
Electrical & Computer Engineering

S E M I N A R

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MEMS technologies for mechanical characterization of adherent cells

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Abstract—MEMS (micro electromechanical system) is a highly miniaturized electromechanical device with a typical dimension varying from a few to a few hundred m. Due to its high level of precision and parallelism, MEMS has been actively studied as a breakthrough solution in life science and medicine. In the field of mechanobiology, MEMS technologies have been widely used to characterize fundamental mechanical properties of cells to elucidate dynamic and complex interactions between the cell mechanics and the cellular processes. This talk will focus on MEMS-based approaches for the mechanical characterization of adherent cells. A unique MEMS mass sensor with a spatially uniform mass sensitivity was developed and used to measure the mass, the growth rate, and the stiffness of the target cells on a single cell level.

When: Wednesday, 10 April 2013, 11:30 - 12:30

Where: Room 1110 P.F. Taylor Hall

Info: <http://www.ece.lsu.edu/seminar>

