

## **CURRICULUM VITAE**

### **Franco Bernini, PhD**

#### *Personal data*

Date of birth: June 24th 1954

Place of birth: Milano, Italy

Nationality: italian

Mailing address: Department of Pharmacy, University of Parma, Parco Area Scienze 27/A, 43124 Parma, Italy

Email: f.bernini@unipr.it

#### *Education and Career*

Graduated "Magna cum Laude" in Drug Chemistry and Technology at the University of Milan in 1979. Fellowship at the Department of Pharmacological Sciences directed by Prof Rodolfo Paoletti, University of Milan in 1979-84 and in 1986-92. Instructor and Visiting Scientist at the Baylor College of Medicine, Department of Medicine in Houston, (TX; USA) directed by Prof. A.M. Gotto in 1984-1986, 1987 and 1988. Board certified in Experimental Pharmacology at the University of Milan in 1981. PhD in Experimental Medicine (Arteriosclerosis) in 1988. Associate Professor (1992-2001) and then Full Professor (since 2001) of Pharmacology at the University of Parma, Italy. Visiting Professor in 2004 (1 month) with an NIH grant at the Joseph Stokes Jr. Research Inst. Children's Hospital of Philadelphia (USA) in the laboratory of Prof. G. Rothblat. Responsible of the laboratory of Cardiovascular Pharmacology at the Department of Pharmacy at the University of Parma (since 1992).

#### *Main research areas*

Physiology and pharmacology of atherosclerosis and cholesterol metabolism. Prof. Bernini has a wide experience in evaluating cholesterol metabolic processes at cellular level and in vivo models applied research, aimed to the investigation of mechanisms regulating lipid homeostasis including its pharmacological or nutraceutical modulation for the prevention and therapy of cardiovascular disease. He provided major contributions to the elucidation of the antiatherogenic process of reverse cholesterol transport.

#### *Collaborations*

Prof Bernini has been invited at foreign institutes for seminars of scientific, special interest. Most relevant national and international scientific collaborations: Prof. GUIDO FRANCESCHINI: Università degli Studi di Milano, Dipartimento di scienze per gli alimenti, la nutrizione e l'ambiente, Milano, Italy; Prof. LAURA CALABRESI: Centro Grossi Paoletti, Dipartimento di Scienze

Farmacologiche e Biomolecolari, Università degli Studi di Milano, Milano, Italy; Prof. SEBASTIANO CALANDRA: University of Modena and Reggio Emilia Department of Biomedical, Metabolic and Neural Sciences, Modena, Italy; Prof. MARCELLO ARCA: Centro Aterosclerosi Dipartimento di Medicine Interne e Specialità Mediche, Policlinico Umberto I, Roma, Italy; Prof. GEORGE ROTHBLAT: Children's Hospital of Philadelphia Abramson Research Center, Philadelphia, USA; Prof. PAOLO PARINI: Division of Clinical Chemistry, Department of Laboratory Medicine, Karolinska Institutet at Karolinska University Hospital Huddinge, Stockholm, Sweden; Prof. LAWRENCE RUDEL: Department of Pathology, Section on Lipid Sciences, Wake Forest University School of Medicine, Winston-Salem, North Carolina, USA; Prof. JOHN M. CHAPMAN: Hôpital de la Pitié, Paris, France, Prof. WENDY JESSUP: Centre for Vascular Research, University of New South Wales, Sidney, Australia; KEMPEN HJ: The Medicines Company (Schweiz) GmbH, Zurich, Switzerland; MIRANDA VAN ECK: Division of Biopharmaceutics, Leiden/Amsterdam Center for Drug Research, Gorlaeus Laboratories, Leiden University, Leiden, The Netherlands; MONIQUE MULDER: Department of Neurology, Erasmus MC, University Medical Center Rotterdam, the Netherlands; VON ECKARDSTEIN ARNOLD: Institute of Clinical Chemistry, University and University Hospital of Zurich, Switzerland; Competence Center for Integrated Human Physiology, University of Zurich, Switzerland.

