

# CAS

Certificate of Advanced Studies  
Certificat de formation continue

## Diving and Hyperbaric Medicine

October > September



FACULTY OF MEDECINE



UNIVERSITÉ  
DE GENÈVE





Underwater medicine (or diving medicine) and hyperbaric medicine are growing disciplines. The development of a very specialized technology is being witnessed. The Evidence-Based-Medicine that was lacking in the hyperbaric field about twenty years ago has developed and has demonstrated the effectiveness of this therapy in many cases.

While underwater medicine is primarily concerned with divers, hyperbaric medicine interacts with many medical and surgical specialties. It can be applied to acute and chronic diseases involving multidisciplinary teams. This specialty nowadays allows many patients to benefit from hyperbaric oxygen therapy as in post-radiation lesions, diabetic ulcers, difficult healing wounds, necrotizing fasciitis, chronic osteomyelitis, etc.

**The Certificate of Advanced Studies (CAS) in Diving and Hyperbaric Medicine** of the Faculty of Medicine at the University of Geneva is an innovative course, unique in Switzerland. The purpose of the CAS is to train specialists and general practitioners to use hyperbaric medicine. This state-of-the-art advanced training programme develops scientific knowledge and skills in prevention, diagnosis, treatment and evaluation in underwater and hyperbaric medicine and applies them in their own professional environment. It interacts with emergency medicine, occupational medicine (hyperbaric workers, professional divers), and opens the field to research in multiple fields.

The CAS consists in 2 modules described below, allowing each student to acquire the desired knowledge according to his objectives.



## Steering Committee

### Director

**Prof. Thibaut Desmettre**, Emergency Department of Geneva University Hospitals (HUG), Department of Acute Medicine, Faculty of Medicine, University of Geneva

### Experts

- **Dr Pierre Louge**, Deputy Physician, Hyperbaric Medicine, Emergency Department, Department of Acute Medicine, HUG
- **Dr Rodrigue Pignel**, Deputy Physician in charge of the Hyperbaric Medicine Program, Emergency Department, Department of Acute Medicine, Geneva University Hospitals (HUG)

### Members

- **Prof. Sylvain Boet**, Department of Anaesthesiology, Pharmacy and Intensive Care, Faculty of Medicine, University of Geneva
- **Prof. Laszlo Vutskits**, Department of Anaesthesiology, Pharmacy and Intensive Care, Faculty of Medicine, University of Geneva
- **Dr Jérôme Stirnemann**, General Intern Medicine Department, Geneva University Hospitals (HUG)

## Scientific Committee

- **Dr Jean-Yves Berney**, Hyperbaric Medicine, Emergency Department, Department of Acute Medicine, Geneva University Hospitals (HUG)
- **Dr Rodrigue Pignel**, Physician in charge of the Hyperbaric Medicine Program, Emergency Department, Department of Acute Medicine, Geneva University Hospitals (HUG)
- **Dr Pierre Louge**, Hyperbaric Medicine, Emergency Department, Department of Acute Medicine, Geneva University Hospitals (HUG)
- **Dr Benoit Desgraz**, Cardiology Service, Cardiovascular Department HUG



## Speakers

Researchers and professors of the Universities, experts of the field at the Swiss and international level:

**Prof. C. Balestra**, Brussels, Belgium • **Prof. J.-E. Blatteau**, Toulon, France •  
**Dr M. Gelsomino**, Basel, Switzerland • **Dr P. Germonpré**, Brussels, Belgium

## Public

Physician

## Objectives

- Train qualified physicians in the field of underwater and hyperbaric medicine
- Provide the theoretical and practical basics of underwater and hyperbaric medicine: determine indications and monitor treatments

## Programme

- The CAS consists in 2 thematic theoretical modules and 100 hours of professional practice in the form of an internship in the field of underwater and hyperbaric medicine. In addition, a research paper is required.
- The CAS conforms to the European standards of ECHM (European Committee for Hyperbaric Medicine, [www.echm.org](http://www.echm.org)).
- Both levels are recognized by SUMHS (Swiss Society of Underwater and Hyperbaric Medicine, [www.suhms.org](http://www.suhms.org)).



