

Spring 2009 Seminar Series

Department of Biomedical Engineering

Wednesday, April 1st @ 3PM in Steinman T-402

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New York, NY

Microfluidics for 3D tissue engineering and global health diagnostics

We will discuss three high-resolution microfluidic techniques for controlling the 3D microenvironments of cells and tissues to high resolution. These techniques are useful for studying microvascularization (our main focus), as well as tumor metastasis and stem-cell differentiation. Lab-on-a-chip (LOC) devices have a tremendous potential for improving the health of people in developing countries. The development of diagnostics for global health, however, presents unique and challenging design criteria. We will discuss our lab's current efforts, in conjunction with partners in industry, public health, and local governments, to develop new rapid diagnostic tests.