BiophysTO Lunchtime Talks

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The design and application of genetically encoded Apollo-NADP+ sensors to image cellular metabolism in tissues

Diabetes is an emerging epidemic due to our aging population. Maintaining pancreatic islet function and survival are critical to treating this disease; however traditional biochemical assays are restricted in studying islets due to the cellular complexity and limited size of this tissue. This seminar will describe my lab's effort to study islet molecular physiology by engineering microfluidic devices ("islet-on-a-chip") and more recently a family of genetically encoded sensors ("Apollo-NADP+"). My seminar will provide an overview of our research progress as well as illustrate how these technical innovations could advance other areas including biochemistry, cell biology, and tissue engineering.

Host: Dr. Josh Milstein

(Refreshments and pizza will be provided)

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Thursday, April 21, 2016 – 12:00 pm, noon
Davenport Room, Chemistry Building
(and via streaming to HSC332 at UTM)