



CURRICULUM VITAE MONICA DI PADOVA

PERSONAL	INFORMATION
----------	-------------

Monica Di Padova

Department Biotechnological and Applied Clinical Sciences

Street Vetoio – 67100 Coppito (AQ)

"Angelo Camillo De Meis" building- COPPITO 2 – 1 st Floor – Corridor A –

Room A2.62

email: monica.dipadova@univaq.it

CURRENT POSITION

Permanent Researcher (Assistant professor) in "Clinical Pathology", S.S.D. MED/05 (new name S.S.D. MEDS-02/B - Patologia clinica) at University of L'Aquila - Italy

EDUCATION OTHER QUALIFICATIONS

1997: Single 2nd Cycle Degree in Biological Sciences, University of Rome La Sapienza'. Honor 108/110.

1999: Professional Biologist qualification, University of Rome 'La Sapienza'. Honor 123/150.

2005: Postgraduate specialization school in "Clinical Pathology", School of Medicine University of L'Aquila. Honor 50/50 magna cum laude.

2005/2007: two years of attendance PhD program in Experimental Medicine and Endocrinology, University of L'Aquila - Italy.

October1st, 2007/To date: Researcher in "Clinical Pathology", S.S.D. MED05 (new name S.S.D. MEDS-02/B - Patologia clinica), at University of L'Aquila - Italy

ACADEMIC APPOINTMENTS

- Member of the PhD Program Committee in "Experimental Medicine and Endocrinology" XXV cycle, University of L'Aquila, Italy
- Member of the PhD Program Committee in "Experimental Medicine and Endocrinology" XXVI cycle, University of L'Aquila, Italy
- Member of the PhD Program Committee in "Experimental Medicine and Endocrinology" XXVII cycle, University of L'Aquila, Italy
- Member of the PhD Program Committee in "Experimental Medicine and Endocrinology" XXVIII cycle, University of L'Aquila, Italy
- Member of the Review Board for the VQR 2004-2010, for the evaluation of the research produced in the Italian universities and Research Centers, supervised by MIUR, in the period 2004-2010 (VQR 2004- 2010) by the National Agency for Evaluation of the University System and Research (ANVUR) of Italy.
- From October 2018 to September 2022: Coordinator of Degree Program (Master's Degree in Medical Biotechnology, Dept. of





Biotechnological and Applied Clinical Sciences, University of L'Aquila).

 From October 2022 to date: Coordinator of Degree Program (Master's Degree in Medical and Pharmaceutical Biotechnology, Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila).

TEACHING EXPERIENCE

<u>Teaching Activity, in Clinical Pathology (SSD MED/05), at School of Medicine - University of L'Aquila.</u>

• Academic year 2008/2009:

1st cycle degree courses: Nutrition and Diet; Prevention Techniques for the Environment and the Workplace

• From Academic year 2008/2009 to Academic year 2010/2011: Specialization Schools for the health sector in: General Surgery; Digestive Surgery; Hematology; Hygiene and Preventive Medicine; Cardiovascular Diseases; Emergency-urgent medicine; Medical Oncology; Clinical Pathology.

Academic year 2009/2010 and Academic year 2011/2012
 Single 2nd Cycle degree course: Dentistry.
 From Academic year 2009/2010 to Academic year 2010/2011:
 Specialization Schools for the health sector in Clinical Biochemistry.

<u>Teaching Activity, in Clinical Pathology (SSD MED/05), at Sport Sciences</u> Faculty- University of L'Aquila.

Academic year 2008/2009 and Academic year 2009/2010
 2nd cycle degree courses: Sciences and Techniques of Sport (75/S);
 Adaptive and Preventive Sport Sciences and Techniques (76/S).

Teaching Activity in Clinical Pathology (SSD MED/05), at Department of Life, Health and Environmental Sciences and Department of Biotechnological and Applied Clinical Sciences- University of L'Aquila.

