Dr. ANNA MARIA CHIARINI

Education

-High School Certificate obtained at the Liceo Classico "Bellini Pastore" in Castiglione delle Stiviere (MN) (Italy), in July 1983.
-Degree in Biological Science obtained at the University of Milano in July 1988. Title of Thesis: "Studio dell'interazione tra acetilcolinesterasi e i gangliosidi".
-Certificate in Clinical Chemistry and Biochemistry obtained at the University of Milano in November 1992.
-Research Doctor (PhD) in Chronic & Degenerative Diseases, University of Verona, (May 2007)

Professional Experience

- Full-time Attendance (February 1987-July 1988) at the Department of Medical Chemistry and Biochemistry, directed by Prof. G. Tettamanti, University of Milan.
- Researcher Activity with fellowship (September 1988-July 1993) at the Department of Medical Chemistry and Biochemistry, directed by Prof. G. Tettamanti, University of Milan.
- Research Scientist (September 1993-August 1995) at the Roche Immunodiagnostic Research Laboratory, Roche S.p.A in Milan.
- Research Scientist (September 1995-August 1996) at the Laboratory of Immunodiagnostic-R&D Hoffmann-La Roche in Basilea (Switzerland).
- Researcher Activity with fellowship (February 1997-July 2002) at the Histology and Embryology Unit (directed by Prof. U. Armato), University of Verona.
- Assistant Professor (October 2002-Present) (SSD: BIO/17 Histology) after winning a national contest (July 2002), University of Verona.
- Assistant Professor (October 2023-Present) (SSD: MED/50 Applied Medical Sciences) at the Department of Surgery & Dentistry & Pediatrics and Gynaecology, University of Verona.

Histology Teaching for Degree Courses in Biomedical Laboratory Techniques, Dental Hygiene, Nursing, Medicine and Surgery, Bioinformatic and Medical Biotechnology at the University of Verona.

Scientific Research Activity

Since 1997 she has been responsible for the Biochemistry and Molecular Biology Laboratory, and since August 2004, she has been co-responsible to the Proteomic Laboratory of the Histology and Embryology Unit (directed by Prof. U. Armato), University of Verona.
During her activity, she has developed and/or applied methods of culturing successfully in vitro human and mammalian cells: es. astrocytes, neurons, keratinocytes, fibroblasts, and different tumor cells.
Her main basic research topics have been:

- Study on the damage induced by beta-amyloid peptides in human neurons.
- Study on the role of beta-amyloid peptides in human astrocytes and their interactions with the Calcium sensing receptor.
- Biochemical and proteomic analysis of the induction mechanisms of the nitric oxide synthase-2 (NOS-2) by pro-inflammatory cytokines in human adult astrocytes.
- Biochemical study on the mechanisms of the nuclear lamina breakdown during cell apoptosis.
- Biochemical and proteomic study on the roles of the PKC isoenzymes during cell proliferation and apoptosis.
- Biochemical and proteomic study of PKC ζ signaling in human cervical carcinoma C4I cells.
- Proteomic study of Adaptive Remodelling of Pulmonary Autograft Roots at a Late Stage After the Ross Procedure.
- Proteomic study of the human nonsyndromic thoracic aortic aneurysms
- Biochemical study on the role of the ratio Ap3A/Ap4A in the differentiation and apoptosis of human cells.

Her main applied research topics have been:

- Production, banking, and application of homo- and xenotransplants in the therapy of burns.
- Study on new models of artificial derma and skin.

