



University  
of Basel

Faculty of  
Medicine



# Certificate of Advanced Studies in Personalized Molecular Oncology



 Universitätsspital  
Basel



ADVANCED STUDIES

# Certificate of Advanced Studies (CAS) in Personalized Molecular Oncology

## Training next generation professionals

Cutting-edge technologies, like next generation sequencing, combined with the development of targeted therapies are now revolutionizing clinical practice, thereby bringing new complexity to the field of oncology.

First of its kind in Switzerland, the CAS in Personalized Molecular Oncology aims at providing an interdisciplinary and integrative view of the field, by focusing on the methodologies used to generate, analyze and interpret patients' molecular profiles, also touching upon the associated technical, regulatory and ethical challenges.

## Objectives

- Establish a **common language** between the wide range of professionals involved in the personalized molecular oncology process.
- Enable efficient and better-informed use of **genomic data for routine clinical practice and clinical research**.
- Empower professionals to develop a vision for their own institution, by critically evaluating the **benefits and limitations** of current and future developments in personalized oncology.

## Target audience

Professionals involved in personalized molecular oncology, e.g. laboratory managers, biologists, bioinformaticians, pathologists, geneticists, clinicians or pharmaceutical company employees.

## Course fee

CHF 6'000.–  
This fee includes course material, lab visits, and exams.

## Registration

Applicants are expected to hold a university degree (MSc or MD degree), and to have a good command of English (oral and written).

The number of participants being limited, selection is based on CV and demonstrated interest or experience in personalized molecular oncology.

Details on the application process can be found on our website.

## Organization

The CAS is organized jointly by the University Hospitals of Basel (USB) and Lausanne (CHUV), and the SIB Swiss Institute of Bioinformatics.

CAS Personalized Molecular Oncology   10 ECTS   Duration: approx. 10 months		
	Module title	Module coordination
Module 1	Tumor biology and genetics	CHUV Cancer Genetics
Module 2	Molecular pathology	USB Pathology
Module 3	Clinical bioinformatics	SIB Clinical Bioinformatics
Module 4	Clinical oncology	USB Oncology
Mini-thesis	Planned in small groups	Program Board

## Structure of the program

Each module consists of 4 days of interactive and practical face-to-face teaching, as well as homework assignments.

Modules are evaluated individually with an exam. In addition, students complete a mini-thesis on a study case in multi-disciplinary groups.

The course is taught entirely in English (lectures and homework). Modules take place in Lausanne (modules 1, 3) and Basel (modules 2, 4). Please visit our website for more information on venue and dates.

## Program board

- PD Dr. Sacha Rothschild, USB
- PD Dr. Andreas Wicki, USB
- Prof. Luigi Terracciano, USB
- Dr. Luca Quagliata, USB
- PD Dr. Christian Ruiz, USB
- Prof. Dr. Jacqueline Schoumans Pouw, CHUV
- Dr. Aitana Lebrand, SIB
- Dr. Grégoire Rossier, SIB

## Website

[pmo.unibas.ch](http://pmo.unibas.ch)



# **Educating Talents** since 1460.

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