• From Academic year 2012/13 to Academic year. 2015/2016 and from Academic year 2020-2021 to date

Single 2nd Cycle degree course: Dentistry.

- From Academic year 2013/2014 to Academic year 2022/2023
 2nd Cycle Degree in Medical Biotechnology
- From Academic year 2023/2024 to date

2nd Cycle Degree in Medical and Pharmaceutical Biotechnology

- From Academic year 2011/2012 to Academic year 2013/2014 Specialization Schools for the health sector in: General Surgery; Digestive Surgery; Hematology; Cardiovascular Diseases; Emergencyurgent medicine; Medical Oncology; Clinical Biochemistry; Clinical Pathology.
- Academic year 2014/2015

Specialization Schools for the health sector in: Cardiovascular Diseases; Emergency-urgent medicine; Sports and Exercise Medicine, Clinical Pathology.

Academic year 2015/2016





Specialization Schools for the health sector in: Cardiovascular Diseases; Emergency-urgent medicine;

Academic year 2016/2017

Specialization School for the health sector in: Emergency-urgent medicine.

• From Academic year 2017/2018 to date

Specialization Schools for the health sector in: Cardiovascular Diseases; Emergency-urgent medicine; Specialization School in Clinical Pathology and Clinical Biochemistry.

• From Academic year 2015/2016 to Academic year 2022/2023 First level Specializing-Master in Molecular Diagnostics of Genetic, Tumorous and Infective Diseases.

RESEARCH ACTIVITIES

 1996 /1998: Laboratory of Cell Metabolism and Pharmacokinetics, Regina Elena Cancer Institute, Rome; Italy. Graduate student and annual post-graduate training

Field of research:

- Effect of anti-tumor drug and local anesthetic on energy metabolism in tumor cells.
- Multi-drug resistance and modulation of energy metabolism in tumor cells.
 - 1998/1999: Laboratory of Cell Metabolism and Pharmacokinetics, Regina Elena Cancer Institute, Rome; Italy. Research Collaborator for the projects supported by grants from 'Ministero della Sanità'.

Field of research:

- Discovery and characterization of new protein-protein interactions using a 'two hybrid system'
 - 2000 / 2002: Laboratory of Cell Metabolism and Pharmacokinetics, Regina Elena Cancer Institute, Rome; Italy. "Mario and Valeria Rindi "scholarship for Cancer Research from Italian Foundation for Cancer Research (FIRC)

Field of research:

- Characterization of novel human gene, Che-1, which interacts with Retinoblastoma protein and RNA polymerase II subunit 11.
 - 2003/2005: Laboratory of Muscle Biology Muscle Gene Expression Group, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institute of Health, Department of Health and Human Services of Bethesda, Maryland (USA). J1 Research Scholar

Field of research:

- Molecular and cellular basis of the effects of the epigenetic modifications during muscle differentiation.
- Follistatin involvement in the recovery of dystrophic mice treated with HDAC inhibitors.
 - 2005 /2007: two years of attendance PhD program in Experimental





Medicine and Endocrinology, XXI cicle University of L'Aquila - Italy. Field of research:

- Muscle gene regulation during skeletal muscle differentiation.
 - October1st, 2007/to date: Researcher in "Clinical Pathology", S.S.D. MED05, at University of L'Aquila - Italy.

Field of research:

