INSTITUT PASTEUR COURSE - EDUCATION CENTER

Human population genomics and genetic epidemiology

Institut Pasteur, Paris, September 28-October 9, 2020

This two-week presents theoretical lectures, research examples and hands-on computer training on concepts and tools used in population genomics and genetic epidemiology.

First week - topics include:
• Principles in genetic epidemiology and statistical genetics
• Public databases in human genomics (1,000 Genomes, ExAC, gnomAD)
• Genetic epidemiology: linkage analyses and association studies
• Genome-wide association studies (GWAS)
• Whole exome and whole genome sequencing
• Computer laboratory work in genetic epidemiology
• Research examples

Second week - topics include:
• Principles in population genetics
• Population structure and human demography
• Methods to detect natural selection
• Genome-wide analyses of natural selection and research examples
• Quantitative genetics and expression quantitative trait loci (eQTL) mapping
• DNA methylation
• Computer laboratory work in population genetics
• Lectures from keynote speakers

Online registration:

Co-directors:
Lluis Quintana-Murci
Aurélie Cobat
Honorary Director: Laurent Abel

Practical information:
Deadline for application: June 20, 2020
Attendees: 25 students
Contact: enseignement@pasteur.fr