



## One Health approach

The Master's Degree in Zoonosis and One Health is a professionally oriented programme that responds to a need for professionals with a well-rounded, multidisciplinary training encompassing human, animal and environmental health, who can work effectively and collaboratively on the prevention, control, management and communication of biological hazards and threats.

The Master will serve to train up highly qualified professionals to work in both the public and the private sector, with a multidisciplinary vision of One Health, in line with the requirements of the major international health bodies, like the World Health Organisation (WHO), the United Nations Food and Agriculture Organisation (FAO) and the World Organisation for Animal Health (OIE).

Precio: 56€ por crédito (estudiantes UE o residentes). Curso 2018-2019.
82€ por crédito (estudiantes no UE no residentes). Curso 2018-2019.
Inicio de curso 30/09/2019

Centro: Facultad de Veterinaria https://www.uab.cat/veterinaria/
Idioma:Castellano (45%) e Inglés (55%)

The master's degree in Zoonosis and One Health comprises 60 ECTS credits, is taught over one year divided into two semesters, and consists of six compulsory modules, five of which are content modules and the sixth is that of the master's dissertation.



## **TEACHING PROGRAM / PROGRAMA DOCENTE**

MÓDULOS/MODULES	Language	ECTS
M1. Una Sola Salud: Introducción, Política Sanitaria y Métodos Epidemiológicos y Estadísticos (Oct-½ Nov)	SPANISH	12
M2. Metodologías aplicadas en el entorno multidisciplinar de Una Sola Salud (½ Nov – ½ Dic) (economía, ecología, ambiente, comunicación)	SPANISH	9
M3,M4,M5: COMPARTIDOS CON ERASMUS MUNDUS in	ONE HEALTH	
M3. Multidisciplinar One Health approach in major and endemic zoonosis (Jan – Feb)	ENGLISH	9
M4. Multidisciplinar One Health approach in emergent zoonosis and in especial contexts (Feb – Mar) (HIV, low-income countries, health emergencies, bio-threats)	ENGLISH	9
M5. Multidisciplinar One Health approach in Food Safety and Security (Ap-May)	ENGLISH	6
M6. Trabajo de Final de Máster –TFM Master Research Dissertation (Feb – Jul)	SPANISH ENGLISH	15



# Teaching staff

More than 120 PROFESSIONALS coming from INTERNATIONAL HEALTH
INSTITUTIONS AND AGENCIES, RESEARCH CENTERS, HOSPITALS AND
UNIVERSITIES







#### COOPERATIVE ACTIVITIES, INTERACTIVE CLASSES AND TEAMWORK





#### CONTENIDOS/ TOPICS

- Introducción a Una Sola Salud (One Health)
- Organismos oficiales: organigrama y funciones (evaluación, gestión, comunicación de riesgos)
- Herramientas epidemiológicas: Evaluación del riesgo
- Herramientas estadísticas aplicadas a One Health: Modelización estadística básica, estadística avanzada y análisis espacial.
- -Sesiones de informática: programación con paquetes estadísticos gratuitos
- Aspectos económicos de la Salud
- Salud Ambiental y Ecología
- Métodos de diagnóstico laboratorial
- Interpretación de resultados diagnósticos (casos clínicos)
- Gestión y comunicación del riesgo frente a enfermedades infecciosas
- Introduction to the zoonosis concept
- Antimicrobial resistance
- New approaches in treatment and contingency strategies of infectious diseases
- Major viral, bacterial and parasitic zoonosis under the one health context
- Laboratory practices: microbiology, immunology
- Risk assessment of exotic and emergent/re-emergent zoonoses
- Effect of the climate change and the global trade with emergence of new zoonoses
- Zoonoses in immuno-compromissed patients
- One Health Management in low-developed countries and public health threats
- One Health Management in low-developed collings
   Laboratory practices: vectors and entomology
- Laboratory practices: Parasitology
- -Extern visit: Lab Biosecurity Level 3 (CReSA)
- Global concept of food safety and security
- Evolution of management policies and risk communication in food safety
- Evolution of food-borne zoonoses from local to global level
- Most relevant zoonoses in the food chain
- Aquiculture, environmental health and risk factors in human health
- Other agents: Viruses, prions, mycotoxins and bio-toxins
- Laboratorial practices: food microbiology -Computer sessions: risk analyses in food safety







## LAB PRACTICES





# **Career options**

Students can go on to pursue careers in any of the following areas.

