

CURRICULUM VITAE

Stefano Bellosta, Ph.D.

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EDUCATION AND SCIENTIFIC ACTIVITIES

2017 Assistant Professor of Pharmacology at the Department of Pharmacological and Biomolecular Sciences, University of Milan.

2007 Master in Oncological Pharmacy and Pharmacology, University of Milan.

2005 Specialization in Oncological Pharmacy, University of Milan.

2001-2017 Assistant Professor of Pharmacology at the Department of Pharmacological and Biomolecular Sciences, then at the Department of Oncology and Hemato-oncology, University of Milan.

2000-2001 Postdoctoral Fellowship of the Department of Pharmacological Sciences, University of Milan.

1998-2000 Postdoctoral Fellowship of the Nutrition Foundation of Italy.

1996-1998 Postdoctoral fellowship of the Institute of Pharmacological Sciences, University of Milan

1995 Ph.D. in Experimental Medicine: Atherosclerosis at the University of Siena, with a thesis entitled "Effect of macrophage-specific expression of human apolipoprotein E on atherosclerotic plaque formation in transgenic mice"

1992-1995 Postdoctoral Fellow, Gladstone Institute of Cardiovascular Disease; Research Fellow, Cardiovascular Research Institute, University of California, San Francisco

1989 Ph.D. in Experimental Pharmacology at the University of Milan, with a thesis entitled "Oxysterols and lipoprotein metabolism."

1988-1991 Researcher in the program entitled "Technologies for the in vitro study of antithrombotic drugs," supported by the National Program for Drug Research (Italian Government).

1988 Postgraduate School of Experimental Pharmacology, University of Milan.

1987-1988 Postdoctoral Fellowship of the Nutrition Foundation of Italy.

1987 Doctor in Drug Chemistry and Technology, at the University of Milan, with an experimental thesis entitled, "Characterization of high density lipoprotein binding in a new human endothelial cell line (EAhy 926)."

1985-1987 Research Student at the Institute of Pharmacological Sciences, University of Milan, Italy.

1981-1987 Student in Drug Chemistry and Technology, University of Milan, Italy.

1981 License in Science

GRANTS

2015-2019 Collaboration to the European Joint Doctorate entitled "*Modulation of glycolytic flux as a new approach for treatment of atherosclerosis and plaque stabilization: a multidisciplinary study*",

Innovative Training Networks (ITN), Call H2020-MSCA-ITN-2015, Marie Skłodowska-Curie Actions, European Commission.

2010-2013 Recipient of a contract "*Cigarette smoke and atherogenesis: the role of monocytes/macrophages*", funded by British American Tobacco (Southampton, UK)

2006-2009 Collaboration to the project "Specific Targeted Research Project", VI Framework Program of the European Commission, call "FP6-2005-LIFESCIHEALTH-6", theme: "Application-oriented studies on regulatory networks involved in lipid homeostasis and atherosclerosis".

2002-2006 Recipient of a contract "Research Training Networks" from the Commission of the European Community on the project "Selective Fluorinated Inhibitors of Matrix Metalloproteinases 3 and 9" (IHP-RTN-00-2) in the Fifth Framework Program of the European Commission.

2002-2004 Recipient of a contract from the M.U.R.S.T. (Italian Government) on the project "Pharmacological control of ABCA1 expression and activity in human monocyte/macrophages: therapeutical prospective for the protection of the vessel wall".

1999-2002 Recipient of a contract from the M.U.R.S.T. (Italian Government) on the project "Role of smooth muscle cells in atherogenesis: pharmacological implications".

1998-2002 Recipient of a contract from the Commission of the European Community on the project "Macrophage function and stability of the atherosclerotic plaque" (QLG1-1999-01007) in the Fifth Framework Program of the European Commission – Quality of Life and Management of Living Resources.

