





# Eco-Epidemiology Master -Montpellier University

Understanding and managing the present and near futur of parasitic and infectious diseases

https://eco-epidemiologie.com/

Eco-Epidemiology Master - Montpellier University.

- To address the challenge of emerging infectious and parasitic diseases in Human and animal populations
- Integration of all scientific and relevant approaches from Biology to Human Sciences, with concrete contexts and needs of public Health (see slide 3)
   Biology of pathogens

○ Ecology

○ Evolution & Phylogeny

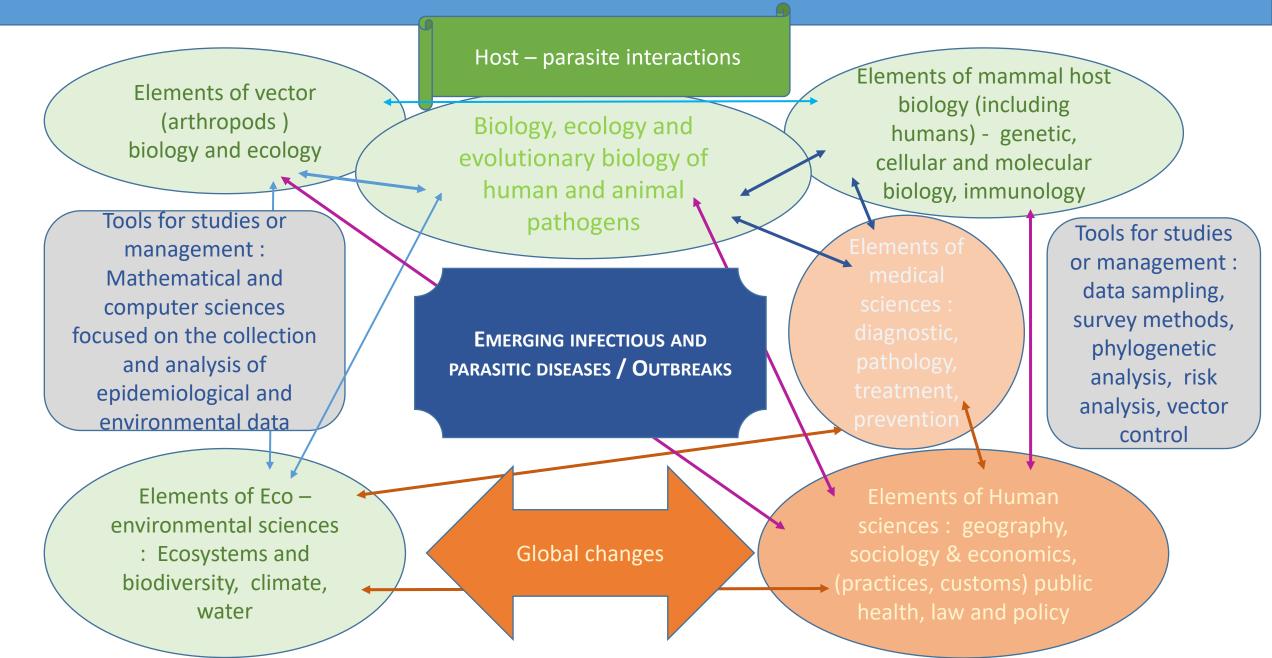
- Mammal host biology (genetic, immunology)
- $\odot$  Vectors biology and ecology
- $\circ$  Medical sciences
- $\circ$  Bio –Mathematics
- $\odot$  Data Bank and statistics

 $\odot$  Risk analysis

○ Human Sciences : anthropology, sociology, socio-economical geography, .....

• To summarize, a One Health master dedicated to researches and applications.

Eco-Epidemiology : Integrating Sciences to integrate scales of study and management of emerging diseases



# Eco-epidemiology: Two main master programs

#### INTEGRATED STUDY OF PARASITIC AND INFECTIOUS EMERGENCES - EI-EPI

- Aim: Trace and describe eco-epidemiological events (short or long-term ecoevolutionnary, environmental, socioeconomic, etc.) focusing on diseases of concern in public and animal health
- Continuation : PhD in fundamental or applied research (doctorate)
- Professions : Researchers, epidemiologists, full professors
- Research organisations / institutes, Universities, International organizations ...

