

Chemistry of RNA and DNA for new therapeutic strategies

 **ECTS**
3 crédits **Composante**
UFR Chimie,
UFR des
Sciences
fondamentales
et biomédicales **Volume horaire**
20h **Période de
l'année**
Semestre 3

En bref

- **Langue(s) d'enseignement:** English
- **Forme d'enseignement :** Lecture and exercise
- **Ouvert aux étudiants en échange:** Non

Présentation

DESCRIPTION

The aim of this course is to provide an understanding of the chemical strategies to modify nucleic acids (DNA and RNA). This will include chemistry of amino acids, nucleosides and nucleotides.

At the end of this course, students will be able to play with protecting groups and orthogonal reactions and to use synthetic and enzymatic methodologies for post-functionalization and bioconjugation of biomolecules.

Some applications will be also discussed, such as the use of modified biomolecules and conjugates and bisubstrate concept in the field of new therapeutical strategies, for targeted, delivery and to produce DNA-encoded libraries and aptamers. We hope that this course will inspire future chemists to branch out on this topical field of designing

new biomolecules for potent applications, including new therapeutic strategies.

Contents:

Chemistry of nucleosides and nucleotides. Post-functionalization methodologies, Combinatorial chemistry as selex for the production of DNA-encoded libraries and synthesis of aptamers.

HEURES D'ENSEIGNEMENT

Chemistry of RNA and DNA for new therapeutic strategies	Cours Magistral	20h
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PRÉ-REQUIS NÉCESSAIRES

Bases in organic chemistry and molecular biochemistry

En bref

CONTACTS

Responsable pédagogique

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