

CURRICULUM VITAE

PERSONAL INFORMATION

NAME: Angelina Anna Pirillo

DATE OF BIRTH: July 26, 1967

PLACE OF BIRTH: Saronno (VA), Italy

ADDRESS: Via Torino, 43 - LAZZATE (MB), Italy

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NATIONALITY: Italian

EDUCATION

1986: High School Degree, scientific studies. Final score: 52/60

1991: Doctor in Biological Sciences, University of Milano. Title of the thesis: "*Secondary metabolites from Baccharis*". Final score: 110/110

LABORATORY EXPERIENCE

- ✓ 1990/1991: Experimental thesis held at the Department of Organic and Industrial Chemistry of the University of Milan, concerning the extraction, separation and identification of natural organic substances.
- ✓ Practical annual internship for practicing the profession of biologist:
 - First semester (September 1991 - March 1992) held at the Department of Organic and Industrial Chemistry of the University of Milan. Research concerning the extraction, separation and identification of natural organic substances.
 - Second semester (March 1992 - September 1992) held at the Department of Physiology and General Biochemistry - Biological Section.
- ✓ 01/02/93-31/01/95: Two-year training course at Pharmacia, Nerviano Research Center-Cardiovascular Area. Project title: "Training of specialists in new methodologies for the investigation and development of hypolipidizing and antiatherosclerotic drugs". This training was divided into three periods:
 - 01/02/93-30/06/94:* Study on the modification induced by elastase on human HDL with investigation, in vitro, of the effects of these lipoproteins modified on lipid metabolism, at Pharmacia, Nerviano, Laboratory of Dr. G. Ghiselli.
 - 01/07/94-23/12/94:* Study on human LDL and Lp (a) and their behavior, in vitro (on human macrophages), after enzymatic hydrolysis of the phospholipid component. Laboratory of Dr. A. M. Scanu (Lipoprotein Study Unit, University of Chicago)
 - 06/02/95 - 17/02/95:* Training course at the Tecnofarmaci headquarters, Pomezia, concerning learning of knowledge in the fields of planning, strategic management, evaluation and operational organization of applied research projects.
- ✓ 01/03/95-31/10/96: Study on the oxidation of low-density lipoproteins and the induction of stress proteins in in vitro cellular systems, Laboratory of Prof. A.L. Catapano, Institute of Pharmacological Sciences, University of Milan, Milan.

- ✓ 01/11/96-31/10/99: PhD in Pharmacognostic Sciences, held at the Laboratory of Prof. A.L. Catapano, Institute of Pharmacological Sciences, University of Milan, Milan. Coordinator of the Doctorate: Prof. L. Puglisi. 04/02/2000 Obtaining the Ph.D. title with discussion of thesis entitled: "Simvastatin and procyanidins from *Vitis vinifera*: effects on the cytotoxic activity of oxidized lipoproteins".
- ✓ 01/11/2000-31/10/2004: Holder of a Research Grant at the Department of Pharmacological Sciences-Milan, linked to a project entitled "LIPOPROTEINE MODIFIED AND ATHEROSCLEROSI", concerning the modification of various lipoprotein classes with different enzymes to evaluate the effects on cells of the vascular wall (primary cultures of endothelial cells and of human monocytes / macrophages); evaluation of the expression of inflammation markers (adhesion molecules, chemotactic factors, metalloproteases, cytokines) and the involved transcription factors; evaluation of the induction of cell proliferation.
- ✓ 2004-2015: Holder of Project Work Contracts concerning the alterations of the biological functions of HDL following enzymatic modification (Department of Pharmacological Sciences-Milan, E. Bassini Hospital, Cinisello Balsamo).
- ✓ 2015-present: Elaboration and drafting of scientific publications; manuscripts review; elaboration and drafting of research projects.

