Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Mariangela Biava**
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E-mail	**mariangela.biava@uniroma1.it**
Nationality	**Italian**
Date of birth	**01/04/1960**
Gender	**F**

Occupational field

(S s/d) Medicinal Chemistry

Work experience

Dates	**2002 to the present**:
	Full Time Associate Professor of Medicinal Chemistry University "La Sapienza" , Address: P.le Aldo Moro 5, 00185 Rome (Italy)
Occupation or position held	Associate Professor
Main activities and responsibilities	Teaching and Research Activities
Name and address of employer	"Sapienza" University of Rome
Sector	Medicinal Chemistry
Dates	**1990-2002**
Occupation or position held	Researcher in Medicinal Chemistry
Main activities and responsibilities	Teaching and Research Activities
Name and address of employer	"Sapienza" University of Rome
Sector	Medicinal Chemistry

Education and training

Dates	**1985-1989**
Title of qualification awarded	PhD student in Medicinal Chemistry
Name and type of organisation providing education and training	"Sapienza" University of Rome

Dates	**16/3/1983**
Title of qualification awarded	Degree in Pharmacy (cum laude)
Name and type of organisation providing education and training	"Sapienza" University of Rome

Personal skills and competences

Experience on the synthesis of organic compounds with biological activity.

Mother tongue(s) **Italian**

Self-assessment *European level (*)*

	Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
English		**B2**		**C1**		**C1**		**B2**		**B2**

(*) Common European Framework of Reference for Languages

Additional information

- Since 1987 member of the Società Chimica Italiana (SCI).
- Reviewer of well known journals of Medicinal and Organic Chemistry and international projects.
- Author of 100 scientific publications, 1 book, 11 patents, more than 100 poster communications (6 at the Gordon Research Conference on Tuberculosis Drug Development) and 14 oral communications (12 as invited speaker).
- Since 2008 Management Committee (MC) member of the COST Action CM0801, title "New drugs in neglected diseases"
- Coordinator of research projects funded by MIUR, Ateneo, Cariplo and Cenci-Bolognetti Foundations, Rottapharm-Madaus and Glaxo pharmaceutical company (2005-2018)

Scientific Publications (last 10 years):

1. Biava M Introduction to COX inhibitors, Future Medicinal Chemistry, 10, 1737-1740, 2018.
2. Cheleschi S, Calamia V, Fernandez-Moreno M, Biava M, Giordani A, Fioravanti A, Anzini M, Blanco F In vitro comprehensive analysis of VA692 a new chemical entity for the treatment of osteoarthritis, International Immunopharmacology, 64, 86-100, 2018.
3. Poce G, Cocozza M, Alfonso S, Consalvi S, Venditti G, Fernandez-Menendez R, Bates RH, Barros Aguirre D, Ballell L, De Logu A, Vistoli G, Biava M In vivo potent BM635 analogue with improved drug-like properties, European J Med Chem, 145, 539-550, 2018.
4. Venditti G, Poce G, Consalvi S, Biava M 1,5-Diarylpyrroles as potent antitubercular and anti-inflammatory agents, Chemistry of Heterocyclic Compounds, 1-11, 2017