PUBLICATIONS (peer-reviewed articles)

1. Proprotein convertase subtilisin-kexin type-9 (PCSK9) and triglyceride-rich lipoprotein metabolism: facts and gaps. A. Baragetti, D. Grejtakova, M. Casula, E. Olmastroni, G. Sacconi Jotti, G.D. Norata, A.L. Catapano, **S. Bellosta**. *Pharmacological Research* 2018, 130:1-11. doi: 10.1016/j.phrs.2018.01.025.
2. The dataset describes: Phenotypic changes induced by cholesterol loading in smooth muscle cells isolated from the aortae of C57BL/6 mice. S. Castiglioni, M. Monti, G. Ainis Buscherini, L. Arnaboldi, M. Canavesi, A. Corsini, **S. Bellosta**. *Data in Brief* 2018, 16:334-340. doi: 10.1016/j.dib.2017.11.050. eCollection 2018 Feb.
3. Statin drug interactions and related adverse reactions: an update. **S. Bellosta**, A. Corsini. *Expert Opin Drug Saf.* 2018, 17(1):25-37. doi: 10.1080/14740338.2018.1394455. Epub 2017 Oct 30.
4. ABCA1 and HDL3 are Required to Modulate Smooth Muscle Cells Phenotypic Switch after Cholesterol Loading. S. Castiglioni, M. Monti, L. Arnaboldi, M. Canavesi, G. Ainis Buscherini, L. Calabresi, A. Corsini, **S. Bellosta**. *Atherosclerosis*. 2017 Nov; 266:8-15. doi: 10.1016/j.atherosclerosis.2017.09.012. Epub 2017 Sep 18.
5. Pharmacokinetic interactions of monoclonal antibodies. N. Ferri, **S. Bellosta**, L. Baldessin, D. Boccia, G. Racagni, A. Corsini. *Pharmacol Res* 2016, 111:592–599. doi: 10.1016/j.phrs.2016.07.015.
6. Cigarette smoke condensate affects monocyte interaction with endothelium. I. Giunzioni, A. Bonomo, E. Bishop, S. Castiglioni, A. Corsini, S. Bellosta. *Atherosclerosis* 2014, 234:383-390.
7. Pharmacology of the new P2Y12 receptor inhibitors: insights on pharmacokinetics and pharmacodynamics properties. N. Ferri, A. Corsini, S. Bellosta. *Drugs* 2013, Oct;73(15):1681-709.
8. Regenerated keratin proteins as potential biomaterial for drug delivery. F. Cilurzo, F. Selmin, A. Aluigi, S. Bellosta. *Polymers for Advanced Technologies* 2013, Nov;24(11):1025–1028.
9. Nitric oxide-donating atorvastatin attenuates neutrophil recruitment during vascular inflammation independent of changes in plasma cholesterol. R. Baetta, A. Granata, D. Miglietta, F. Oliva, L. Arnaboldi, A. Bonomo, N. Ferri, E. Ongini, S. Bellosta, A. Corsini. *Cardiovascular Drugs and Therapy* 2013Jun;27(3):211-9.
10. Cholesterol: Its Regulation and Role in Central Nervous System Disorders. M. Orth, S. Bellosta. *Cholesterol* Epub 2012 Oct 17.

