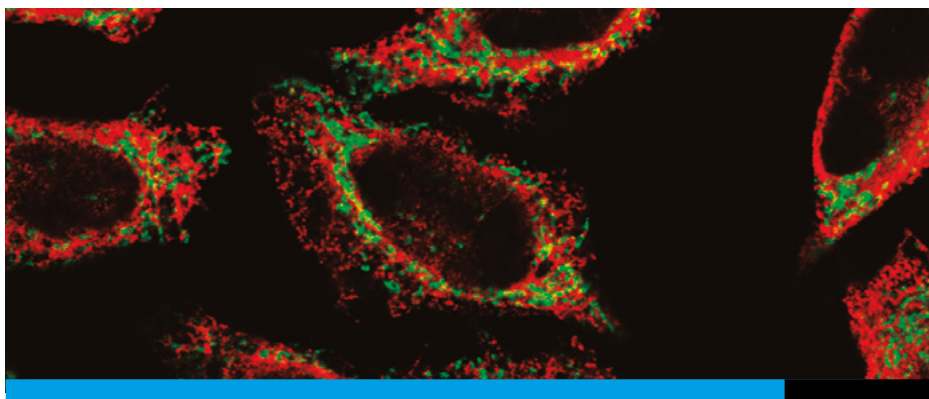


UNIVERSITY MASTER'S DEGREE IN

# Experimental Biomedical Research





The main objective of the Master's Degree in Experimental Biomedical Research is to provide the necessary skills to any student who has completed a degree course closely related to the experimental health sciences to carry out a doctoral thesis and to start a scientific career in the field of biomedicine.

### Why take this master's degree?

- **It is an official master's degree** that guarantees access to doctoral studies and a scientific career.
- **Comprehensive Training:** You will be able to acquire the skills and tools necessary to develop new and better methods of diagnosis, prevention or treatment of human pathologies.
- **Hands-on approach.** The teaching methodology will reinforce your training and autonomy in biomedical research, through practical training with the most innovative techniques in each subject, as well as a whole semester of external work placements in an internationally renowned research centre.
- **International outlook:** we promote an international outlook through internship mobility, with international lecturers. English is also the working language of the programme.
- **Personalised support and follow-up:** A maximum of 20 students.

#### ACADEMIC ACCREDITATION

**Máster Universitario en Investigación Biomédica Experimental por la Universitat Internacional de Catalunya**

#### Organising centre

Faculty of Medicine and Health Sciences - Sant Cugat Campus

#### Dates and times

- From October to June.
- 1st semester: Theory classes and lab work in the afternoons.
- 2nd semester: External work placements and Final Master's Degree Project.

#### Language

100% English

#### Format

On-site

#### Information and admissions

Tel.+ 34 93 504 20 00

[uic.es/informacion-contacto](http://uic.es/informacion-contacto)

### Intended for

Graduates in Biomedical Sciences or related degrees (Biomedicine, Human Biology, Biology, Biotechnology and Biochemistry) interested in deepening their knowledge, skills and abilities necessary for investigating the molecular and cellular bases of human pathology and developing experimental biomedical research, either to continue on to a doctorate or directly into private sector research.

### Work Placements

The University Master's Degree in Experimental Biomedical Research includes the completion of work placements with a specific weight of 20 ECTS credits within the programme. During the semester, students will undertake guaranteed work placements in a prestigious research centre.

### DIRECTOR

#### Rosalía Rodríguez Rodríguez

Researcher and senior lecturer at UIC Barcelona PhD in Pharmacology, with more than 15 years in teaching and with solid national and international experience in Biomedical research in the area of neurometabolism.

### Coordinator

#### Sebastián Zagmutt

Pre-tenured lecturer at UIC Barcelona, PhD in Biomedical Sciences with more than 10 years experience in teaching and experimental research in the field of neurometabolism.

### Research Group

#### Atypical cyclins lab

(cancer, cell metabolism)

