PERSONAL INFORMATION

Anna Barbara Mancuso

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✉ Annabarbara.mancuso@uniroma1.it

Sex F | Date of birth 00/00/0000 | Nationality Italian

POSITION HELD

PhD student in: Biomedical Techniques in Clinical Medicine

WORK EXPERIENCE

From 1/11/2016 to today

I – II – III years of PhD student with grant at the University of Rome 'La Sapienza'

Department of Pediatrics, avenue Regina Elena, 324 - 00161 Rome.

Research activity carry out at the Research Center ENEA Casaccia, unit SSPT-TECS-TEB, avenue Anguillarese, 301 - 00123 Rome.

Tutor: MD PhD. Salvatore Cucchiara and Dr. Laura Stronati

Title of the research project "New diagnostic and therapeutic strategies for the identification and treatment of inflammatory diseases"

Skills:

- manipulation of mouse models of intestinal inflammation;
- manipulation of transgenic mouse models;
- analysis of gene expression levels (Real Time PCR) and protein expression levels (Western Blotting, ELISA, Immunofluorescence) on samples of murine and human origin (tissues, serum and stools);
- manipulation of cell and medical bioptic samples cultures.

From 1/09/2018 to 12/04/2019

PhD Internship at Katholieke Universiteit Leuven (KU Leuven) (BE)

Department of Chronic Disease, Metabolism and Ageing, Harestraat 49, O&N1, 3000 Leuven, Belgium.

Tutor: MD PhD. Séverine Vermeire and MD PhD. Marc Ferrante

Title of the research project "New diagnostic and therapeutic strategies for the identification and treatment of inflammatory diseases"

Skills:

- 3D cultures: HUMAN INTESTINAL ORGANOID (primary cultures from patients)
- From 3D cultures to 2D
- Treatment of organoids and analysis of gene expression levels (Real Time PCR) and protein expression levels (Western Blotting)
- Functional test on 2D primary cultures (Trans-Epithilial-Electical-Resistence TEER)

From September 2014 to September 2016

Research intership at the University of Rome 'La Sapienza'

Department of Molecular Medicine, avenue Regina Elena, 391 - 00161 Rome.

Tutor: MD PhD Gianluca Canettieri

Title of the research project "Epigenetic therapy of Medulloblastoma Shh by selective targeting of HDAC1 and HDAC2 in preclinical models"

Skills:

- analysis of gene expression levels (Real Time PCR) and protein expression levels (Western Blotting, Immunofluorescence) on samples of murine and human origin (tissues);
- manipulation of cell cultures and primary cultures (cerebellum) of murine samples;
- immunohistochemistry, cell proliferation assays;
- site-specific gene mutation and transformation techniques with bacterial cell plasmids and bacterial cloning techniques.

EDUCATION AND TRAINING

July 2016

Master's Degree in Medical Biotechnologies

Faculty of Medicine and surgery, 'La Sapienza' Rome.

Thesis subject: "Epigenetic therapy of Medulloblastoma Shh by selective targeting of HDAC1 and HDAC2 in preclinical models"

Vote 106/110

December 2012

Three-years degree in Biotechology

Faculty of Medicine and surgery, University of Catanzaro 'Magna Græcia', Catanzaro, Italy.

Tutor: MD PhD Francesco Baudi

Thesis subject: " Application of multiplex ligation-dependent probe amplification (MLPA) for the identification of rearrangements in BRCA1 / 2 genes in Calabrian patients familiar with breast and ovarian cancer."

Vote 106/110

Skills:

- analysis of gene expression levels (PCR)
- MLPA assay
- Sanger sequencing and electropherogram analysis

PERSONAL SKILLS

Mother tongue(s)   Italian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

English row: B2 B2 B2 B2 B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Communication skills
- Good communication and interpersonal acquired during my internship laboratory at the university in multicultural environments;
- ability to work alone in an independent way or in a team;
- good command in the exposure of my research activity in a clear and precise way through Power Point presentations during meetings with colleagues and collaborators.