5. Poce G, Consalvi S, Cocozza M, Fernandez-Menendez R, Bates RH, Ortega Muro F, Barros Aguirre D, Ballell L, Biava M Pharmaceutical salt of BM635 with improved bioavailability, European Journal of Pharmaceutical Sciences 99, 17-23, 2017
6. Consalvi S, Biava M, Poce G A series of COX-2 inhibitors endowed with NO-releasing properties: synthesis, biological evaluation and docking analysis. ChemMedChem 11, 1804-1811, 2016
7. Di Capua A, Sticozzi C, Brogi S, Brindisi M, Cappelli A, Sautebin L, Rossi A, Pace S, Ghelardini C, Di Cesare Mannelli L, Valacchi G, Giorgi G, Giordani A, Poce G, Biava M, Anzini, M Synthesis and biological evaluation of fluorinated 1,5-diarylpyrrole-3-alkoxyethyl ether derivatives as selective COX-2 inhibitors endowed with anti-inflammatory activity. European J Med Chem, 109, 99-106, 2016.
8. Desideri N, Proietti Monaco L, Fioravanti R, Biava M, Yáñez M, Alcaro S, Ortuso F (E)-3-Heteroarylidenechroman-4-ones as potent and selective monoamine oxidase-B inhibitors. European J Med Chem, 117, 292–300, 2016
9. Poce G, Consalvi S, Biava M MmpL3 inhibitors: diverse chemical scaffolds inhibit the same target. Mini Rev Med Chem. 16, 1274-1283, 2016
10. Consalvi S, Biava M, Poce G COX inhibitors: a patent review (2011 - 2014). Expert Opin Ther Pat 25, 1357-71, 2015Poce G, Biava M Overcoming drug resistance for tuberculosis. Future Microbiology 10, 1735–1741, 2015
11. Poce G, Biava M Overcoming drug resistance for tuberculosis. Future Microbiology 10,1735-1741, 2015
12. Fioravanti R, Desideri N, Biava M, Droghini P, Atzori EM, Ibba C, Collu G, Sanna G, Delogu I, Loddo R, N-((1,3-Diphenyl-1H-pyrazol-4-yl)methyl)anilines: A novel class of anti-RSV agents. Bioorg Med Chem Lett. 25, 2401-2404, 2015
13. Cheleschi S, Pascarelli NA, Valacchi G, Di Capua A, Biava M, Belmonte G, Giordani A, Sticozzi C, Anzini M, Fioravanti A Chondroprotective effect of three different classes of anti-inflammatory agents on human osteoarthritic chondrocytes exposed to IL-1β. Int Immunopharmacol, 28, 794-801, 2015
14. Piccaro G, Poce G, Biava M, Giannoni F, Fattorini L Activity of lipophilic and hydrophilic drugs against dormant and replicating Mycobacterium tuberculosis. Journal of Antibiotics, 68, 711-714, 2015
15. Dragset Marte S, Poce G, Alfonso S, Padilla-Benavides T, Ioerger T R, Kaneko T, Sacchettini JC, Biava M, Parish T, Argüello JM, Steigedal M, Rubin EJ, A Novel Antimycobacterial Compound Acts as an Intracellular Iron Chelator. AAC, 59, 2256-64, 2015.
16. Consalvi S, Alfonso S, Di Capua A, Poce G, Pirolli A, Sabatino M, Ragno R, Anzini M, Sartini S, La Motta C, Ghelardini C, Di Cesare Mannelli L, Ghelardini C, Biava M Synthesis, biological evaluation and docking analysis of a new series of methylsulfonyl and sulfamoyl acetamides and ethyl acetates as potent COX-2 inhibitors. Bioorg Med Chem, 23, 810–820, 2015.
17. Poce G, Cocozza M, Consalvi S, Biava M SAR analysis of new anti-TB drugs currently in pre-clinical and clinical development. Eur J Med Chem, 86, 335-351, 2014.
18. Biava M, Battilocchio C, Poce G, Alfonso S, Porretta GC, Consalvi S, Calderone V, Martelli A, Testai L, Sautebin L, Rossi A, Ghelardini C, Di Cesare Mannelli L, Giordani A, Patrignani P, Anzini M Enhancing the pharmacodynamic profile of a class of selective COX-2 inhibiting nitric oxide donors. Bioorg Med Chem, 22, 772–786, 2014
