Curriculum Vitae



Personal information

First name(s) / Surname(s) Maria Rosaria Pricolo

> Address(es) Via Nazionale 95 - 84018 Scafati (SA)

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mariarosaria.pricolo@unina.it / mariarosaria.pricolo@gmail.com E-mail

Nationality Italian

Date of birth 29/01/1987

> Gender Female

Professional experience

September 2017-to date Date

Occupation or position held Long-term stay for PhD Project

Main activities and responsibilities -Thermal and Mechanical stability of the domain C4 of Myosin Binding Protein C (cMyBPC)

-Pathogenic mechanism of unknown mutations localized in cMyBPC which cause Hypertrophic

Cardiomyopathy

Molecular biology, single-molecule mechanobiochemistry, Inherited cardiomyopathies Type of activity or sector

Name of the employer Department of Molecular Mechanics of the Cardiovascular System - under the supervision of Asst Prof

J. Alegre Cebollada

Fundación CNIC, Madrid-Spain

Date November 2016-May 2017

Occupation or position held Erasmus+ Traineeship: Cardiovascular Research Experience

Main activities and responsibilities -Pathogenic mechanism in Hypertrophic Cardiomyopathy caused by mutations in MYBPC3

-Molecular biology and cloning procedure to produce AFM-ready polyproteins

-Optimization of minigene assays, nonsense mediated RNA decay

Type of activity or sector Molecular biology, single-molecule mechanobiochemistry, Inherited cardiomyopathies

Name of the employer Department of Molecular Mechanics of the Cardiovascular System - under the supervision of Asst Prof

J. Alegre Cebollada

Fundación CNIC, Madrid-Spain

Date 2015 to date

Occupation or position held 3st year of the PhD Program in Molecular Medicine and Medical Biotechnology (XXXI cycle)

Main activities and responsibilities -Study of the pathogenetic basis of Hypertrophic Cardiomyopathy

-Functional analysis of unknown mutations localized in non-coding regions by building minigene or

direct analysis of mRNA, in order to evaluate the splicing alterations

Type of activity or sector Molecular biology, Molecular Genetics, Inherited cardiomyopathies

Department of Molecular Medicine and Medical Biotechnology - under the supervision of Assoc Prof Name of the employer G. Frisso

University of Naples Federico II, Naples-Italy

Date	2013-2015
Occupation or position held	Postgraduate student in Clinical Biochemistry
Main activities and responsibilities	Search for mutations and/or polymorphisms associated or predisposing to cardiomyopathy using sequence analysis of sarcomeric genes and genes encoding channels voltage employees
Type of activity or sector	Molecular medicine
Name of the employer	Department of Molecular Medicine and Medical Biotechnology University of Naples Federico II, Naples-Italy
Date	2013-2014
Occupation or position held	Learning and vocational training
Main activities and responsibilities	DNA extraction from peripheral blood, PCR amplification of genes implicated in cardiomyopathies an analysis of electropherogram obtained by sequencing
Type of activity or sector	Molecular medicine
Name of the employer	U.O.C. Clinical Molecular Biology of D.A.I. of Laboratory Medicine, the University Hospital Federico I
Date	2009-2012
Occupation or position held	Graduate internship
Main activities and responsibilities	-Study of the antiproliferative effects of carnosine on cells of colorectal carcinoma HCT116; -Role of the DNA-damage-binding protein (DBB1) in the E3 ubiquitin ligase complex; -Study of photoprotective action of natural antioxidants against DNA damage caused by exposure to ultraviolet radiation UVB.
Type of activity or sector	Molecular biology, cancer research, molecular pathways, cellular biochemistry
Name of the employer	Department of Molecular Medicine and Medical Biotechnology University of Naples Federico II, Naples-Italy

Competitive Fellowships	
Date Type of Fellowship Activity Place	2016-2017 Eramus+ Trainsheep Fellowship Department of Molecular Mechanics of the Cardiovascular System Fundaciòn CNIC, Madrid-Spain
Date	2015-in progress
Type of Fellowship	PhD Fellowship from University of Naples Federico II
Activity Place	Department of Molecular Medicine and Medical Biotechnology University of Naples Federico II, Naples-Italy

Education and training

Post-graduate training

Title of qualification awarded
Principal subjects/occupational skills
covered
Name and type of organisation
providing education and training
Level in national or international
classification

Date
2013

Post-graduate Master's Degree in "Biotechnology Applied to Assisted Reproduction"

Karyotype analysis, semen analysis, and artificial insemination.

