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| CV Date | 04/04/2023 |
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Part A. PERSONAL INFORMATION

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|---------------------------------------|---|---------------------|------------|
| First Name * | Jesús | | |
| Family Name * | Mateos Martín | | |
| Sex * | Male | Date of Birth * | 09/08/1973 |
| ID number Social Security, Passport * | | Phone Number * | |
| URL Web | https://mibiopharm.com/unidad-farmacia-hospitalaria/equipo/ | | |
| Email Address | jesusmateosmartin@gmail.com | | |
| Researcher's identification number | Open Researcher and Contributor ID (ORCID) * | 0000-0002-1782-6779 | |
| | Researcher ID | N-3610-2014 | |
| | Scopus Author ID | 2230083 | |

* Mandatory

A.1. Current position

| | | | |
|---------------------|--|--------------|--|
| Job Title | Investigador Programa Talento Senior GAIN | | |
| Starting date | 2021 | | |
| Institution | Fundación Instituto de Investigaciones Sanitarias de Santiago de Compostela | | |
| Department / Centre | | | |
| Country | Spain | Phone Number | |
| Keywords | Drugs evaluation; Ageing (biology); Cell culture; Clinical biology; Proteomics | | |

A.2. Previous positions

| Period | Job Title / Name of Employer / Country |
|-------------|---|
| 2020 - 2021 | Senior Scientist Proteomics / Galapagos NV / Belgium |
| 2016 - 2020 | Investigador Postdoctoral / Consejo Superior de Investigaciones Científicas / Spain |
| 2007 - 2015 | Investigador Postdoctoral-Contratado Apoyo Investigación / INIBIC-SERGAS |
| 2006 - 2007 | Postdoctoral Fellow / Columbia University / United States of America |
| 2003 - 2006 | Professional career gap/Paternity leave |
| 1997 - 2003 | Becario Predoctoral / Universidad Autónoma de Madrid |

A.3. Education

| Degree/Master/PhD | University / Country | Year |
|---------------------------------|--------------------------------|------|
| Doctor en Ciencias (Biológicas) | Universidad Autónoma de Madrid | 2003 |
| Licenciado en Biología | Universidad de Alcalá | 1996 |

A.4. General quality indicators of scientific production

WOS metrics:

Total Articles in Web of Science: 65

Percentage of articles in Q1: 71%

Sum of the Times Cited: 1381

Average Citations per Article: 22.31

h-index: 22

Verified Reviews: 39

Last Updated:20/03/2023

Part B. CV SUMMARY

I did my Doctoral Thesis at the Department of Biochemistry of the Autonomous University of Madrid, under the supervision of Professor Roberto Marco, PhD, MD, working on musculoskeletal function and structure of Tropomyosin Heavy (TmHs) isoforms of *Drosophila melanogaster*. I demonstrated by mass spectrometry that both isoforms are part of the tropomyosin complex and that TmH phosphorylation is essential for proper muscle function (PMID: 16752200). I also studied the evolution of the gene that codes for tropomyosins and Troponins C, I and T (PMIDs: 16049195, 15696366). After reading my Doctoral Thesis, I decide to take a gap in my professional career due to the birth of my son. I return to postdoctoral training in May 2006 by joining the Department of Dermatology at Columbia University (NY, USA) directed by Dr. Angela M. Christiano where I began working on the proteomic study of Hutchinson-Gilford progeroid syndrome (HGPS) or progeria. I had to prematurely interrupt my stay due to personal reasons in March 2007 and I returned to Spain. For eight years (2007-2015) I carried out my postdoctoral research (two consecutive three-years postdoctoral "Apoyo a la Investigación" contracts from the Health Ministry) at the Proteomics Unit- INIBIC, A Coruña, under the supervision of Francisco J. Blanco, PhD, MD, to apply proteomics to the study of natural and accelerated aging. We identified those relatively more abundant proteins in the synovial fluid (SF) of patients suffering from rheumatoid arthritis (RA) and osteoarthritis (OA) (PMID: 22245418), work that has been widely cited in the field establishing new standards for clinical studies. In parallel I continued working on progeria, I performed a quantitative proteomic analysis to study 3T3L1-PG cells transduced with progerin, determining the importance of mitochondrial dysfunction, the autophagy and proteostasis in premature aging (PMID: 26066325). I participated as a corresponding author in the study of the group led by Dr. María Arufe (INIBIC, A Coruña) on the influence of age on the differentiation capacity of mesenchymal stem cells (PMID: 26581954). Finally, I validated the results obtained both in cell lines from patients with HGPS and their healthy parents as controls, as well as in the HGPS animal model (PMID: 30379953) identifying de novo synthesis of purine bases as altered in the disease.

