
Summary

I am a senior postdoc with strong experience in Molecular and Cell Biology, Oncology and Immunology. I worked for 10 years in laboratories on several projects related to different topics and diseases, which lead me to become very versatile and open mind. By developing good critical and technical skills, I achieved suitable endpoints and a good productivity. I contributed to the different projects with new ideas and important support. It has been always crucial for me the reproducibility and the accuracy of the data. I have relevant abilities in setting new protocols and quickly learn new methods. I regularly supervised many students and have been involved in writing papers and projects. I love to work in team and collaborate with my colleagues. Always open to increase my knowledge and share my results, I constantly attended, as participant as well as speaker, to scientific meetings and seminars which was fundamental to develop optimal communication and social skills.

Languages

Italian (native language)

English (proficient user)

Swedish (beginner)

Core Competencies & Skills

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| <ul style="list-style-type: none">▪ Cell cultures (cell lines and primary cells)▪ Isolation of different cell sub-populations from peripheral blood▪ Biochemistry (WB, ELISA, protein purification, Co-IP, luciferase assay)▪ Gene expression (q-PCR, RNAseq)▪ Molecular Biology (most techniques)▪ FACS (BD Canto and Fortessa)▪ <i>In vitro</i> cloning▪ Study of several signalling pathways▪ Sequencing (Sanger method)▪ Transgenics (development and study of pre-clinical mouse models)▪ Gene expression modulation (Retro and Lentiviruses handling, transfection and electroporation method)▪ Epigenetics (ATACseq, ChIP, histone modification analysis)▪ Drug library screening▪ Duo-Link Proximity Ligation Assay▪ ADCC, PCD and CDC assays (cell viability assays)▪ Confocal microscopy and preparation of sections from different tissues and organs | <ul style="list-style-type: none">▪ Desktop publishing (Microsoft Office)▪ Graphics (ImageJ)▪ DiVa software and FlowJo▪ Statistics (Prism)▪ Projects/reports/articles writing▪ Presentation skills▪ Lab-book and protocol updating▪ Multitasking, dynamic and smart worker▪ Team and alone working▪ Organization and communication skills▪ Open mind person with great curiosity and patient character▪ problem solving capacity |
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Work Experiences15.04.2019
ongoing**Senior Post-doc with research assignment****University of Perugia, Department of Medicine, Perugia, Italy**

- Addressing the role of DNMT3a and NPM1 cooperation in acute myeloid leukemia onset and relapse *in vitro* and *in vivo*.
- Investigating NPM1 involvement in the epigenetic signature of AML and its interaction- with different epigenetic modifiers.

14.03.2018 to
09.10.2018**Research Assistant****Lund University, Department of Hematology, Lund, Sweden**

- Addressing the role of histone acetyltransferases CREBBP and EP300 in the treatment of DLBCL
Main techniques: - Isolation of hematopoietic cells and PBMC. - Complement dependent cytotoxicity (CDC), Antibody-dependent cytotoxicity (ADCC), Programmed cell death (PCD) assays with anti-CD20 mABs (FACS-based methods) .
- Study of CD20 regulation by histone acetyltransferases CREBBP and EP300 in Diffuse Large B-cell Lymphoma (DLBCL) and Follicular Lymphoma (FL).
Main Techniques:- isolation of hematopoietic cells, - PBMC, - ChIP, -molecular techniques.
- Study of chromatin remodelling induced by CREBBP and EP300 deficiency on DLBCL cell line model (basics of ATACseq and study of histone modifications).