- Cell cycle control, DNA damage response and cell differentiation in normal and tumor cells: validation of new targets for preventive / therapeutic strategies.
- Validation of new strategies to identify new bio-markers in neoplastic cell lines.
- Muscle gene expression regulation: characterization of new targets in order to support myogenesis / regeneration in pathologies related to the deregulation of muscle homeostasis.
 - Scientific Responsible of University Research Funds (ex 60% and RIA) Department of Experimental Medicine / Department of Applied Clinical Sciences and Biotechnology, University of L'Aquila.
 - PRIN 2012: Participant in the Research Program. Project Title: Identificazione, sintesi sostenibile e studio dell'efficacia di nuovi farmaci molecolari nei tumori del sistema nervoso. Principal investigator Fabrizi Giancarlo Scientific coordinator of work unit Di Marcotullio Lucia Protocol 2012C5YJSK 002
 - PRIN 2017: Participant in the Research Program. Project Title: Interfering with NF-Kappa B activation in human cancer. Principal investigator Francesca Zazzeroni Scientific Coordinator of work unit Francesca Zazzeroni Protocol 2017WLKYAM 001.
 - 2019: Principal Investigator University Research Funds " SPECIAL RESEARCH PROJECT: RIA 2019" Project title: Definition of Che-1/AATF as a novel key player in skeletal myogenesis: implications in muscle transformation and regeneration. Department of Applied Clinical Sciences and Biotechnology, University of L'Aquila.
 - "SonoMarkers Project": participant in the Research Project "SonoMarkers". Project title "Realizzazione di una piattaforma tecnologica innovativa a ultrasuoni per sperimentazione pre-clinica di nuovi approcci diagnostici basati su Bio- Markers molecolari in Oncologia" Funded by POR FESR Abruzzo 2014-2020 Principal investigator Francesca Zazzeroni.
 - University Research Funds /DISCAB GRANT 2021: Participant in the research project funded by DISCAB (RIA 2021). Project title: Neurophysiology of stress: dissecting the role of Endocannabinoid System, from behavioural to single receptor function. Principal investigator: Pierangelo Cifelli.





- University Research Funds /DISCAB GRANT 2022: Participant in the research project funded by DISCAB (RIA 2022). Project title: Neurofisiologia dello stress: approfondimento sul ruolo del sistema endocannabinoide, dal comportamento alla singola funzione recettoriale. Principal investigator: Pierangelo Cifelli. Project code: 07_DG_2022_05.
- PRIN 2022: Participant in the Research Program. Project Title: Targeting cancer stem cell metabolism by exploiting ncRNAs to improve drug therapy outcome in lung cancer. Principal investigator Joanna Kopecka Scientific coordinator of work unit Daria Capece.
- University Research Funds /DISCAB GRANT 2023: Participant in the research project funded by DISCAB (RIA 2023). Project title: Sviluppo di nuove strategie terapeutiche per l'inibizione selettiva di NF-κB nel Carcinoma dell'ovaio (OC). Principal investigator: Verzella Daniela Project code: 07_DG_2023_22.
- "MISE Project": Participant in the Research project "MISE" Project title: Sviluppo di piattaforme e modelli in vitro e in vivo di patologie degli organi di senso per la caratterizzazione di nuovi farmaci. Principal investigator Edoardo Alesse.
- MIMIT (ex MISE): Participant in the Research project "MIMIT" Project title: Piattaforma tecnologica integrata per l'identificazione e lo sviluppo di neurotrofine per il trattamento di patologie neurosensoriali a carico degli organi di vista e udito e patologie del CNS, rare o ad elevato bisogno di cura insoddisfatto. Principal investigator Francesca Zazzeroni.
- University Research Funds /DISCAB GRANT 2024: Participant in the research project funded by DISCAB (RIA 2024). Project title: Developing novel therapeutics to cancer-selectively target the NF-κB pathway in human cancers Principal investigator: Verzella Daniela.





RESPONSIBILITY IN ACADEMIC ACTIVITIES

- From January 2024 to date: member of the University Teaching board "Teaching Work Table".
- From October 2022 to date: Coordinator of Degree Program (Master's Degree in Medical and Pharmaceutical Biotechnology, Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila).
- From October 2018 to 2022: Coordinator of Degree Program (Master's Degree in Medical Biotechnology, Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila).
- From October 2018 to date: Member of the Biotechnology Area Teaching board - Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila.
- From October 2018 to date: Member of the "Quality Assurance Group / Review group" of the Master's Degree in Medical and Pharmaceutical Biotechnology/ Medical Biotechnology Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila.
- From 1 st January 2021 to date: Member of the communication and website board Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila.
- From 1 st January 2021 to date: Member of Teaching and Orientation board Dept. of Biotechnological and Applied Clinical Sciences, University of L'Aquila.

SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS

Scopus Author ID:: 6602880837 http://orcid.org/0000-0003-3808-7159

SELECTED PUBLICATIONS

-- COLAIANNI, F.; ZELLI, V.; COMPAGNONI, C.; MISCIONE, M.S.; ROSSI, M.; VECCHIOTTI, D.; DI PADOVA, M.; ALESSE, E.; ZAZZERONI, F.; TESSITORE, A.(2024) Role of Circulating microRNAs in Liver Disease and HCC: Focus on miR-122. Genes (Basel). 2024 Oct 12;15(10):1313. doi: 10.3390/genes15101313.

-CAPPABIANCA, L.; RUGGIERI, M.; SEBASTIANO, M.; SBAFFONE, M.; MARTELLI, I.; RUGGERI, P.; DI PADOVA, M.; FARINA, A.R.; MACKAY, A.R. (2024) Molecular Characterization and Inhibition of a Novel Stress-Induced Mitochondrial Protecting Role for Misfolded TrkAIII in Human SH-SY5Y Neuroblastoma Cells. INT. J. MOL. SCI. nt J Mol Sci. 2024 May 17;25(10):5475. doi: 10.3390/ijms25105475.

- DI FRANCESCO B, VERZELLA D, CAPECE D, VECCHIOTTI D, DI VITO NOLFI M, FLATI I, CORNICE J, DI PADOVA M, ANGELUCCI A, ALESSE E, ZAZZERONI F. (2022) NF-kB: A Druggable Target in Acute Myeloid Leukemia.CANCERS (BASEL);14(14):3557.doi: 10.3390/cancers14143557.





- -DI VITO NOLFI M, VECCHIOTTI D, FLATI I, VERZELLA D, DI PADOVA M, ALESSE E, CAPECE D, ZAZZERONI F.(2022) EV-Mediated Chemoresistance in the Tumor Microenvironment: Is NF-κB a Player? FRONT ONCOL. 12:933922. doi: 10.3389/fonc.2022.933922.
- CORNICE J, CAPECE D, DI VITO NOLFI M, DI PADOVA M, COMPAGNONI C, VERZELLA D, DI FRANCESCO B, VECCHIOTTI D, FLATI I, TESSITORE A, ALESSE E, BARBATO G, ZAZZERONI F.(2021) Ultrasound-Based Method for the Identification of Novel MicroRNA Biomarkers in Prostate Cancer.GENES (BASEL);12(11):1726. doi: 10.3390/genes12111726.
- ZELLI V, COMPAGNONI C, CAPELLI R, CORRENTE A, CORNICE J, VECCHIOTTI D, DI PADOVA M, ZAZZERONI F, ALESSE E, TESSITORE A. (2021) Emerging Role of isomiRs in Cancer: State of the Art and Recent Advances.GENES (BASEL);12(9):1447. doi: 10.3390/genes12091447.
- -ANGELUCCI A, DELLE MONACHE S, CORTELLINI A, DI PADOVA M, FICORELLA (2018) Vessels in the Storm: Searching for Prognostic and Predictive Angiogenic Factors in Colorectal Cancer. C.INT J MOL SCI. Jan;19(1):299. doi: 10.3390/ijms19010299.
- CIPRIANI P, DI BENEDETTO P, LIAKOULI V, DEL PAPA B, DI PADOVA M, DI IANNI M, MARRELLI A, ALESSE E, GIACOMELLI R. (2013) Mesenchymal Stem Cells (MSCs) from Scleroderma patients (SSc) preserve their immunomodulatory properties although senescent and normally induce T regulatory cells (Tregs) with a functional phenotype: implications for cellular based therapy. CLIN EXP IMMUNOL. AUG;173(2):195-206. ISSN: 00099104
- BRUNO T, IEZZI S, DE NICOLA F, DI PADOVA M, DESANTIS A, SCARSELLA M, DI CERTO MG, LEONETTI C, FLORIDI A, PASSANANTI C, FANCIULLI M (2008). Che-1 activates XIAP expression in response to DNA damage. CELL DEATH AND DIFFERENTIATION, vol. 15 (3), p. 515-520, ISSN: 1350-9047.
- DI PADOVA M, CARETTI G, ZHAO P, HOFFMAN EP, SARTORELLI V (2007). Myod acetylation influences temporal patterns of skeletal muscle gene expression. THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 282 (52), p. 37650-37659, ISSN: 0021-9258.
- DE NICOLA F, BRUNO T, IEZZI S, DI PADOVA M, FLORIDI A, PASSANANTI C, DEL SAL G, FANCIULLI M (2007). The prolyl isomerase Pin1 affects CHE-1 stability in response to apoptotic DNA damage. THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 282 (27), p. 19685-196891, ISSN: 0021-9258.