PUBLICATIONS

1. Pirillo A, Catapano AL, Norata GD. Strategie di Silenziamento genico nel trattamento delle dislipidemie. *Giornale Italiano dell'Arteriosclerosi*. 2018;9(2):34-46.
2. Pirillo A, Catapano AL, Norata GD. Biological consequences of dysfunctional HDL. *Curr Med Chem*. 2018. doi: 10.2174/0929867325666180530110543.
3. Pirillo A, Catapano AL. PCSK9 inhibition and Lp(a) reduction: another piece of the puzzle? *Eur Heart J*. 2018;39:2586-2588.
4. Pirillo A, Catapano AL. Proprotein Convertase Subtilisin Kexin 9 Inhibitors. *Cardiol Clin*. 2018 May;36(2):241-256.
5. Pirillo A, Bonacina F, Norata GD, Catapano AL. The Interplay of Lipids, Lipoproteins, and Immunity in Atherosclerosis. *Curr Atheroscler Rep*. 2018 Feb 14;20(3):12.
6. Faggiano P, Pirillo A, Griffo R, Ambrosetti M, Pedretti R, Scorcu G, Werren M, Febo O, Malfatto G, Favretto G, Sarullo F, Antonini-Canterin F, Zobbi G, Temporelli P, Catapano AL. Prevalence and management of familial hypercholesterolemia in patients with coronary artery disease: the HEREDITY survey. *Int J Cardiol* 2018; 252:193-198.
7. Catapano AL, Pirillo A, Norata GD. Targeting cholesterol in non-ischemic heart failure: a role for LDLR gene therapy? *Mol Ther* 2017; 25(11):2435-2437 (IF 7.008)
8. Pirillo A, Garlaschelli K, Arca M, Averna M, Bertolini S, Calandra S, Tarugi P, Catapano AL. Spectrum of mutation in Italian patients with familial hypercholesterolemia: New results from the LIPIGEN study. *Atherosclerosis Suppl* 2017; 29:17-24 (IF 3.078)

9. Pirillo A, Norata GD, Catapano AL. Strategies for the use of non-statin therapies. *Curr Opin Lipidol* 2017; 28(6):458-464. (IF 3.853)
10. Catapano AL, Pirillo A, Norata GD. Anti-PCSK9 antibodies for the treatment of heterozygous familial hypercholesterolemia: patient selection and perspectives. *Vasc Health Risk Manag* 2017; 13:343-351.
11. Casula M, Pirillo A, Norata GD, Catapano AL. PCSK9 inhibition in statin intolerant HeFH patients: what's new? *Eur J Prev Cardiol.* 2017; 24(14):1525-1527 (IF 4.542)
12. Pirillo A, Catapano AL. Pitavastatin and HDL: Effects on plasma levels and function(s). *Atheroscler Suppl.* 2017 Jul;27:e1-e9. (IF 3.078)
13. Catapano AL, Pirillo A, Norata GD. Vascular inflammation and low density lipoproteins: is cholesterol the link? A lesson from the clinical trials. *Br J Pharmacol* 2017 Nov; 174(22):3973-3985 (IF 6.81)
14. Casula M, Mozzanica F, Scotti L, Tragni E, Pirillo A, Corrao G, Catapano AL. Statin use and risk of new-onset diabetes: A meta-analysis of observational studies. *Nutr Metab Cardiovasc Dis.* 2017 May;27(5):396-406 (IF 3.318)
15. Norata GD, Tavori H, Pirillo A, Fazio S, Catapano AL. Biology of proprotein convertase subtilisin kexin 9: beyond low-density lipoprotein cholesterol lowering. *Cardiovasc Res.* 2016;112(1):429-442 (IF 5.878)
16. Pirillo A, Catapano AL, Norata GD. Niemann-Pick C1-Like 1 (NPC1L1) Inhibition and Cardiovascular Diseases. *Curr Med Chem.* 2016;23(10):983-99 (IF 2016 3.249)
17. Pirillo A, Catapano AL. Berberine, a plant alkaloid with lipid- and glucose-lowering properties: from in vitro evidence to clinical studies. *Atherosclerosis* 2015; 243(2):449-461 (IF 3.942)
18. Norata GD, Tsimikas S, Pirillo A, Catapano AL. Apolipoprotein C-III: from pathophysiology to pharmacology. *Trends Pharmacol Sci* 2015; 36(10):275-687 (IF 11.84)
19. Pirillo A, Catapano AL. Mutations of APOC3 gene, metabolism of triglycerides and reduction of ischemic cardiovascular events. *G Ital Cardiol (Rome)* 2015; 16(5):289-294
20. Pirillo A, Catapano AL. Update on the management of severe hypertriglyceridemia – focus on free fatty acid forms of omega-3. *Drug Des Dev Ther* 2015;9:2129-2137 (IF 2.881)
21. Pirillo A, Catapano AL. Statin intolerance: diagnosis and remedies. *Curr Cardiol Rep* 2015;17(5):582 (IF 1.83).
22. Pirillo A, Catapano AL, Norata GD. HDL in infectious disease and sepsis. *Handb Exp Pharmacol* 2015; 224:483-508.
23. Pirillo A, Catapano AL. Nutraceutica: definizione, regolamentazione e applicazioni. *GIFF* 2014;6(4):23-30.