Master programs opened in longlife training -

Master GS-EPI in apprenticeship

#### MANAGEMENT AND SURVEILLANCE OF PARASITIC AND INFECTIOUS EMERGENCE – GS-EPI

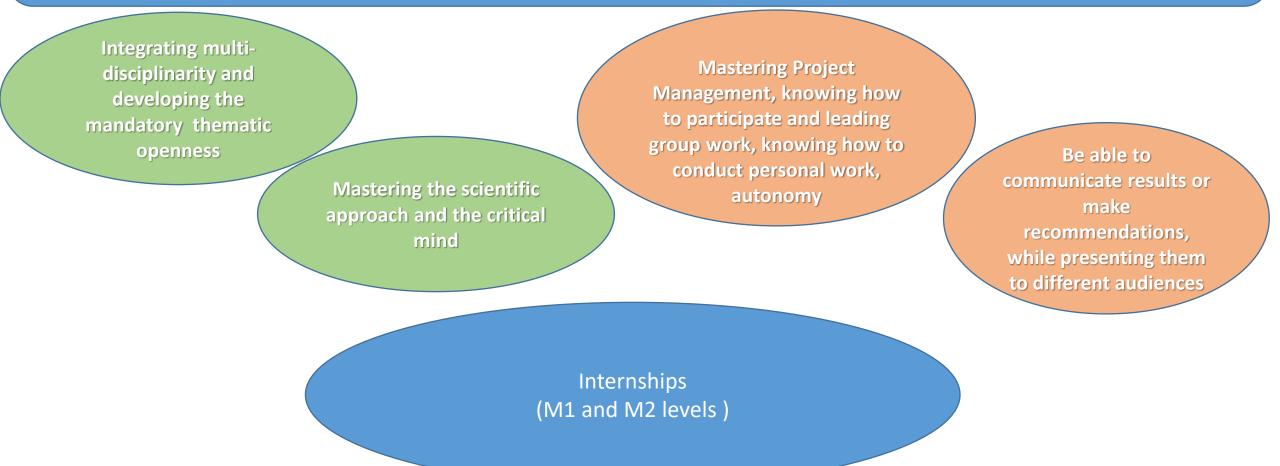
- Aim : reinforce prevention, surveillance and control by integrating eco-environmental, health and socio-economic factors... specific to each intervention context
- Continuation : operational with master's degree, or applied research (after a doctorate / PhD)
- Professions: Experts in charge of epidemiological monitoring, responsible for surveillance networks, ....
- National management and surveillance organisations, health watch institutes, surveillance networks, International organizations, pharmaceutical companies

#### Admission

- First year : Bachelors in Life Sciences or Life and Earth Sciences or Health Sciences 4th years of medical or pharmaceutic studies (incidentally : Bachelors in Geography, Social Sciences, Health and Social Sciences)
- Second year : M1 Eco-EPI and potentially from various Biology or Biology-health M1, 6th year of veterinary studies

### Eco-epidemiology master: pedagogical approach

- Mastering sciences of interest (basic and / or advanced level) and their application to parasitic and infectious pathogens
  /diseases
- Mastering the unmissable scientific tools
- Applying the mastered concepts on emergence and outbreak analyses and/or management-surveillance



## Master internships

- M1 : short internship from mid-march to early-july (14 weeks) Defense second week of july.
- M2 : master thesis from mid-january to mid-june (20 to 22 weeks) Defense late june
- The work (and the internship agreement) could be extended after the defense but the date of the defense is mandatory
- Field internships (partial or complete) are welcome but not mandatory, depending on the subject
- For information: the apprenticeship program foresees 4 to 8 supplementary weeks for the M2 internship

### Eco-epidemiology: a new IDIL master program

- Open to International students : English langage
- Research centered : less time for teaching units, more time in laboratory
- Two long-lasting internships
- See details on the Eco-EPI web site : <u>https://eco-</u> <u>epidemiologie.com/formation-initiale/graduate-school-epied/</u>