

Curriculum Vitae

Education

1. **Master's Degree Course in Pharmaceutical Biotechnology**

School of Pharmacy, Biotechnology and Sport Science; University of Bologna, Italy

Experimental dissertation entitled "Improving gene edition tools for Wiskott-Aldrich Syndrome gene therapy", defended on 22/10/2015

2. **Bachelor's Degree Course in Biotechnology**

Faculty of Mathematical, Physical and Natural Sciences; University of Perugia, Italy

Dissertation entitled "Terapia genica: Stato dell'Arte", defended on 22/05/2012

Others education

1. **Certificate of attendance – Use of Animals for Scientific and Educational Purposes – Level 1**

University of Bologna

Held on 28/01 and 4-5-11/02/2020

2. **Second Level Master – Pharmaceutical Technologies and Regulatory Activities**

University of Torino – in collaboration with Consorzio TEFARCO Innova, Associazione farmaceutici dell'industria (AFI)

09/02/2018 – 09/05/2019

3. **Certificate of attendance – Scientific Area Security (Code ID: 101974.3)**

San Raffaele Hospital - reference sector ATECO 86.10.3

Held on 13/07/2016

4. **Certificate of attendance – Training Course On Animal Testing**

San Raffaele Hospital

Held on 28/11/2016, 01/12/2016 and 02/12/2016

5. **Summer School in Chemical and Genomics-based Strategies in the Discovery of Novel Drug Targets**

Department of Pharmacy and Biotechnology

24/06/2013 – 28/06/2013

Research experiences

• **University of Bologna – Department of Biomedical and Neuromotor Sciences (DIBINEM)**

Internship: 02/2018 – ongoing

Study and in-depth research on the topic of CDKL5 deficiency disorder.

- **IRCCS San Raffaele Scientific Institute – Diabetes Research Institute (DRI)**
 Research Fellow: 05/2016 – 31/07/2017
 Regulation of Adaptive Immunology Unit - Technical assistance for the analysis of lymphocytic cells in the blood and tissues of patients with diabetes and murine models – Project: “Role and therapeutic targeting of follicular helper T cells in T1 Diabetes”
- **Pfizer-University of Granada-Junta de Andalucía Centre for Genomics and Oncological Research (GENYO)**
 04/2014 – 12/2014
 Area of genomic medicine – Gene and Cell Therapy
 Master thesis project funded by “Erasmus Placement” program of the Faculty of Pharmacy of the University of Bologna – Project: “Improving gene editing tools for Wiskott-Aldrich Syndrome gene therapy”
- **Internship at University of Perugia**
 07/2008
 Experimental medicine and biochemical sciences Department – Sec. Pharmacology
 Project: “Screening test of plasmacytoid cells derived from human peripheral blood stimulated with IFN- γ : evaluation of the expression of the enzyme IDO”

Congresses

- **XX Scientific Convention Telethon Foundation**
 Riva del Garda, 28-30/10/2019
- **18th NATIONAL CONGRESS OF THE ITALIAN SOCIETY FOR NEUROSCIENCE (SINS)**
 Poster: Pharmacological targeting of the serotonergic system as a promising therapeutic approach for CDKL5 deficiency disorder (CDD)
 Perugia, September 26-29, 2019 <https://www.sinsmeeting.com/>
- **1st International Conference on Neuroprotection by Drugs, Nutraceuticals and Physical Activity**
 Poster: Loss of CDKL5 enhances microglia activation: are neuro-inflammatory mechanisms implicated in the pathophysiology of CDKL5 deficiency disorder?
 Rimini Campus, Università di Bologna, June 6-7, 2019
- **OSR Retreat**
 Poster: Protein tyrosine phosphatase PTPN22 controls T cell immune responses and drives viral persistence
 Grand Hotel Dino, Baveno, March 10-12, 2017
- **DITID Scientific Retreat**
 Speaker: Protein tyrosine phosphatase PTPN22 controls T cell immune responses and drives viral persistence