1) Risk assessment in general for any sector included in the programme (public, human, animal, plant and environmental health), including monitoring of critical flowchart points for illnesses, in:

**Private companies** (food, pharmaceuticals, hospitals, veterinary medicine, phytosanitary products)

Research Centres into public health, animal health or environmental health.

2) Risk management in advisory and consultancy services for policies on detection, surveillance and control of diseases in:

Government bodies at regional, national or international level.

Non-government, non-profit organisations (NGOs) and private healthcare organisations.

Research in the field of health and access to PhD studies.



All classes are taken at the Vet School UAB

Oficial languages: Spanish (45%) and English(55%)

Calendar: October 2019 to September 2020

## COORDINACIÓN Y CONTACTO PARA INFORMACIÓN

### Coordinador del máster:

Dra. Laila Darwich laila.darwich@uab.cat 93 581 10 46





# Master's Teaching Staff

## Departamentos y Hospitales asociados a la UAB

- Dp. Sanitat i Anatomia Animals
- Dp. Ciencia Animal i dels Aliments
- Dp. Medicina y cirugía animal
- Dp. Biología Animal, Biología Vegetal y Ecología
- Dp. Genética v Microbiología
- Dp. Matemáticas
- Dp. Medicina
- Dp. Medicina y siquiatría legal/forense
- Dp. Farmacología, terapéutica y toxicología
- Dp. Pediatría, Obstetricia y Ginecología y Medicina preventiva
- Dp. Sociología

Hospital de la Vall d'Hebron, Barcelona

Hospital de la Santa Creu i Sant Pau, Barcelona

Hospital Germans Trias i Pujol, Badalona

Hospital ParcTaulí, Sabadell

## Colaboradores externos

Agencia Catalana de Seguridad Alimentaria (ACSA)

Agencia de Salud Pública de Barcelona (ASPB)

Agencia de Salud Pública de Cataluña (ASPC)

Centre d'Estudis Epidemiològics sobre les ITS i la Sida de Catalunya (CEEISCAT)

Centre de Recerca en Sanitat Animal (CReSA-IRTA)

Centre for Research in Environmental Epidemiology (CREAL)- ISGlobal

Cuerpo policial: TEDAX-mossos esquadra (CBRN Unit, EOD-IEDD-CBRN Area)

Dp d'Agricultura, Ramaderia, Pesca, Alimentació i Medi Natural, Generalitat de Catalunya (DARP)

European Centre for Disease Prevention and Control (ECDC)

European Commission's Directorate General Health and Consumer Protection

European Food Safety Authority (EFSA)

Food and Agriculture Organization of the United Nations (FAO)

Hospital Clínic de Barcelona

Hospital Sant Joan de Déu, Barcelona

Hospital Universitari de Bellvitge

Hospital Universitari Son Espases. Mallorca

Institut Català d'Oncologia (ICO)

Institut de Recerca de la SIDA-AIDS- IRSICaixa Foundation

Institut de Recerca I Tecnologia Agroalimentàries (IRTA)

Institut de Recerca Germans Trias i Pujol

Instituto de Investigación en Recursos Cinegéticos (IREC)- Castilla la Mancha

Institut de Recerca I Tecnologia Agroalimentàries (IRTA)

Instituto de Salud Carlos III de Madrid

Institut de Salut Global-ISGlobal Barcelona

Ministerio de Agricultura, Alimentación y Medio Ambiente (MAGRAMA)

Organizaciones no gubernamentales (ONGs)

Pan American Health Organization (PAHO)

Servei de Control de Mosquits - Consell Comarcal del Baix Llobregat

Unitat de Salut Internacional Vall d'Hebron-Drassanes (PROSICS)

Universidad de Alicante

Universitat de Barcelona

Universidad de Castilla la Mancha-Facultad de Medicina

Universidad Complutense de Madrid

Universidad de Córdoba

Universitat de Girona

Universidad de Navarra

Universitat Rovira i Virgili de Tarragona

Universidad de Zaragoza

University of London, The Royal Veterinary College (UK)

World Organisation for Animal Health (OIE)



# UMB MASTER IN ZOONOSIS AND ONE HEALTH









The first official master's degree in One Health in the whole of the Mediterranean area.



Coordination: Departament Sanitat i Anatomia Animal Veterinary School, UAB

Coordinator:

Dra. Laila Darwich laila.darwich@uab.c



