GEMO2110 Génétique moléculaire médicale

[30h] 2 credits

Teacher(s): Christine Dumoulin
Language: French
Level: Second cycle

Aims

Illustrate the impact of molecular biology on our understanding of hereditary and acquired human diseases. Technical aspects are left out, as they are dealt with in other courses.

Main themes

1. Basic concepts reminder: the eukaryotic genome and the regulation of gene expression.
2. Methodological concepts : principles of genotypic analyses, restriction polymorphisms, mapping the human genome, inverse genetics, genotypic diagnostics.
3. Molecular biology and diseases. Molecular genetics of a few constitutive diseases, diseases caused by exogenous DNA, filiation analysis through molecular pedigree, gene therapy, industrial molecular biology.

Content and teaching methods

1. Basis concepts.
2. Methods.
3. Molecular genetics of some constitutive diseases.
4. Diseases caused by exogenous DNA.
5. Molecular pedigree.
6. Gene therapy.
7. Industrial molecular biology

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Lecturing.
Evaluation through either a personal essay on one of the topics included in the lectures, or a conventional written examination.

Other credits in programs

CHIM22	Deuxième licence en sciences chimiques	(2 credits)
MED12BA	Deuxième année de bachelier en médecine	(2 credits)
MED13BA	Troisième année de bachelier en médecine	(2 credits)