Bioinformatics & Systems Biology

BISB BOOTCAMP
SUMMER SEMINAR SERIES

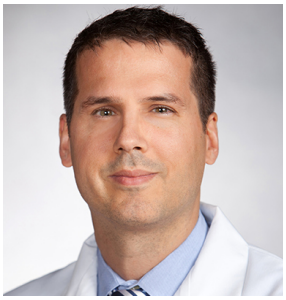
August 5th, 2021 | 12:00 PM PST – 1:00 PM PST

Zoom ID: 969 2714 6510
Password: binfobuds

ENGINEERING THERAPEUTICS WITH SYSTEMS AND SYNTHETIC BIOLOGY

Nathan Lewis, Ph.D.

No molecule in a living organism exists in a vacuum. Indeed, each interacts with thousands of other molecules, and the functions associated with each gene product are influenced by surrounding proteins, metabolites, and other molecules. The existence of complex pathways governing phenotypes poses a substantial challenge in efforts to diagnose complex diseases, unravel their causes, and to develop effective therapeutics. The Lewis lab uses systems biology approaches to develop network-based diagnostics for childhood disorders and to understand the regulation and activity of pathways, such as metabolism, protein synthesis/secretion, and glycosylation. Insights are also used to guide efforts to engineer mammalian cells for biotherapeutics.



INFORMATICS TO SUPPORT DIAGNOSTIC SAFETY AT UCSD

Robert El-Kareh, M.D., M.P.H., M.S.

Robert El-Kareh is an Associate Professor of Medicine within the Division of Biomedical Informatics at UC San Diego. He also serves as Director of Inpatient Medical Quality and leads the Clinical Decision Support Oversight Committee at UC San Diego Health. Clinically, he is a practicing hospital medicine physician. Dr. El-Kareh's primary academic activities involve the use of clinical data to improve diagnostic safety in healthcare. Dr. El-Kareh has active research and performance improvement projects related to detection and evaluation of inpatient diagnostic delays, systematic feedback of patient outcomes to frontline providers and tools to guide the appropriate use of diagnostic tests.

For ongoing updates on upcoming lectures:
Visit https://tinyurl.com/BISB-Summer-Seminar

BISB Bootcamp 2021 Organizers:
Cameron Martino; Michelle Franc Ragsac; Lauryn Bruce; Mike Cuoco