Introduction to drug discovery and drug design

Niveau d'étude
Bac +4

ECTS
3 crédits

Composante
UFR Médecine

Période de l'année
Printemps (janv. à avril/mai)

Langue(s) d'enseignement: Anglais

Ouvert aux étudiants en échange: Non

Présentation

Description

To lay the groundwork for the design of drugs and new biologically active substances by exploiting the knowledge related to the Chemistry-Biology interface. The program of this teaching unit will allow the student to discover the key –elements of research in the field of the design of new molecules of drug candidate.

The teaching unit (on line and face to face learning) is open to students from Master BioHealh Engeneering (BHE), Master Sciences et Ingénierie du Médicament (SIM), Double Cursus Santé.

Exemples of topics:

- Introduction to Medicinal Chemistry and Drug Design
- Plants as source of drugs
- Physicochemical profile of the ligand
- Ligands and their chemical structure: Intermolecular interactions
- Direct drug design by molecular modeling
- Main principles of the metabolism of drugs
- Case studies : Platinum-derived anti-cancer drugs and PARP inhibitors
- Pharmaceutical development and biopharmaceutical aspects of drugs
- Initiation to molecular modeling

Heures d'enseignement

UE Introduction to drug discovery and drug design - CM	CM	18h
UE Introduction to drug discovery and drug design - TD	TD	3h
UE Introduction to drug discovery and drug design - TP	TP	3h

Période : Semestre 8

Infos pratiques

Lieu(x) ville

Grenoble

Campus

Grenoble - Domaine universitaire