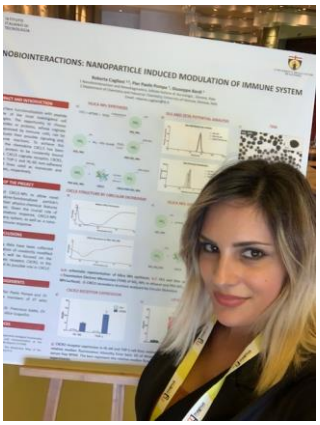
FORMATO EUROPEO PER IL CURRICULUM VITAE



Personal information

First name(s) / Surname(s)	Cagliani Roberta
Address	Botanica tower, Dubai Marina
Telephone	Mobile: +971524586142
E-mail	croberta@sharjah.ac.ae, roberta.3@hotmail.it
Nationality	Italian
Date of birth	23/07/1990 in Como (CO)

Education and training

December 2020

Post-Doc Associate at Research Institute of Medical & Health Sciences, University of Sharjah, United Arab Emirates

April 2020

PhD final exam, Title of the thesis - NANOBIOINTERACTIONS: CHEMOKINE MEDIATED SELECTIVE TARGETING OF NANOPARTICLES

April 2019

Poster presentation 2019, Roberta Cagliani, Pier Paolo Pompa, Giuseppe Bardi. Nanobiointeractions: nanoparticle induced modulation of immune system - World Nanotechnology conference 15-17 April in Dubai**.**

croberta@sharjah.ac.ae
cell.+971524586142

October 2016- October 2019

PhD fellowship in Science and Technology of Chemistry and Materials at Istituto Itaiano di Tecnologia, Genova,Italy.

Aim of my research

Main project

Nanoparticle surface functionalization with peptide moieties is one of the most investigated cell targeting strategies. The opportunity to choose specific polypeptides or proteins, whose cognate receptors are expressed on immune cells can be exploited to evaluate their possible signaling and, eventually, immune reactions.To achieve this challenging goal, the chemokine CXCL5 has been covalently bound onto silica NPs. CXCL5 cognate receptor, CXCR2, is overexpressed in THP-1 and HL-60 non-adherent hematopoietic cell lines used as monocyte and neutrophil cell models, respectively. The development of CXCL5-NPs will allow the characterization and the biological behavior. Moreover, given the crucial role of CXCR2 in the inflammatory response, CXCL5-NPs could be used as delivery system, as well as a nano-tool to modulate the immune response.

Secondary project

Study of the effects of 5 nm citrate-coated platinum NPs on innate immune cells (HL-60 and differentiated HL-60). To evaluate the potential cytotoxicity of PtNPs in both non-adherent HL-60 phenotypes, an AnnV/PI assay was performed by flow cytometry. The results showed that PtNPs do not induce any significant necrotic or apoptotic cell death in both the HL-60 phenotypes.

March-September 2016

Fellowship at the Polyclinic in Naples.

Research activities: study of the role of the ribosomal protein rpL3 in tumors lacking p53 tumor suppressor gene. I performed the transfection of the ribosomal protein L3 in cancer cells (hct 116 -/- w.t. and Calu-6 -/- w.t.). Then I made a treatment with 5-Fluorouracil and performed the Mtt assay to evaluate cell viability. Western blot analysis was performed to evaluate the expression of protein L3, Bax and Bcl-2 after the treatment with 5- FU.

April-October 2015

Internship at "Istituto Italiano di Tecnologia" in Fuorigrotta (NA).

Research activities: Synthesis, characterization and functionalization of polymeric nanoparticles (PLGA-PEG) with the peptides gH625 (gH) and the CRTIGPSVC (CRT) that simulates iron for transport through the blood-brain barrier (BBB) to target selectively the brain endothelium.

