

Course Announcement

Complex Trait Analysis of Next Generation Sequence Data

MDC
Berlin-Buch

Max Delbrück Center for Molecular Medicine

November 22-26, 2021

Max Delbrück Center for Molecular Medicine
Berlin, Germany

Emphasis: both theory and application of methods to analyze next generation sequence (NGS) data for will be taught. Attendees will learn how to design studies, call variants, analyze population and family-based sequence data and evaluate variant functionality. Analysis of NGS data will include performing complex trait rare variant association analysis for population, trio, and family data.

Topics: sequence alignment, variant calling, data quality control, association testing, rare variant association methods, GLMM, LMM, PRS, power estimation, imputation, and evaluating variant functionality.

Exercises: will be performed using a variety of computer programs including: ANNOVAR, BOLT-LMM, FAST-GWA, REGENIE, IGV, R, PSEQ, & VAT.

Instructors: Suzanne Leal (Columbia University) & Michael Nothnagel (University of Cologne)

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

<https://statgen.us/index.php/ComplexNGS2021>
(Google: Berlin NGS Complex Trait Course 2021)