### 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 evolution. You will be able to do your master thesis in a research laboratory (6 to 9 months research work). Several laboratories, hospitals, companies and facilities, national and international are involved in this program.

# **Basic Information**

Degree level Master

Specialties Human Genetics 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 September 27th 2021

Pre-enrolment period Starts on February 1st, 2021. Ends on June 16th, 2021

Resolution June 25th, 2021

Registration From 12 to 26 July 2021 (also in September)

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 2021 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	Development & Stem Cells	Developmental Genetics and Genomics Evolution and Development Stem Cells and Regeneration Fluorescence and Image Analysis
15 ECTS	Modules	Human Genetics	Mendelian and Complex Genetic Diseases Genetic Diagnosis Neurogenetics Forensic Genetics

**Advanced Bioinformatics** 

5 ECTS	Elective Module	Advanced Techniques of Genetic Engineering High Throughput Analysis of Genomic Data Differentiation during Fetal and Neonatal Development Comparative Genomics Organogenesis and Aging Or choose any from the other specialties
30 ECTS	Research Project and Master Thesis TFM	Choose research project and laboratory from the list in the Master's web page
	NIVERSITAT DE RCELONA	CENERG centre nacional d'anàlisi genòmica centro nacional de anàlisis genòmica