

MASTER SCIENCES DU MÉDICAMENT ET DES PRODUITS DE SANTÉ - SMPS

Parcours

ADVANCED BIOMEDICINE AND CELL THERAPY - ABCT

120 ECTS
2 ANS



UFR3S

UFR3S – Département de
Pharmacie

Lieu d'enseignements :
Lille (campus Santé)

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Organisation du parcours

2 ans organisés en 4 semestres en
M1 & M2

Régimes d'étude

Formation Initiale
Formation Continue

Langue d'enseignement

Anglais

Stages

5 à 6 mois

PRESENTATION OF THE TRAINING COURSE

PRESENTATION OF THE SMPS MASTER'S PROGRAMME

The objective of the ABCT master's degree is to provide the fundamental knowledge and skills required to properly understand the various applications and issues related to biomedicines, cell and gene therapies. The aim is to provide students with high-quality multidisciplinary training (biochemistry, molecular biology, bioinformatic, cell biology, immunology...) enabling them to acquire the skills, competency and expertise in the field of biological drugs and cellular therapies. This international course offers a solid training for future professionals in academic, clinical and industrial research.

ABCT COURSE OVERVIEW

Advanced Biomedicines and Cell Therapies master's program is organized in two years:

- year 1 (M1) "from bench" focuses on biological drugs, their mechanism of action, production, exploratory methods, and control stages. The objective is to provide the fundamental scientific and technical basis necessary for understanding biology-based therapies
- year 2 (M2) "to bedside" places biologically derived medicines in the context of their clinical use. The objective is for students to understand the use of these biological drugs in human medicine and the challenges that remain in patient care.

There are two possible routes to the Master 2 ABCT degree. Either after the Master 1 ABCT or after completing the ABCT course of within the SMPS Master 1 degree.

THE ADVANTAGES OF THE TRAINING COURSE

The two-year ABCT master is an international program (all courses will be taught in English) developed in collaboration with Ramon LLULL University in Barcelona. This unique program offers specialization in therapies based on biological drugs, with a particular focus on the clinical use of these innovative molecules and their positioning in clinical practice. Finally, the two-year ABCT master's degree gives students an international dimension to their future career path.

MASTER SMPS - ADVANCED BIOMEDICINE AND CELL THERAPY – ABCT

ORGANISATION DE LA FORMATION DU MASTER

1^{ère} année Master Sciences du médicament et des produits de santé – Tronc commun



GENERAL SKILLS

The objective of this master's degree is to provide the fundamental knowledge and skills required to properly understand the various applications and issues related to biomedicines, cell and gene therapies. The aim is to provide students with high-quality multidisciplinary training (biochemistry, molecular biology, bioinformatic, cell biology, immunology...) enabling them to acquire the skills, competency and expertise in the field of biological drugs and cellular therapies. This international course offers a solid training for future professionals in academic, clinical and industrial research.

The competencies developed during the two-year ABCT master's program are as follows:

- Design a biomedicine and validate its use in clinical practice
- Design a tissue, cell or gene therapy medicinal product and validate its use in clinical practice
- Understand and analyze the role of microbiota in therapeutics
- Evaluate and optimize the performance of a biomedicinal product and an ATMP
- Promote a scientific project and communicate its results

AND AFTER

Entering professional life is the natural outcome of this program. However, our graduates will have acquired skills that are useful for pursuing higher education, for example in a PhD program, thereby deepening their

knowledge in the field of biomedicine and cell therapy. Overall, various professions can be targeted with the ABCT master's degree, such as:

- Research and development executives
- Specialists in quality assurance and related fields
- Researcher or research professor

Several sectors of activities can be targeted:

- Biopharmaceutical industries involved in production of therapies derived from biology
- Both national and international regulatory authorities (ANSM, HAS, EMA, WHO...)
- Research laboratories (academic and industrial)
- Hospitals

TERMS OF ACCESS

Master 1

- Specific registration details will soon be available from the university's international office. Registration will open on April 1, 2026

Master 2

- after M1 ABCT through the university's international office platform
- after M1 SMPS (option ABCT) through online application platform (ecandidat.univ-lille.fr).