- Investigation on innovative protein scaffolds for tissue engineering.
- Application of matrix-assisted laser desorption ionization-TOF (MALDI-TOF) mass spectrometry in the forensic medicine

She has participated as co-investigator in the following **funded research projects**:
§ *Verona University Consortium - Innovative Health Project, "Use of silk fibroin protein as a scaffold for human tissues regeneration and repair 1999-2001*" (together with Professor U. Armato and Dr. Ilaria Dal Pra)
§ *PRIN 1999,* the Italian Ministry for University & Scientific and Technological Research (about the validation of simple or composite silk fibroin scaffolds for human tissue engineering)
§ *PRIN 2005,* the Italian Ministry for University & Scientific and Technological Research (about the proteomic of the human nonsyndromic thoracic aortic aneurysms)
§ *PRIN 2007*, the Italian Ministry for University & Scientific and Technological Research (about the application of matrix-assisted laser desorption ionization-TOF (MALDI-TOF) mass spectrometry in the forensic medicine)
§ *Cariverona Foundation 2007-2008* - Cardiovascular Disease Projects (about the proteomics of the effects of continuous or pulsatile perfusion on human adult skeletal muscle and proteomics of vascular Assist Devices on myocardiocytes)
§ *FSE (Social European Fund 2010)*
§ *FSE (Social European Fund 2011)*
§ *Joint Project 2014: University of Verona-AB Analitica s.r.l. Advances in Biomedicine.*
§ *Silk Biomaterial Milan Fund 2017 for research into a new cardiovascular implant of a silk fibroin-based biomaterial*
§ *Joint project 2018 Università di Verona- C.M.S.R. Veneto Medica S.r.l. (Altavilla -Vicenza).*

Along with Professors Ubaldo Armato and Jun Wu and Dr. Ilaria Dal Prà, Dr. Anna Chiarini has acted as one of the main promoters of the International Scientific Cooperation Agreement between the University of Verona Graduate School of Life and Health Sciences, Ph.D. course in Clinical & Experimental Biomedical Sciences, and the affiliated Hospital of Zunyi Medical University, Zunyi, China. (2017-present).

Referee:
She is a member of the Editorial Board of the following journals: *BioMed Research International, Current Alzheimer Research, Frontiers in Neuroscience,* and *Molecular Medicine Reports*.
She has been a Referee for the scientific journals: *Biomaterials, Biochemistry and Cell Biology, BioTechniques, Brain Behaviour and Immunity, Brain Research, Current Alzheimer Research, CNS & Neurological Disorders-Drug Targets, Frontiers in Neuroscience, Fundamental & Clinical Pharmacology, Gerontology, Journal of Neuroinflammation, JoVE, Heliyon, International Journal of Molecular Medicine, International Journal of Biological Sciences, International Journal of Oncology, Molecular Biotechnology, Molecular Medicine Reports, Neurological Research, Neuroscience, Neurochemistry International, Oncology Letters, Proteomics, Pharmaceutics, Stem Cell International.*

Grant Reviewer:
She has served as a grant reviewer for the following scientific foundations:
§ Swiss National Science Foundation
§ Czech Science Foundation
§ Alzheimer's Society UK (Great Britain)
§ Marsden Fund Council - Royal Society (New Zealand)

Professional Society Memberships:
Member of the Professional Order of Biologists.
Member of HUPO (Human Protein Organization).

Pubblications:
69 full papers in International Scientific Journals.
14 articles or chapters in Books and Proceedings of National and International Congress.
98 Communications at National and International Congress
3 Patents

Citations = 1796 (Feb 2024) H-index= 25 (*Scopus)*
Citations = 1579 (Feb 2024) H-index= 23 *(Web of Science*)
Citations = 2416 (November 2019) H-index= 27 (*Google Scholar*)

