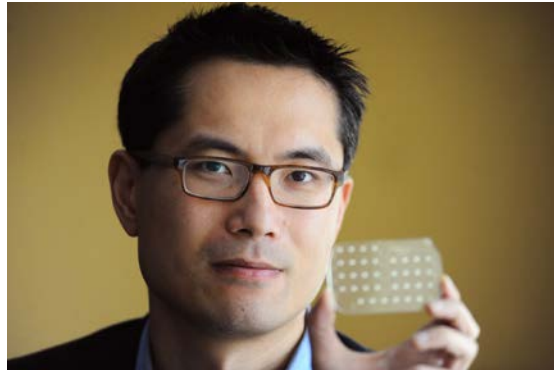


BME & CIGHT Seminar Series



Sam Sia, PhD

*Associate Professor of Biomedical Engineering
Columbia University*

“Microfluidics for 3D Tissue Engineering and Personal Health Diagnostics”

Thursday, April 14th

Tech L361

4:00-5:00PM

I will discuss the use of microfluidic techniques for two different applications: controlling 3D microenvironments of cells and tissues, and for developing low-cost point-of-care diagnostics for use in U.S. and in developing countries.

1) A number of microfluidic techniques have been developed in our group for controlling the 3D microenvironments of cells and tissues to high resolution. These techniques are useful for studying microvascularization in a number of organ systems, and for engineering implantable devices.

2) In the second half of the talk, I will discuss the development of lab-on-a-chip devices for personal health in the U.S., and for diagnosing diseases for global health. I will discuss our lab's current efforts, in conjunction with partners in industry, public health, and local governments, to develop new rapid diagnostic tests for use in sub-Saharan Africa.

Host: Professor Matthew Glucksberg