

**CURRICULUM  
VITAE ET STUDIORUM**



**PERSONAL INFORMATION**

NAME  
ADDRESS

E-MAIL

NATIONALITY  
DATE OF BIRTH  
PLACE OF BIRTH

**RAFFAELLA PACCHIANA**  
**VIA CARLO ALBERTO, 30 – 37057 SAN GIOVANNI LUPATOTO (VR) - ITALY**  
**MARRIED, I HAVE A CHILD**  
**raffaella.pacchiana@univr.it**

ITALIAN  
13/11/1973  
CASALMAGGIORE (CREMONA - ITALY)

**WORK EXPERIENCE**

*JANUARY 2015–NOW*

*OCTOBER 2005–DECEMBER 2014*

*APRIL 2004–SEPTEMBER 2005*

*AUGUST 200 –MARCH 2004*

- Technician at the Department of Neuroscience, Biomedicine and Movement. Biochemistry Section, University of Verona, Italy.
- Technician at the Department of Life and Reproduction Science, Histology and Embriology Section, University of Verona, Italy.
- Post-doc fellowship at the Department of Life and Reproduction Science, Histology and Embriology Section, University of Verona, Italy
- Post-doc fellowship at the “Cell Factory”, IRCCS, Ca’ Granda Foundation – Policlinico Hospital of Milan.

**EDUCATION AND TRAINING**

*NOVEMBER 2000–JULY 2003*

*JULY 2000*

*JULY 1992*

- PhD in Molecular Medicine at the University of Milan
- Graduate in Biological Sciences at the University of Parma, Italy.
- High School Diploma obtained at the Senior High School in Classical Studies, “Istituto G.Romani” of Casalmaggiore, Cremona, Italy.

**MOTHER TONGUE**

**OTHER LANGUAGE**

ITALIAN

ENGLISH (written and spoken)

**TECHNICAL SKILLS  
AND COMPETENCE**

- Cell Biology (primary cells and cell lines), Immunohistochemistry, Immunofluorescence, Fluorescence and Confocal laser scanning microscopy. Western Immunoblotting, Lentiviral particles, ChIP and Immunoprecipitation. RT-PCR.

