GRADUATE SCHOOL
ONE HEALTH-EMERGING INFECTIOUS DISEASES
1H-EID

WHY A GRADUATE SCHOOL DEDICATED TO EMERGING INFECTIOUS DISEASES?

Education of excellence is paramount to prepare the next generation of scientists, health-care professionals and policy-makers 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 SCHOOL AND ITS MISSION

The Graduate School of One Health-Emerging Infectious Diseases 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, evolutionary 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
- 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
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Master 1
A new EID track is open in the Molecular and Cellular Biology Master at Université Paris Cité. This track includes new courses: computational biology, One Health, biostatistics, ecology, and promotes internships on EID research subjects in Graduate School-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

**EPIDEMIOLOGY AND BIOSTATISTICS**
*From the field*
- Initiation to epidemiology and to R
- Epidemiology and biostatistics
- Introduction to R and statistical reminders

**ANIMAL, ENVIRONMENT AND HUMAN INTERFACES**
- Environment, Ecosystems and Biodiversity
- One health-one planet
- Emerging infectious diseases and zoonoses
- Risk analysis training
- Natural and induced microbiological threats

**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
- Ecological challenges from a multidisciplinary perspective

**EVOLUTIONARY DYNAMICS**
- Genomics and evolutionary dynamics
- Population genetics
- Comparative phylogenetic approaches
- Biodiversity and functional ecology of microorganisms

**PERSONALIZED INTERNSHIP IN RESEARCH LABORATORIES**
(30 ECTS)

**OPTIONAL COURSES** (12 ECTS)
Complementary courses in 5 disciplines

**MASTER CONTACTS**
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