Scientific publications
Full papers

1. Effect of phospholipase C from Bacillus cereus on the release of membrane bound sialidase from pig brain. A. Chiarini, A. Fiorilli, C. Siniscalco, G. Tettamanti and B. Venerando. *Journal of Neurochemistry* 55, 1576-1584, (1990). IF(2018) 4.807
2. Occurrence of sialidase activity in two distinct and highly homogeneous populations of lysosomes prepared from the brain of developing mouse. A. Fiorilli, C. Siniscalco, A. Chiarini, L. Di Francesco, B. Venerando and G. Tettamanti. *FEBS Letters* 282, 235-238, (1991). IF(2018) 2.675
3. Human erythrocyte sialidase is linked to the plasma membrane by a glycosylphosphatidylinositol anchor partly located on the outer surface. A. Chiarini, A. Fiorilli, L. Di Francesco, B. Venerando and G. Tettamanti. *Glyconjugate Journal*, 10, 64-71, (1993). IF(2018) 2.926
4. Cytosolic sialidase from pig brain: a protein complex containing catalytic and protective units. B. Venerando, A. Fiorilli, L. Di Francesco, A. Chiarini, E. Monti, D. Zizioli, G. Tettamanti *Biochimica et Biophysica Acta* 1208, 229-237, (1994). IF(2018) 2.540
5. Changes in nuclear protein kinase C-delta holoenzyme, its catalytic fragments, and activity in polyomavirus transformed pyF111 rat fibroblasts while proliferating and following exposure to apoptogenic topoisomerase-II inhibitors. I. Dal Pra, J.F. Whitfield, A. Chiarini and U. Armato *Experimental Cell Research* 249,147-160 (1999). IF(2018) 3.329
6. "What are the roles of the protein kinase Cs, particularly protein kinase C-delta in apoptosis?" U. Armato, J.F. Whitfield, A. Chiarini, and I. Dal Pra *Current Topics in Biochemical Research* 1, 1-18 (1999).
7. Increased activity of the protein kinase C-delta holoenzyme in the cytoplasmic particulate fraction precedes the activation of caspases in polyomavirus-transformed pyF111 rat fibroblasts exposed to calphostin C or topoisomerase-II inhibitors. I. Dal Pra, J.F. Whitfield, A. Chiarini, and U. Armato *Experimental Cell Research* 255,171-183 (2000). IF(2018) 3.329
8. Protein kinase C-βII is an apoptotic lamin kinase in polyomavirus-transformed, etoposide-treated pyF111 rat fibroblasts. A. Chiarini, J.F. Whitfield, U. Armato, I. Dal Pra *J. Biol. Chem*. 277: 18827-18839 (10.1074/jbc.M111921200) (2002). IF(2018) 4.106
9. Silk fibroin/poly(carbonate)-urethane as a substrate for cell growth: *in vitro* interactions with human cells. A. Chiarini, P. Petrini, S. Bozzini, I. Dal Pra, U. Armato *BIOMATERIALS,* 24: 789-799 (2003). IF(2018) 10.273
10. Silk-fibroin-coated 3D polyurethane scaffolds for tissue engineering: interactions with normal human fibroblasts. I. Dal Pra, P. Petrini, A. Chiarini, S. Bozzini, S. Farè, U. Armato *TISSUE E*NG, 9: 1113-1121 (2003). IF(2018) 3.616
11. De novo engineering of reticular connective tissue by silk fibroin nonwoven materials. I. Dal Pra, G. Freddi, J. Minic, A. Chiarini, U. Armato *BIOMATERIALS*, 26: 1987-1999 (2005). IF(2018) 10.273
12. The BH4 (Tetrahydrobiopterin)-dependent activation, but not the expression, of inducible NOS (Nitric oxide synthase)-2 in proinflammatory Cytokine-stimulated, cultured normal astrocytes is mediated by MEK-ERK kinases. A. Chiarini I. Dal Pra, R. Gottardo, F. Bortolotti, J.F. Whitfield, U. Armato *J.Cell.Biochem.*, 94: 731-743 (2005). IF(2018) 3.448