24. Catapano AL, Pirillo A, Bonacina F, Norata GD. HDL in innate and adaptive immunity. *Cardiovasc Res* 2014 Aug 1;103(3):372-383. (IF 5.940)
25. Pirillo A, Tibolla G, Norata GD, Catapano AL. HDL: to treat or not to treat? *Curr Atheroscler Rep.* 2014 Aug;16(8):429. (IF 3.417)
26. Ammirati E, Bozzolo EP, Contri R, Baragetti A, Palini AG, Cianflone D, Banfi M, Uboldi P, Bottoni G, Scotti I, Pirillo A, Grigore L, Garlaschelli K, Monaco C, Catapano AL, Sabbadini MG, Manfredi AA, Norata GD. Cardiometabolic and immune factors associated with increased common carotid artery intima-media thickness and cardiovascular disease in patients with systemic lupus erythematosus. *Nutr Metab Cardiovasc Dis* 2014. (IF 3.323)
27. Pirillo A, Norata GD, Catapano AL. Postprandial lipemia as a cardiometabolic risk factor. *Curr Med Res Opin* 2014 (IF 2.653)
28. Cutuli L, Pirillo A, Uboldi P, Kuehn H, Catapano AL. 15-lipoxygenase-mediated modification of HDL3 impairs eNOS activation in human endothelial cells. *Lipids* 2014; 49(4):317-26. (IF 1.854)
29. Pirillo A, Catapano AL. Soluble lectin-like oxidized low density lipoprotein receptor-1 (sLOX-1) as a biochemical marker for atherosclerosis-related diseases. *Dis Markers* 2013; 35(5):413-418. (IF 2.174)
30. Pirillo A, Catapano AL. Omega-3 polyunsaturated fatty acids in the treatment of atherogenic dyslipidemia. *Atheroscler Suppl.* 2013; 14(2):237-242. (IF 9.667)
31. Pirillo A, Norata GD, Catapano AL. LOX-1, OxLDL and Atherosclerosis. *Mediators Inflamm* 2013; 2013:152786. (IF 2.417)
32. Pirillo A, Catapano AL, Omega-3 polyunsaturated fatty acids in the treatment of hypertriglyceridemia. *Int J Cardiol.* 2013; 170(2 Suppl 1):S16-20. (IF 6.175)
33. Sala F, Cutuli L, Grigore L, Pirillo A, Chiesa G, Catapano AL, Norata GD Prevalence of classical CD14⁺⁺/CD16⁻ but not of intermediate CD14⁺⁺/CD16⁺ monocytes in hypoalphalipoproteinemia. *Int J Cardiol.* 2013; 168(3):2886-9. (IF 6.175)
34. Pirillo A, Norata GD, Catapano AL. Treating high density lipoprotein cholesterol (HDL-C):quantity versus quality. *Curr Pharm Des.* 2013;19(21):3841-57. (IF 3.288)
35. Pirillo A, Norata GD, Catapano AL. High-density lipoprotein subfractions: what the clinicians need to know. *Cardiology.* 2013;124(2):116-125. (IF 2.044)
36. Grigore L, Raselli S, Garlaschelli K, Redaelli L, Norata GD, Pirillo A, Catapano AL. Effect of treatment with pravastatin or ezetimibe on endothelial function in patients with moderate hypercholesterolemia. *Eur J Clin Pharmacol* 2013;69(3):341-6. (IF 2.697)
37. Pirillo A, Uboldi P, Ferri N, Corsini A, Kuhn H, Catapano AL. Upregulation of Lectin-Like Oxidized Low Density Lipoprotein Receptor 1 (Lox-1) Expression in Human Endothelial Cells by Modified High Density Lipoproteins. *Biochem Biophys Res Commun.* 2012;428(2):230-3 (IF 2.406)

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47. Pirillo A, Uboldi P, Catapano AL. Dual role of hypochlorite in the modification of high density lipoproteins. *Biochem Biophys Res Commun*. 2010;403:447-451 (IF 2.595)
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49. Norata GD, Marchesi P, Pirillo A, Uboldi P, Chiesa G, Maina V, Garlanda C, Mantovani A, Catapano AL. Long Pentraxin 3, a Key Component of Innate Immunity, Is Modulated by High-Density Lipoproteins in Endothelial Cells. *Arterioscler Thromb Vasc Biol*. 2008;28:925-931. (IF 6.858).
50. Pirillo A, Uboldi P, Pappalardo G, Kuhn H, Catapano AL. Modification of HDL₃ by mild oxidative stress increases ATP-binding cassette transporter-1-mediated cholesterol efflux. *Cardiovascular Research* 2007;75:566-574 (IF 6.127).

