





Diego Quintana Torres

PhD Student

✉ quintanadiego@uniovi.es |  [Website](#) |  [diego-quintana-torres](#) |  [ORCID](#) |  [dquintanatorres](#)

Brief summary

As a dedicated **third-year PhD student** in the Genomics, Cancer and Aging group led by **Prof. Carlos López Otín**, I am deeply interested in harnessing computational approaches and employing omics technologies to extract meaningful insights from biological data. Over the past five years, I have honed a comprehensive skill set encompassing both dry lab (computational) and wet lab (experimental) techniques, with a particular emphasis on the research areas of **immunology and aging**. My current research endeavors are centered around an in-depth exploration of the immune system in the context of **accelerated aging**, with a specific focus on **Hutchinson Gilford Progeria Syndrome (HGPS)**, thereby contributing to the broader understanding of aging (both premature and physiological) and age-related diseases.

Education

Ph.D. Biomedicine and Molecular Oncology 2021 -

Thesis: Analysis of immune function and its relevance in mouse models of premature aging

Advisors: Prof. Alicia Rodríguez Folgueras, Prof. Alejandro López Soto.

Prof. Carlos López Otín's Laboratory, University of Oviedo, Spain

M.S. Biomedicine and Molecular Oncology (First-Class Honors) 2020 - 2021

Master's Thesis: Characterization and Functional Analysis of the Immune Response in Accelerated Aging

Prof. Carlos López Otín's Laboratory, University of Oviedo, Spain

B.S. Computer Science (Distance learning) 2020 -

University of Burgos, Spain

B.S. Biology (First-Class Honors) 2016 - 2020

Senior Thesis: Study of Immunomodulatory Mechanisms in Physiological and Accelerated Aging (with Honors)

Prof. Carlos López Otín's Laboratory, University of Oviedo, Spain

Publications

Diego Quintana-Torres*, Alejandra Valle-Cao*, Pablo Bousquets-Muñoz*, Sandra Freitas-Rodríguez, Francisco Rodríguez, Alejandro Lucia, Carlos López-Otín, Alejandro López-Soto, Alicia R. Folgueras. "The secretome atlas of two mouse models of progeria". *Aging Cell* (2023) [[link](#)] (* denotes equal contribution)

Research projects

Functional and therapeutic exploration of the immune system in aging (IMMaging). 2022 -

Principal Investigators: Alicia Rodríguez Folgueras, Alejandro López Soto

Spanish Ministry of Science, Innovation and Universities

Determination of the specific contribution of organs and tissues to the systemic regulation of aging (ORGANAGING). 2019 - 2022

Principal Investigator: Alicia Rodríguez Folgueras

Spanish Ministry of Science, Innovation and Universities

Internships

Prof. Mario Fernández Fraga Group. Cancer Epigenetics and Nanomedicine 2019

Instituto Universitario de Oncología del Principado de Asturias (IUOPA)

Fundación para la Investigación y la Innovación Biosanitaria del Principado de Asturias (FINBA), Instituto de Investigación Sanitaria del Principado de Asturias (ISPA)

Center for Research in Nanomaterials and Nanotechnology, Spanish National Research Council (CINN - CSIC)

Biotechnological and Biomedical Assays and Photonic Microscopy and Image Processing Units, Biological Analysis Section 2018

Scientific-Technical Services, University of Oviedo

University service

Representative of the group of PhD students in the Biochemistry and Molecular Biology Department Council 2023 -

University of Oviedo, Spain

Collaborator in the European Researchers' Night Sept 2022

Oviedo, Spain

Student Representative of the Quality Commission of the Faculty of Medicine and Health Sciences 2020 - 2021

University of Oviedo, Spain

Grants, honors & awards

University Faculty Training Grant / Ayuda para la Formación de Profesorado Universitario (FPU) 2021 - 2025

National Program to Develop, Attract and Retain Talent

Spanish Ministry of Science, Innovation and Universities

Collaboration grant to carry out research tasks in university departments 2020 - 2021

Secretary of State for Education, Spanish Ministry of Education and Vocational Training

Biochemistry and Molecular Biology Department, University of Oviedo

María Cristina Masaveu Peterson Bachelor's Degree Scholarship for Academic Excellence	2018/2019, 2019/2020
María Cristina Masaveu Peterson Foundation, Spain	
Collaboration Scholarship in University Services	2018
Biological Analysis Section, Scientific-Technical Services, University of Oviedo	

Teaching experience

Incorporation of a virtual laboratory simulator as a case-based learning tool for Molecular Biology students.	2022 - 2023
Coordinators: Alicia Rodríguez Folgueras, Alejandro López Soto	
Teaching innovation project, University of Oviedo	
Analysis and Biosanitary Evaluation (GBIOLO01-4-004)	2022 - 2023
Graduate Teaching Assistant, BS in Biology, University of Oviedo	
Biochemistry (GBIOLO01-2-001)	2021 - 2022
Graduate Teaching Assistant, BS in Biology, University of Oviedo	

Skills & Activities

- **Dry lab:** single-cell (RNA|TCR|BCR)-seq, single-cell immune profiling, aptamer-based proteomics, transcriptomics.
- **Programming languages:** R, Python, Bash, Java, with beginner skill in MATLAB, C, HTML*, CSS* and Javascript. (*Although not programming languages)
- **Tools:** Git, Jupyter, GitHub.
- **Wet lab:** Cell culture, broad range of experiments with mouse models (mouse colony handling, surgery, drug administration, carcinogenic protocols, calorimetry, animal care and handling, sample collection, behavioral tests...), *in vitro* and *in vivo* assays, PCR, RT-qPCR, flow cytometry, immunofluorescence, SA- β -gal. assays, metabolic assays (Seahorse).
- **Spoken languages:**
 - **Spanish:** Native.
 - **English:** Professional proficiency (C1 - Official Language School of Oviedo, B2 - University of Cambridge FCE)
 - **German:** Intermediate proficiency (B2 - Goethe-Institut)
 - **French:** Intermediate proficiency (A2 - Alliance Française)
- **Certificate of recognition of training for animal experimentation.** Animal Health and Production Service, Regional Ministry of Rural Environment and Agrarian Policy of the Principality of Asturias, Spain.
- **Revolutions in Biomedicine Summer School.** Presentation of a seminar and a poster, presentation of results of laboratory practices, and attendance at seminars and poster presentations by other summer school attendees. Imperial College London, London, UK. Jul 2019