In collaboration Dr. Nieves Domenech, head of the Biobank of the University Hospital of A Coruña, I participated as part of the research team in a national project (Project FIS PI12/02670) entitled "Search for indicators to assess the quality of plasma samples stored in biobanks to determine their suitability for analytical proteomics (PMIDs: 24521361, 27620695).

In 2016 I obtained a position at the Spanish National Scientific Council (CSIC) under the supervision of Mónica Carrera PhD, working on the H2020 EMI-TB Project (Eliciting Mucosal Immunity in Tuberculosis) in which I participate as a researcher of the team (H2020- PHC-2014-#643558). I identified novel innate immune response biomarkers in serum, saliva and sputum samples from healthy and infected TB patients and contacts (PMIDs: 30660769, 32123229). The results will soon be transferred to clinical-diagnostic and follow-up guidelines in patients with tuberculosis, an endemic disease in Galicia.

In 2020 I decided to accept the position of Senior Scientist Proteomics at the biotechnological company Galápagos NV (Malines, Belgium). This company contacted me directly to offer me integration into a newly created group (Pathway Group) within the Area of Inflammatory Diseases. My work consisted of introducing SWATH/DIA massive proteomic analysis for the study, in inflammatory diseases, of cellular processes modulated by the action of drugs specifically designed against molecular targets identified by "high throughput screening" analysis. Using PBMCs and monocytes isolated from patients and donors as models, I performed total proteome and phospho-proteome studies, identifying drug-modulated kinases. By mid-2021 the Clinical Pharmacology group of the Santiago de Compostela Health Research Institute (IDIS), coordinated by Dr. Anxo Fernández Ferreiro, offered me to apply for a contract as a senior researcher focused on facilitating the state return of figures of biomedical research excellence (Senior Talent Program of the Xunta de Galicia), which I get. The possibility of returning to my family and being able to apply for projects makes me decide to join in October 2021. At this moment I am applying my knowledge acquired in the proteomic study and in the "high throughput" analysis of the action of drugs in ocular inflammatory diseases such as

cystinosis, uveitis and age-related macular degeneration (PMID: 36499086) and applying to calls for projects that allow my consolidation as a researcher in the national and regional health system.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Publications

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- 1 **Scientific paper.** Castro-Balado, A.; Bandín-Vilar, E.; Cuartero-Martínez, A.; et al; Fernández-Ferreiro, A.2022. Cysteamine Eye Drops in Hyaluronic Acid Packaged in Innovative Single-Dose Systems: Stability and Ocular Biopermanence Pharmaceuticals. 14-10. ISSN 1999-4923.
- 2 **Scientific paper.** Garcia-Quintanilla, L.; Rodriguez-Martinez, L.; Bandin -Vilar, E.; Gil-Martinez, M.; Gonzalez-Barcia, M.; Mondelo-Garcia, C.; Fernandez-Ferreiro, A.; Mateos, J. (AC). (8/8). 2022. Recent Advances in Proteomics-Based Approaches to Studying Age-Related Macular Degeneration: A Systematic Review Int J Mol Sci. 23-23. ISSN 1422-0067. <https://doi.org/10.3390/ijms232314759>
- 3 **Scientific paper.** Mierzejewski, K.; Stryński, R.; Łopieńska-Biernat, E.; Mateos, J.; Bogacka, I.; Carrera, M.(4/6). 2021. A Complex Proteomic Response of the Parasitic Nematode Anisakis simplex s.s. to Escherichia coliLipopolysaccharide Mol Cell Proteomics. 20, pp.100166-100166. ISSN 1535-9484. <https://doi.org/10.1016/j.mcpro.2021.100166>
- 4 **Scientific paper.** Sánchez-Marín, P.; Vidal-Liñán, L.; Fernández-González, L. E.; et al; Mateos, J.; Beiras, R.(8/10). 2021. Proteomic analysis and biochemical alterations in marine mussel gills after exposure to the organophosphate flame retardant TDCPP Aquat Toxicol. 230, pp.105688-105688. ISSN 1879-1514. <https://doi.org/10.1016/j.aquatox.2020.105688>
- 5 **Scientific paper.** Mateos, J. (AC); Estévez, O.; González-Fernández, Á; et al; Carrera, M.(1/12). 2020. Serum proteomics of active tuberculosis patients and contacts reveals unique processes activated during Mycobacterium tuberculosis infection Sci Rep. 10-1, pp.3844-3844. ISSN 2045-2322. <https://doi.org/10.1038/s41598-020-60753-5>
- 6 **Scientific paper.** Mateos, J. (AC); Estévez, O.; González-Fernández, Á; et al; Carrera, M.(1/9). 2019. High-resolution quantitative proteomics applied to the study of the specific protein signature in the sputum and saliva of active tuberculosis patients and their infected and uninfected contacts J Proteomics. 195, pp.41-52. ISSN 1876-7737. <https://doi.org/10.1016/j.jprot.2019.01.010>
- 7 **Scientific paper.** Carrera, M.; González-Fernández, Á; Magadán, S.; Mateos, J.; Pedrós, L.; Medina, I.; Gallardo, J. M.(4/7). 2019. Molecular characterization of B-cell epitopes for the major fish allergen, parvalbumin, by shotgun proteomics, protein-based bioinformatics and IgE-reactive approaches J Proteomics. 200, pp.123-133. ISSN 1876-7737. <https://doi.org/10.1016/j.jprot.2019.04.005>
- 8 **Scientific paper.** Blanco, F. J.; Camacho-Encina, M.; González-Rodríguez, L.; et al; Mateos, J.; Calamia, V.(5/15). 2019. Predictive modeling of therapeutic response to chondroitin sulfate/glucosamine hydrochloride in knee osteoarthritis Ther Adv Chronic Dis. 10, pp.2040622319870013-2040622319870013. ISSN 2040-6223. <https://doi.org/10.1177/2040622319870013>
- 9 **Scientific paper.** Stryński, R.; Mateos, J.; Pascual, S.; González, ÁF; Gallardo, J. M.; Łopieńska-Biernat, E.; Medina, I.; Carrera, M.(2/8). 2019. Proteome profiling of L3 and L4 Anisakis simplex development stages by TMT-based quantitative proteomics J Proteomics. 201, pp.1-11. ISSN 1876-7737. <https://doi.org/10.1016/j.jprot.2019.04.006>

