Genome analysis

ECTS

3

Mots clés

Genomics, Animal, Genome, ADN, Breeding, DNA, Génome, Amélioration génétique, QTL, Génomique

Description du contenu de l'enseignement

Objectifs:
The goal is to make students familiar with concepts and methods used in genome analysis and to have a good view of the complexity of the structural and functional genome variations.
Contenu:
Animal Genomes can be studied in various scientific contexts. This module is intended to show a large range of them. Genome analysis will be presented in order to identify the genetic regions undergoing selection (signatures of selection) Linkage and association are used to relate pedigree and genomic information to the presence of a QTL for a given trait. Information brought by linkage and association and, how statistic methods exploit these information will be described. Genome variabilities, both structural and functional, will also be presented at the molecular level, to underline their impact on cellular and individual phenotypes. Practical uses of these sources of variations by scientists and breeders will be highlighted.

Langue

Anglais

Volume horaire

CM : 20h, TD : 10h

Période et lieu(x) enseignements

Période:
semestre 3

Lieu:
AgroParisTech Claude Bernard

Mode de contrôle des connaissances

Assignments, oral presentation, participation