# Carlo Francesco

## Morasso

**Technical skills:** 

Nanomedicine; Surface Plasmon Resonance; Raman Spectroscopy; UV Vis Spectroscopy; Particle sizing and Nanotechnology; Light Scattering; characterization; Zeta potential;

Surface chemistry; Data analysis & modeling; SEM;

Microscopy; Organic chemistry; Gel electrophoresis;

**EDUCATION:** 

Advanced short course – Biobusiness. USI-University of Lugano (June 2010)

Ph.D. Medicinal Chemistry. Faculty of Pharmacy, University of Milan. (December 2008)

M.Sc. Pharmaceutical Chemistry and Technology. (103/110) Faculty of Pharmacy, University of

Milan (September 2005)

## **WORK EXPERIENCE:**

Nov. 17 – current position

<u>SENIOR RESEARCHER</u> at ICS Maugeri SPA – Laboratory of Nanomedicine and molecular imaging. Pavia, Italy. Reference: Prof. Fabio Corsi

I oversee the establishment and daily operations of the new nanomedicine laboratory at ICS Maugeri, leading a team of 6 to 9 young researchers and university students. My research centers on biomarkers, specifically extracellular vesicles in oncology and neurology. Since the inception of this laboratory, I have successfully secured nearly & 800,000 in competitive funding and established international collaborations with prestigious research institutes globally. I particularly emphasize the application of innovative techniques, including Raman spectroscopy and SiMoA technology in biomedical research.

Apr. 11 – October 17

<u>RESEARCHER</u> at Fondazione Don Carlo Gnocchi ONLUS— Laboratory of Nanomedicine and Clinical Biophotonics Milan, Italy. Reference: Dr. Furio Gramatica

I contributed at the setup of the new Laboratory of Nanomedicine (www.labion.eu) of the Don Gnocchi Foundation. The laboratory is focused on the development of new methods for the diagnosis and monitoring of neurodegenerative disease. My main responsibilities are the supervision of younger researchers, grant proposal design and writing, dissemination of results and the coordination of the work with external research groups (in Italy and abroad). Since 2011, I contributed to win more than 1.500.000€ in competitive funds and I have been project coordinator of an European - FP7 EraNet project involving four partners from three different countries (IT-FR-UK).

Sept. 09 – March 11

<u>POST-DOCTORAL RESEARCH ASSISTANT</u> at University College London – London Centre for Nanotechnology; London, UK. Reference: Dr. Rachel McKendry

I worked at the development of a new point of care medical device for the monitoring of multiple HIV infection biomarkers. In addition to being responsible for the surface chemistry necessary in the device I was asked to prepare reports on the advancement and on the problems occurred providing not only the possible technical solutions but also the necessary timeline.

March 09 - Sept 09

<u>TEAM COORDINATOR</u> at City of Lugano – Youth and Events Department; Lugano Switzerland. Reference: Dr. Claudio Chiapparino

As team coordinator I supervised seven young collaborators and I was responsible for the back office activities of the public books/movies/audiobooks rent service (www.agorateca.ch). During this period, apart from the day to day activities, I supervised the updating of the database adding a descriptions of all the items available for public consultation (20.000 records). Besides, I also contribute at the setting up of a second front office in a different venue (Nuovo Studio Foce).

Jan. 09 – Feb. 09

<u>RESEARCH GRANT</u> at USI-University of Lugano - Institute of Communication and Health.; Lugano, Switzerland. Reference: Prof. Peter Shoulz

I designed a research on the abuse of drugs by healthy people and on-line direct-to-consumer advertising. Within this work, I reviewed and organized the scientific literature on the topic and interviewed the relevant public health authorities of Canton Ticino - Switzerland.

Nov 05. - Dec. 08

<u>PHD STUDENT</u> at Università degli Studi di Milano – LITA; Segrate, Italy. Reference: Prof. Tommaso Bellini

I developed a new label free technique for the measure of (bio)molecular interactions based on light scattering. I developed the protocol for the conjugation of different species of biomolecules on the surface of fluoroelastomeric nanoparticles and I synthetized a small library of monomers for the development of functional polymers. I worked on the development of theoretical models for the analysis of the results as well. This project was done in collaboration with *Solvay Solexis*.

## LANGUAGES:

Italian: mother tongue

English: fluent (spoken and written), experience in academic writing as well as in report/project writing

French: basic level of comprehension

## **INFORMATICS SKILLS:**

Excellent knowledge of Microsoft Office (Word, Excel, PowerPoint), Outlook and Internet. Excellent knowledge of OriginLab (data analysis).

## **PROFESSIONAL MEMBERSHIP:**

Member of SPIE International society for optics and photonics.

Founding member of EVIta: Italian Society for the study of Extracellular Vesicles

#### ORCID:

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