#### *Membership*

Member of: International Society of Arteriosclerosis (IAS), European Lipoprotein Club (ELC), European Atherosclerosis Society (EAS), ULLA Consortium of European Pharmacy Schools, COST Steering Committee, Italian Society of Pharmacology (SIF), Italian Society of Cardiovascular Research (SIRC), Italian Society for Atherosclerosis Study (SISA).

#### *Previous projects*

National Drug Project (1997),

National Project sponsored by the University and Scientific and Technologic Research Minister (1998-2000; 2000-2002; 2005-2007),

Fifth Framework Program of the European Commission (1999),

FIRB (2001), Cofin (2000; 2005),

Scientific project funded by Italian Group for Systemic Lupus Erythematosus Research (2010), Advance Diagnostics in Lipidology (ADSL) Regional Project (DiAL-ER) (2009-2011),

European COST Action BM0904 HDL-From Biological Understanding to Clinical Exploitation (2010-2013).

### *Ongoing project*

2013. Scientific project funded by Cariplo Foundation. Title of the project: *Investigating the role of pro-protein convertase subtilisin/kexin type 9 (PCSK9) released from smooth muscle cells (SMC) on atherogenesis*. Role: Co-Investigator (Operative Unit responsible).

2014. Scientific project funded by European Foundation for Alcohol Research (ERAB) (2014). Title of the project: *Impact of alcohol consumption on the atheroprotective process of the reverse cholesterol transport*. Role: Co-Investigator.

2014-2020. Project of Interdepartmental Center BIOPHARMANET TEC in the context of POR FESR Title of the project: Development of Drugs in the form of inhalable powder starting from a platform for drug lung delivery. Role: Co-Investigator (Operative Unit responsible).

Scientific responsible for grants from Fournier, Glaxo, Recordati, Sigma Tau, Kowa, Hoffman La-Roche, Sienabiotec, Astrazenaca, Chiesi Farmaceutici, Circomed AG, Merck S&D, The Medicines Company, Rottapharm. Additional contributions from: University of Parma, Spinner, Cariparma Foundation, Cariplo Foundation.

### *Patent*

International Filing of patent application entitled "New MDR1 inhibitors for overcoming multidrug Resistance"

Number: PCT/EP2015/067795

Filing date: August 4<sup>th</sup>, 2015

### *Honors*

Previous:

COST action on HDL, Steering Committee

European Lipoprotein Club (ELC), Scientific Committee

President of the Emilia Romagna section of SISA

Actual:

ULLA Consortium of European Pharmacy Schools, Executive Committee

SISA National Executive Committee.

### *Meetings participation and Organization*

Participation at national and international scientific meetings including invited lectures. Part of the Organization committee for several national and international meetings.

*Bibliometric indicators related to publications and citations (Scopus)*

Total number of publications with Impact Factor: 119

Total number of citations: 4043

Total Impact Factor: 393.58

Mean Impact factor: 3.31

H index: 31 (Scopus)

20 Selected publications from the total number of publications

Number of citations: 1325

Total Impact Factor: 107.28

Mean Impact Factor: 5.36

Cumulative quartile of relevance distribution of the 20 selected publications

Q1: 95%, Q2: 5%, Q3: 0%, Q4: 0%

1. Newly identified antiatherosclerotic activity of methotrexate and adalimumab: complementary effects on lipoprotein function and macrophage cholesterol metabolism.

Ronda N, Greco D, Adorni MP, Zimetti F, Favari E, Hjeltnes G, Mikkelsen K, Borghi MO, Favalli EG, Gatti R, Hollan I, Meroni PL, Bernini F.

Arthritis Rheumatol. 2015 May;67(5):1155-64. doi: 10.1002/art.39039.

Number of citations: 2

IF=7.764

Q1

2. Impaired serum cholesterol efflux capacity in rheumatoid arthritis and systemic lupus erythematosus.

Ronda N, Favari E, Borghi MO, Ingegnoli F, Gerosa M, Chighizola C, Zimetti F, Adorni MP, Bernini F, Meroni PL.

Ann Rheum Dis. 2014 Mar;73(3):609-15. doi: 10.1136/annrheumdis-2012-202914.

