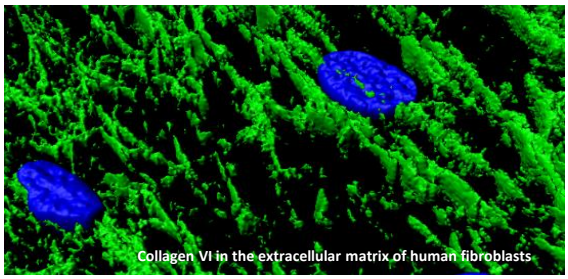
If you want to be part of an exciting story and help to develop life-changing therapies for rare diseases this could be your opportunity.

Post-doctoral position in Therapy Development for Rare Diseases.

You will join our laboratory of Translational **Research in Neuromuscular Diseases** at the Institut de Recerca Sant Joan de Déu-Hospital Sant Joan de Déu Barcelona (https://www.irsjd.org/es/investigacion/5/investigacion-aplicada-en-enfermedades-neuromusculares).

Our Institute is a leading biomedical research hub in Europe for rare diseases and one of the largest pediatric Hospitals in the world. We are a multidisciplinary group recognized as a reference centre for neuromuscular diseases working with an extensive network of collaborators inside and outside Europe. We participate in several clinical trials for various neuromuscular and neurological conditions.



Collagen VI in the extracellular matrix of human fibroblasts

You will lead a project with the overall aim of investigating the application of **gene and base editing** strategies using various CRISPR /Cas9 and RNA-based systems for the correction of **mutations in collagen VI genes** that result in a severe form of congenital muscular dystrophy. The candidate will gain experience in a wide range of molecular and cell biology techniques as well as specialized knowledge on muscle biology and neuromuscular diseases which is a fast-growing field where numerous clinical trials are being developed. He/she will have the opportunity to work in a thriving clinical research centre with state-of-the-art facilities.

We are recruiting an outstanding candidate to apply in the coming months to highly competitive and prestigious post-doctoral fellowships funded by national private or public funding bodies or the European Union (Beatriu de Pinós, Juan de la Cierva, La Caixa, Ramon y Cajal and Marie Sklodowska-Curie Actions).

The duration and salary will depend on the conditions of the fellowship and the seniority and experience of the candidate. They range from 2 to 5 years in duration and between 30,000 € and 50,000 € per year (gross salary).

To be eligible for the different national and EU fellowships candidates must meet the following academic and mobility criteria:

- Candidates must have obtained their PhD between the 1st of January 2013 or the 1st of January 2016 (depending on the entry-level of the fellowship) and the 31st of December 2021.
- Candidates must have at least 2 years post-doctoral experience outside Spain and not have lived or worked in Spain for longer than 12 months since March 2021

Skills:

- We are looking for a highly motivated candidate committed to translational research and with an interest in gene/advanced therapy development.
- Previous experience in similar projects and with gene editing tools will be advantageous.
- Publications and official participation in research projects will be highly valued.
- English proficiency
- Good communication skills and ability to work as part of a team.

Relevant publications

- *Proteomic and functional characterisation of extracellular vesicles from collagen VI deficient human fibroblasts reveals a role in cell motility.* Badosa C, Roldán M, Fernández-Irigoyen J, Santamaria E, Jimenez-Mallebrera C. Sci Rep. 2023 Sep 5;13(1):14622.
- *Full-Length SMN Transcript in Extracellular Vesicles as Biomarker in Individuals with Spinal Muscular Atrophy Type 2 Treated with Nusinersen.* Trifunov S,Natera-de Benito D, Carrera-García L, Codina A, Expósito-Escudero J, Ortez C, Medina J, Torres Alcala S, Bernal S, Alias L, Badosa C, Balsells S, Alcolea D, Nascimento A, Jimenez-Mallebrera C. J Neuromuscul Dis. 2023;10(4):653-665.
- *The Capillary Morphogenesis Gene 2 Triggers the Intracellular Hallmarks of Collagen VI-Related Muscular Dystrophy.* Castroflorio E, Pérez Berná AJ, López-Márquez A, Badosa C, Loza-Alvarez P, Roldán M, Jiménez-Mallebrera C. Int J Mol Sci. 2022 Jul 11;23(14):7651. doi: 10.3390/ijms23147651.
- *Personalized in vitro Extracellular Matrix Models of Collagen VI-Related Muscular Dystrophies*. Almici E, Chiappini V, López-Márquez A, Badosa C, Blázquez B, Caballero D, Montero J, Natera-de Benito D, Nascimento A, Roldán M, Lagunas A, Jiménez-Mallebrera C, Samitier J. Front Bioeng Biotechnol. 2022 Apr 25;10:851825. doi: 10.3389/fbioe.2022.851825.
- *CRISPR/Cas9-Mediated Allele-Specific Disruption of a Dominant COL6A1 Pathogenic Variant Improves Collagen VI Network in Patient Fibroblasts.* López-Márquez A, Morín M, Fernández-Peñalver S, Badosa C, Hernández-Delgado A, Natera-de Benito D, Ortez C, Nascimento A, Grinberg D, Balcells S, Roldán M, Moreno-Pelayo MÁ, Jiménez-Mallebrera C. Int J Mol Sci. 2022 Apr 16;23(8):4410. doi: 10.3390/ijms23084410.

Interested candidates please send CV with the names of 2 referees and a motivation letter to cecilia.jimenez@sjd.es. You can also contact us on this email if you have any questions.

In September 2018, the European Commission awarded us with the "HR Excellence in Research" seal. This seal, provided by the European Commission, identifies the institutions and organisms that promote a stimulating working environment and favourable working conditions, with a commitment to continuous improvement of HR strategies, by the **European Charter for Researchers** and the **Code of Conduct for the Recruitment of Researchers**. For this reason, our Institution is committed to generating and supporting the existence of a stimulating and encouraging research environment.