19. Martelli A, Testai L, Anzini M, Cappelli A, Di Capua A, Biava M, Poce G, Consalvi S, Giordani A, Caselli G, Rovati L, Ghelardini C, Patrignani P, Sautebin L, Breschi MC, Calderone V The novel anti-Inflammatory agent VA694, endowed with both NO-Releasing and COX2-selective inhibiting properties, exhibits NO-mediated positive effects on blood pressure, coronary flow and endothelium in an experimental model of hypertension and endothelial dysfunction. Pharmacol Research, 78, 1– 9, 2013.
20. Radi M, Bernardo V, Vignaroli G, Brai A, Biava M, Schenone S, Botta M An alternative synthetic approach for the synthesis of biologically relevant 1,4-disubstituted pyrazolo[3,4-d]pyrimidines. Tetrahedron Lett, 54, 5204-5206, 2013.
21. Fioravanti R, Desideri N, Biava M, Proietti Monaco L, Grammatica L, Yàñez M Design, synthesis, and in vitro hMAO-B inhibitory evaluation of some 1-methyl-3,5-diphenyl-4,5-dihydro-1H-pyrazoles. Bioorg Med Chem Lett, 23, 5128-5130, 2013.
22. Tintori C, Laurenzana I, La Rocca F, Falchi F, Carraro F, Ruiz A, Esté JA, Kissova M, Crespan E, Maga G, Biava M, Brullo C, Schenone S, Botta M Identification of Hck inhibitors as hits for the development of antileukemia and anti-HIV agents. ChemMedChem, 8, 1353-1360, 2013.
23. Battilocchio C, Guetzoyan L, Cervetto C, Di Cesare Mannelli L, Frattaroli D, Baxendale IR, Maura G, Rossi A, Sautebin L, Biava M, Ghelardini C, Marcoli M, Ley SV Flow synthesis and bio-pharmacological studies of an adamantane derivative that shows analgesic activity and inhibits the P2X7-evoked glutamate release. ACS Med Chem Lett, 4, 704-709, 2013.
24. Friggeri L, Ballante F, Ragno R, Musmuca I, De Vita D, Manetti F, Biava M, Scipione L, Di Santo R, Costi R, Feroci M, Tortorella S Pharmacophore assessment through 3-D QSAR: evaluation of the predictive ability on new derivatives by the application on a serie of antitubercular agents. J Chem Inf Model, 53, 1463-1474, 2013.
25. Mazzarino M, Biava M, de la Torre X, Fiacco I, Botrè F Characterization of the biotransformation pathways of clomiphene, tamoxifen and toremifene as assessed by LC-MS/(MS) following in vitro and excretion studies. Anal Bioanal Chem, 405, 5467-5487, 2013.
26. Baiocco P, Poce G, Alfonso S, Cocozza M, Porretta GC, Colotti G, Biava M, Moraca F, Botta M, Yardley V, Fiorillo A, Malatesta F, Ilari A Evaluation of azole-based compounds as inhibitors of trypanothione reductase from leishmania infantum: a comparative analysis with its physiological substrate by X-ray crystallography. ChemMedChem, 8, 1175-1183, 2013.
27. Battilocchio C, Poce G, Alfonso S, Porretta GC, Consalvi S, Sautebin L, Rossi A, Pace F, Ghelardini C, Di Cesare Mannelli L, Schenone S, Giordani A, Di Francesco L, Patrignani P, Biava M A class of pyrrole derivatives endowed with analgesic/anti-inflammatory activity. Bioorg Med Chem, 21, 3695-3701, 2013.
28. Anzini M, Di Capua A, Valenti S, Brogi S, Rovini M, Giuliani G, Cappelli A, Vomero S, Chiasserini L, Saga A, Poce G, Giorgi G, Calderone V, Martelli A, Testai L, Sautebin L, Rossi A, Papa G, Ghelardini C, Di Cesare Mannelli L, Benetti V, Giordani A, Anzellotti P, Dovizio M, Patrignani P, Biava M Novel analgesic/anti-inflammatory agents: 1,5-diarylpyrrole nitro-oxyalkyl ethers and related compounds as cyclooxygenase-2 inhibiting nitric oxide donors. J Med Chem, 56, 3191-3206, 2013.