1. Danzi F, **Pacchiana R**, Mafficini A, Scupoli MT, Scarpa A, Donadelli M, Fiore A. To Metabolomics And Beyond: A Technological Portfolio To Investigate Cancer Metabolism. *Signal Transduct Target Ther.* 2023 Mar 22;8(1):137. Doi:10.1038/S41392-023-01380-0. PMID: 36949046; PMCID: PMC10033890.
2. Galbiati A, Bova S, **Pacchiana R**, Borsari C, Persico M, Zana A, Bruno S, Donadelli M, Fattorusso C, Conti P. Discovery Of A Spirocyclic 3-Bromo-4,5-Dihydroisoxazole Covalent Inhibitor Of Hgapdh With Antiproliferative Activity Against Pancreatic Cancer Cells. *Eur J Med Chem.* 2023 Jun 5;254:115286. Doi: 10.1016/J.Ejmech.2023.115286. Epub 2023 Apr 6. PMID: 37058971.
3. **R. Pacchiana**, N. Mullappilly, A. Pinto, S. Bova, S. Forciniti, G. Cullia, E. Dalla Pozza, I. Dando, E. Bottani, I. Decimo, S. Bruno, P. Conti, M. Donadelli. 3-Bromo-Isoxazoline Derivatives Inhibit GAPDH Enzyme In PDAC Cells Triggering Autophagy And Apoptotic Cell Death. *Cancers (Basel).* 2022 Jun 27;14(13):3153. Doi:10.3390/Cancers14133153. PMID: 35804925; PMCID: PMC9264795.
4. Butera G, Manfredi M, Fiore A, Brandi J, **Pacchiana R**, De Giorgis V, Barberis E, Vanella V, Galasso M, Scupoli MT, Marengo E, Cecconi D, Donadelli M. Tumor Suppressor Role Of Wild-Type P53-Dependent Secretome And Its Proteomic Identification In PDAC. *Biomolecules.* 2022 Feb 13;12(2):305. Doi: 10.3390/Biom12020305.
5. Butturini E, Butera G, **Pacchiana R**, Carcereri De Prati A, Mariotto S, Donadelli M. Redox Sensitive Cysteine Residues As Crucial Regulators Of Wild-Type And Mutant P53 Isoforms. *Cells.* 2021 Nov 12;10(11):3149. Doi: 10.3390/Cells10113149.
6. Cordani M, Butera G, **Pacchiana R**, Masetto F, Mullappilly N, Riganti C, Donadelli M. Mutant P53-Associated Molecular Mechanisms Of ROS Regulation In Cancer Cells. *Biomolecules.* 2020 Feb 26;10(3). Pii: E361. Doi: 10.3390/Biom10030361.
7. Torrens-Mas M, Cordani M, Mullappilly N, **Pacchiana R**, Riganti C, Palmieri M, Pons DG, Roca P, Oliver J, Donadelli M. Mutant p53 induces SIRT3/mnsod axis to moderate ROS production in melanoma cells. *Arch Biochem Biophys.* 2020 Jan 15;679:108219. Doi: 10.1016/j.abb.2019.108219.
8. Dalla Pozza E, Dando I, **Pacchiana R**, Liboi E, Scupoli Mt, Donadelli M, Palmieri M. Regulation Of Succinate Dehydrogenase And Role Of Succinate In Cancer. *Semin Cell Dev Biol.* 2019 May 1. Doi: 10.1016/J.Semcdb.2019. Review.
9. Butera G, Mullappilly N, Masetto F, Palmieri M, Scupoli Mt, **Pacchiana R**<sup>#</sup>, Donadelli M. Regulation Of Autophagy By Nuclear Gapdh And Its Aggregates In Cancer And Neurodegenerative Disorders. *Int J Mol Sci.* 2019 Apr 26;20(9). Doi: 10.3390/Ijms20092062. Review. *# Corresponding author.*
10. Dando I, Pozza Ed, Ambrosini G, Torrens-Mas M, Butera G, Mullappilly N, **Pacchiana R**, Palmieri M, Donadelli M. Oncometabolites In Cancer Aggressiveness And Tumour Repopulation. *Biol Rev Camb Philos Soc.* 2019 Aug;94(4):1530-1546. Doi:10.1111/Brv.12513.
11. Cordani M, Butera G, Dando I, Torrens-Mas M, Butturini E, **Pacchiana R**, Oppici E, Cavallini C, Gasperini S, Tamassia N, Nadal-Serrano M, Coan M, Rossi D, Gaidano G, Caraglia M, Mariotto S, Spizzo R, Roca P, Oliver J, Scupoli Mt, Donadelli M. Mutant P53 Blocks Sen1/Ampk/Pgc-1α/Ucp2 Axis Increasing Mitochondrial O2<sup>-</sup> Production In Cancer Cells. *Br J Cancer.* 2018 Oct;119(8):994-1008. Doi: 10.1038/S41416-018-0288-2.
12. Dando I, **Pacchiana R**, Pozza ED, Cataldo I, Bruno S, Conti P, Cordani M, Grimaldi A, Butera G, Caraglia M, Scarpa A, Palmieri M, Donadelli M. UCP2 inhibition induces ROS/Akt/mTOR axis: Role of GAPDH nuclear translocation in genipin/everolimus anticancer synergism. *Free Radic Biol Med.* 2017 Dec;113:176-189. doi: 10.1016/j.freeradbiomed.2017.09.022. PMID: 28962872.
13. Butera G, **Pacchiana R**, Donadelli M. Autocrine Mechanisms Of Cancer Chemoresistance. *Seminars In Cell And Developmental Biology.* 2018 Jun;78:3-12. doi:10.1016/j.semcdb.2017.07.019. PMID: 28751251
14. Brandi J, Cecconi D, Cordani M, Torrens-Mas M, **Pacchiana R**, Dalla Pozza E, Butera G, Manfredi M, Marengo E, Oliver J, Roca P, Dando I, Donadelli M. The Antioxidant Uncoupling Protein 2 Stimulates Hnrnpa2/B1, Glut1 And Pkm2 Expression And Sensitizes Pancreas Cancer Cells To Glycolysis Inhibition. *Free Radic Biol Med.* 2016 Dec;101:305-316.
15. Cordani M, Butera G, **Pacchiana R**, Donadelli M. Molecular Interplay Between Mutant P53 Proteins And Autophagy In Cancer Cells. *Biochim Biophys Acta.* 2017 Jan; 1867(1):19-28.
16. Cordani M, **Pacchiana R**, Butera G, D'orazi G, Scarpa A, Donadelli M. Mutant P53 Proteins Alter Cancer Cell Secretome And Tumor Microenvironment Involvement In Cancer Invasion And Metastasis. *Cancer Lett.* 2016. Jul1;376(2):303-9 Review.
17. Dal Prà I, Chiarini A, **Pacchiana R**, Gardenal E, Chakravarthy B, Whitfield Jf, Armato U. Calcium-Sensing Receptors Of Human Astrocyte-Neuron Teams: Amyloid-B-Driven Mediators

