

The University of Lausanne (UNIL) is offering an International Master in Vaccinology (IMVACC) developed by the Swiss Vaccine Research Institute (SVRI) and the Health Sciences e-Training Foundation (HSeT) in collaboration with the Lausanne University Hospital (CHUV).

To develop the vaccines of the future

Scientists, physicians, and engineers with a broad knowledge in vaccines are needed to respond to the threats of emerging diseases and to continue the development of vaccines against tuberculosis, enteric infections, AIDS and malaria. IMVACC students will acquire a broad knowledge of how vaccines are designed, developed, manufactured and implemented through public health programs.

To develop a network of vaccinologists

To contribute more efficiently to the development of vaccines, IMVACC students will be provided with the opportunity to work on real-life questions and situations encountered in vaccine development and to develop their professional network. They will gain broad scientific, strategic and technical experience applicable to their work environment.

For professionals in medical sciences

IMVACC has been designed for a broad population of medical sciences professionals that are already actively engaged in a professional work environment and who want to broaden and deepen their knowledge of vaccines.

Tutor-assisted on-line teaching

The flexible on-line teaching approach accommodates the time constraints of the trainees and saves long-distance travel and housing expenses. It also allows the students to engage in individual and group activities with the support of tutors. These features set IMVACC apart from existing vaccinology courses.



The Swiss Vaccine Research Center, the Research laboratories of the Service of Immunology & Allergy (IAL) of the University Hospital (CHUV), and the Health Sciences eTraining Foundation (HSeT), are located in Epalinges near Lausanne in Switzerland.

"With its on-line, tutor-supported teaching approach, IMVACC offers a new way to train students in vaccinology across the World. It fits well with the goal of WHO to build capacity for science and research, especially in low- and middle-income countries."

Dr Marie-Paule Kieny, Assistant Director-General, WHO, Geneva

If you are interested in IMVACC and you want to know the tuition and fees of this MAS, please contact the program administrator (Davide Mercuri, <u>Davide.Mercuri@chuv.ch</u>)

To give the opportunity to more candidates to apply, the start date of the course has been postponed to beyond June 2016, likely to September 2016. The precise date will be confirmed later.

Program

Module 1: Vaccine-related sciences

Knowledge in immunology, microbiology, epidemiology and statistics needed to follow the course.

Module 2: General vaccinology

Characteristics of most marketed vaccines as well as information on vaccines in development.

Various vaccine topics like their history, the different types of vaccines, immunological memory, adjuvants, correlates of protection, routes of administration, vaccine markets and vaccine manufacturers.

Module 3: Vaccine development

Presentation of the vaccine development process followed by the discussion of each of the fields of activity involved in vaccine development including quality management:

- Discovery
- Preclinical testing
- Manufacturing process development
- Clinical development
- Measurement of immune responses
- · Regulatory affairs

Module 4: Public health & vaccines

Presentation of various topics related to public health:

- Vaccination hesitancy
- Impact of vaccines on disease burden and how it is measured
- Elements of pharmacoeconomy
- Vaccines implementation
- Pharmacovigilance
- Emerging diseases

Module 5: Project management

Presentation of the principles of project management applied to the development of vaccines

Master's thesis

Definition and execution of a personal project either in the usual work environment or as an intern in another field of activity, with the support of a tutor.



1. Bourhy H, Troupin C, Faye O, Meslin FX, Abela-Ridder B, Sall AA, Kraehenbuhl JP (2015). Customized online and on-site training for rabies control officers in low-income countries, Bull World Health Organ, 14, pp: Article ID 149849

Cursus

IMVACC is constituted of one year of on-line teaching with a one-week face-to-face meeting with tutors and experts at the end followed by a master thesis of 6 to 12 months.

Diploma

Master of Advanced Studies (MAS) delivered by the University of Lausanne. The curriculum is valued at 60 credits (in conformance with the European Credit Transfer System [ECTS]): 40 credits for the modules of the first year and 20 credits for the master thesis to be prepared during the second year.

Methodological approach

The course will follow the principles of Customized On-Line Training (COLT) developed by HSeT¹.

The course will focus on case studies and problem solving exercises. It will be moderated by tutors who will be in regular contact with the students to guide them, to answer questions, and to maintain momentum. Students will work individually and then share experience with each other through internet forums, and virtual conferences.

The teaching language is English.

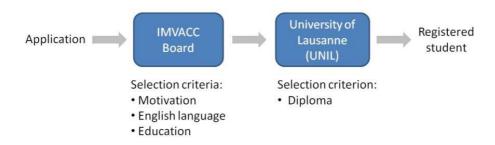
Target population

IMVACC is open to a broad population of physicians, veterinarians, researchers and health professionals actively engaged in professional life and who live and work in geographically dispersed clinical and research facilities. Participants of every country and type of employment, from pharmaceutical companies to government agencies and NGOs, are welcome if they fulfill the academic requirements of the course. A good level of spoken and written English is mandatory.

The level of education required for admission includes:

- · Master's of sciences (Msc) or doctorate in human or veterinary medicine, biology or pharmacy
- Master in theoretical or applied sciences (MSc) with experience in microbiology, immunology, epidemiology or biomedicine
- Bachelor in sciences (BSc) with at least three years of full-time professional experience in microbiology, immunology, epidemiology or biomedicine

The number of participants is limited. At the end, they will obtain a Master of Advanced Studies (MAS) diploma from the University of Lausanne.



Registration

The registration process has two steps:

- 1. Preregistration followed by a review of the application by the IMVACC Board of Directors. The selection criteria are mainly education, motivation, and the level of spoken and written English.
- 2. Registration at the University of Lausanne including an assessment of the diplomas of the applicant for equivalence with the Swiss diplomas required for a Master in Advanced Studies at UNIL. A certified copy of the diplomas and a transcript of grades will have to be sent in a sealed envelope by the issuing university to the University of Lausanne.

More information and the preregistration form are available on-line at http://imvacc.bio-med.ch.