Ospedale San Raffaele, Milano, January 16-17, 2017

- **Viral Immunity Workshop**

Poster: Protein tyrosine phosphatase PTPN22 controls T cell immune responses and drives viral persistence

Centro Congressi San Raffaele, Milano, October 20-21, 2016

- **Improving gene edition tools for Wiskott-Aldrich Syndrome gene therapy**

Poster (co-author)

European Society of Gene and Cell Therapy, Sept. 2015 Helsinki, Finland

ESGCT and FSGT Collaborative Congress

- **Development of a cellular reporter for WAS gene editing**

Poster (co-author)

EMBO, Apr. 2015 Evry, France

Modern DNA concepts and tools for safe gene transfer and modification

- **Improving gene edition tools for Wiskott-Aldrich Syndrome gene therapy**

Poster (co-author)

European Society of Gene and Cell Therapy, Oct. 2014 The Hague, Holland

ESGCT and NVGCT Collaborative Congress

Technical skills

- **Mastery of laboratory techniques acquired during the period at University of Bologna – Department of Biomedical and Neuromotor Sciences (DIBINEM):** mice behavioral test (i.e. Morris water maze, Open field, Passive avoidance, Buried food test, Nesting, Marble burying, Rotarod performance test, Fear conditioning test). Histological and Immunohistochemistry analysis. Stereotaxic surgery mouse system.
- **Mastery of laboratory techniques acquired during the period at IRCCS San Raffaele Scientific Institute – Diabetes Research Institute (DRI):** immunostaining techniques (i.e. ELISA, flow cytometry), animal models manipulations.
- **Mastery of laboratory techniques acquired during the internship at GENYO:** cell culture, molecular biology techniques, stem cells gene manipulation, lentiviral vector production, eukaryotic cell transfection and transduction, nucleofection, DNA extraction and quantification, PCR, gene therapy, design of gRNA for human genome engineering via Cas9, gene editing through CRISPR/Cas9 system and ZFNs nucleases, flow cytometry.
- **Mastery of laboratory techniques acquired during the internship in the Dept. of Experimental Medicine and Biochemical Sciences, Sec. Pharmacology, of the University of Perugia:** Western blot, Elisa.

- **Mastery of laboratory techniques acquired in didactical laboratories during BSc and MSc:** nucleic acids and proteins extraction and quantification, PCR, gene reporter assays, dual luciferase system, immunohistochemistry techniques, ChIP, transfection through viral vectors, baculovirus system, protein expression, prokaryotic and eukaryotic cell cultures.

Language skills

English level: B2

Spanish level: B1.2

Personal skills

I consider myself a dynamic, proactive, and helpful person able to work both independently and in groups. I'm responsible and accurate in carrying out the tasks entrusted to me and I learn quickly and enthusiastically.

Communication skills

Great spin on interpersonal relationships.

Organisational / managerial skills

Good predisposition to teamwork and good organizational skills acquired over the years during work experiences.

Digital competence

Notions of bioinformatics and knowledge of protein and genomics database: skills acquired during my course of study. Good knowledge of Office packages (Word, Excel, Power Point). Good knowledge of FlowJo software, Graph-pad PRISM, ImageJ and Image-Pro Plus. EthoVision XT software (Noldus).

Reference contacts

1 – **Francisco Martin Molina** (Principal Investigator)

GENYO. Pfizer - Universidad de Granada - Junta de Andalucía Centre for Genomics and Oncological Research.

Genomic Medicine Department - Gene & Cell Therapy Group

Email: francisco.martin@genyo.es

2 – **Georgia Fousteri** (Group Leader)

IRCCS San Raffaele Institute - Diabetes Research Institute (DRI). Regulation of Adaptive Immunology Unit

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3 – **Elisabetta Ciani** (Associate Professor)

Department of Biomedical and Neuromotor Sciences (DIBINEM)

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