

# Graduate School 1H-EID (One Health - Emerging Infectious Diseases)









# Why a Graduate School (Ecole Universitaire de Recherche) dedicated to Emerging Infectious Diseases?

- Education of excellence is paramount to prepare the next generation of scientists, health-care professionals and policymakers to major challenges of (re)-emerging infectious diseases (EIDs).
- Current educational programs on EIDs are highly fragmented within disciplines, preventing implementation of a "One Health" approach.
- Recent crises have shown that researchers from different disciplines and health-care professionals have difficulty carrying
  out cross-cutting research projects and sharing their results with policy-makers.

The Graduate School 1H-EID provides high-level, research-based multidisciplinary training to build a community of scientists, health-care professionals and policy-makers sharing the same vocabulary, network and understanding of health, societal, economic and communication challenges represented by EIDs.

## A Graduate School structured around 5 complementary objectives to better prevent and manage emerging infectious diseases

### 1. Master

- M1 and M2 levels
- International and multidisciplinary (biology of emerging pathogens, epidemiology, veterinary sciences, evolutive biology and socio-anthropology)
- · Students in sciences and health, and from veterinary and engineering schools
- Personalized internships in a unique, multidisciplinary and internationally renowned research environment

## 2. PhD

- Wide range of training in the disciplines covered by the Graduate School 1H-EID
- Partnership with 5 Doctoral Schools (BioSPC, MTCI, Pierre Louis de Santé Publique, Science des sociétés, ABIES)
- · Funding of targeted, inter-partner and interdisciplinary or international doctoral contracts
- Funding of thesis end, mobility grants and participation to congress

## 3. Continuing Education

- Professionals, researchers, policy-makers (public and private sectors)
- MOOCs, DUs (UPCité and Institut Pasteur)
- Validation of professional experience (VAP) or validation of acquired experience (VAE)
- Training of non-scientific audiences (MOOCs and crisis management exercises)

## 4. Innovative educational tools

- MOOCs, virtual reality tools, serious games, iGEM challenge
- Summer Schools
- Career Workshops

## 5. Support tools for students

- · Incoming (Master) and outgoing (internship in the laboratory) mobility grants
- Mobility grants for PhD students
- Partnership with international networks: Institut Pasteur Network, CircleU, ERASMUS, IDEAL+

#### Contacts

Isabelle Martin-Verstraete : isabelle.martin-verstraete@pasteur.fr - Solen Kernéis : solen.kerneis@aphp.fr - Monica Sala : monica.sala@pasteur.fr





# Graduate School 1H-EID (One Health - Emerging Infectious Diseases)











# An Emerging Infectious Diseases (EID) track of the Molecular and Cellular Biology Master (BMC)

#### Master 1

A new EID track is open in the Molecular and Cellular Biology Master at UPCité. This track includes new courses (Computational Biology, One Health, Biostatistics, Ecology) and promotes internships on EID research subjects in EUR-associated laboratories.

### Master 2

A multidisciplinary M2 course with options in the following disciplines:

## Biology of emerging pathogens

Emerging pathogens Basic aspects in pathogen control Host-emerging pathogen interactions Antiviral immunity

## Animal, Environment and Human Interfaces

One health-one planet Emerging infectious diseases and zoonoses Risk analysis training Natural and induced microbiological threats

## Epidemiology and biostatistics

Principles, methods and data analysis Introduction to R and statistical reminders Epidemiological surveillance and health monitoring International health, global health

## Humanities & social sciences

Global health security, risks and memories Socio-anthropology of health Political socio-anthropology, humanitarian aid and development Sociology of health: health, diseases and societies

## **Evolutionary dynamics**

Biodiversity and functional ecology of microorganisms

Genomics and evolutionary dynamics

Comparative phylogenetic approaches

Population genetics

# Contacts

India Leclercq : india.leclercq@pasteur.fr Sandie Munier : sandie.munier@pasteur.fr Naim Ouldali : naim.ouldali@aphp.fr

