

INSTITUT PASTEUR COURSE - EDUCATION CENTER

Human population genomics and genetic epidemiology

Institut Pasteur, Paris, September 30-October 11, 2019

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:

www.pasteur.fr/en/human-population-genomics-and-genetic-epidemiology

Co-directors:

Lluís Quintana-Murci

Aurélié Cobat

Honorary Director: Laurent Abel

Practical information:

Deadline for application: June 22, 2019

Attendees: 25 students

Contact: enseignement@pasteur.fr