- 14.03.2017 to
14.03.2018
- Senior Post-doc in Oncology and Immunology**
Karolinska Institute, Stockholm in collaboration with Lund University, Department of Hematology, Lund, Sweden
- Study of CD20 regulation by histone acetyltransferases CREBBP and EP300 in Diffuse Large B-cell Lymphoma (DLBCL) and Follicular Lymphoma (FL).
Main Techniques: - FACS- Real time, - WB to assess CD20 levels and study other proteins of interest in the established cell line model – ChIP of different transcriptional factors to assess the binding to the CD20 promoter. - Screening of cancer and epigenetic drug library on CREBBP/EP300-down modulated cell lines.
- 14.03.2015 to
13.03.2017
- Post-doctoral position in Oncology and Immunology**
Lund University, Department of Hematology, Lund, Sweden
- Studying the mechanisms of action of Valproate (HDACi) in chronic lymphocytic leukaemia. Follow up of one clinical trial including chronic lymphocytic leukaemia patients treated with Valproate.
Main techniques: - Isolation and culture of primary B-CLL and PBMC from human blood, - Treatment of B-CLL with several histone modifiers drugs *in vitro* and *ex vivo* and subsequent analysis of histones modifications: ChIP with anti-acetyl H3K9, anti-acetyl H4K8, anti-methyl H3K27, anti-EZH2 to analyse the CD20 promoter status.- FACS, Real time and WB to analyse CD20 levels as well as other mRNA/proteins of interest.
 - Supervised students and PhD for laboratory activities and writing, helping them to develop critical abilities and analytical skills.
 - Presented ongoing projects to conferences, attended and presented seminars to Departmental meetings, published papers.
- 07.2010 to
21.10.2014
- PhD in Molecular Oncology and experimental Immunology**
University "Magna Graecia", Catanzaro (CZ) and University of Naples "Federico II", 2nd Polyclinic, Molecular Medicine Department, Naples, Italy
- Main projects:
 - Study of HIV-1 Tat mediated dysregulation of the immune system in HIV-1 Tat transgenic mice.
Briefly: - Isolation of thymus, spleen, bone marrows, lymph nodes, main organs and peripheral blood from mice. -FACS analysis of T-lymphocytes sub-populations. – Immunofluorescence. – Immunohistochemistry. Hematoxylin/eosin staining of thymus and spleen. - Study of the inflammation status of Tat-tg mice through analysis of cytokines levels (RT-PCR, WB, expression panels) and NF-κB pathways. – LPS response. – Transcriptomic analysis of thymus tissue and gene expression analysis on main organs.
 - Functional analysis of IBTK (Inhibitor of Bruton's Tyrosine kinase) protein and characterization of IBTK knockout mice.
Main techniques: shRNA lentiviral production and infection of mammalian cells. - IBTK retroviral cloning and overexpression. - Study of metabolic signalling pathways in shIBTK knockdown cells (K562, U937, HeLa) and IBTK-KO murine tissues (white fat, brown fat, muscles, heart, liver). - Mouse model genotyping. - Gene expression profiling of shIBTK knockdown cells. – Contribution to the development of an anti-IBTK antibody from mouse ascites, - ELISA.
 - Study of the Tat /NF-κB crosstalk.
Main techniques: Expression and purification of recombinant GST-Tat protein. – GST pull down. - Immunoprecipitation and Co-Immunoprecipitation of Tat and NF-κB (p65) proteins. - Study of the NF-κB pathway (cytoplasm/nuclei fractionation and WB of the different NF-κB proteins).
 - Study of the regulation of the Eukaryotic Initiation Factor 4H (EIF4H).
 - Writing and presenting reports and articles
 - Supervised several students in their laboratory activities, writing thesis and preparing final presentation/dissertation.
- 03.2009 to
09.2009
- Internship with productivity bonus**
Telethon Institute of Genetics and Medicine (TIGEM), Laboratory of General Pathology, Naples, Italy
- Contribution to the project. "LGMD2F and delta-sarcoglycan delivery in BIO14.6 hamsters. Study of molecular, biochemical and morphological effects of the treatment with Deflazacort in BIO14.6 (spontaneous for LGMD2F) hamsters injected with AAV/delta-sarcoglycan gene.
Main techniques: - Collection and cryopreservation or PFA fixation of different organs (ex: heart, quadriceps, gastrocnemius, tongue). – Hematoxylin/eosin staining. – Immunohistochemistry and immunofluorescence of cryopreserved tissue sections – protein and RNA extraction from different organs.

10.2007 to 02.2009	Internships (training) University of Naples "Federico II", 2nd Polyclinic, Molecular Medicine Department, Naples, Italy Study of the role of C-terminal Valine motif in the transport of proteins from endoplasmic reticulum to plasmamembrane. Role of the Valine motif in the localization of Frizzled4 receptor in plasmamembrane and the development of Familial exudative vitreoretinopathy. Main techniques: cloning of Fzd4 in plasmid. - Transfection of Fzd4 –GFP in mammalian cells lines (HepG2, HEK293) – Immunofluorescence and analysis of the RER/Golgi to plasmamembrane transport. – Western blot.
05.2005 to 03.2006	Second University of Naples, 1st Polyclinic, Laboratory of Neuroanatomy, Naples, Italy Study of Spinocerebellar Ataxia type 1 (SCA1) in transgenic mouse model: analysis of the behavioural phenotype and its connection with the very early morpho-molecular changes in the cortex. Main techniques: - Preparation of cortical, hippocampal and cerebellar sections – Immunofluorescence - Basics of mouse perfusion and organs fixation <i>in vivo</i>. - Basics of rotarod test.

Education

07.2010 to 21.10.2014	PhD in Molecular Oncology and experimental Immunology University "Magna Graecia", Catanzaro (CZ) and University of Naples "Federico II", 2nd Polyclinic, Molecular Medicine Department, Naples, Italy
09.2006 to 12.2008	M.Sc.: Medical Biotechnology University of Naples "Federico II", 2nd Polyclinic, Naples, Italy Grade: 110summa cum laude
09.2003 to 12.2006	BSc of Science: Biotechnology Second University of Naples (SUN), Caserta, Italy Grade: 110summa cum laude
09.1997 to 07.2002	Humanistic Diploma "Pietro Giannone" High School, Caserta, Italy Grade: 100/100

Other activities

01/09/05- 01/09/06	Social voluntary service at ASL CE-1 (Caserta, Italia)
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Main conferences and courses

15/02/2016	Cytofluorimetry course with BD company experts about basic knowledges of FACS Canto and FACS Fortessa
16-20/04/2016	American Association for Cancer Research (AACR) Annual Meeting 2016 in New Orleans, Louisiana. Topic: "Delivering cures through Cancer Science". Poster presentation with the title: "Overcoming the resistance to the anti CD20 treatments in chronic lymphocytic leukaemia". Number: 4471
23-26/09/2013	55 th Annual Meeting of "Società Italiana di Cancerologia" (SIC) in Catanzaro, Italy. Theme: "Understanding onc-OMICS for patient-tailored cancer therapy".