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July 2014

Master's Degree in Pharmaceutical Chemistry and Technology awarded on July 28, 2014 at Pharmacy Department of the University Federico II in Naples
Final mark 110/110 magna cum laude. Title of the thesis: " Synthesis and characterization of new cholecalciferol's prodrugs "

Research activities: synthesis and characterization of new cholecalciferol pro-vitamins against melanoma. Vitamin D3 was modified with different amino acids. These pro-vitamins had the ability to be converted back to cholecalciferol by esterase in the skin. The new derivatives were synthesized using L-proline, L-tyrosine, L-serine, L-asparagine as hydrophilic units to favor the penetration in the skin.

July 2009

(High school leaving certificate) in Science & Maths, English and French, at Salvatore di Giacomo High School in San Sebastiano al Vesuvio (NA)
Final mark 96/100.

Publications

December 2019

Roberta Cagliani, Francesca Gatto , Giulia Cibecchini, Roberto Marotta, Federico Catalano, Paola Sanchez-Moreno, Pier Paolo Pompa and Giuseppe Bardi, **CXCL5 modified nanoparticle surface improves CXCR2+ cell selective internalization,** Cells- submitted.

June 2019

Roberta Cagliani , Francesca Gatto,Giuseppe Bardi : **Protein adsorption: a feasible method for nanoparticle functionalization?** Materials (Basel). 2019 Jun 21 ;12(12). pii: E1991. doi: 10.3390/ma12121991.

July 2018

Falanga AP, Melone P, Cagliani R, Borbone N, D'Errico S, Piccialli G, Netti PA, Guarnieri D**:Design, Synthesis and Characterization of Novel Co-Polymers Decorated with Peptides for the Selective Nanoparticle Transport across the Cerebral Endothelium**, Molecules. 2018 Jul 6;23(7). pii:E1655.doi: 10.3390/molecules23071655

October 2017

Gatto F,Cagliani R, Catelani T, Guarnieri D, Moglianetti M, Pompa PP, Bardi G:**PMA-induced THP-1 macrophage differentiation is not impaired by citrate-coated platinum nanoparticles**, Nanomaterials.2017 Oct 17;7(10). pii: E332. doi: 10.3390/nano7100332

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December 2016

Russo A, Saide A, Cagliani R, Cantile M, Botti G, Russo G: **rpL3 promotes the apoptosis of p53 mutated lung cancer cells by down-regulating CBS and NFκB upon 5-FU treatment,** Sci Rep. 2016 Dec 7;6:38369. doi: 10.1038/srep38369.

Personal skills and competences

Native language ITALIAN

Other languages

	Understanding		Speaking		Writing	listening
Self-assessment European level (*)	Reading		Spoken interaction		Spoken production	
English	fluent		fluent		fluent	fluent
French	fluent		fluent		fluent	fluent

DELF B1 certificate

Social skills and competences

Equipments used : HPLC analytical and preparative, automatic synthesizer for peptide synthesis, freeze dryer, LC-mass, optical microscope, confocal microscope, scanning and transmission electron microscope, Dynamic light scattering, spectrophotometer, spectrofluorimeter, spectropolarimeter for Circular Dichroism analysis.

- Summer school on Smart materials for drug delivery 10-15 June 2018, Anacapri (Italy).
- Six-month internship at Farmacia Comunale in Cercola (NA)
- Visit at the pharmaceutical company Guacci Spa located in Nola (NA) on 26-05-2014
- Participation at the international meeting "Cosmofarma Exhibition" in Bologna on 9-10-11 May 2014.
- During my training as a master's degree student I worked in the university lab on the formulation and research in the fields of Chemistry of Cosmetics and Pharmaceutical Chemistry.

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Computer skills and competences

Cerificate ECDL (European Computer Driving Licence) awarded on 31/03/2010

Software: Windows : very well
Software: Microsoft Word e Power Point: very well
Software: Microsoft Excell : very well
Chem Draw Ultra : very well

License

Driving license: category B

Additional information

Availability to transfer to other regions and abroad for short and long periods. Good ability to relate to others and team working.

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