51. Norata GD, Marchesi P, Passamonti S, Pirillo A, Violi F, Catapano AL. Anti-inflammatory and anti-atherogenic effects of catechin, caffeic acid and trans-resveratrol in apolipoprotein E deficient mice. *Atherosclerosis*. 2007;191:265-271 (IF 4.287).
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56. Norata GD, Banfi C, Pirillo A, Tremoli E, Hamsten A, Catapano AL, Eriksson P. Oxidised-HDL3 induces the expression of PAI-1 in human endothelial cells. Role of p38MAPK activation and mRNA stabilization. *Br J Haematol*. 2004;127:97-104. (IF 3.195)
57. Norata GD, Pirillo A, Pellegatta F, Inoue H, Catapano AL. Native LDL and oxidized LDL modulate cyclooxygenase-2 expression in HUVECs through a p38-MAPK, NF-kappaB, CRE dependent pathway and affect PGE2 synthesis. *Int J Mol Med*. 2004;14:353-359. (IF 3.190)
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59. Norata GD, Pirillo A, Catapano AL. Statins and oxidative stress during atherogenesis. *J Cardiovasc Risk*. 2003;10:181-189. (IF 1.99)
60. Catapano AL, Norata GD, Pirillo A. Lipoproteine ossidate ed endotelio. *Giornale della Arteriosclerosi*. 2002;27:53-57.
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62. Pirillo A, Norata GD, Zanelli T, Catapano AL. Overexpression of hsp70i in Cos-1 cells fails to protect from OxLDL cytotoxicity. *Arteriosclerosis, Thrombosis, and Vascular Biology*. 2001;21: 348-354. (IF 5.816)

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64. Pirillo A, Zhu W, Norata GD, Zanelli T, Barberi L, Roma P, Catapano AL. Oxidized lipoproteins and endothelium. *Clinical Chemistry and Laboratory Medicine*. 2000; 38(2): 155-160. (IF 1.744)
65. Pirillo A, Zhu W, Roma P, Rasetti MF, Caruso D, Pellegatta F, Catapano AL. Oxysterols from oxidized LDL are cytotoxic but fail to induce hsp70 expression in endothelial cells. *FEBS Letters* 1999; 462: 113-116. (IF 3.72)
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72. Pirillo A, Verotta L, Gariboldi P, Torregiani E, Bombardelli E. Constituents of Nothapodytes-Foetida. *Journal of the Chemical Society. Perkin Transactions I*. 1995;5: 583-587. (IF 1.641)
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BOOK CHAPTERS

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2. Pirillo, A., Norata, G. D., Catapano, A. L. (2017) Advances in Hypercholesterolemia. In: Samuel Chackalamannil, David P Rotella and Simon E Ward, (eds.) Comprehensive Medicinal Chemistry III vol. 7, pp. 663–693. Oxford: Elsevier. <http://dx.doi.org/10.1016/B978-0-12-409547-2.12435-7>. ISBN: 9780128032008
3. Angela Pirillo, Alberico L. Catapano, (2015), STATINS AND LOMITAPIDE: A SUITABLE RESPONSE FOR HoFH?, in Combination Therapy in Dyslipidemia, Banach M. editor, 1st ed. Springer International Publishing Switzerland 2015. DOI 10.1007/978-3-319-20433-8_8
4. Angela Pirillo, Giuseppe Danilo Norata, Alberico Luigi Catapano, (2012), PREVENTION AND CARE OF ATHEROSCLEROSIS, in *Pharmacology*, [Eds. UNESCO-EOLSS Joint Committee], in *Encyclopedia of Life Support Systems (EOLSS)*, Developed under the Auspices of the UNESCO, Eolss Publishers, Oxford ,UK, [<http://www.eolss.net>]
5. Angela Pirillo, Giuseppe Danilo Norata, Alberico Luigi Catapano, (2014), PRODUCTION AND METABOLISM OF TRIGLYCERIDE-RICH LIPOPROTEINS IN BOTH THE NORMAL AND DIABETIC STATES, in Lipoprotein in Diabetes Mellitus, Jenkins, Alicia J.; Toth, Peter P.; Lyons, Timothy J. (Eds.), Humana Press