11. Statin drug interactions and related adverse reactions. S. Bellosta, A. Corsini. *Expert Opinion On Drug Safety* 2012, Nov;11(6):933-46.
12. Free cholesterol alters macrophage morphology and mobility by an ABCA1 dependent mechanism. M.P. Adorni, E. Favari, N. Ronda, A. Granata, S. Bellosta, L. Arnaboldi, A. Corsini, R. Gatti, F. Bernini. *Atherosclerosis*. 2011 Mar;215(1):70-6.
13. Olive oil phenols modulate the expression of metalloproteinase 9 in THP-1 cells by acting on nuclear factor-kappaB signaling. M. Dell'Agli, R. Fagnani, G.V. Galli, O. Maschi, F. Gilardi, S. Bellosta, M. Crestani, E. Bosisio, E. De Fabiani, D. Caruso. *J Agric Food Chem*. 2010 Feb 24;58(4):2246-52
14. Everolimus Inhibits Monocyte/Macrophage Migration in Vitro and Their Accumulation in Carotid Lesions of Cholesterol-Fed Rabbits. R. Baetta, A. Granata, M. Canavesi, N. Ferri, Ferri, L. Arnaboldi, S. Bellosta, P. Pfister, A. Corsini. *J Pharmacol Exp Ther*. 2009, 328(2):419-425.
15. Mediterranean diet and cardioprotection: wild artichoke inhibits metalloproteinase 9. S. Bellosta, P. Bogani, M. Canavesi, C. Galli, F. Visioli. *Molecular Nutrition and Food Research* 2008, 52(10):1147-52.1.
16. Thiol supplementation inhibits metalloproteinase activity independent of glutathione status. P. Bogani, M. Canavesi, T.M. Hagen, F. Visioli, S. Bellosta. *Biochem Biophys Res Commun* 2007; 363:651-6
17. Raloxifene modulates MMPs expression and activity in macrophages and smooth muscle cells S. Bellosta, R. Baetta, M. Canavesi, C. Comparato, M. Monetti, F. Silva, I. Eberini, F. Cairoli, C. Puglisi, A. Corsini. *Pharmacological Research* 2007;56(2):160-167.
18. Perivascular carotid collar placement induces neointima formation and outward arterial remodeling in mice independent of apolipoprotein E deficiency or Western-type diet feeding. R. Baetta, F. Silva, C. Comparato, M. Uzzo, I. Eberini, S. Bellosta, E. Donetti, A. Corsini. *Atherosclerosis*. 2007; 195:e112-e124.
19. Rosuvastatin displays anti-atherothrombotic and anti-inflammatory properties in apoE-deficient mice. M Monetti, M Canavesi, M Camera, R Parente, R Paoletti, E Tremoli, A Corsini, S Bellosta. *Pharmacological Research* 2007;55(5):441-449.
20. Rosuvastatin treatment prevents progressive kidney inflammation and fibrosis in stroke-prone rats. A. Gianella, E. Nobili, M. Abbate, C. Zoja, P. Gelosa, L. Mussoni, S. Bellosta, M. Canavesi, D. Rottoli, U. Guerrini, M. Brioschi, C. Banfi, E. Tremoli, G. Remuzzi, L. Sironi. *American Journal of Pathology* 2007;170(4):1165-77.
21. Inhibition of MMP-2 activation and release as a novel mechanism for HDL-induced cardioprotection. S. Bellosta, M. Gomaraschi, M. Canavesi, G. Rossoni, M. Monetti, G. Franceschini, L. Calabresi. *FEBS Letters* 2006, 580(25):5974-5978.
22. Stereochemically Pure α -Trifluoromethyl-Malic Hydroxamates: Synthesis and Evaluation as Inhibitors of Matrix Metalloproteinases. M. Moreno, M. Sani, G. Raos, S.V. Meille, D. Belotti, R. Giavazzi, S. Bellosta, A. Volonterio, M. Zanda. *Tetrahedron* 2006, 62:10171–10181.
23. Hypolipidemic therapy for the metabolic syndrome. A. Cignarella, S. Bellosta, A. Corsini, C. Bolegoc. *Pharm Res* 2006, 53 (6):492-500.
24. Pharmacokinetic Interactions Between Statins and Fibrates. A. Corsini, S. Bellosta, M. H. Davidson. *Am J Cardiol* 2005, 96(Suppl 9A):44K-49K.
25. A structure-activity study for the inhibition of metalloproteinase-9 activity and gene expression by analogues of gallic acid. M. Dell'Agli, S. Bellosta, L. Rizzi, G.V. Galli, M. Canavesi, F. Rota, R. Parente, E. Bosisio, S. Romeo. *Cell Mol Life Sci* 2005, 62: 2896 - 2903.
26. PPAR α inhibits vascular smooth muscle cell proliferation underlying intimal hyperplasia by inducing the tumor suppressor gene p16INK4a. F. Gizard, C. Amant, O. Barbier, S. Bellosta, R. Robillard, F. Percevault, H. Sevestre, P. Krimpenfort, A. Corsini, J. Rochette, C. Glineur, J-C Fruchart, G. Torpier, B. Staels. *J Clin Invest* 2005, 115:3228-3238.
27. Synthesis of α -trifluoromethyl- α -amino- β -sulphone hydroxamates: novel nanomolar inhibitors of matrix metalloproteinases. R. Sinisi, M. Sani, G. Candiani, R. Parente, F. Pecker, S. Bellosta, M. Zanda. *Tetrahedron letters*, 2005, 46:6515-6518
28. Dietary polyphenols and regulation of gelatinases expression and activity. M. Dell'Agli, M. Canavesi, G. Galli, S. Bellosta. *Thrombosis and Haemostasis*, 2005, 93:751-760.