13. Roles of Ca2+ and the Ca2+-Sensing Receptor (CaSR) in the Expression of Inducible NOS (Nitric Oxide Synthase)-2 and Its BH4 (Tetrahydrobiopterin)-Dependent Activation in Cytokine-Stimulated Adult Human Astrocytes I. DalPra, A. Chiarini, E. Nemeth, U. Armato, J.F. Whitfield. *J.Cell.Biochem.*, 96: 428-438 (2005). IF(2018) 3.448
14. Soluble amyloid β-peptide and myelin basic protein strongly stimulate, alone and in synergism with combined proinflammatory cytokines, the expression of functional nitric oxide synthase-2 in normal adult human astrocytes. A. Chiarini, I. Dal Pra, L. Menapace, R. Pacchiana, J.F. Whitfield, U. Armato *Int.J. Mol.Med.,*16: 801-807 (2005). IF(2018) 2.928
15. VP-16 (etoposide) and calphostin C trigger different nuclear but akin cytoplasmic patterns of changes in the distribution and activity of protein kinase C-beta I in polyomavirus-transformed pyF111 rat fibroblasts. A. Chiarini, J.F. Whitfield, U. Armato, I. Dal Pra *Int J Mol Med.,* 17: 111-20 (2006). IF(2018 2.928
16. 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. A. Chiarini, I. Dal Pra, R. Pacchiana, L. Menapace, G. Zumiani., M. Zanoni., U. Armato. *Int J Mol Med.,* 18: 17-25 (2006). IF(2018) 2.928
17. Novel dermo-epidermal equivalents on silk fibroin-based formic acid-crosslinked three-dimensional nonwoven devices with prospective applications in human tissue engineering/regeneration/repair. I. Dal Pra, A. Chiarini, A. Boschi, G. Freddi, U. Armato *Int J Mol Med.,* 18: 241-247 (2006). IF(2018) 2.928
18. 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. A. Chiarini, I. Dal Pra, R. Pacchiana, G. Zumiani., M. Zanoni., U. Armato. *Int J Mol Med.,* 18: 1073-1079 (2006). IF(2018) 2.928
19. *In vitro* and *in vivo* characteristics of frozen/thawed neonatal split-skin strips: A novel biologically active dressing for areas of severe, acute or chronic skin loss. A. Chiarini, I. Dal Pra, U. Armato *Int J Mol Med.,* 19: 245-255 (2007). IF(2018) 2.928
20. Comano's (Trentino) thermal water interferes with tumor necrosis factor-α expression and interleukin-8 production and secretion by cultured human psoriatic keratinocytes: yet other mechanisms of its anti-psoriatic action. I. Dal Pra, A. Chiarini, R. Pacchiana, G. Zumiani, M. Zanoni, U. Armato. *Int J Mol Med.,* 19: 373-379 (2007). IF(2018) 2.928
21. Emerging concepts of how β-amyloid proteins and pro-inflammatory cytokines might collaborate to produce an 'Alzheimer brain'. I. Dal Pra, A. Chiarini, R. Pacchiana, B. Chakravarthy, J.F. Whitfield, U. Armato. *Mol.Med.Rep*. 1: 173-178 (2008). IF(2018) 1.851
22. 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. A. Chiarini, J.F. Whitfield, R. Pacchiana, U. Armato, I. Dal Pra. *Biochimica et Biophysica Acta –Molecular Cell Research* 1783(9):1642-53 (2008). IF(2018) 4.739
23. Proteomic analysis of GTP cyclohydrolase 1 multi-protein complexes in cultured normal adult human astrocytes under both basal and cytokine-activated conditions. A. Chiarini, U. Armato, R. Pacchiana, I. Dal Pra. *Proteomics* 9(7):1850-1860 (2009). IF(2018) 3.106
24. Calcium-sensing receptor (CaSR) in human brain's pathophysiology: roles in Late Onset Alzheimer's Disease (LOAD). A. Chiarini, I. Dal Pra, M. Marconi, B. Chakravarthy, J.F. Whitfield, U. Armato. *Curr. Pharmacol. Biotechnol.* 10(3): 317-326 (2009). IF(2018) 1.516
25. Calphostin C, a remarkable multimodal photodynamic killer of neoplastic cells by selective nuclear lamin B1 destruction and apoptogenesis (Review). A. Chiarini, JF. Whitfield, R. Pacchiana, M. Marconi, U. Armato, I. Dal Prà. *Oncol Rep*. 23(4):887-92. (2010). IF(2018) 3.041
26. Amyloid β25–35, an amyloid β1-42 surrogate, and proinflammatory cytokines stimulate VEGF–A secretion by cultured, early passage, normoxic adult human cerebral astrocytes. A. Chiarini, J.F. Whitfield, C. Bonafini, B. Chakravarthy, U. Armato I. Dal Pra,. *J. Alzheimers Dis*. 21(3): 915-926. (2010). IF(2018) 3.517

