GEORGE MASON UNIVERSITY COLLEGE OF SCIENCE BIOLOGY DEPARTMENT SEMINAR Spring 2016

Sridhar Hannenhalli, Ph.D. Department of Cell Biology and Molecular Genetics University of Maryland, College Park

"Understanding Genotype-Phenotype Associations via Transcriptional Regulation"

The ENCODE project, via generation of unprecedented transcriptomic and epigenomic profiles, has revealed a complex layer of transcriptional regulation mediated by distal regulatory enhancers distributed throughout the human genome. These data open up more questions than they answer. I will talk about our attempts to identify distal enhancers based on epigenomic marks, and then present our ongoing efforts to predict the gene targets of the distal enhancers. The broader context and the motivation for these studies are to interpret eQTL and GWAS results in light of enhancer-mediated regulatory networks. I will then present a first look at correlated networks of enhancers in the human genome.

TUESDAY April 26, 2016 3:00-4:15 PM

Fairfax Campus: Innovation Hall Room 334 Science & Technology Campus: OCC 221