- 10 Scientific paper.** Mateos, J.; Fafian-Labora, J.; Morente-Lopez, M.; et al; Arufe, M. C.(1/9). 2018. Next-Generation Sequencing and Quantitative Proteomics of Hutchinson-Gilford progeria syndrome-derived cells point to a role of nucleotide metabolism in premature aging PLoS One. 13-10, pp.e0205878-e0205878. ISSN 1932-6203. <https://doi.org/10.1371/journal.pone.0205878>

C.2. Conferences and meetings

- 1 Serum proteomics of active tuberculosis patients and contacts reveals unique processes activated during Mycobacterium tuberculosis infection. 6th International Conference on Analytical Proteomics. Bioscope. 2019. Portugal.
- 2 Jesús Mateos. High-resolution quantitative proteomics applied to the discovery of biomarkers of innate immune response in tuberculosis.. XII European Proteomics Association EUPA congress. Sociedad Española de Proteómica SEPOT. 2018. Spain.

C.3. Research projects and contracts

- 1 **Project.** PROTEOCYST: Determinación proteómica del efecto de la cisteamina a nivel molecular en células de pacientes con cistinosis nefropática.. Jesús Mateos Martín. (Health Research Institute of Santiago de Compostela). 01/04/2023-31/10/2023. 6.000 €.
- 2 **Project.** Eliciting Mucosal Immunity in Tuberculosis EMI-TB PHC-2014-single-stage RTD.. European Commission H2020. Mónica Carrera Mouriño. (Consejo Superior de Investigaciones Científicas). 16/05/2016-31/12/2019. 323.036 €.
- 3 **Project.** PI12/02670, Búsqueda de indicadores para evaluar la calidad de muestras de plasma almacenadas en los biobancos y determinar su adecuación a los métodos analíticos proteómicos.. Instituto de Salud Carlos III. (INIBIC-SERGAS). 2012-2014.
- 4 **Project.** Expediente PI08/2028, Estudio de la disfunción mitocondrial y de la condrogénesis en la patogénesis de la artrosis.. Instituto de Salud Carlos III. (INIBIC-SERGAS). 2009-2012.

C.5. Stays in public or private R&D centres

- 1 Galápagos NV. . Belgium. Mechelen. 01/10/2020-31/10/2021. 1 year - 1 month. Contracted.
- 2 Departamento de Dermatología, Columbia University. . United States of America. Nueva York. 01/04/2006-31/03/2007. 1 year. Post-doctoral.