Advanced Gene Mapping Course

January 10-14, 2022

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, FaST-LMM, FUSION, LDpred, LDSC,PLINK2.0, R, REGENIE, SuSiE, tensorQTL, etc).

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

Course Academic Fee: 100 USD. **Fellowships to cover travel costs are available**

Instructors: Heather Cordell (University of Newcastle), Andrew DeWan (Yale University), Suzanne Leal (Rockefeller University & Columbia University), Shamil Sunyaev (Harvard University) & Gao Wang (Columbia University)

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

http://statgen.us/advgenemap2022

(Google: Rockefeller Advanced Gene Mapping Course 2022)