Seconda Università di Napoli- Faculty of Mathematical, Physical and Natural Sciences
research-based

Date	2012
Title of qualification awarded	Qualification to practice the profession of Biologist
Name and type of organisation providing education and training	The University of Sannio
School graduation	
Date	2012
Title of qualification awarded	Degree in Medical Biotechnology 110/110 Thesis title: "Effect of Carnosine on cell proliferation of colon cancer"
Principal subjects/occupational skills covered	Molecular and cellular biology, biochemistry, genetics, organic and inorganic chemistry, molecular oncology, gene therapy.
Name and type of organisation providing education and training	The University of Naples Federico II- Faculty of Biotechnological Science
Level in national or international classification	Masterly Degree-2nd cycle degree
Dates	2010
Title of qualification awarded	University Degree in Biotechnological Science 99/110
	Thesis title: "The effects of ultraviolet radiation and cisplatin on DNA"
Principal subjects/occupational skills covered	Molecular and cellular biology, biochemistry, genetics, organic and inorganic chemistry, molecular oncology.
Name and type of organisation providing education and training	The University of Naples Federico II- Faculty of Biotechnological Science
Level in national or international classification	1nd cycle degree
Pre-university studies	
Title of qualification awarded	Secondary school focusing on humanities at G. B. Vico in Nocera Inferiore (SA)
Level in national or international classification	Secondary School
Personal skills and	
competences	
Native language	Italian
Other language(s) European level* (*)Self-assessment	English C1
Other language(s) European level* (*)Self-assessment	Spanish C1
Social skills and competences	Team player, Determination, Passion, High interpersonal skills.
Organisational skills and competences	Ability to plan the laboratory works Ability to problem solving

Acquired biochemistry-related skills: Technical skills and competences · Circular Dichroism method • Expression of recombinant protein • Protein purification (Affinity Chromatography) Acquired cellular and molecular biology skills: • Construction and minigenes analysis to evaluate the splicing alterations; • Purification and nucleic acids analysis (DNA and RNA); • PCR, Real Time PCR and semi-quantitative PCR; • cDNA production, oligo design, cloning, mutagenesis, minipreps, digestions, ligations, DNA sequencing; Analysis of protein products (western blot): • Cell cultures: • Assays of cell viability (Trypan Blue, MTT assay, assay ATP); Identification of DNA damage (COMET ASSAY); • Immunoprecipitation assays. Acquired reproduction skills: Basic skills in citogenetic (coltured amniocytes, chromosome banding); • Semen Analysis: • Morphological and functional investigations of sperm. Use of laboratory equipment: microscope (electronic and fluorescence microscopy), instruments for the acquisition of biological imaging (Gel Doc), centrifuges, electrophoresis equipment, spectrophotometers (NanoDrop), micromanipulator. Bioinformatics Toolbox: CodonCode Aligner, Alamut, Human Splicing Finder (HSP), ESE Finder, Computer skills and competences Primer3. **Operative systems**: Windows and Macintosh; Microsoft Office: Word, Excel, PowerPoint, Outlook; Software database: PubMed, UCSC Genome Browser, Gene sources, Protein database Other program: Comet Assay program to analyse the comets Driving license class B Driving licence **Annexes** Scientific paper Frisso G. Detta N. Coppola P. Mazzaccara C. Pricolo MR. D'Onofrio A. Limongelli G. Calabrò R. Salvatore F Functional Studies and In Silico Analyses to Evaluate Non-Coding Variants in Inherited Cardiomyopathies Int J Mol Sci. 2016 Nov 10;17(11) Iovine B, Iannella ML, Nocella F, Pricolo MR, Bevilacqua MA Carnosine inhibits KRAS-mediated HCT116 proliferation by affecting ATP and ROS production Cancer Lett. 2012 Feb 28;315(2):122-8