29. Sticozzi C, Belmonte G, Cervellati F, Di Capua A, Maioli E, Cappelli A, Giordani A, Biava M, Anzini M, Valacchi G Antiproliferative effect of two novel COX-2 inhibitors on human keratinocytes. Eur J Pharm Sci, 49, 133-141, 2013.
30. Poce G, Bates HR, Alfonso S, Cocozza M, Porretta GC, Ballel L, Rullas J, De Logu A, Agus E, La Rosa V, Pasca MR, De Rossi E, Wae B, Franzblau SJ, Manetti F, Botta M, Biava M Improved BM212 MmpL3 inhibitor analogue shows efficacy in acute murine model of tuberculosis infection. Plos One, 8, e56980, 2013.
31. Desideri N, Fioravanti R, Proietti Monaco L, Biava M, Yàñez M, Ortuso F, Alcaro S 1,5-Diphenylpenta-2,4-dien-1-ones as potent and selective monoamine oxidase-B inhibitors. Eur J Med Chem, 59, 91-100, 2013.
32. Biava M, Battilocchio C, Poce G, Alfonso S, Porretta GC, Consalvi S, Calderone V, Martelli A, Testai L, Ghelardini C, Di Cesare Mannelli L, Sautebin L, Rossi A, Giordani A, Patrignani P, Anzini M Improving the solubility of a new class of antiinflammatory pharmacodynamic hybrids, that release nitric oxide and inhibit Cycloxygenase-2 isoenzyme. Eur J Med Chem, 58, 287-298, 2012.
33. Fioravanti A, Tinti A, Pascarelli A, Di Capua A, Lamboglia A, Cappelli A, Biava M, Giordani A, Niccolini S, Galeazzi M, Anzini M In vitro effects of VA441, a new selective Cyclooxygenase-2 inhibitor, on human osteoarthritic chondrocytes exposed to IL-1β. J Pharmacol Sci, 120, 6-14, 2012.
34. Battilocchio C, Baxendale IR, Biava M, Kitching MO, Ley SVA Flow based synthesis of 2-aminoadamantane-2-carboxilic acid. Org Process Res Dev 16, 798-810, 2012.
35. Battilocchio C, Baumann M, Baxendale IR, Biava M, Kitching MO, Ley SV, Martin RE, Ohnmacht SA, Tappina NDC Scale-Up of flow-assisted synthesis of C2-symmetric chiral PyBox ligands. Synthesis, 44, 635–647, 2012.
36. La Rosa V, Poce G, Ortiz Canseco J, Buroni S, Pasca MR, Biava M, Raju RM, Porretta GC, Alfonso S, Battilocchio C, Javid B, Sorrentino F, Ioerger TR, Sacchettini JC, Manetti F, Botta M, De Logu A, Rubin EJ MmpL3 is the cellular target of the antitubercular pyrrole derivative BM212. AAC, 56, 324–331, 2012.
37. Biava M, Porretta GC, Poce G, Battilocchio C, Alfonso S, Rovini M, Valenti S, Giorgi G, Calderone V, Martelli A, Testai L, Sautebin L, Rossi A, Papa G, Ghelardini C, Di Cesare Mannelli L, Giordani A, Anzellotti P, Bruno A, Patrignani P, Anzini M Novel analgesic/anti-inflammatory agents: diarylpyrrole acetic esters endowed with nitric oxide releasing properties. J Med Chem, 54, 7759−7771, 2011.
38. Radi M, Brullo C, Crespan E, Tintori C, Musumeci F, Biava M, Schenone S, Dreassi E, Zamperini C, Maga G, Pagano D, Angelucci A, Bologna M, Botta M Identification of potent c-Src inhibitors strongly affecting the proliferation of human neuroblastoma cells. Bioorg Med Chem Lett 21, 5928-5933, 2011.
39. Schenone S, Brullo C, Musumeci F, Biava M, Falchi F, Botta M Fyn kinase in brain diseases and cancer: the search for inhibitors. Current Med Chem, 18, 2921-2942, 2011.
40. Maccari G, Jaeger T, Moraca F, Biava M, Flohe L, Botta M A fast virtual screening approach to identify structurally diverse inhibitors of trypanothione reductase. Bioorg Med Chem Lett, 21, 5255-5258, 2011.