Publications

- 1) Bcor deficiency perturbs erythro-megakaryopoiesis and cooperates with Dnmt3a loss in acute erythroid leukemia onset in mice

Sportoletti P, Sorcini D, Guzman AG, Reyes JM, Stella A, Marra A, Sartori S, Brunetti L, Rossi R, Papa BD, Adamo FM, Pianigiani G, Betti C, Scialdone A, Guarente V, Spinozzi G, Tini V, Martelli MP, Goodell MA, Falini B. *Leukemia*. 2020 Nov 6.

2) Depletion of the transcriptional coactivators CREB-binding protein or EP300 downregulates CD20 in diffuse large B-cell lymphoma cells and impairs the cytotoxic effects of anti-CD20 antibodies

Scialdone A, Khazaei S, Hasni MS, Lennartsson A, Gullberg U, Drott K. *Exp Hematol*. 2019 Nov

3) The HDAC inhibitor valproate induces a bivalent status of the CD20 promoter in CLL patients suggesting distinct epigenetic regulation of CD20 expression in CLL in vivo.

Scialdone A, Hasni MS, Damm JK, Lennartsson A, Gullberg U, Drott K; *Oncotarget*. 2017 Jun 6.

4) IBTK Differently Modulates Gene Expression and RNA Splicing in HeLa and K562 Cells.

Fiume G, Scialdone A, Rizzo F, De Filippo MR, Laudanna C, Albano F, Golino G, Vecchio E, Pontoriero M, Mimmi S, Ceglia S, Pisano A, Iaccino E, Palmieri C, Paduano S, Viglietto G, Weisz A, Scala G, Quinto I; *Int J Mol Sci*. 2016 Nov 7.

5) Impairment of T cell development and acute inflammatory response in HIV-1 Tat transgenic mice.

Fiume G, Scialdone A, Albano F, Rossi A, Tuccillo FM, Rea D, Palmieri C, Caiazza E, Cicala C, Bellecine C, Falcone C, Vecchio E, Pisano A, Ceglia S, Mimmi S, Iaccino E, de Laurentiis A, Pontoriero M, Agosti V, Troncone G, Mignogna C, Palma G, Arra C, Mallardo M, Buonaguro FM, Scala G, Quinto I; *Sci Rep*. 2015 Sep 7.

6) CRL3IBTK Regulates the Tumor Suppressor Pcd4 through Ubiquitylation Coupled to Proteasomal Degradation.

Pisano A, Ceglia S, Palmieri C, Vecchio E, Fiume G, de Laurentiis A, Mimmi S, Falcone C, Iaccino E, Scialdone A, Pontoriero M, Masci FF, Valea R, Krishnan S, Gaspari M, Cuda G, Scala G, Quinto I; *J Biol Chem*. 2015 May.

7) Eukaryotic Initiation Factor 4H Is under Transcriptional Control of p65/NF- κ B.

Fiume G, Rossi A, de Laurentiis A, Falcone C, Pisano A, Vecchio E, Pontoriero M, Scala I, Scialdone A, Masci FF, Mimmi S, Palmieri C, Scala G, Quinto I; *PLoS One*. 2013 Jun 11.

8) Design and Characterization of a Peptide Mimotope of the HIV-1 gp120 Bridging Sheet.

Schiavone M, Fiume G, Caivano A, de Laurentiis A, Falcone C, Masci FF, Iaccino E, Mimmi S, Palmieri C, Pisano A, Pontoriero M, Rossi A, Scialdone A, Vecchio E, Andreozzi C, Trovato M, Rafay J, Ferko B, Montefiori D, Lombardi A, Morsica G, Poli G, Quinto I, Pavone V, de Berardinis P, Scala G; *Int J Mol Sci*. 2012 May.

9) Human immunodeficiency virus-1 Tat activates NF- κ B via physical interaction with I κ B and p65.

Fiume G, Vecchio E, De Laurentiis A, Trimboli F, Palmieri C, Pisano A, Falcone C, Pontoriero M, Rossi A, Scialdone A, Fasanella Masci F, Scala G, Quinto I; *Nucleic Acids Res*. 2012 Apr.

References

Kristina Drott	kristina.drott@med.lu.se
Urban Gullberg	urban.gullberg@med.lu.se
Andreas Lannartsson	andreas.lennartsson@ki.se

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.

Annarita Scialdone