## Northwestern ENGINEERING

## <u>CIGHT Seminar Series</u>



## **David Eddington, PhD**

Associate Professor of Bioengineering University of Illinois at Chicago

## "Microenvironmental Control with Microfluidics" Friday, March 18<sup>th</sup> Tech E311 3:30-4:30PM

The projects of the Eddington lab span clinical diagnostics, tools for experimental biology, and therapeutic devices. The common theme of these projects is developing simple microfabricated tools which yield unique advantages over current methods. By simplifying device design it is far easier to integrate into other research labs, which is the true test of innovativeness. Specifically, I will present work on investigating chemotropic signaling in yeast, oxygen gradients in tissue engineering constructs, dynamic oxygen profiles in standard cell cultures, microfluidic characterization of islets prior to transplantation, and new tools for in vitro brain slice electrophysiology.