- And Therapeutic Targets Of Alzheimer's Disease. *Curr. Neuropharmacol.* 2014 Jul; 12(4):353-64.
18. **Pacchiana R**, Abbate M, Armato U, Dal Prà I, Chiarini A. Combining Immunofluorescence With In Situ Proximity Ligation Assay: A Novel Imaging Approach To Monitor Protein-Protein Interactions In Relation To Subcellular Localization. *Histochem Cell Biol.* 2014 Nov;142(5):593-600.
  19. Dal Pra I, Armato U, Chioffi F, **Pacchiana R**, Whitfield Jf, Chakravarthy B, Gui L, Chiarini A. The Ab Peptides-Activated Calcium-Sensing Receptor Stimulates The Production And Secretion Of Vascular Endothelial Growth Factor-A By Normoxic Adult Human Cortical Astrocytes. *Neuromolecular Med.* 2014 Dec;16(4): 645-57.
  20. Dal Prà I, Chiarini A, Gui L, Chakravarthy B, **Pacchiana R**, Gardenal E, Whitfield Jf, Armato U. Do Astrocytes Collaborate With Neurons In Spreading The "Infectious" A $\beta$  And Tau Drivers Of Alzheimer's Disease? *Neuroscientist.* 2015 Feb;21(1):9-29.
  21. Armato U, Chiarini A, Chakravarthy B, Chioffi F, **Pacchiana R**, Colarusso E, Whitfield Jf, Dal Prà I. Calcium-Sensing Receptor Antagonist (Calcilytic) Nps 2143 Specifically Blocks The Increased Secretion Of Endogenous Ab-42 Prompted By Exogenous Fibrillary Or Soluble A $\beta$ 25-35 In Human Cortical Astrocytes And Neurons-Therapeutic Relevance To Alzheimer's Disease. *Biochim Biophys Acta.* 2013;1832(10):1634-52.
  22. Armato U, Chakravarthy B, **Pacchiana R**, Whitfield Jf. Alzheimer's Disease: An Update Of The Roles Of Receptors, Astrocytes And Primary Cilia (Review). *Int J Mol Med.* 2013;31(1):3-10.
  23. Armato U1, Bonafini C, Chakravarthy B, **Pacchiana R**, Chiarini A, Whitfield Jf, Dal Prà I. The Calcium-Sensing Receptor: A Novel Alzheimer's Disease Crucial Target? *J Neurol Sci.* 2012;322(1-2):137-40.
  24. Chiarini A, Marconi M, **Pacchiana R**, Dal Prà I, Wu J, Armato U. Role-Shifting Pkc $\zeta$  Fosters Its Own Proapoptotic Destruction By Complexing With Bcl10 At The Nuclear Envelope Of Human Cervical Carcinoma Cells: A Proteomic And Biochemical Study. *J Proteome Res.* 2012 Jul 19.
  25. Dal Prà I, Whitfield Jf, **Pacchiana R**, Bonafini C, Talacchi A, Chakravarthy B, Armato U, Chiarini A. The Amyloid-B $_{42}$  Proxy, Amyloid-B(25-35), Induces Normal Human Cerebral Astrocytes To Produce Amyloid-B $_{42}$ . *J Alzheimers Dis.* 2011;24(2):335-47.
  26. A. Chiarini, J. F. Whitfield, **R. Pacchiana**, M. Marconi, U. Armato, I. Dal Pra. Calphostin C, A Remarkable Multimodal Photodynamic Killer Of Neoplastic Cells By Selective Nuclear Lamin B1 Destruction An Apoptogenesis (Review). *Oncol Reps.* 2010;23: 887-92. Review.