Conferences/Presentations

- MR Pricolo, N. Detta, C. Mazzaccara, P. Coppola, M. Messere, F. Salvatore, G. Frisso
 Functional Studies and in Silico Analyses to Evaluate Non-coding Variants in Inherited Cardiomyopathies
 19th National Meeating of the Società Italiana di Genetica Umana (SIGU), Torino, Italy 23-26
 November 2016
- 2) Maria Rosaria Pricolo, N. Detta, P.Coppola, A.Nolano, F.Salvatore, G.Frisso. Altered pre-mRNA splicing caused by novel intronic mutations in sarcomeric genes National Ph.D. Meeting. Salerno, Italy, April 7-9 2016. Abstract P.85
- 3) Nicola Detta, Cristina Liguori, Pamela Coppola, Maria Rosaria Pricolo, Francesco Salvatore, Giulia Frisso. Interpretation of non-coding variants in inherited cardiomyopathies associated to sudden death 58th National Meeating of the Italian Society of Biochemistry and Molecular Biology (SIB). Urbino 14-16 september 2015.
- 4) Iovine B., Nocella F., Garofalo M., Pricolo M.R., Orefice M., Bevilacqua M.A L-Camosine inhibits KRAS-mediated HCT116 proliferation, by affecting ROS production and Hypoxia inducible factor (HIF-1α) expression 56th National Meeating of the Italian Society of Biochemistry and Molecular Biology (SIB).
- 5) Barbara Iovine, <u>Maria Rosaria Pric</u>olo, Maria Luigia lannella, Maria Assunta Bevilacqua, Rossella Di Giaimo. DDB1 (DNA damage- binding protein 1) as a new partner of Cystatin B (CSTB). 36th FEBS Congress. Torino, Italy, June 25-30, 2011. Abstract P14-51 pp 272
- 6) Barbara Iovine, Maria Luigia Iannella, Maria Rosaria Pricolo, Francesca Nocella, Vincenzo Schettini, Maria Assunta Bevilacqua. Effetto della Carnosina su cellule di carcinoma colon-rettale (HCT) Giomate scientifiche del Polo delle Scienze e delle Tecnologie per la Vita Facoltà di Medicina e Chirurgia. Università Federico II. Napoli. 24-26 novembre 2010. Abstract 059
- 7) Barbara Iovine, Maria Luigia Iannella, Vincenzo Schettini, Maria Rosaria Pricolo, Francesca Nocella, Maria Assunta Bevilacqua.

Carnosine inhibits melanoma cells proliferation.

Chieti 26-29 september 2012. Abstract 48

55th National Meeating of the Italian Society of Biochemistry and Molecular Biology (SIB). Milano 14-17 settembre 2010. Abstract 38

Certificate of attendance

SUMMER SCHOOL TRANSKILLS-Competenze strategiche per i giovani ricercatori

Universita' Cattolica del Sacro Cuore Como. 4-7/07/2017

Alpha Technology Training

Fisciano, 13/05/2016

Bio-Rad seminar:

"La nuova frontiera della PCR quantitativa QX200TM droplet digital PCR" Naples, 15/10/2014

Bio-Rad seminar:

"Gene-Expression analysis; from the beginnings to the state of the art. The relevance of reference genes, RNA quality and the importance of MIQE guidelines" e "HRM the Bio-Rad way. New opportunity for genomic screening and mutation analysis with real-time PCR Instruments".

Naples, 25/05/2010

NETCAMPUS 2013 event:

Technical conference on the Microsoft world news organized by DevLeap group, in collaboration with Microsoft Student Partners and the most active community.

Rom, 13-04-2013

Date 14.12.2017

In Fede Maria Rosaria Pricolo