27. The p75 neurotrophin receptor is localized to primary cilia in adult murine hippocampal dentate gyrus granule cells. B. Chakravarthy, C. Gaudet, M. Ménard, T. Atkinson, A. Chiarini, I. Dal Prà, J.F. Whitfield. *Biochem Biophys Res Commun*. 401(3):458-62 (2010). IF(2018) 2.705
28. The Amyloid–β42 Proxy, Amyloid–β25–35, Induces Normal Human Cerebral Astrocytes to Produce Amyloid–β42. I. Dal Pra, J.F. Whitfield, R. Pacchiana, C. Bonafini, A. Talacchi, B. Chakravarthy, U. Armato, A. Chiarini. *J. Alzheimers Dis*. 24 (2):335-347 (2011). IF(2018) 3.517
29. Is Alzheimer's Disease at Least Partly a Ciliopathy? U. Armato, B. Chakravarthy, A. Chiarini, I. Dal Prà, J.F. Whitfield *Journal. of Alzheimer's disease & Parkinsonism* 1(1): 1-3 (2011).
30. Will silk fibroin nanofiber scaffolds ever hold a useful place in Translational Regenerative Medicine? U. Armato, I. Dal Prà, A. Chiarini, G. Freddi *International Journal of Burns and Trauma*, 1 (1):27-33 (2011). IF(2018) 2.493
31. Paradigm-Changing Surprise from Dentate Gyrus Granule Cells—Cilium-Localized p75NTR May Drive Their Progenitor Cell Proliferation. U. Armato, B. Chakravarthy, A. Chiarini, I. Dal Prà, J.F. Whitfield *Journal of Alzheimer's disease & Parkinsonism* 1(2): (2011).
32. Leptin, Sonic Hedgehogs, and Neurogenesis—A Primary Cilium's Tale. U. Armato, B. Chakravarthy, A. Chiarini, F. Chioffi, I. Dal Prà, J.F. Whitfield. *Journal. of Alzheimer's disease & Parkinsonism* 2(1): (2012).
33. Direct screening of herbal blends for new synthetic cannabinoids by MALDI-TOF MS. R. Gottardo, A. Chiarini, I. Dal Prà, C. Seri, C. Rimondo, G. Serpelloni, U. Armato, F. Tagliaro. *J Mass Spectrom.,* 47(1):141-6 (2012) IF(2018) 2.112.
34. Role-Shifting PKCζ Fosters Its Own Proapoptotic Destruction by Complexing with Bcl10 at the Nuclear Envelope of Human Cervical Carcinoma Cells: A Proteomic and Biochemical Study. A. Chiarini, M. Marconi, R. Pacchiana, I. Dal Pra, J. Wu, U. Armato *J. Prot. Res.* 11 (8): 3996-4012 (2012). IF(2018) 3.780
35. The calcium-sensing receptor: a novel Alzheimer's disease crucial target? U. Armato, C. Bonafini, B. Chakravarthy, R. Pacchiana, A. Chiarini, J. F. Whitfield, I. Dal Prà *J. Neurol.Sci* 322: 137-140 (2012). IF(2018) 2.651
