



UT SOUTHWESTERN MEDICAL CENTER

Postdoctoral fellowship in studying polycystic kidney disease pathogenesis Dr. Saikat Mukhopadhyay's lab, UT Southwestern, Dallas

The current project aims to study the role of cilia-generated signaling in polycystic kidney disease (PKD). Studying signaling by cilia has been challenging due to the minute size of these compartments and lack of good models. We utilize a variety of cell biological, biochemical, and reverse genetic approaches to understand signaling mediated by cilia and to dissect their role during normal development and disease. We have pioneered multiple paradigms in studying cilia in development and disease using mouse models targeting trafficking to cilia and signaling by cilia. These paradigms instruct us about developmental programs, previously unknown phenotypic outcomes, and new ways to understand and target diseases such as PKD. Going forward, we are now in a unique position to translate our understanding in ciliary trafficking and signaling in multiple contexts including: (a) studying core trafficking and signaling mechanisms in PKD pathogenesis and (b) drugging ciliary signaling targets in PKD.

We are a closely-knit group of scientists with diverse sets of expertise and passionate about solving the biological problem, often embarking on newer methods and paradigms as necessary. We also utilize a variety of high-quality core services inside and outside UT Southwestern that enables us to address a biological problem using expertise from various fields. Thus, the postdoctoral fellow will work independently but will also be well supported with complementary expertise inside and outside our group. As our lab studies cilia in different developmental contexts, the current project in PKD could benefit from rare, and general insights in ciliary signaling from the other related and ongoing projects. The vibrant and collegial scientific atmosphere in the Cell Biology department and in UT Southwestern will also be a catalyst for professional growth. Here is a recent lab link: <https://www.utsouthwestern.edu/labs/mukhopadhyay/news/current-projects.html>

Candidates must have a recent Ph.D. or M.D./Ph.D., with less than five years of prior postdoctoral experience, and a demonstrated research record with at least one first author publication. Preference will be given to applicants with a strong background in cell and molecular biology, mouse genetics or chemical biology. Pay scale as per NIH guidelines.

Interested applicants should email saikat.mukhopadhyay@utsouthwestern.edu a CV, a cover letter describing major accomplishments and reasons for interest in our lab, along with 3 references.

UT Southwestern is one of the nation's premier academic medical centers, integrates pioneering biomedical research with exceptional clinical care and education. The institution's faculty has received six Nobel Prizes and includes 26 members of National Academy of Sciences, 17 members of National Academy of Medicine, and 14 HHMI Investigators. UT Southwestern is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans, and individuals with disabilities are encouraged to apply.