



Stony Brook University

Biomedical Informatics Grand Rounds



Adam Rosebrock, PhD

Assistant Professor of Pathology
Member, Cancer Center

Enabling Biochemical "Big-Data" With Mass Spectrometry Metabolomics

Wed, April 18 2018 3pm—4pm

Atkins Center – HSC Level 4 (Radiology)

Bio/Abstract:

Dr. Adam Rosebrock is an assistant professor in the Department of Pathology and a member of the Cancer Center at Stony Brook School of Medicine. Dr. Rosebrock has a longstanding interest in leveraging big data to address fundamental biological challenges. His group is using a combination of mass spectrometry metabolomics, genetics, and big data analytical techniques to build a quantitative understanding of the biochemical wiring of cells across diverse cellular states. Dr. Rosebrock will discuss how his lab is leveraging patterns of metabolic response to identify and understand regulation of pathways and how he is linking changes in biochemical phenotype back to genetic regulators.

Educational Objectives:

- Introduce analysis of endogenous metabolites by full-scan and targeted mass spectrometry
- Highlight fundamental differences between metabolic, genomic, and proteomic experiments
- Discuss current limitations of mass spectrometry metabolomics and present multiple areas where novel computational approaches may improve experimental interpretation.

****CME CREDIT AVAILABLE****

Questions? Please call the Biomedical Informatics Department at 631-638-2590.