

# Postdoctoral Associate- Nanoscale Mechanics

## Job Summary

We are searching for a Postdoctoral Associate in collagen and single-molecule biophysics in the laboratory of Drs. Dhaher and Lin. We seek an enthusiastic and talented postdoc to develop and apply state-of-the-art atomic force microscopy (AFM) to elucidate the dynamics and energetics of single biomolecules and their interactions with collagen.

The University of Texas Southwestern, located in Dallas, is committed to building a culturally diverse community of faculty, staff, and students dedicated to contributing to an inclusive campus environment. We are an Equal Opportunity Employer, including veterans and individuals with disabilities.

## Who We Are

UTSW supports eclectic and innovative research programs fostering creative collaboration among scientists across the institution. The wide-ranging interests of UTSW scientists have made UTSW one of the nation's leading research institutes in the biomedical sciences. UTSW science encompasses Atomic & Molecular Physics, Biophysics, and Chemical Physics.

## What Your Key Responsibilities Will Be

- Conduct single-molecule force spectroscopy of diverse proteins using AFM.
- Develop assays to pursue complementary new research directions.
- Analyze data and prepare manuscripts for submission.
- Work in a collaborative atmosphere within the group and with external collaborators.
- Participate in preparing external grants and, as appropriate, apply for fellowships.
- Mentor graduate students.

## What We Require

- Ph.D. in Physics, Biophysics, Biochemistry, Material Science, or a closely related field, awarded no more than five years before the appointment.
- A proven track record of outstanding research as reflected in publications.

## What You Will Need

- The ideal candidate will be highly motivated to conduct independent research, have excellent communication skills, and enjoy working collaboratively. Expertise in methods development and quantitative analysis.
- Background in the use of quartz microbalance is plus but not essential.
- Background in biology is a plus.
- Also desirable, though not required, is experience with mechanical testing and the topic of mechanical behavior of materials (theory and application).

## Special Instructions

To apply, please submit the following materials:

- Resume or CV
- Cover letter addressed to the Search Committee briefly describing your qualifications, professional goals, and specific interest in this position.
- List of contact information for 3 references who may be contacted on your behalf. You don't need to include letters of recommendation with your application.

If you are selected as the finalist, your degree will be verified by the UTSW Human Resources department using an approved online vendor. If your degree was obtained outside the United States, please submit a translated version as an optional attachment.

The position will be open until filled. Applications will be screened as they are received.

Please send your application material to [Monica.Muniz@UTSouthwestern.edu](mailto:Monica.Muniz@UTSouthwestern.edu) with the subject line: **Application for Nanoscale Mechanics Postdoc**