

# CAS

Certificat de formation continue  
Certificate of Advanced Studies

## Biobanking

2025

Modular Training Programme



FACULTY OF MEDECINE



UNIVERSITÉ  
DE GENÈVE



## Directors

- **Prof. Jean Villard**, Director, Faculty of Medicine, University of Geneva, Geneva University Hospitals (HUG)
- **Prof. Caroline Samer**, co-Director, Faculty of Medicine, University of Geneva, Geneva University Hospitals (HUG)

## Steering Committee

### Academic Members

- **Prof. Carlo R. Largiadèr**, Head of Liquid Biobank Bern, Inselspital, Bern University Hospital
- **Prof. Walter Reith**, Faculty of Medicine, University of Geneva, Health Sciences e-Training Foundation (HSeT)

### Experts

- **Dr Christine Joye**, Executive Director of the Swiss Biobanking Platform (SBP)
- **Prof. Hervé Bourhy**, Institut Pasteur (IP) Paris
- **Dr Monica Sala**, Institut Pasteur (IP) Paris
- **Julien Virzi**, Faculty of Medicine, University of Geneva, Geneva University Hospitals (HUG)

## Coordination

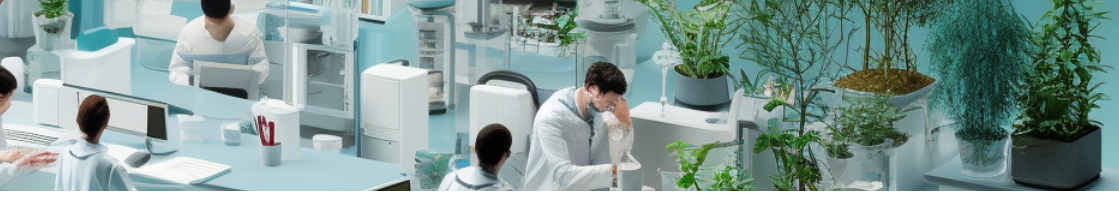
- University of Geneva | [casbiobanking@unige.ch](mailto:casbiobanking@unige.ch)

## Scientific Coordination

- Swiss Biobanking Platform

## Lecturers and Speakers

- Teaching and Research Members of the Faculty of Medicine of the University of Geneva
- International experts in the field of biobanking from the Swiss and European SBP Network, and from the Pasteur Network



## Introduction

The Certificate of Advanced Studies (CAS) in Biobanking of the Faculty of Medicine at the University of Geneva is an innovative and unique training course in Switzerland and around the world. The purpose of the CAS is to train worldwide individuals or institutions with an interest in biobanking and research (e.g., PhDs, physicians, clinical investigators, ethics committees, patient organizations). This state-of-the-art advanced training programme is meticulously designed to **give participants the indispensable knowledge and proficient skills critical for the successful establishment and management of a biobank**. The central purpose is to elevate the standards of quality, management protocols, and interconnections within the domains of clinical laboratory medicine and pioneering research endeavors.

The study programme was designed to promote the acquisition of essential knowledge in a stepwise approach by participants ranging from beginners to highly specialized professionals in the field. Through these comprehensive modules, the participants will develop the necessary knowledge and skills for the creation and day-to-day running of a biobank.