29. The safety of statins: Focus on clinical pharmacokinetics and drug interaction. S. Bellosta, R. Paoletti, A. Corsini. *Circulation* 2004, 109(23 Suppl 1):III50-57.
30. Inhibition of metalloproteinase-9 activity and gene expression by polyphenolic compounds isolated from the bark of *Tristanopsis calobuxus* (Myrtaceae) S. Bellosta, M. Dell'Agli, M. Canavesi, N. Mitro, M. Monetti, M. Crestani, L. Verotta, N. Fuzzati, F. Bernini, E. Bosisio. *Cell Mol Life Sci* 2003, 60: 1440-1448.
31. Synthesis, Structure and Conformation of Partially-Modified Retro and Retro-inverso α [NHCH(CF₃)]Gly-Peptides. A. Volonterio, S. Bellosta, F. Bravin, C. Bellucci, P. Bravo, G. Colombo, L. Malpezzi, S. Mazzini, S. V. Meille, M. Meli, C. R. de Arellano, M. Zanda. *Chem. Eur. J.* 2003, 9:4510-4522
32. Endogenous proteolytic activity in a rat model of spontaneous cerebral stroke. L. Sironi, A. M. Calvio, S. Bellosta, B. Lodetti, U. Guerrini, M. Monetti, E. Tremoli, L. Mussoni. *Brain Res* 2003, 974: 184-192
33. Rupture of the atherosclerotic plaque: does a good animal model exist? P. Cullen, R. Baetta, S. Bellosta, F. Bernini, et al. for the MAFAPS Consortium. *Arterioscl. Thromb. Vasc. Biol.* 2003, 23: 535-542.
34. Safety consideration for statins. C. Bolego, R. Baetta, S. Bellosta, A. Corsini, R. Paoletti. *Curr Opin Lipidol* 2002, 13: 637-644.
35. Pharmacological interactions of statins. R. Paoletti, A. Corsini, S. Bellosta. *Atherosclerosis Supplements* 2002, 3: 35-40.
36. Macrophage function and stability of the atherosclerotic plaque: progress report of a European project. Bellosta S, Bernini F, Chinetti G, Cignarella A, Cullen P, von Eckardstein A, Exley A, Freeth J, Goddard M, Hofker M, Kanters E, Kovanen P, Lorkowski S, Pentikainen M, Printen J, Rauterberg J, Ritchie A, Staels B, Weitkamp B, de Winther M; Macrophage Function and Stability of Atherosclerotic Plaque Consortium. *Nutr Metab Cardiovasc Dis* 2002 Feb;12(1):3-11
37. Solution/solid-phase synthesis of partially modified retro- and retro-inverso [NHCH(CF₃)]-peptidyl hydroxamates and their evaluation as MMP-9 inhibitors. A. Volonterio, S. Bellosta, P. Bravo, M. Canavesi, E. Corradi, S. V. Meille, M. Monetti, N. Moussier, M. Zanda. *Eur J Org Chem*, 2002: 428-438.
