

2nd NCBI CBB Scientific Retreat – May, 2014
38A Lister Hill Auditorium
Organizers: Anna Panchenko, Zhiyong Lu, and John Spouge

10AM – 12PM Session 1

Disease, Infection, and Resistance Chairs: Anastasia Nikolskaya and Josh Cherry

Mileidy Gonzalez - Conserved signatures in the gp120 molecule potentially drive HIV transmission

Kira Makarova - General principles of organization and evolution of CRISPR-Cas systems

Jean Thierry-Mieg - Blinded outcome prediction using large scale RNA-sequencing in human neuroblastoma and rat toxicology

Raja Mazumder (NCBI alumnus) - Understanding the cancer variome through pan-cancer analysis of somatic mutation data

Emil Alexov (sabbatical visitor) - Snyder-Robinson syndrome: molecular mechanism and rescuing the effect with small molecules

1PM – 3PM Session 2

Knowledge discovery from biomedical data Chairs: Lana Yeganova and Ben Shoemaker

Sun Kim - Extracting drug-drug interactions from literature using a rich feature-based linear kernel approach

Robert Leaman - DNorm: Disease Name Normalization with Pairwise Learning to Rank

Yoo-Ah Kim - Network-based approaches to identify dysregulated pathways in cancer

Vahan Grigoryan (NCBI alumnus) - Knowledge Discovery Projects at Consumer Financial Protection Bureau

3PM-3:30PM Coffee Break and Poster Session

3:30PM-5:30PM Session 3

Gene regulation and sequence analysis Chairs: by Teresa Przytycka and Ivan Ovcharenko

Svetlana Shabalina - Overlapping regulatory codes as a key to transcriptome and proteome complexity

Damian Wójtowicz - Role of DNA conformational dynamics in gene regulation

Valer Gotea (NCBI alumnus) - Ascertaining regions affected by GC-biased gene conversion through weak-to-strong mutational hotspots

Aravind Iyer - It more than just ATGC: discovering new bases in DNA