Number of citations: 16

IF= 10.377

Q1

3. Inflammation impairs eNOS activation by HDL in patients with acute coronary syndrome.

Gomaschi M, Ossoli A, Favari E, Adorni MP, Sinagra G, Cattin L, Veglia F, Bernini F, Franceschini G, Calabresi L.

Cardiovasc Res. 2013 Oct 1;100(1):36-43. doi: 10.1093/cvr/cvt169. Epub 2013 Jun 28.

Number of citations: 12

IF=5.808

Q1

4. Cellular cholesterol efflux and cholesterol loading capacity of serum: effects of LDL-apheresis.

Adorni MP, Zimetti F, Puntoni M, Bigazzi F, Sbrana F, Minichilli F, Bernini F, Ronda N, Favari E, Sampietro T.

J Lipid Res. 2012 May;53(5):984-9. doi: 10.1194/jlr.P024810.

Number of citations: 8

IF=4.386

Q1

5. Characterization of three kindreds with familial combined hypolipidemia caused by loss-of-function mutations of ANGPTL3.

Pisciotta L, Favari E, Magnolo L, Simonelli S, Adorni MP, Sallo R, Fancello T, Zavaroni I, Ardigò D, Bernini F, Calabresi L, Franceschini G, Tarugi P, Calandra S, Bertolini S.

Circ Cardiovasc Genet. 2012 Feb 1;5(1):42-50. doi: 10.1161/CIRCGENETICS.111.960674.

Number of citations: 20

IF=6.728

Q1

6. Free cholesterol alters macrophage morphology and mobility by an ABCA1 dependent mechanism.

Adorni MP, Favari E, Ronda N, Granata A, Bellosta S, Arnaboldi L, Corsini A, Gatti R, Bernini F.

Atherosclerosis. 2011 Mar;215(1):70-6. doi: 10.1016/j.atherosclerosis.2010.12.004. Epub 2010 Dec 15.

Number of citations: 7

IF=3.794

Q1

7. Macrophage, but not systemic, apolipoprotein E is necessary for macrophage reverse cholesterol transport in vivo.

Zanotti I, Pedrelli M, Potì F, Stomeo G, Gomasaschi M, Calabresi L, Bernini F.

Arterioscler Thromb Vasc Biol. 2011 Jan;31(1):74-80. doi: 10.1161/ATVBAHA.110.213892.

Number of citations: 24

IF=6.368

Q1

8. Small discoidal pre-beta1 HDL particles are efficient acceptors of cell cholesterol via ABCA1 and ABCG1.

Favari E, Calabresi L, Adorni MP, Jessup W, Simonelli S, Franceschini G, Bernini F.

Biochemistry. 2009 Nov 24;48(46):11067-74. doi: 10.1021/bi901564g.

Number of citations: 62

IF=3.226

Q2

9. A novel homozygous mutation in CETP gene as a cause of CETP deficiency in a Caucasian kindred.

Calabresi L, Nilsson P, Pinotti E, Gomaraschi M, Favari E, Adorni MP, Bernini F, Sirtori CR, Calandra S, Franceschini G, Tarugi P.

Atherosclerosis. 2009 Aug;205(2):506-11. doi: 10.1016/j.atherosclerosis.2009.01.006.

Number of citations: 21

IF=4.522

Q1

10. Functional LCAT is not required for macrophage cholesterol efflux to human serum.

Calabresi L, Favari E, Moleri E, Adorni MP, Pedrelli M, Costa S, Jessup W, Gelissen IC, Kovanen PT, Bernini F, Franceschini G.

Atherosclerosis. 2009 May;204(1):141-6. doi: 10.1016/j.atherosclerosis.2008.08.038.

Number of citations: 45

IF=4.522

Q1

11. The LXR agonist T0901317 promotes the reverse cholesterol transport from macrophages by increasing plasma efflux potential.

Zanotti, I., Potì, F., Pedrelli, M., Favari, E., Moleri, E., Franceschini, G., Calabresi, L., Bernini, F.

