

Cristina Fontecha Cuenca

Biotechnologist
Viale Arcella 2Ter, Padua (Italy)

Email: Cris.fontecha@usal.es

Phone: +34 600774964

PROFILE

A highly motivated PhD candidate with 2+ years of experience of working in different research projects across several disciplines. Specializing in infectious diseases, immunology, gene editing, and neuroscience. Excellent communicator and team member with experience delivering project results to challenging deadlines. A keen advocate of being “hands on” to get the work done.

RESEARCH EXPERIENCE

01/2021 – Present • MSCA PhD Candidate

Biomedical Science Department
University of Padua, Padua (Italy)

Marie Skłodowska-Curie Actions PhD candidate at the DIRNANO project (Directing the Immune Response through Design Nanomaterials). The aim of the PhD program is the production of recombinant plasma proteins – such as element of the innate immune response – for the functional modulation of the nanoparticles corona effects and for species-specific assays.

09/2020 – 12/2020 • Graduate Research Associate

Nuffield Department of Medicine
University of Oxford, Oxford (UK)

The viral immunology group at the NDM Research Building works on the development of a therapeutic vaccine for the treatment of Human Papillomavirus (HPV) - associated lesions and cancer. The vaccine candidate is currently undergoing clinical trial. Key responsibilities/skills:

- Blood components fractionation and preservation of leukocytes in liquid nitrogen.
- ELISPOT. Patient's leukocytes were incubated with a pool of HPV peptides. Immune response to HPV was measured by INF γ detection.
- FACS. Examination of the cell identity of HPV-reactive leukocytes.
- Experience using Aid ELISpot Reader and GraphPad.

11/2017 – 08/2018 • Master's Research Project

Department of Pharmacology
University of Oxford, Oxford (UK)

The project involved the in vivo genetic modification of mice neurons through chemogenetic technology and its effects on anxiety-related behaviours. Key responsibilities/skills:

- Gene editing of mice interneurons in vivo through the Cre/loxP recombination technology and AVV vector delivery system.
- Assisted and participated in over 25 surgical procedures on live mice. Supported surgeon throughout entire procedure – preparation, sterilization, anaesthesia, post-surgery follow-up checks, etc.
- Immunohistochemistry (IHC). Including mice brain tissue fixation and sectioning, optimization of antibody titer, and visualization through fluorescence microscopy.
- Extensive experience using Fiji software for microscopy image processing.
- Behavioural experiments: locomotor activity test, light-dark box, elevated plus maze, and open field test.
- Handling and processing of big loads of experimental data from behavioural experiments.
- Statistical analysis using IBM SPSS and GraphPad software.

10/2015 – 06/2016 • Graduate Research Assistant

Tropical Diseases Centre of Salamanca (CIETUS)
University of Salamanca, Salamanca (Spain)

Development and optimization of a LAMP protocol, an isothermal DNA amplification technology, for the detection of the parasite *Amphimerus spp* in human stool samples. Key responsibilities/skills:

- Optimization of genomic PCR protocol for the detection of parasitic DNA.
- Sensitivity and specificity analyses of the PCR and LAMP techniques in the detection of *Amphimerus spp* DNA.
- Southern blot for DNA visualization after amplification through either PCR or LAMP protocols.
- DNA extraction and purification from 60+ human stool samples.
- Writing of project thesis and presentation against a tribunal.

Summer 2013 & 2015 • Research Internship

Institute of Molecular Biology and Genetics
Valladolid (Spain)

Apprenticeship in general molecular biology and genetic techniques, including cell culture – both cell lines and primary cell culture, western blot, ELISA, plasmid transfection and expression, protein interaction studies through immunocytochemistry, confocal and fluorescence microscopy, and X-Ray diffraction.

WORKING EXPERIENCE

05/20 – 01/21 • Freelance Scientific Writer (Online)

Writerbay UK

Elaboration of academic and scientific writing projects according to the needs of the clients and adjusting to demanding deadlines.

09/19 – 05/20 • Head Waitress & Bar tender

The Chester Arms, Oxford (UK)

Responsible for looking after the guests during their visit and providing assistance in the bar area.

09/18 – 07/19 • Administration

Cowley Road MOT's, Oxford (UK)

Working within a reception environment, providing a telephone answering and admin service.

04/15 - 08/17 • Administrative Secretary (volunteer)

Cultural Association "Peña los Enebros",
Palencia (Spain)

Responsible for planning and organising a wide range of activities related to the preservation of the natural environment, as well as collaborating in administrative task and legal aspects pertaining to the association.

11/13 - 11/15 • Administrative Secretary (volunteer)

Biotechnology Association of Salamanca,
Salamanca (Spain)

Responsible for organising and managing scientific courses, conferences, science divulgation events, and networking events, as well as collaborating with administrative tasks for the maintenance of the association

EDUCATION & QUALIFICATIONS

09/16 - 11/18 • MSc in Neuroscience

Maastricht University, the Netherlands

09/12 - 07/16 • BSc in Biotechnology (1st)

Universidad de Salamanca, Spain

09/10 - 11/12 • Health and Bioscience School

Diego de Praves Institute, Spain

Graduated with honours (GPA: 9.75/10)

PUBLICATIONS & AWARDS

Cevallos, W., Fernández-Soto, P., Calvopiña, M., Fontecha-Cuenca, C., et al. (2017). LAMPhimerus: A novel LAMP assay for detecting *Amphimerus* sp. DNA in human stool samples. *PLoS Negl Trop Dis*, 11(6).

Scholarship with the Research Centre of Tropical Diseases (CIETUS) awarded by the Spanish Government (2015-2016). Award granted to the top 1% of the students based on GPA and demonstrable knowledge in the subject.

REFERENCES

Prof. Lucy Dorrell

NDM Research Building, Oxford University
Email: Lucy.dorrell@ndm.ox.ac.uk

Prof. Pedro Fernández-Soto

Tropical Diseases Centre of Salamanca (CIETUS), University of Salamanca
Email: pfsoto@usal.es