  27. A. Chiarini, U. Armato, **R. Pacchiana**, I. Dal Pra. Proteomic Analysis Of Gtp Cyclohydrolase I In Multi-Protein Complexes In Cultured Normal Adult Human Astrocytes Under Both Basal And Cytokine-Activated Conditions. *Proteomics* 2009;9: 1850-60.
  28. Chiarini A., J.F. Whitfield, **R. Pacchiana**, U. Armato, I. Dal Pra. Photoexcited Calphostin C Selectively Destroys Nuclear Lamin B1 In Neoplastic Human And Rat Cells - A Novel Mechanism Of Action Of A Photodynamic Tumor Therapy Agent. *Biochim. Biophys. Acta* 2008;1783: 1642-53. Epub 2008 Apr 6.
  29. I. Dal Pra, A. Chiarini, **R. Pacchiana**, B. Chakravarthy, J. F. Whitfield, U. Armato. Emerging Concepts Of How Beta-Amyloid Proteins And Pro-Inflammatory Cytokines Might Collaborate To Produce An "alzheimerbrain". *Mol. Med. Report* 2008;1: 173-8. Review.
  30. I. Dal Pra, A. Chiarini, **R. Pacchiana**, G. Zumiani, M. Zanoni, U. Armato. Comano's (Trentino) Thermal Water Interferes With Tumour Necrosis Factor-Alpha Expression And Interleukin-8 Production And Secretion By Cultured Human Psoriatic Keratinocytes: Yet Other Mechanisms Of Its Anti-Psoriatic Action. *Int J Mol Med.* 2007;19:373-9.
  31. Chiarini A, Dal Pra I, **Pacchiana R**, Zumiani G, Zanoni M, Armato U. Comano's (Trentino) Thermal Water Interferes With Interleukin-6 Production And Secretion And With Cytokeratin-16 Expression By Cultured Human Psoriatic Keratinocytes: Further Potential Mechanisms Of Its Anti-Psoriatic Action. *Int J Mol Med.* 2006;18:1073-9.
  32. Chiarini A, Dal Pra I, **Pacchiana R**, Menapace L, Zumiani G, Zanoni M, Armato U. Comano's (Trentino) Thermal Water Interferes With The Expression And Secretion Of Vascular Endothelial Growth Factor-A Protein Isoforms By Cultured Human Psoriatic Keratinocytes: A Potential Mechanism Of Its Anti- Psoriatic Action. *Int J Mol Med.* 2006;18:17-25.
  33. Chiarini A, Dal Pra I, Menapace L, **Pacchiana R**, Whitfield Jf, Armato U. Soluble Amyloid Beta-Peptide And Myelin Basi Protein Strongly Stimulate, Alone And In Synergism With Combined Proinflammatory Cytokines, The Expression Of Functional nitricoxide Synthase-2 In Normal Adult Human Astrocytes. *Int J Mol Med.* 2005;16:801-7.
  34. Ciulla MM, Ferrero S, Lazzari L, **Pacchiana R**, Paliotti R, Gianelli U, Busca G, Esposito A, Bosari S, Magrini F, Rebullà P. The Translocation Of Marrow Mncs After Experimental Myocardial Cryoinjury Is Proportional To The Infarcted Area. *Transfusion.* 2004;44:239-44.
  35. Ciulla Mm, Lazzari L, **Pacchiana R**, Esposito A, Bosari S, Ferrero S, Gianelli U, Paliotti R, Busca G, Giorgetti A, Magrini F, Rebullà P. Homing Of Peripherally Injected Bone Marrow Cells In Rat After Experimental Myocardial Injury. *Haematologica.* 2003;88:614-21.