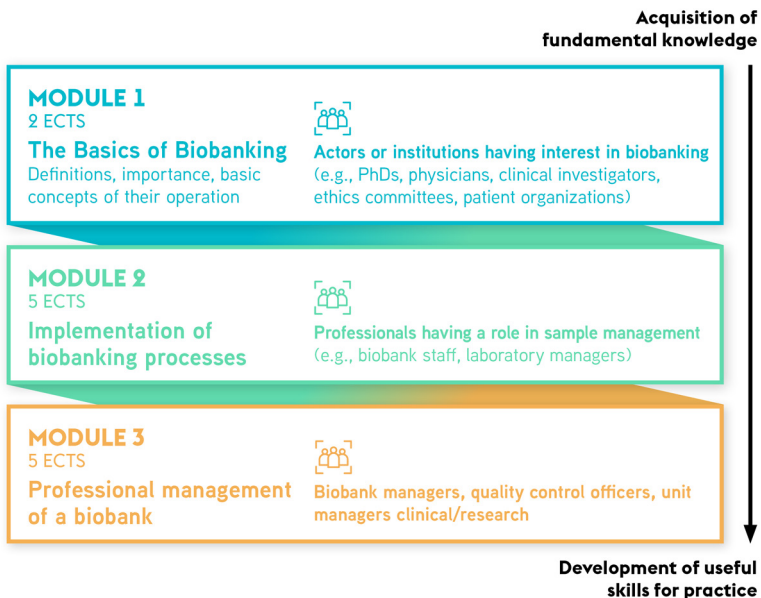
## Audience

Beginners to specialized professionals in Switzerland and abroad, working with biological samples and wishing to acquire harmonized and proper knowledge and competencies in biobanking: medical doctors, biologists, biochemists, pharmacists, researchers, biobank managers, data managers, clinical investigators, ethics committees, patient organisations, etc.

**Module 1** is designed for actors (e.g. PhDs, physicians, clinical researchers, ethics committees, patient organisations) having an interest in learning about the basics of biobanking (Beginner)

**Module 2** is oriented to participants having followed Module 1 or professionals dealing with biological sample management (Intermediate).

**Module 3** targets professionals having followed the previous modules, such as biobank managers, quality control officers, clinical unit managers (Advanced).





## Objectives

Upon completion, the CAS participants will:

- Acquire the knowledge and competencies required for the set-up, implementation, and day-to-day management of a biobank;
- Speak a common language in the field of biobanks and gain in-depth comprehension of the different types and functions of biobanks, with the aim of understanding and designing the different steps involved in setting up a biobank in a specific context.
- Develop the skills required to design the practical implementation, day-to-day management, and continuous improvement of biobanking management, by applying the concepts covered in practical case studies.

By following the individual modules, participants will acquire knowledge progressively (See Learning Outcomes by Module).



# Learning Outcomes

## MODULE 1



**Recognize the significance of biobanking** in scientific research, healthcare, and advancing medical knowledge.



**Define biobanks based on their unique characteristics**, including types (e.g., research, clinical), functions, and the type of samples they handle.



**Understand the ethical and legal regulations governing biobanks**, ensuring compliance and responsible sample management.

## MODULE 2



Prepare required **documentation**, implement **coding processes** and **consent procedures**, and maintain **quality standards** for proper sample management.



**Recognize the value of local and global biobanking networks**, utilizing their resources and collaborating with various stakeholders.



**Establish and oversee biobanks** by considering resource allocation, governance structures, operational processes, and quality control systems.

## MODULE 3



**Identify training needs** in order to ensure the proper development and management of a biobank.



**Keep informed of local and international ethical and legal requirements** related to biobanks, and monitor their future developments.





## Learning Methods

- E-learning
- A combination of lectures, case studies and individual practical exercises performed online

## Programme Structure

- 3 modules
- 360 hours of study
- 12 ECTS credits
- Possibility to register for individual modules
- E-learning, and online lectures
- The teaching language is English



## Modules

### M1 | **The Basics of biobanking (100% online) - 2 ECTS**

- Recognise the importance of biobanks in improving research quality
- Understand the different types of biobanks and be aware of the main biobanking networks
- Master the ethical and legal framework relevant to biobanking
- Integrate the governance requirements for the implementation of a biobank

### M2 | **Implementation of the biobanking processes - 5 ECTS**

- Recognize and understand how to use the different types of consent
- Know and implement the required documentation to be set up
- Establish the technical and logistical aspects to ensure the exploitation of a biobank and guarantee the quality of the conserved resources
- Manage and maintain the resources necessary for a successful biobank operation

### M3 | **Professional management of a biobank - 5 ECTS**

- Recognize the processes and resources involved in the professional management of a biobank
- Understand and implement a QMS, measure its effectiveness and ensure continuous improvement
- Select the appropriate standards in adequacy with the defined quality objectives



## Assessment

The programme has a modular structure. To obtain the Certificate of Advanced Studies in Biobanking, students must pass each module. Assessment methods will be specified at the beginning of each module.

