

## Postdoctoral Fellow Position

### Nanobiomechanics Laboratory

A postdoctoral position is immediately available in **Dr. Lin Han's Laboratory** at the School of Biomedical Engineering, Science and Health Systems at Drexel University. We are investigating the role of small proteoglycans in the initiation and progression of post-traumatic osteoarthritis. The active project will include 1) utilizing knockout mouse models to study the impacts of matrix proteoglycans in post-traumatic osteoarthritis (PTOA) in mice, 2) investigating the role of matrix proteoglycans in mediating cell inflammation pathways and mechanobiology, and 3) testing the impact of adeno-associated virus (AAV) vectors-based gene therapy on treating PTOA. We utilize in vitro cell-culture, in vivo transgenic animal models, in combination with atomic force microscopy-based nanomechanical tools to integrate basic and translational studies (<http://www.biomed.drexel.edu/labs/nanobiomech/>).

## Qualifications

Creative, highly motivated individuals with a PhD in a relevant area (cartilage biology/mechanobiology or musculoskeletal bioengineering or related disciplines), are encouraged to apply. Experience with mouse handling, cell culture, histology/immunohistochemistry and mechanobiological assays is a plus.

## About the School and Drexel

Drexel University and the School of Biomedical Engineering, Science, and Health Systems have a strong history of research and innovation in neuroengineering encompassing of the development of brain-machine interfaces, regenerative medicine, and drug delivery approaches for the treatment of brain and spinal cord injury and neurodegenerative diseases. Emerging cross-disciplinary areas of development include immunoengineering and pediatric bioengineering. There is strong support for medical technology commercialization through the endowed Coulter-Drexel Translational Research Partnership Program.

Drexel's School of Biomedical Engineering, Science and Health Systems enjoys outstanding collaborations with the other colleges and schools at Drexel, including the College of Engineering, the College of Medicine, the College of Nursing and Health Professions, the School of Public Health, and the College of Arts and Sciences. The School's faculty have also developed an extensive collaboration network with other regional institutions including the University of Pennsylvania, Children's Hospital of Philadelphia, Thomas Jefferson Medical School, Temple University.

Drexel University is a private, urban university located in Center City Philadelphia and is recognized for its traditionally strong technological focus and career-integrated education. The School of Biomedical Engineering Science and Health Systems was founded as a research institute in 1958 and was among the first in the country to offer graduate degrees in Biomedical Engineering. In 1998, the School in its present form was created, and the undergraduate degree program was established. The School confers ABET accredited undergraduate degrees in Biomedical Engineering and MS and PhD degrees in Biomedical Engineering and Biomedical Science.

## To Apply

Please submit a cover letter, CV with detailed research experience and contact information of three references to Dr. Lin Han via email at [lh535@drexel.edu](mailto:lh535@drexel.edu)