36. Calcium-sensing receptor antagonist (calcilytic) NPS 2143 specifically blocks the increased secretion of endogenous Aβ42 prompted by exogenous fibrillary or soluble Aβ25-35 in human cortical astrocytes and neurons-Therapeutic relevance to Alzheimer's disease. U. Armato, A. Chiarini, B. Chakravarthy F. Chioffi, R. Pacchiana, E. Colarusso, J.F. Whitfield, I. Dal Prà *Biochimica et Biophysica Acta- Molecular basis of disease* 1832: 1634–1652 (2013). IF(2018) 4.328
37. The Aβ peptides-activated calcium-sensing receptor stimulates the production and secretion of vascular endothelial growth factor-A by normoxic adult human cortical astrocytes. I. Dal Prà, Armato, F. Chioffi, R. Pacchiana, L. Gui, A. Chiarini *Neuromolecular Med.*, 16(4): 645-657. (2014). IF(2018) 2.576
38. Combining immunofluorescence with in situ proximity ligationassay: a novel imaging approach to monitor protein–proteininteractions in relation to subcellular localization. R. Pacchiana, M. Abbate, U. Armato, I. Dal Prà, A. Chiarini *Histochem Cell Biol* 142: 593-600 (2014). IF(2018) 2.640
39. Calcium-Sensing Receptors of Human Astrocyte-Neuron Teams: Amyloid-β-Driven Mediators and Therapeutic Targets of Alzheimer's Disease. I. Dal Prà, A. Chiarini, R. Pacchiana, E. Gardenal, B. Chakravarthy, J. F. Whitfield, U. Armato *Current Neuropharmacology,* 12, 353-364 (2014). IF(2018) 4.568
40. Calcium-Sensing Receptors of Human Astrocyte-Neuron Teams: Amyloid-Driven Mediators and Therapeutic Targets of Alzheimer's Disease. I. Dal Prà, A. Chiarini;, R. Pacchiana, E. Gardenal, B. Chakravarthy, J.F. Whitfield, U. Armato. *World Biomedical Frontiers*, 1(8):1-4 (2014).
41. Do Astrocytes Collaborate with Neurons in Spreading the "Infectious" Aβ and Tau Drivers of Alzheimer's Disease? I. Dal Prà, A. Chiarini, L. Gui, B. Chakravarthy, R. Pacchiana, E. Gardenal, J.F. Whitfield, U. Armato *Neuroscientist* 21: 9-29 (2015). IF(2018) 6.791
42. Antagonizing amyloid-beta/calcium-sensing receptor signaling in human astrocytes and neurons: a key to halt Alzheimer's disease progression? I. Dal Prà, A. Chiarini, U. Armato *Neural Regen Res.*, 10(2):213-218 (2015). IF(2018) 2.472

