



# Department of Biomedical Engineering

## **Graduate Seminar**



## Dr. Yaling Liu

Director of Graduate Studies Dept. of Bioengineering, Dept. of Mechanical Engineering and Mechanics Lehigh University

Sep 16 (Friday) 11:30am – 1:00pm **CKB 217** 

### "BIO TRANSPORT OF CELLS: CHARACTERIZATION, CULTURING, AND DRUG TESTING ON CHIP"

#### Abstract:

Blood cell transport in microscale channels is important for cardiovascular device development and cancer metastasis. This talk will discuss recent developments in multiscale modeling of blood cell damage in medical devices and tumor cell transport in biomimetic organ-on-chip devices. The potential precision medicine through fast tumor spheroid and organoid culturing and personalized drug screening will be described.

#### **About the Speaker**

Yaling Liu is a professor and Director of Graduate Studies in the Bioengineering Department and Mechanical Engineering and Mechanics Department at Lehigh University. Dr. Liu receives his B.S. degree from Tsinghua University, and M.S and Ph.D. degrees from Northwestern University. After graduation, Dr. Liu worked as a senior engineer for a year at Seagate Technology. Dr. Liu is a Fellow of ASME, Associate Editor of the Journal of Medical Device, and Associate Editor of Frontiers in Bioengineering and Biotechnology.