- CARETTI G, SCHILTZ RL, DILWORTH FJ, DI PADOVA M, ZHAO P, OGRYZKO V, FULLER-PACE FV, HOFFMAN EP, TAPSCOTT SJ, SARTORELLI V (2006). The RNA Helicases p68/p72 and the Noncoding RNA SRA Are Coregulators of MyoD and Skeletal Muscle Differentiation. DEVELOPMENTAL CELL, vol. 11 (4), p. 547- 560, ISSN: 1534-5807.
- -MINETTI GC, COLUSSI C, ADAMI R, SERRA C, MOZZETTA C, PARENTE V, FORTUNI S, STRAINO S, SAMPAOLESI M, DI PADOVA M, ILLI B, GALLINARI P, STEINKUHLER C, CAPOGROSSI MC, SARTORELLI V, BOTTINELLI R, GAETANO C, PURI PL (2006). Functional and morphological recovery of dystrophic muscles in mice treated with deacetylase inhibitors. NATURE MEDICINE, vol. 12 (10), p. 1147-1150, ISSN: 1078-8956.
- -BRUNO T, DE NICOLA F, IEZZI S, LECIS D, DANGELO C, DI PADOVA M, CORBI N, DIMIZIANI L, ZANNINI L, JEKIMOVS C, SCARSELLA M, PORRELLO A, CHERSI A, CRESCENZI M, LEONETTI C, KHANNA K, SODDU S, FLORIDI A, PASSANANTI C, DELIA D AND FANCIULLI M (2006). Che-1/AATF phosphorylation by ATM/ATR and Chk2 kinases activates p53 transcription and the G2/M checkpoint. CANCER CELL, vol. 10 (6), p. 473-486, ISSN: 1535-6108.
- -CORBI N, BRUNO T, DE ANGELIS R, DI PADOVA M, LIBRI V, DI CERTO MG, SPINARDI L, FLORIDI A, FANCIULLI M, PASSANANTI C (2005). RNA polymerase II subunit 3 is retained in the cytoplasm by its interaction with HCR, the psoriasis vulgaris candidate gene product. JOURNAL OF CELL SCIENCE, vol. 118 (Pt.18), p. 4253-4260, ISSN: 0021-9533.
- -IEZZI S, DI PADOVA M, SERRA C, CARETTI G, SIMONE C, MAKLAN E, MINETTI G, ZHAO P, HOFFMAN EP, PURI PL, SARTORELLI V (2004). Deacetylase inhibitors increase muscle cell size by promoting myoblast recruitment and fusion through induction of follistatin. DEVELOPMENTAL CELL, vol. 6 (5), p. 673-684, ISSN: 1534-5807.
- -CARETTI G, DI PADOVA M, MICALES B, LYONS GE, SARTORELLI V (2004). The Polycomb Ezh2 Methyltransferase regulates muscle gene expression and skeletal muscle differentiation. GENES & DEVELOPMENT, vol. 18, p. 2627-2638, ISSN: 0890-9369.
- -DE ANGELIS R, IEZZI S, BRUNO T, CORBI N, DI PADOVA M, FLORIDI A, FANCIULLI M, PASSANANTI C (2003). Functional interaction of the subunit 3 of RNA polymerase II (RPB3) with transcription factor-4 (ATF4). FEBS LETTERS, vol. 547, p. 15-19 ISSN: 0014-5793.
- DI PADOVA M, BRUNO T, DE NICOLA F, IEZZI S, D'ANGELO C, GALLO R, NICOSIA D, CORBI N, BIROCCIO A, FLORIDI A, PASSANANTI C,





