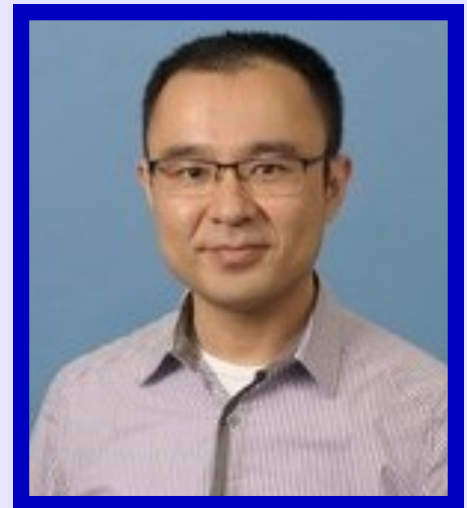


Engineering Sciences and Applied Mathematics**ESAM Seminar Series Presents:****Multiscale Modeling in Cell/Tissue Mechanics
and Related Diseases****Presented by:****Professor Zhangli Peng
University of Notre Dame**

Molecular mutations can lead to altered mechanical properties and malfunction of cells and tissues. However, it is a grand computational challenge to bridge the scales from molecules to cells and tissues. In this seminar, I will show examples of applying multiscale modeling to investigate biomechanics problems, from molecular level to tissue level, such as malaria, hereditary blood disorder, circulating tumor cells and vascular diseases. The findings from these problems have only become possible due to the multiscale modeling technique and the state-of-the-art understanding of molecular structures, and promise a new avenue to study the mechanics of biological systems.

**Monday, June 1st, 4:00 PM
Technological Institute M416**For further information see <http://www.esam.northwestern.edu>Engineering Sciences and Applied Mathematics
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