Dr Josep Clotet

#### Fundamental Mechanisms in Cell Biology (cancer)

Dr Javier Jiménez

#### Synaptic Plasticity Laboratory (neuroscience)

Dr Miquel Bosch

#### Research Group in Iron Metabolism (genetics)

Dr Mayka Sánchez

#### Neurolipid group (endocrinology, neurometabolism)

Dr Núria Casals and Dr. Rosalia Rodríguez

#### Cancer biology (cancer)

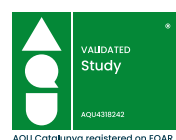
Dr Roni Wright. Ramon y Cajal grant

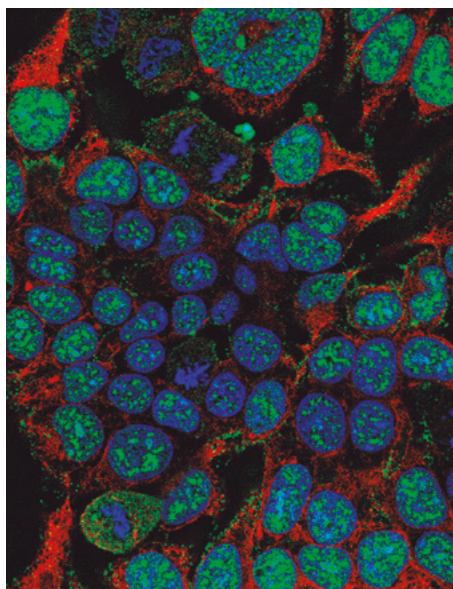
#### Research Group in Biomaterials for Tissue Regeneration (regenerative medicine)

Dr Roman Pére, Ramon y Cajal grant

#### Computational Biology (genomics)

Uciel Pablo Chorostecki. Ramon y Cajal grant





## CENTRES WITH PRACTICE AGREEMENT

- Innovation Centre of Nanomedicine (iCONM) - Kawasaki, Japan
- Department of Biomedicine, Aarhus University - Aarhus, Denmark
- Wallenberg Centre for Molecular Medicine, Lund University - Lund, Sweden
- Faculty of Medicine, KU Leuven Leuven, Belgium
- Center for Neuroscience and Cell Biology, Coimbra University - Portugal
- International Institute of Molecular and Cell Biology - Warsaw, Poland
- UMONS Research Institute for Biology, Mons Université - Mons, Belgium
- Institute of Molecular Genetics of the Czech Academy of Sciences Prague, Czech Republic
- Faculty of Medicine and Surgery, Campus Bio-Médico di Roma Rome, Italy
- Institut d'Investigacions Biomèdiques August Pi i Sunyer - IDIBAPS, Barcelona
- Institut Hospital del Mar d'Investigacions Mèdiques - IMIM, Barcelona
- Vall d'Hebron Instituto de Investigación (VHIR)
- Agreement with research institutes of the Consejo Superior de Investigaciones Científicas (CSIC) in Spain

## FORMACIÓN EN LAS PRINCIPALES ÁREAS DE INVESTIGACIÓN:



Cáncer



Cardiovascular



Neurociencia



Metabolismo



**Margherita Pucci**  
Master's Degree Student  
Italy

"This Master's Degree has been instrumental in enhancing my understanding of scientific research. It provided me with valuable insights and hands-on experience within a laboratory setting, inspiring me to pursue a career in this field."

The opportunity of attending this program outside my home country, not only enhanced my professional skills but also allowed me to discover a new cultural environment, fostering personal growth and a broader perspective."

## CURRICULUM - 60 ECTS - 1 ACADEMIC YEAR

### MODULE I (MANDATORY)

#### Advanced tools for Biomedical Research

- Methodologies and models  
12 ECTS credits
- Scientific career  
4 ECTS credits

### MODULE II (OPTIONAL)

#### Current Research in human diseases

- Current Research in human diseases  
16 ECTS credits

### PRACTICUM

- Practicum  
20 ECTS credits

### MASTER'S DEGREE FINAL PROJECT

- Master's Degree Final Project  
8 ECTS credits

In the different **optional subjects** of Module II you will be able to study the following areas in more detail:

- Research in central nervous system related diseases
- Research in obesity and diabetes
- Research in cardiovascular diseases
- Research in rare diseases
- Research in cancer
- Research in regenerative medicine
- Infectious diseases



## STUDYING IN BARCELONA

Start the most important learning experience of your life in one of the main European cities. Barcelona is a cultural and financial role model and a city where your knowledge can adapt to multiple professional opportunities.



## UIC BARCELONA, OUR CAMPUSES

Classes are held on our Barcelona campus and also our Sant Cugat campus, which has a total area of more than 52.000 m<sup>2</sup>. Each Faculty has the best facilities and latest generation equipment for both theoretical and practical classes.

Find out more about the admissions procedure, reserving a place and enrolment here [uic.es/masters](https://uic.es/masters). Click on [uic.es/grants](https://uic.es/grants) for information about financial aid, discounts and grants.

## RANKINGS

The main rankings in which the Universitat Internacional de Catalunya has been classified.



Find out here about all our rankings.


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Universitat Internacional  
de Catalunya

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