43. Preventing the spread of Alzheimer's disease neuropathology: A role for calcilytics? A. Chiarini, E. Gardenal, JF. Whitfield, B. Chakravarthy, U. Armato, I. Dal Pra. *Curr. Pharm. Biotechnol.* 16(8):696-706 (2015). IF(2018) 1.516
44. Bcl10 crucially nucleates proapoptotic complexes including PDK1, PKCζ, and caspase-3 at the nuclear envelope of etoposide-treated human cervical carcinoma C4-I cells. A. Chiarini, D. Liu, U. Armato, I. Dal Prà. *Int J Mol Med.* 36(6):845-856 (2015). IF(2017) 2.784
45. The possible roles of the dentate granule cell's leptin and other ciliary receptors in Alzheimer's Neuropathology. J.F. Whitfield, A. Chiarini, I. Dal Prà, U. Armato, B. Chakravarthy. *Cells.* 4(3):253-274 (2015). IF(2018) 5.656
46. Evidence for caspase-dependent programmed cell death along with repair processes in affected skeletal muscle in patients with mitochondrial disorders. V. Guglielmi, G. Vattemi, R. Chignola, A. Chiarini, M. Marini, I. Dal Pra, M. Di Chio, C. Chiamulera, U. Armato, G. Tomelleri. *Clinical Science* 130(3):167-181 (2016). IF(2018) 5.237
47. Calcium-sensing receptors of human neural cells play crucial roles in Alzheimer's disease. A. Chiarini, U. Armato, L. Daisong, I. Dal Prà *Frontiers in Physiology, section Integrative Physiology* 7:134. doi: 10.3389/fphys.2016.00134 (2016). IF(2017) 3.394
48. Biocompatible Silk Noil-Based Three-Dimensional Carded-Needled Nonwoven Scaffolds Guide the Engineering of Novel Skin Connective Tissue. A. Chiarini, G. Freddi, L. Daisong, U. Armato I. Dal Prà *Tissue Eng Part A.* 22(15-16):1047-60 (2016). IF(2018) 3.616
49. Increased Calcium-Sensing Receptor Immunoreactivity in the Hippocampus of a Triple Transgenic Mouse Model of Alzheimer's Disease. E. Gardenal, A. Chiarini, U. Armato, I. Dal Prà, A.Verkhratsky and J. J.Rodríguez Arellano *Frontiers in Neuroscience* (2017) doi: 10.3389/fnins.2017.00081. IF(2018) 3.648
50. Amyloid β-exposed human astrocytes overproduce phospho-Tau and overrelease it within exosomes, effects suppressed by calcilytic NPS 2143--Further implications for Alzheimer's therapy. A. Chiarini, U. Armato, E. Gardenal, L. Gui and I. Dal Prà *Frontiers in Neuroscience* (2017) doi: 10.3389/fnins.2017.0027. IF(2016) 3.648
51. Targeting Human Astrocytes' Calcium-sensing Receptors for Treatment of Alzheimer's Disease. A. Chiarini, U. Armato, J. Withfield, I. Dal Prà *Current Pharmaceutical Design* (2017) 23(33), pp. 4990-5000 doi: 10.2174/1381612823666170710162509. IF(2018) 2.412
52. Calcium-Sensing Receptor Antagonist NPS 2143 Restores Amyloid Precursor Protein Physiological Non-Amyloidogenic Processing in Aβ-Exposed Adult Human Astrocytes. A. Chiarini, U. Armato, D. Liu, I. Dal Prà *Scientific Reports* (2017) 7, Article number: 1277 doi:10.1038/s41598-017-01215-3. IF(2018) 4.011
53. Studies on Sporadic Non-Syndromic Thoracic Aortic Aneurysms—1. Deregulation of Jagged/Notch 1 homeostasis and selection of synthetic/secretor phenotype smooth-muscle cells A. Chiarini, F. Onorati, M. Marconi, A. Pasquali, C. Patuzzo, A. Malashicheva, O. Irtyega, Gi. Faggian, P.F. Pignatti, E. Trabetti, U. Armato and I. Dal Pra *European Journal of Preventive Cardiology* (2018) 25(1_suppl), pp. 42-50 doi: 10.1177/2047487318759119 IF(2018) 5.640
54. Studies on Sporadic Non-Syndromic Thoracic Aortic Aneurysms—2. Alterations of Extra-Cellular Matrix Components and Focal Adhesion Proteins. A. Chiarini, F. Onorati, M. Marconi, A. Pasquali, C. Patuzzo, A. Malashicheva, O. Irtyega, G. Faggian, P. F. Pignatti, E. Trabetti, U. Armato and I. Dal Pra *European Journal of Preventive Cardiology* (2018) 25(1_suppl), pp. 51-58 doi: 10.1177/2047487318759120 IF(2018) 5.640
55. Over Expressed TKTL1, CIP-2A, and B-MYB Proteins in Uterine Cervix Epithelium Scrapings as Potential Risk Predictive Biomarkers in HR-HPV-Infected LSIL/ASCUS Patients. A. Chiarini, D.Liu, M. Rassu, U. Armato, C. Eccher, I.Dal Pra *Frontiers in Oncology* (2019) Volume 9, Article n. 213 doi.: 10.3389/fonc.2019.00213 IF(2018) 4.137
56. Family C G-Protein-coupled receptors in Alzheimer's disease and therapeutic implications. I. Dal Prà, U. Armato, A. Chiarini. *Frontiers in Pharmacology* (2019) vol. 10 Article n.1282 doi:10.3389/fphar.2019.01282. IF(2018) 3.845

