading to publication in peer-reviewed journals are recommended. Prior exposure to mass spectrometry is preferred, but NOT required.

Interested individuals should send a CV, statement of interests, and a list of three references to:

Yonghao Yu, Ph.D.
Yonghao.yu@utsouthwestern.edu

UT Southwestern Medical Center is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans and individuals with disabilities are encouraged to apply.