41. Biava M, Porretta GC, Poce G, Battilocchio C, Botta M, Manetti F, Rovini M, Cappelli A, Sautebin L, Rossi A, Pergola C, Ghelardini C, Galeotti N, Makovec F, Giordani A, Anzellotti P, Tacconelli S, Patrignani P, Anzini M Enlarging the NSAIDs family: ether, ester and acid derivatives of the 1,5-diarylpyrrole scaffold as novel anti-inflammatory and analgesic agents. Curr Med Chem, 18, 1540-1554, 2011.
42. Biava M, Porretta GC, Poce G, Battilocchio C, Alfonso S, De Logu A, Manetti F, Botta M Developing pyrrole-derived antimycobacterial agents: a rational lead optimization approach. ChemMedChem, 6, 593-599, 2011.
43. Biava M, Porretta GC, Poce G, Battilocchio C, Alfonso S, De Logu A, Serra N, Manetti F, Botta M Identification of a novel pyrrole derivative endowed with antimycobacterial activity and protection index comparable to that of the current antitubercular drugs streptomycin and rifampin. Bioorg Med Chem, 18, 8076–8084, 2010.
44. Biava M, Porretta GC, Poce G, Battilocchio C, Manetti F, Botta M, Sautebin L, Rossi A, Pergola C, Ghelardini C, Norcini M, Makovec F, Anzellotti P, Cirilli R, Ferretti R, Patrignani P, Anzini M Novel ester and acid derivatives of the 1,5-diarylpyrrole scaffold as anti-inflammatory and analgesic agents. Synthesis, in vitro and in vivo biological evaluation. J Med Chem, 53, 723-733, 2010.
45. Biava M, Porretta GC, Poce G, De Logu A, Saddi M, Meleddu R, Manetti F, De Rossi E, Botta M. 1,5-Diaryl-2-ethyl pyrrole derivatives as antimycobacterial agents: design, synthesis, and microbiological evaluation. Eur J Med Chem, 44, 4734–4738, 2009.
46. Biava M, Porretta GC, Poce G, Supino S, Manetti F, Botta M, Sautebin L, Rossi A, Pergola C, Ghelardini C, Norcini M, Makovec F, Anzellotti P, Cirilli R, Ferretti R, Gallinella B, La Torre F, Anzini M, Patrignani P Synthesis, biological evaluation, and enzyme docking simulations of 1,5-diarylpyrrole-3-alkoxyethyl ethers as highly selective COX-2 inhibitors endowed with anti-inflammatory and antinociceptive activity. Bioorg Med Chem, 16, 8072-8081, 2008.
47. Anzini M, Rovini M, Cappelli A, Vomero S, Manetti F, Botta M, Sautebin L, Rossi A, Ghelardini C, Norcini M, Giordani A, Makovec F, Anzellotti P, Patrignani P, Biava M Synthesis, biological evaluation, and enzyme docking simulations of 1,5-diarylpyrrole-3-alkoxyethyl ethers as highly selective COX-2 inhibitors endowed with anti-inflammatory and antinociceptive activity. J Med Chem, 51, 4476-4481, 2008.
48. Biava M, Porretta GC, Poce G, De Logu A, Saddi M, Meleddu R, Manetti F, De Rossi E, Botta M 1,5-Diphenyl pyrrole derivatives as antimycobacterial agents. Probing the influence on antimycobacterial activity of lipophilic substituents at the phenyl rings. J Med Chem, 51, 3644-3648, 2008.
49. Poce G, Zappia G, Porretta GC, Botta B, Biava M New oxazolidinone derivatives as antibacterial agents with improved activity. Exp Opin Ther Patents, 18, 97-121, 2008.
50. Biava M, Cirilli R, Fares V, Ferretti R, Gallinella B, La Torre F, Poce G, Porretta GC, Supino S, Villani C HPLC enantioseparation and absolute configuration of novel antiinflammatory pyrrole derivatives. Chirality, 20, 775-780, 2008.