57. Three-Layered Silk Fibroin Tubular Scaffold for the Repair and Regeneration of Small Caliber Blood Vessels: From Design to in vivo Pilot Tests. A. Alessandrino, A. Chiarini, M. Biagiotti, I. Dal Prà, G. Bassani, V. Vincoli, P. Settembrini, P. Pierimarchi, G. Freddi, U. Armato. *Frontiers in Bioengineering and Biotechnology* (2019) Volume 7, Article n.356 doi: 10.3389/fbioe.2019.00356 IF(2018) 5.122
58. Maladaptive remodeling of pulmonary artery root autografts after Ross procedure: A proteomic study. A. Chiarini, I. Dal Prà, G. Faggian, U. Armato, G. B. Luciani. *Journal of Thoracic and Cardiovascular Surgery* (2019) *in press* doi: 10.1016/j.jtcvs.2019.07.083 IF(2018) 5.261
59. Mesenchymal stromal cells-exosomes: a promising cell-free therapeutic tool for wound healing and cutaneous regeneration. P. Hu, Q. Yang, Q. Wang, C. Shi, D. Wang, U. Armato, I. Dal Prà, A. Chiarini. *Burns & Trauma* 7, 38, (2019) doi: 10.1186/s41038-019-0178-8. *Corrigendum in Burns & Trauma*, 2020, 8, tkaa007, doi:10.1093/burnst/tkaa007.
60. CaSR Antagonist (Calcilytic) NPS 2143 Hinders the Release of Neuroinflammatory IL-6, Soluble ICAM-1, RANTES, and MCP-2 from Aβ-Exposed Human Cortical Astrocytes. (2020) A. Chiarini, P. Hu, U. Armato, I. Dal Prà. *Cells* 6, 1386 (2020). doi: 10.3390/cells9061386.
61. Danger-Sensing/Pattern Recognition Receptors and Neuroinflammation in Alzheimer's Disease. A. Chiarini, P. Hu, U. Armato, I. Dal Prà. *International Journal of Molecular Sciences* 21, 9036 (2020). doi:10.3390/ijms21239036
62. Exosomes of adult human fibroblasts cultured on 3D silk fibroin nonwovens intensely stimulate neoangiogenesis. P. Hu, A. Chiarini, J. Wu, K. Nie, U. Armato, I. Dal Prà *Burns &Trauma* 9, tkab003 (2021). doi: 10.1093/burnst/tkab003.
63. Electrospun Silk Fibroin Scaffolds for Tissue Regeneration: Chemical, Structural, and Toxicological Implications of the Formic Acid-Silk Fibroin Interaction. M. Biagiotti, G.A. Bassani, A. Chiarini, V.T. Vincoli, I. Dal Prà, C. Cosentino, A. Alessandrino, P. Taddei and G. Freddi. *Frontiers in Bioengineering and Biotechnology* 10: 833157 (2022). doi: 10.3389/fbioe.2022.833157.
64. Adult human vascular smooth muscle cells on 3D silk fibroin nonwovens release exosomes enriched in angiogenic and growth-promoting factors. P. Hu, A. Chiarini, J. Wu, Z. Wei, U. Armato, I. Dal Prà *Polymers* 14(4), 697 (2022). doi:10.3390/polym14040697.
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