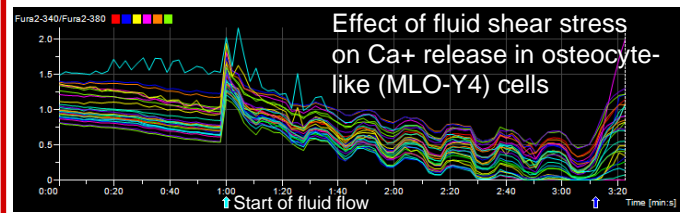
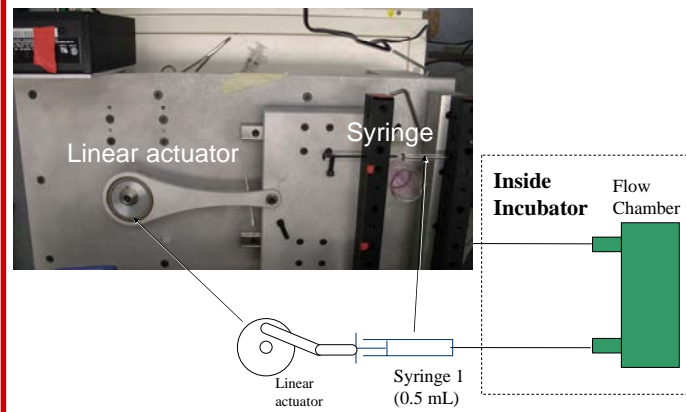


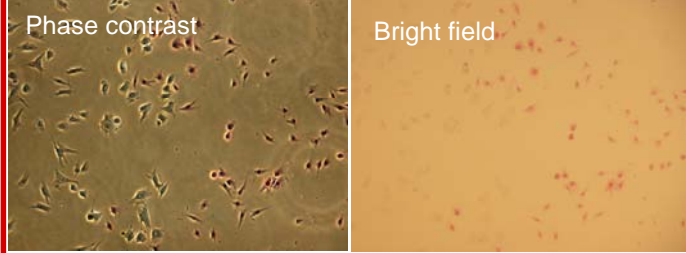
# Cellular Biomechanics Laboratory

Lidan You

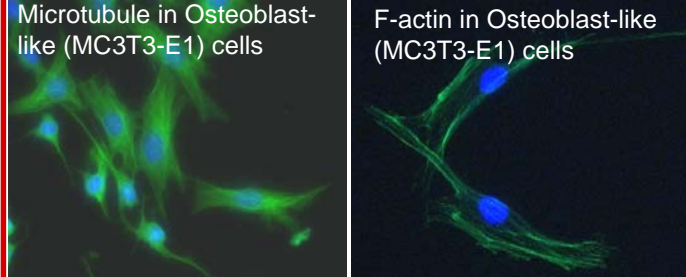
## Effects of fluid shear flow on bone cells



## Apoptopercantage staining on bone cells



## Immunostaining on bone cell cytoskeleton

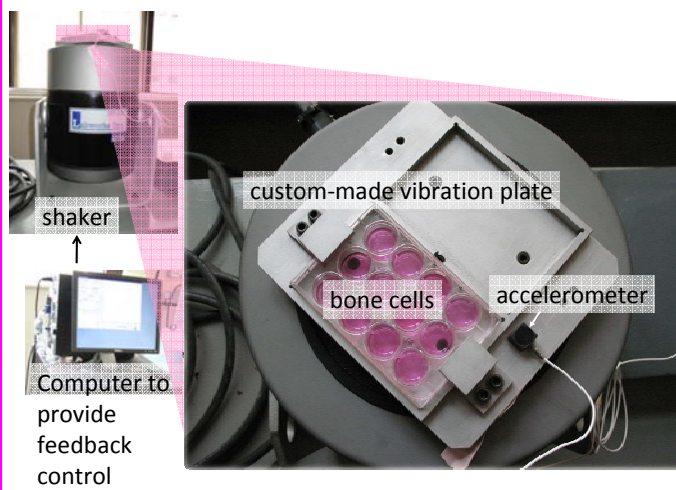


## Areas of Research

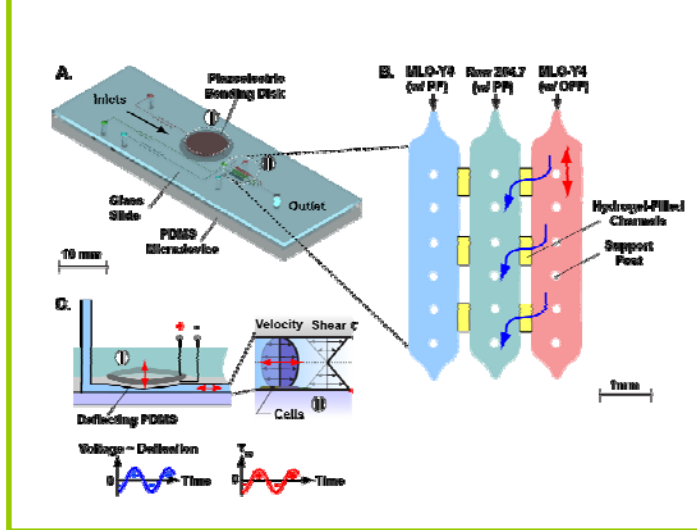
Our research interest is focused on solving biomechanical questions in muscular skeletal system at the cellular level. More specifically, we are working on

- The anti-resorptive effect of mechanical loading on bone tissue
- Advanced microfluidics system for bone cell mechanotransduction study
- The role of focal adhesion assembly in cell mechanosensitivity using micropatterned surface
- The development of advanced artificial bone matrix by employing novel microfabrication technologies.

## Anti-resorptive effect of low-magnitude, high-frequency vibrations on bone cells



## Microfluidic Co-Culture System for Studying the Effect of Mechanical Loading on Osteocyte-Mediated Bone Remodeling



## Microfluidics Chamber System for Bone Cell Mechanotransduction Study and Bone Tissue Engineering Application