J Lipid Res. 2008 May;49(5):954-60. doi: 10.1194/jlr.M700254-JLR200

Number of citations: 28

IF=4.409

Q1

12. A unique protease-sensitive high density lipoprotein particle containing the apolipoprotein A-I(Milano) dimer effectively promotes ATP-binding Cassette A1-mediated cell cholesterol efflux.

Favari E, Gomaraschi M, Zanotti I, Bernini F, Lee-Rueckert M, Kovanen PT, Sirtori CR, Franceschini G, Calabresi L.

J Biol Chem. 2007 Feb 23;282(8):5125-32. 10.1074/jbc.M609336200.

Number of citations: 49

IF=5.581

Q1

13. Pitavastatin effect on ATP binding cassette A1-mediated lipid efflux from macrophages: evidence for liver X receptor (LXR)-dependent and LXR-independent mechanisms of activation by cAMP.

Zanotti I, Potì F, Favari E, Steffensen KR, Gustafsson JA, Bernini F.

J Pharmacol Exp Ther. 2006 Apr;317(1):395-401. doi: 10.1124/jpet.105.093930.

Number of citations: 21

IF=3.956

Q1

14. Probucol inhibits ABCA1-mediated cellular lipid efflux.

Favari E, Zanotti I, Zimetti F, Ronda N, Bernini F, Rothblat GH.

Arterioscler Thromb Vasc Biol. 2004 Dec;24(12):2345-50. doi: 10.1161/01.ATV.0000148706.15947.8a.

Number of citations: 69

IF=7.432

Q1

15. Depletion of pre-beta-high density lipoprotein by human chymase impairs ATP-binding cassette transporter A1- but not scavenger receptor class B type I-mediated lipid efflux to high density lipoprotein.

Favari E, Lee M, Calabresi L, Franceschini G, Zimetti F, Bernini F, Kovanen PT.

J Biol Chem. 2004 Mar 12;279(11):9930-6. doi: 10.1074/jbc.M312476200.

Number of citations: 80

IF=6.355

Q1

16. Inhibition of metalloproteinase-9 activity and gene expression by polyphenolic compounds isolated from the bark of *Tristaniaopsis calobuxus* (Myrtaceae).

Bellosta S, Dell'Agli M, Canavesi M, Mitro N, Monetti M, Crestani M, Verotta L, Fuzzati N, Bernini F, Bosisio E.

Cell Mol Life Sci. 2003 Jul;60(7):1440-8. doi: 10.1007/s00018-003-3119-3

Number of citations: 23

IF=4.995

Q1

17. Rupture of the atherosclerotic plaque: does a good animal model exist?

Cullen P, Baetta R, Bellosta S, Bernini F, Chinetti G, Cignarella A, von Eckardstein A, Exley A, Goddard M, Hofker M, Hurt-Camejo E, Kanters E, Kovanen P, Lorkowski S, McPheat W, Pentikäinen M, Rauterberg J, Ritchie A, Staels B, Weitekamp B, de Winther M; MAFAPS Consortium.

Arterioscler Thromb Vasc Biol. 2003 Apr 1;23(4):535-42. doi: 10.1161/01.ATV.0000060200.73623.F8

Number of citations: 91

IF=6.791

Q1

18. Non-lipid-related effects of statins.

Bellosta S, Ferri N, Bernini F, Paoletti R, Corsini A.

Ann Med. 2000 Apr;32(3):164-76. Review. doi: 10.3109/07853890008998823.

Number of citations: 265

IF=2.794

Q1

19. 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 Mar;296(3):736-43. Erratum in: J Pharmacol Exp Ther 2001 May;297(2):827.

Number of citations: 28

IF=3.555

Q1

20. HMG-CoA reductase inhibitors reduce MMP-9 secretion by macrophages.

Bellosta S, Via D, Canavesi M, Pfister P, Fumagalli R, Paoletti R, Bernini F.

Arterioscler Thromb Vasc Biol. 1998 Nov;18(11):1671-8. doi: 10.1161/01.ATV.18.11.1671.

Number of citations: 454

IF=3.917

Q1