FANCIULLI M (2003). Che-1 arrests human colon carcinoma cell proliferation by displacing HDAC1 from the p21WAF1/CIP1 promoter. THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 278 (38), p. 36496-36504, ISSN: 0021-9258.

- CORBI N, DI PADOVA M, DE ANGELIS R, BRUNO T, LIBRI V, IEZZI S, FLORIDI A, FANCIULLI M. AND PASSANANTI C (2002). The a-like RNA Polymerase II core subunit 3 (RPB3) is involved in tissue-specific transcription and muscle differentiation via interaction with the myogenic factor Myogenin. FASEB JOURNAL, vol. 16(12), p. 1639-1641., ISSN: 0892-6638.
- BRUNO T, DE ANGELIS R, DE NICOLA F, BARBATO C, DI PADOVA M, CORBI N, LIBRI V, BENASSI B, MATTEI E, CHERSI A, SODDU S, FLORIDI A, PASSANANTI C, FANCIULLI M (2002). Che-1 affects cell growth by interfering with the recruitment of HDAC1 by Rb. CANCER CELL, vol. 2 (5), p. 387-399, ISSN: 1535-6108.
- FANCIULLI M, BRUNO T, GIOVANNELLI A, GENTILE F.P, DI PADOVA M, RUBIU O, FLORIDI A (2000). Energy metabolism of human LoVo colon carcinoma cells: correlation to drug resistance and influence of Lonidamine. CLINICAL CANCER RESEARCH, vol. 6 (4), p. 1590-1597, ISSN: 1078-0432.
- FANCIULLI M, BRUNO T, DI PADOVA M, DE ANGELIS R, IEZZI S, IACOBINI C, FLORIDI A, PASSANANTI C (2000). Identification of a novel partner of RNA polymerase II subunit 11, Che-1, which interacts with and affects the growth-suppression function of Rb. FASEB JOURNAL, vol. 14 (7), p. 904-912, ISSN: 0892-6638.
- BRUNO T, CORBI N, DI PADOVA M, DE ANGELIS R, FLORIDI A, PASSANANTI C, FANCIULLI M (1999). The RNA polymerase II core subunit 11 interacts with keratin 19, a component of the intermediate filament proteins. FEBS LETTERS, vol. 453 (3), p. 273-277, ISSN: 0014-5793.
- FLORIDI A, DI PADOVA M, BARBIERI R, ARCURI E (1999). Effect of local anesthetic ropivacaine on isolated rat liver mitochondria. BIOCHEMICAL PHARMACOLOGY, vol. 58 (6), p. 1009-1016, ISSN: 0006-2952.

AUTORIZZO IL TRATTAMENTO DEI MIEI DATI PERSONALI PRESENTI NEL CV AI SENSI DELL'ART. 13 D. LGS. 30 GIUGNO 2003 N. 196 - "CODICE IN MATERIA DI PROTEZIONE DEI DATI PERSONALI" E DELL'ART. 13 GDPR 679/16 - "REGOLAMENTO EUROPEO SULLA PROTEZIONE DEI DATI PERSONALI".

L'AQUILA, 28 OTTOBRE 2024

MONICA DI PADOVA