### Goal

Interested to become an expert in genetic diagnosis of human diseases? Would you like to use stem cells to reconstruct missing parts of the body? Or may be you are thinking in using animal models for understanding how genes work? Perhaps you would like to discover hidden gems in complex genomes? In this master you will receive up-to-date, in-depth training based on the latest genomics and genetics advances.

# **Specialization**

You may choose the **Human Genetics** specialization that will train you in genomic medicine and personalized diagnosis for health, clinical and research institutions. You may choose the **Stem Cells and Development** specialization, which will train you in the analysis of genes and genomes for research studies of development, regeneration and disease. You will be able to do your master thesis in a research laboratory (6 to 9 months

research work). Several

laboratories, hospitals,

program.

companies and facilities,

national and international are involved in this

# **Basic Information**

Degree level **Master** 

Specialties
Human Genetics
Stem Cells and
Development

School (Lectures)
School of Biology
Campus Pedralbes
University of
Barcelona

Research project (Master Thesis) Choice of over 50 research laboratories national or international

Language of instruction **English** 

Duration

1 year

Credits **60 ECTS** 

Start Studies
Last week of
September 2020

Application period Starts on February 1, 2020. Ends on June 15, 2020

Eligibility
Eligibility to apply
for a master's
program requires
an applicable
bachelor's degree
or other equivalent
qualification
(see web).

## Contact

Contact information:

Send us a message and we will get back to you as soon as possible master.genetica@ub.edu

Follow us on twitter @MasterGeneUB

Open on-line pre-enrolment in the web starting on February 2020 www.ub.edu/estudis/ mastersuniversitaris/ geneticagenomica/



# Master in Genetics and Genomics

10 ECTS

Mandatory Module

Advanced Genetic Analysis and Functional Genomics Epigenetics and Cellular Memory Human Genome

**Speciality Modules** 

Stem cells & Development

Developmental Genetics and Genomics Evolution and Development Stem Cells and Regeneration Fluorescence and Image Analysis

Human Genetics Mendelian and Complex Genetic Diseases Genetic Diagnosis Advanced Techniques of Genetic Engineering Forensic Genetics

Or choose any from the other specialties

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**5 ECTS** 

**30 ECTS** 

**15 ECTS** 

Elective Module Advanced Bioinformatics
Genetic Research Seminars
High Throughput Analysis of Genomic Data
Differentiation during Fetal and Neonatal Development
Gene Regulatory Networks
Organogenesis and Aging
Comparative Genomics

Research Project and Master

Thesis TFM

Choose research project and laboratory from the list in the Master's web page





