

Dear Faculty, IGERT Fellows, IGERT Associates and Students,

You are cordially invited to attend a Seminar presented by Adam Witmer.
Please plan to attend.

Adam Witmer

IGERT Fellow

Date: Friday, October 23rd, 2015

Location: Chung 218 (VISLAB)

Time: 11:00am

Human Neural Stem Cell Growth and Differentiation in a Gradient-Generating Microfluidic Device.

Abstract:

Researchers have constructed a multi-chambered microfluidic device capable of generating a concentration gradient for studies of stem cell growth and differentiation in vitro. In conjunction with a microscope incubation unit, cells were visualized over the course of 7 days, while being exposed to a concentration gradient of growth factors. They found that cell proliferation increased in proportion to growth factor exposure, and differentiation decreased with the same stimulus. Comparison to positive and negative controls verified these findings. They concluded that this type of microfluidic experimentation overcame problems imposed by traditional culture methods.