38. Total synthesis of a Pepstatin analog incorporating two trifluoromethyl hydroxymethylene isosteres (Tfm-GABOB) and evaluation of Tfm-GABOB containing peptides as inhibitors of HIV-1 protease and MMP-9. C. Pesenti, A. Arnone, S. Bellosta, P. Bravo, M. Canavesi, E. Corradi, M. Frigerio, S. V. Meille, M. Monetti, W. Panzeri, F. Viani, R. Venturini, M. Zanda. *Tetrahedron* 2001, 57: 6511-6522.
39. Lacidipine modulates the secretion of matrix metalloproteinase-9 by human macrophages. Bellosta S, Canavesi M, Favari E, Cominacini L, Gaviraghi G, Fumagalli R, Paoletti R, Bernini F. *J Pharmacol Exp Ther* 2001;296(3):736-743.
40. Non-lipid-related effects of statins. Bellosta S, Ferri N, Bernini F, Paoletti R, Corsini A. *Ann Med* 2000, 32(3): 164-176.
41. Pleiotropic effects of statins in atherosclerosis and diabetes. Bellosta S, Ferri N, Arnaboldi L, Bernini F, Paoletti R, Corsini A. *Diabetes Care* 2000, 23 suppl 2: B72-B78.
42. New insights into the pharmacodynamics and pharmacokinetic properties of statins. Corsini A, Bellosta S, Baetta R, Fumagalli R, R. Paoletti, Bernini F. *Pharmacol Therapeut.* 1999, 84: 413-428.
43. Expression of human apolipoprotein E3 or E4 in neurons of apoE knockout mice: isoform-specific effects on neurodegeneration in vivo. Orth M, Buttini M, Bellosta S, Akeefe H, Pitas RE, Wyss-Coray T, Mucke L, Mahley RW. *J. Neurosci.* 1999, 19: 4867-4880.
44. Characterization of a new form of inherited hypercholesterolemia: the familial recessive hypercholesterolemia. Zuliani G, Arca M, Signore A, Bader G, Fazio S, Chianelli M, Bellosta S, Campagna F, Montali A, Maioli M, Pacifico A, Ricci G, Fellin R. *Arterioscl. Thromb. Vasc. Biol.* 1999, 19: 802-809.
45. Natural anti-endothelial cell antibodies (AECA). Ronda N, Leonardi S, Orlandini G, Gatti R, Bellosta S, Bernini F, Borghetti A. *J. Autoimmun.* 1999, 13: 121-127
46. HMG-CoA reductase inhibitors reduce MMP-9 secretion by macrophages. Bellosta S, Via D, Canavesi M, Pfister P, Fumagalli R, Bernini F. *Arterioscl. Thromb. Vasc. Biol.* 1998; 18:1671-1678.
47. Isoform-specific effects of human apolipoprotein E on brain function revealed in apoE knockout mice – Increased susceptibility of females. Raber J, Wong D, Buttini M, Orth M, Bellosta S, Pitas R, Mahley RW, Mucke L. *Proc. Natl. Acad. Sci. U.S.A.* 1998 ; 95: 10914-10919.

