

PERSONAL INFORMATION

Manuel Antonio Oria Muriel ID:29616786P



Avenida Monforte de Lemos, 171, 11th floor, 4. Postal Code 28029

+34 674917533

oria.muriel@cajal.csic.es or maanormu@hotmail.es
<https://www.linkedin.com/in/manuel-antonia-oria-muriel-99641311b/>

Sex Male | Birth date 3/11/1993 | Born in Lepe (Huelva) | Nationality Spanish

Working expertise

Since November 2016 to September 2018

Associated researcher to a Master's Final Thesis

Tutor: Carlos Vicario Abejón (Instituto Cajal, Spanish National Research Council (CSIC), Madrid)

- 'Characterization of a human iPSCs line with mutation in PS1 as a cellular model to study familiar Alzheimer Disease'. Several techniques were used: freezing and defrosting of mouse embryonic fibroblasts (MEFs) and human iPSCs; human fibroblast reprogramming into iPSCs and their maintenance both on MEFs feeders and xeno-free medium; obtention of MEFs' conditioned medium; immunohistochemistry against markers of pluripotency and multipotency; derivation and maintenance of iPSCs-derived Neural Stem Cells (NSCs), generation of embryoid bodies and their induction into the three germ layers (ectoderm, mesoderm and endoderm; RT-qPCR; quality control of ADN/ARN (quantification and integrity); quality control of iPSCs culture (micoplasma, microsatellite, confirmation of PS1 mutation and genotype by PCR and DNA sequencing, alkaline phosphatase assay); bioinformatic tools (PrimerSelect, MegAlign, NCBI, GraphPad Prism, Excel, etc.)

Business Cellular and Molecular Biology

Since January 2016 to June 2016

Associated Researcher to a Bachelor's Final Project

Tutors: María del Mar Malagón Poyato and Rocío Guzmán Ruiz (IMIBIC and University of Córdoba).

- 'Characterization of biomarkers associated to insulin resistance and obesity: microRNAs and adipose tissue'. Several techniques were used: isolation of fibroblasts from adipose biopsy, differentiation of fibroblasts into 3T3-L1 adipocytes (adipogenesis assay), cell culture, cellular transfection by means of lipofectamine and electroporation, *in silico* analysis (microRNA and MirTarBase), lipolysis and lipogenesis assay, histochemistry assay, RT-qPCR analysis of microRNAs.

Business Cellular and Molecular Biology

Since July 2015 to August 2015

Summer internship

Simon McDade (Center for Cancer Research and Cell Biology, Queen's University, Belfast, UK)

- 'Tumour suppressor genes in cancer: Role of c-met as a p63 target in head and neck carcinomas'. Several techniques were used: cell culture of oropharyngeal cell lines (FaDu, Detroit 562, VU-04OT), gene silencing by means of siRNAs knock-down, cell harvesting and protein extraction, protein quantification by spectrophotometry, chromatin immunoprecipitation; gel electrophoresis in a 4-20% acrylamide gradient; Western blot; chemoluminescence. Bioinformatic tools (GraphPad, ImageJ, Excel, NCBI)

Business Cellular and Molecular Biology

July-August 2010; July-August 2012; July-September 2017

Plastic industry worker

2012, July-September 2017

Manuel Muriel Pérez (Lepeplas S.L., Lepe (Huelva, Spain)).

- Responsible for the cutting and extruder machines, producing polietilene film for agriculture as well as commercial plastic bags.

Business Plastic industry

December 2019-August 2020

Salesclerk in a jewelry (Lepe) and ocasional teacher in Aran School (Cartaya).

August 2020-present

Lab technician II

Jorge Alegre Cebollada (Spanish National Center of Cardiovascular Research, CNIC). Contracted with funds from a grant from 'Myokardya' pharmaceutical company.

FORMACIÓN ACADÉMICADegree in Biochemistry
(2012-2016)**7,83/10**

University of Córdoba (Spain) and University of Lincoln (United Kingdom) as an Erasmus student in Life Sciences program during the third year of the Degree.

- Several methods and techniques were learned and used: RT-qPCR; solid/liquid/gas chromatography; spectroscopy (UV-Visible, infrared, fluorometry; fluorescence; mass spectrometry by MALDI-TOF/quadrupole); bidimensional electrophoresis of proteins/ nucleic acids, cell culture; bacterial, virus, animal and plant tissue processing and fixation for optic, confocal and electronic microscopy; histochemistry; immunocytochemistry and immunohistochemistry; ELISA; bioinformatic tools (Excel, SPSS, Linux, Octave/MATLAB, PDB, NCBI, EMBL-EBI, Blast, FastQC, Mauve assembler).