## Module |

### **Diving Medicine Physician Level 2D ECHM**

8 theoretical courses

5 practical courses

**Dr Pierre Louge**

#### **Topics**

Adaptation to pressure

Introduction to diving medicine

Ability to dive

Diving: technique and decompression

Diving accidents

Management and treatment of diving accidents

Professional diving

Practical courses (5 days)

#### **Skills**

Ensure the medical evaluation of divers and other professionals working in hyperbaric environment (aptitude, advice)

Manage diving accidents (therapeutic, monitoring, requalification, prevention)

#### **Exam**

One day in March



## Module |

### **Hyperbaric Medicine Physician Level 2H ECHM**

5 theoretical courses

8 practical courses

**Dr Rodrigue Pignel**

#### Topics

Physiological aspects of HBOT

Indications of HBOT

Incidents and contraindications of HBOT

Organization and operation of a hyperbaric system

Practical courses — registration must be done at the beginning of the first semester (8 days)

#### Skills

Manage hyperbaric oxygen therapy and its multiple treatment indications

Master a high level hyperbaric facility

#### Exam

One day in June and one day in September: Final exam and oral presentations

This module can only accept up to 20 candidates.





## Teaching methods

The complete programme of studies (2 thematic modules) takes place over 2 semesters, articulating theoretical teaching and practical cases, hours of professional practice in the form of traineeship, a final exam and a research paper.

## Evaluation methods

The complete programme of studies (2 thematic modules) takes place over 2 semesters, articulating theoretical teaching and practical cases, hours of professional practice in the form of traineeship, a final exam and a research paper.

## Graduation work

The final paper completes the Hyperbaric Medicine Physician module. A written report aims to deepen and / or put into practice the lessons learned. There is a public oral presentation. The subject to be discussed is defined with a member of the Steering Committee or the Scientific Committee.





## Qualification awarded

The Certificate of Advanced Studies (CAS) in Diving and Hyperbaric Medicine / *Certificat de formation continue (CAS) en médecine subaquatique et hyperbare* is awarded by the Faculty of Medicine of the University of Geneva. It equates to 15 ECTS credits (European Credit Transfer and Accumulation System). These credits are validated through the candidates follow-up during all the programme.

## Certificate

A certificate is issued to participants who have completed only the Diving Medicine Physician module and have successfully passed the corresponding evaluation.

## Recognition

These 2 levels are recognised by the European College of Baromedicine (ECB / ECHM). The candidate is responsible for obtaining the different equivalences of certificates or diploma.



## Practical information

### Admission Criteria

- Federal title of doctor or deemed equivalent
- Valid BLS
- Experience in emergency medicine, intensive care or anaesthesia (otherwise 8 days of training)
- Medical visit: no contraindication to diving or medical visit: of aptitude to diving

Application files must be submitted before **30 June 2022** and should include the signed registration form, a letter of motivation, a photograph, a CV with copies of the diplomas obtained as well as information concerning professional experience.

### Equivalence

Successful applicants who have already validated the Dive Medicine module (Level 2D) as part of an ECHM / SUMHS or equivalent training can register for the Hyperbaric Medicine module. For this, they will have to provide the certificates justifying their preliminary training during their application for admission.

The applications are assessed by the Steering Committee.

### Registration before the end of June

The registration form can be downloaded from  
[www.unige.ch/formcont/en/courses/diving-hyperbaric](http://www.unige.ch/formcont/en/courses/diving-hyperbaric)



### **Registration fees**

- CAS in Diving and Hyperbaric Medicine full: CHF 3'900.-
- Module Diving Medicine Physician | Level 2D ECHM: CHF 2'700.-
- Module Hyperbaric Medicine Physician | Level 2H ECHM: CHF 2'400.-

Applicants enrolled in the entire CAS are given priority.

### **Teaching Venue**

Geneva University Hospitals (HUG)  
Rue Gabriel Perret Gentil 2-4 – CH-1205 Genève

### **Timetable**

8:30-18:00 (Lunch break: 1h30)

### **Information**

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