48. Direct vascular effects of HMG-CoA reductase inhibitors. Bellosta S, Bernini F, Ferri N, Quarato P, Canavesi M, Arnaboldi L, Fumagalli R, Paoletti R, Corsini A. *Atherosclerosis* 1998; 137 (Suppl): S101-S109.
49. Low-dose expression of a human apolipoprotein E transgene in macrophages restores cholesterol efflux capacity of apolipoprotein E-deficient mouse plasma. Zhu Y, Bellosta S, Bernini F, Pitas RE, Assmann G, von Eckardstein A. *Proc. Natl. Acad. Sci. U.S.A.* 1998 ; 95:7585-7590.
50. Oleuropein, the bitter principle of olives, enhances nitric oxide production by mouse macrophages. Visioli F, Bellosta S, Galli C. *Life Sci.* 1998; 62 (6): 541-546.
51. Effect of lacidipine on cholesterol esterification: in vivo and in vitro studies. Bernini F, Canavesi M, Bernardini E, Scurati N, Bellosta S, Fumagalli R. *Br. J. Pharmacol.* 1997; 122 : 1209-1215.
52. Disruption of the acyl CoA: cholesterol acyltransferase gene in mice: evidence suggesting multiple cholesterol esterification enzyme in mammals. Meiner VL, Cases S, Myers HM, Sande ER, Bellosta S, Schambelan M, Pitas RE, McGuire J, Herz J, Farese RV. *Proc. Natl. Acad. Sci. USA* 1996; 93: 14041-14046.
53. Macrophage-specific expression of human apolipoprotein E reduces atherosclerosis in hypercholesterolemic apolipoprotein E-null mice. Bellosta S, Mahley RW, Sanan DA, Murata J, Newland DL, Taylor JM, Pitas RE. *J. Clin. Invest.* 1995; 96: 2170-2179.
54. Stable expression and secretion of apolipoproteins E3 and E4 in mouse neuroblastoma cells produces differential effects on neurite outgrowth. Bellosta S, Nathan BP, Orth M, Dong L-M, Mahley RW, Pitas RE. *J Biol Chem.* 1995; 270: 27063-27071.
55. The inhibitory effect of apolipoprotein E4 on neurite outgrowth is associated with microtubule depolymerization. Nathan BP, Chang K-C, Bellosta S, Brisch E, Ge N, Mahley RW, Pitas RE. *J Biol Chem.* 1995; 270: 19791-19799.
56. Apolipoprotein E: impact of cytoskeletal stability in neurons and the relationship to Alzheimer's disease. Mahley RW, Nathan BP, Bellosta S, Pitas RE. *Curr Opin Lipidol.* 1995; 6(2):86-91
57. Differential effects of apolipoproteins E3 and E4 on neuronal growth in vitro. Nathan BP, Bellosta S, Sanan DA, Weisgraber KH, Mahley RW, Pitas RE. *Science* 1994; 264: 850-852
58. 27-hydroxycholesterol modulation of low-density lipoprotein metabolism in cultured human hepatic and extrahepatic cells. Bellosta S, Corsini A, Bernini F, Granata A, Didoni G, Mazzotti M, Fumagalli R. *FEBS* 1993; 1,2: 115-118.
59. Requirement for mevalonate in acetylated LDL induction of cholesterol esterification in macrophages. Bernini F, Didoni G, Bellosta S, Fumagalli R. *Atherosclerosis* 1993; 104: 19-26.
60. Calcium antagonists and cholesteryl ester homeostasis in macrophages. Bernini F, Bellosta S, Didoni G, Fumagalli R. *J Cardiovasc Pharm* 1991; 18 (Suppl. 10): S42-S45.
61. Cholesterol stimulation of HDL binding to human endothelial cells EAhy 926 and skin fibroblasts: evidence for a mechanism independent of cellular metabolism. Bernini F, Bellosta S, Corsini A, Maggi FM, Fumagalli R, Catapano A.L. *Biochim. Biophys. Acta* 1991; 1083: 94 100.
62. Lipoprotein changes and increased affinity of LDL for their receptors after acipimox treatment in hypertriglyceridemia. Franceschini G, Bernini F, Michelagnoli S, Bellosta S, Vaccarino V, Fumagalli R, Sirtori CR. *Atherosclerosis* 1990; 81: 41-49

Author of 104 publications (62 peer-reviewed scientific papers and 42 non-peer-reviewed publications (meeting proceedings and editorials)).

Total impact factor = 286; average IF = 4.6; total number of citations = 8522; H index = 35 (Google scholar).

Author of more than 180 presentations to national and international congresses.