Master in Neuroscience
(2016-2018)**7,88/10**

University Autónoma of Madrid (UAM), Spain

- Several methods and techniques were learned and used: electrophysiology, characterization of neurotransmitters; handling, sedation, blood obtention and animal sacrifice (mice and rats); animal perfusion and tissue fixation; histochemistry and immunohistochemistry; western blot, sample processing with vibratome and ultramicrotome; transmission electronic microscopy; grade C license to work with animal models (rodents and lagomorphs).

PERSONAL SKILLS

Mother language

Spanish

Other languages

English

COMPREHENSION		ORAL COMMUNICATION		WRITING
Listening	Reading	Oral interaction	Oral production	
C1 (Advanced) Cambridge ESO level.	C1 (Advanced) Cambridge ESO level.	C1 (Advanced) Cambridge ESO level.	C1 (Advanced) Cambridge ESO level.	C1 (Advanced) Cambridge ESO level.
Actually, I am preparing for the C2 (Proficiency) Cambridge Level				
Portuguese/French	Basic user	Basic user	Basic user	Basic user
No certificate. Learned from high school.				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communicative skills

- Good communicative skills acquired from multiple seminars and presentations at the University, the Cajal's Institute and Dr. Vicario's lab (most of them in English)

Organizational skills

- Responsible for the project on the characterization of a human iPSCs line and generation of iPSCs-derived Neural Stem Cells at Dr. Vicario's lab; and responsible of the product quality and machines while working at Lepeplas S.L.

Digital skills

SELF EVALUATION				
Data processing	Communication	Content creation	Security	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user

Digital competences - Self-assessment grid

- Good skills with PowerPoint/Keynote presentations gained through multiple seminars during the Degree and as lab researcher.
- Good skills with ImageJ, Fiji, AdobeReader and other editors during my stay in different labs (CCRCB, IMIBIC and Cajal's Institute).

Other skills

- Autodidact for any activity thanks to tutorials, seminars and forums. Car driving license (B)

ADDITIONAL INFORMATION

Publications

Eva Díaz-Guerra, Manuel A. Oria-Muriel, M.A., Elena Moreno-Jiménez, Itziar de Rojas, César Rodríguez, Eva-Rodríguez Traver, María Orera, Isabel Hernández, Agustín Ruiz, Carlos Vicario. (2019) Generation of an integration-free iPSC line, ICCSi006-A, derived from a male Alzheimer's disease patient carrying the PSEN1-G206D mutation. *Stem Cell Research*. 101574

Presentations

Final Degree Project, Final Master Project and final summer internship presentation in the CCRCB .

Conferences

- Conchita Rábago of Jiménez Díaz Foundation (17 May 2018). Manuel Serrano (IRB) and Juan Carlos Izpisua Belmonte (Salk Institute) presented this day, amongst other renowned researchers.
- Ramón Areces Foundation: 'Stem Cells and organoids: unrevealing their potential towards new treatments' (8 February 2018).
- VII Scientific Seminars of University of Córdoba (27-28 June 2016). Carlos López Otín (University of Oviedo) presented this time on progeria, ageing, cancer and metalloproteinases.

Courses

- Molecular (M), Clinical (C) and Population (P) Bases of Cardiovascular Disease and Health. Cardona (Barcelona) 15-16 July 2019. Dr. Valentín Fuster (Mount Sinai, president of CNIC and American College of Cardiology) directed and presented this course.
- The Science of Stem Cells (American Museum of Natural History)-Online Course (January 2020).
- Understanding Cancer Metastasis (Johns Hopkins University)-Online Course (January 2020)
- Basics of CRISPR/Cas9 (The Jackson Laboratories; 13 May 2020)

Seminars

- NIMGenetics: 'Realities, promises and risks of genetic edition in biomedicine'. Presented by Lluís Montoliu (National Center of Biotechnology) 29 June 2018.
- AstraZeneca: May-Britt Moser (Nobel Prize of Medicine or Physiology) presented on 26 September 2018.
- Red de Terapia Celular (TerCel): Herramientas de Edición Molecular/*Tools for molecular Editing* (at CNIC-Spanish National Center of Cardiovascular Research, 22 January 2020).
- Il Tec4Bio annual meeting (at CNIC-Spanish National Center of Cardiovascular Research, 6 October 2020).

Member

CIBERNED (Biomedical Research Center in Neurodegenerative Diseases, associated to Health Institute Carlos III).