

# Lab skills – introduction to Biotechnologies



**ECTS**  
3 crédits



**Composante**  
UFR Chimie,  
UFR des  
Sciences  
fondamentales  
et biomédicales



**Volume horaire**  
26h



**Période de  
l'année**  
Semestre 2

## En bref

- **Langue(s) d'enseignement:** English
- **Forme d'enseignement :** Travaux dirigés & Travaux pratiques
- **Ouvert aux étudiants en échange:** Non

## Présentation

### DESCRIPTION

Biotechnology is the technology that uses living organisms or cells (plants, eukaryotic cells, yeast, bacteria) to make various products benefiting human beings. This teaching lab is designed as an introduction to biotechnologies with focus on a very useful technique to produce proteins; the recombinant DNA technology. Thanks to this technology, crucial proteins required for health (insulin, growth factors, vaccines proteins, antibodies) and dietary purposes can be manufactured safely and affordably, in large scale. This teaching lab will give you an overview of the steps and techniques used in laboratories and industries to produce and purify a recombinant protein. (bioinformatics: research of coding sequence in databases, molecular cloning, protein expression by bacteria and purification by affinity chromatography).

### HEURES D'ENSEIGNEMENT

|                                              |                   |     |
|----------------------------------------------|-------------------|-----|
| Lab skills - introduction to Biotechnologies | Cours Magistral   | 2h  |
| Lab skills - introduction to Biotechnologies | Travaux Pratiques | 24h |

### PRÉ-REQUIS NÉCESSAIRES

Basics of molecular biology (replication, transcription, translation, PCR). Recorded lessons will be provided in advance for students who have no notion of molecular biology. These notions are considered acquired when the teaching lab starts.

## En bref

### CONTACTS

#### Responsable pédagogique

Armelle Melet

✉ [armelle.melet@u-paris.fr](mailto:armelle.melet@u-paris.fr)

### LIEU(X)

- Campus Saint Germain des Prés

**Pour en savoir plus, rendez-vous sur > [u-paris.fr/choisir-sa-formation](https://u-paris.fr/choisir-sa-formation)**