Advanced Gene Mapping Course

January 27-31, 2020

The Rockefeller University

New York, NY

Emphasis: Analysis of sequence and other omics data. This course will cover both theory and applied exercises. Computer exercises will be carried out using a variety of programs (CASSI, EPACTS, FOCUS, GCTA-MLMA, FaST-LMM, LDpred; Matrix-eQTL, MR-base, PAINTOR, PLINK2.0, PrediXCan, R, SEQSpark VAT, etc).

Topics: Complex trait rare variant association studies, whole genome association studies, qualitative and quantitative traits, family-based and population-based data analysis, data quality control, functional annotation, Analysis of RNAseq data, detection of pleiotropy, mediation analysis, Mendelian Randomization, polygenic risk scores, fine mapping, heritability estimation, analysis of imputed data, meta analysis, controlling for population admixture/substructure, detecting gene x gene interactions, analysis of epigenomic data, and power estimation.

Course Fee: 100 USD academic; travel stipends for pre and post-doctoral fellows are available

Instructors: Heather Cordell (University of Newcastle), Nancy Cox (Vanderbilt University), Andrew DeWan (Yale University), Suzanne Leal (Rockefeller University & Columbia University), Bogdan Pasaniuc (UCLA) & Shamil Sunyaev (Harvard University)

For additional information, course schedule and application form visit the course websites:

http://statgen.us/advgenemap2020

(Google: Rockefeller Advanced Gene Mapping Course 2020)