## Diploma Awarded

The *Certificate of Advanced Studies in Biobanking / le Certificat de formation continue en Biobanking* is granted by the Faculty of Medicine of the University of Geneva upon decision by the Steering Committee once all requirements of the programme regulations have been met by the participant and fees have been paid.

A participant enrolled in one or more individual modules of the programme who has passed all mandatory tests and satisfied all requirements for active and regular attendance in accordance with article 6 of the CAS Study Regulations will be granted a certificate confirming that the corresponding ECTS credits have been obtained.

Participants who meet all required regulations and who have paid the related fees, may request a certificate stating which module(s) they have regularly and actively attended and passed, the results obtained and ECTS credits awarded.

- **Module 1:** a certificate listing the module he/she regularly and actively attended and passed, the results obtained and ECTS credits awarded (2 ECTS).
- **Modules 1 + 2:** a certificate listing the modules he/she regularly and actively attended and passed, the results obtained and ECTS credits awarded (7 ECTS)
- **Module 1 + Module 2 + Module 3:** A Certificate of Advanced Studies (CAS) in Biobanking is awarded (12 ECTS).

# BIENVENUE

## Practical Information

### Admission Criteria

Candidates eligible for admission to the CAS or for one or more individual modules must meet one of the following requirements:

- Hold a university master's degree in biology or medicine, a license or diploma in a relevant field from a Swiss university, or a title from a foreign university deemed equivalent by the Steering Committee.
- Hold a master's degree from a Swiss Haute Ecole Spécialisée (HES) in a relevant field, or a title deemed equivalent by the Steering Committee.
- Hold a bachelor's degree (university baccalaureate) from a Swiss university or HES in a relevant field, or a title deemed equivalent by the Steering Committee and provide proof of a full-time professional experience of at least 3 years.

Candidates must attach the requested documents to their application.

The Steering Committee reserves the right to accept the application from candidates who do not meet the requirements stipulated under article 3.1, following the evaluation of their file. The Steering Committee decides on title equivalences and requests for equivalence of ECTS credits. Applicants must demonstrate professional interest in the field of training and their ability to follow the programme.

In addition, the Steering Committee may decide whether or not to accept the application from candidates wishing to follow one or two individual modules, depending on the number of regular participants admitted to the full CAS.



## Application

- Starting as of **January 2025**
- Online: [www.unige.ch/formcont/en/courses/cas-biobanking](http://www.unige.ch/formcont/en/courses/cas-biobanking)

Priority will be given to participants who wish to follow the programme as a whole. Application for one or two modules is possible.

## Fees

- Module 1: CHF 1'000.-
- Module 2: CHF 2'000.-
- Module 3: CHF 3'000.-
- CAS = Module 1 + Module 2 + Module 3: CHF 6'000.-

Special fees or financial support available (for persons from low-income backgrounds). For inquiries please contact [casbiobanking@unige.ch](mailto:casbiobanking@unige.ch).

## Location

University of Geneva and online

## Schedule

Module 1: January 2025

Module 2: April 2025

Module 3: September 2025

## Contact

[casbiobanking@unige.ch](mailto:casbiobanking@unige.ch)



*Images p. 1-8: SBP with the help of an AI software*

## Partnerships

The CAS is organised in partnership with the Health Sciences e-Training Foundation, Switzerland, the Institut Pasteur, France, and the Swiss Biobanking Platform, Switzerland.

**SWISS  
BIOBANKING  
PLATFORM**  
— **BBMRI.ch**