Organisational / managerial skills	▪ Excellent ability to organize individual and team work, by defining priorities and assuming responsibilities to achieve the objectives set; ▪ Good predisposition to solve unexpected problems and acquired discrete ability to work under stress; ▪ Complete management of the laboratory routine (good laboratory practice, relationship and contact with suppliers, offers and completion of orders and maintenance of the instruments); ▪ Training of degree students.
Job-related skills	Theoretical and practical knowledge of laboratory techniques in the biochemical and molecular and cellular biology fields: ▪ Manipulation, treatment (with drugs, for proliferation assays) and genetic modification of prokaryotic (transformation), eukaryotic (transfection) and tissue (siRNA) cell cultures; ▪ Molecular hybridization techniques: Western Blotting and ELISA; ▪ DNA and RNA extraction techniques, PCR, RT-PCR, RealTime PCR, cloning techniques and production of recombinant proteins; ▪ Immunohistochemistry and Immunofluorescence on fixed cells or tissues; ▪ Functional Test: Trans-Epithilial-Electical-Resistence (TEER); ▪ Study of post-translational modifications using Chromatin immuno precipitation (Chip) and protein immunoprecipitation; ▪ Experience with laboratory animals; ▪ Primary cultures cells from cerebellum of mouse model; ▪ 3D organoids from human intestinal sample (manipulation and treatment); ▪ From 3D to 2D primary cultures cell (manipulation and treatment).

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Independent user	Basic user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

Other computer skills.
▪ good command of office suite (word processor, spread sheet, presentation software)
▪ good command of digital image processing programs (GraphPad, PhotoShop, SigmaPlot);
▪ good knowledge of HTML applications;
▪ good command with statistical data analysis programs (Instat, SigmaStat);
▪ basic competence with bioinformatics software (BLASTA, FASTA, ENSEMBL);

Other Skills   private repetitions to students in the field of scientific subjects such as: biology and chemistry to high school students, biology, genetics, chemistry and biochemistry to university students of health professions and medicine.

Driving licence   B

ADDITIONAL INFORMATION

Publications

Stronati L ,Palone F, Negroni A, Colantoni E, **Mancuso AB**, Cucchiara S, Cesi V, Isoldi S and Vitali R. Dipotassium Glycyrrhizate Improves Intestinal Mucosal Healing by Modulating Extracellular Matrix Remodeling Genes and Restoring Epithelial Barrier Functions. Front Immunol. 2019 Apr 26;10:939.

Pierdomenico M, Palone F, Cesi V, Vitali R , **Mancuso AB**, Cucchiara S, Oliva S , Aloi M and Stronati L. Transcription Factor ZNF281: A Novel Player in Intestinal Inflammation and Fibrosis. Front Immunol. 2018 Dec 11;9:2907

Coni S, **Mancuso AB**, Di Magno L, Sdruscia G, Manni S, Serrao SM, Rotili D, Spiombi E, Bufalieri F, Petroni M, Kusio-Kobialka M, De Smaele E, Ferretti E, Capalbo C, Mai A, Niewiadomski P, Screpanti I, Di Marcotullio L, Canettieri G. Selective targeting of HDAC1/2 elicits anticancer effects through Gli1 acetylation in preclinical models of SHH Medulloblastoma. Sci Rep. 2017 Mar 9;7:44079.

Presentations Projects

9- 12 Luglio 2016   24th Biennel Congress of the Europea Association for Cancer Research (EARC), Manchester, UK

Title: " Selective inhibition of HDAC1 and HDAC2 counteracts Medulloblastoma growth in mouse models throughGli1 acetylation"

Authors: Sonia Coni, **Anna Barbara Mancuso**, Laura Di Magno, Giulia Sdruscia , Simona Manni, Dante Rotili, Antonello Mai, Gianluca Canettieri

FIRMATO
ANNA BARBARA MANCUSO