
LUCIA OTON-GONZALEZ

RESEARCH INTERESTS: Cell and Virus Engineering, Immunology, Bioinformatics, Biospecimen Research, DNA Methylation, Non-coding RNA, Diagnostic Assays Development, Biomarkers, Proteomics, Animal Models

PROFESSIONAL EXPERIENCE

July 2014 – April 2017

Volunteer Research Assistant. Hackensack University Medical Center. Hackensack, New Jersey.

Diagnostics and evaluation of potential prognostic biomarkers in Mantle cell Lymphoma under supervision of Dr. Arati A Inamdar and Dr. K. Stephen Suh

Techniques used:

- Cell and tissue culture of immortalized human cell lines, primary human B-cells (using Rho Kinase inhibitor and feeder layers) and murine fibroblasts.
- Immunocytochemistry
- Nucleic acid extraction from cell lines, PBMC's and FFPE (RNA)
- Real Time q-PCR and analysis
- End-Point PCR
- Protein lysate preparation and Western Blot

Other:

- Primer design
- Draft technical documents

Data analysis:

- Graphing through SigmaPlot
- Microsoft office
- Infinicyt: Basic knowledge.

Jul 2016 – Oct 2016

Summer Research Assistant. University of Ferrara. Ferrara. Italy

Worked on two unique projects; one involving the role of p53 and PML in NLRP3 inflammasome for a case study, the second one focused on methylation status of the promoter of the SERPINA1 gene in Acute Coronary Syndrome. Under the supervision of Dr. Fernanda Martini

Techniques used:

- Multiplex PCR
- Bisulfite conversion and semi-quantitative PCR analysis
- Gel DNA extraction and purification
- Sequencing analysis for methylation status

Jun 2013 - Dec 2013 **Research Assistant Intern.** INIA (National Institute of Research and Agrarian and Produce Technology). Madrid, Spain.

Proteomic Analysis of various sub-species of *Triticum aestivum* group under supervision of PI Rosario Fite.

Search for duplicates in the core collection of *Triticum aestivum* seeds:

- Use of the database from the CRF-INIA
- Preparation and extraction of samples
- Preparation of stock solutions
- Detection of glycines of *Triticum aestivum*, usage of acid-polyacrylamide gel electrophoresis
- Characterization of *Aegilops* and *Triticum*, to collect the data in the database
- Root fastening and staining to perform chromosome counting
- Field sampling from the crops and mixing detection of the cultured samples
- Propagating the samples from season 2013-2014

Nov 2012 to Jan 2013 **Research Assistant Trainee.** University of Alcalá. Madrid, Spain.

Synthesis of enzyme-modified nanoparticles using biomimetically synthesized silica under supervision of Dr. Patricia Zamora Bonachela.

Responsibilities included:

- Preparation of stock solutions and biomimetic synthesis of silica nanoparticles
- Synthesis of silica nanoparticles with encapsulated HRP
- Measurement of enzymatic activity using the spectrophotometer for free and encapsulated enzymes and also at different pH
- Synthesis of gold nanoparticles using the Frens method

EDUCATION AND TRAINING

2007-2013 LICENCIATE DEGREE (3+2 YEARS). University of Alcalá. Madrid, Spain. Grade 6.33/10.

- First cycle (3 years): Biology
- Second cycle (2 years): Molecular Biology

ADDITIONAL COURSES

- January 2014 - May 2014 **Principals of Microbiology.** Raritan Valley Community College. Branchburg, New Jersey
- November 2015 **Responsible conduct in research: on authorship, plagiarism and data protection policy.** 5h. Seminar organized by the University of Alcalá. Madrid, Spain.
- February 2016 **Characterization of *in vitro* cells: Initiation to flow cytometry.** 40h. Organized by UCM and IdISSC. Madrid, Spain.
- February 2016 **Initiation to cell culture techniques of animal and human cells.** 25h. Organized by UCM and IdISSC. Madrid, Spain.
- March 2016 **How to Write a Great Research Paper, and Get it Accepted by a Good Journal.** 2h. Seminar organized by the University of Alcalá. Madrid, Spain.

MENTORING AND SUPERVISION EXPERIENCE

- January-February 2016 Cancer Center, HUMC, Hackensack, NJ. Mentored 1 graduate student.
- December 2016- March 2017 Cancer Center, HUMC, Hackensack, NJ. Mentored 1 MD student.

LANGUAGES

- Spanish** Native
- English** Highly proficient in spoken and written English. TOEFL 2017: 102/120
- Italian** Intermediate knowledge
- French** Basic knowledge

INFORMATICS

Experience at user level:

- Microsoft Office: Word, PowerPoint, Excel, Access
- SigmaPlot 12.0
- Infinicyt

PUBLICATIONS

Inamdar AA, Goy A, Ayoub NM, Attia C, **Oton L** et al. Mantle cell lymphoma in the era of precision medicine-diagnosis, biomarkers and therapeutic agents. *Oncotarget*. 2016

Inamdar AA*, Moe Tun*, Kausar T, Bhattacharyya P, Ayoub NM, Morris D, Siyam N, Sandhu R, Gerona A, Williams S, **Oton L**, Goy A, Pecora A, K. Suh S. Biomarkers and therapeutic approaches for diffuse large B-cell lymphoma in the era of precision medicine. Submitted.

Inamdar AA, Remache YK, **Oton L** et al. Serum based diagnostic biomarkers for Mantle cell Lymphoma. Submitted.

Inamdar AA, Remache YK, Gerona A, **Oton L** et al. Serum based prognostic biomarkers for Mantle cell Lymphoma. Submitted.

Il sottoscritto acconsente, ai sensi del D.Lgs. 30/06/2003 n.196, al trattamento dei propri dati personali

Il sottoscritto acconsente alla pubblicazione del presente curriculum vitae sul sito dell'Università di Ferrara