



Stefania Villa

PERSONAL INFORMATION

Birth date and place: April 10th, 1965; Milano (MI), Italy
 Nationality: Italian
 Office Address: via L. Mangiagalli, 25-20133 Milano
 Email: stefania.villa@unimi.it

PERSONAL STATEMENT

Permanent researcher

WORK EXPERIENCE

01/09/1995-today

Scientific-disciplinary sector CHIM/08 ex C07X

Permanent researcher

Dipartimento di Scienze Farmaceutiche (DISFARM) dell'Università degli Studi di Milano

The scientific competences concern the synthesis of compounds with pharmacological activity and the discussion of the structure-pharmacological activity relationships. The scientific production focused mainly on the synthesis of small molecules of pharmaceutical interest endowed with anticancer and antitubercular activities.

01/05/1991-31/10/1992

Scientific-disciplinary sector CHIM/08 ex C07X

PhD student

PhD in Medicinal Chemistry (VIII ciclo) at Università degli Studi di Milano. Supervisor Prof. Giorgio Cignarella.

Project title: "Sintesi di nitro derivati etero aromatici a potenziale attività antiischemica"

01/11/1992-31/10/1995

Scientific-disciplinary sector CHIM/08 ex C07X

Research fellow

Fellowship by Midy S.p.a at University of Milan, Istituto di Chimica Farmaceutica,

Project title: "Synthesis of compounds as potentially useful biological tools" Supervisor Prof. Giorgio Cignarella.

01/06/1990-30/10/1991

Scientific-disciplinary sector CHIM/07 ex C07X

Research fellow

Fellowship GESCO (Consorzio Italiano Tecnologie e Farmaci Invecchiamento cerebrale-CITFI 3) at University of Milan, Istituto di Chimica Farmaceutica Supervisor Prof. Giorgio Cignarella.

Project title: "Sintesi di composti contro l'invecchiamento cerebrale"

EDUCATION

10/1995

PhD in Medicinal Chemistry

Università degli Studi di Milano

Thesis title: "Synthesis of nitro derivatives endowed with antiischemic activity."
(supervisor: prof. Giorgio Cignarella)

12/1990-1/1991

Authorization to practice the Pharmacist profession

Università degli Studi di Milano

- State examination for obtaining the qualification to practice the profession of the Pharmacist

11/07/1990

Degree in Pharmaceutical Chemistry and Technology

Università degli Studi di Milano

- Thesis title: "Derivati del benzopirano (4.3c) piridazinone. Relazioni struttura attività.".
- Supervisor Prof. Giorgio Cignarella

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	good	good	good	good	good

Organisational/managerial skills

- Ability to coordinate a research group and specific skills on the design and synthesis of molecules to study the structure-activity relationships of ligands for enzymes and receptors within the scientific-disciplinary sector CHIM08, establishing national and international scientific collaborations.

MOTHER TONGUE

ITALIAN

Job-related skills

Experience in design and synthesis of organic small molecules with biological activity using conventional synthetic organic chemistry methodologies.

Ability to use: NMR, LCMS, HRMS, analytical HPLC, preparative HPLC, Flash Chromatography, microwave synthesizer, plasma reactor, IR, ATR-FTIR.

Good knowledge:

- operating systems Windows
- software Office
- molecular editor (ChemDraw)
- NMR Software (Mestrenova, TopSpin)
- Data bank (Scifinder, Reaxys, Pubmed)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
intermediate	intermediate	intermediate	intermediate	intermediate

- good skills of office suite tools (word processor, presentation software).

Driving licence

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ADDITIONAL INFORMATION

- Publications**
- Co-author of 52 scientific publications in peer reviewed and SCOPUS indexed international journals, one contribution in conference proceedings published in a journal with ISSN and 60 contributions to national and international congresses. Three other scientific publications are awaiting to be indexed.
 - Author ID: ORCID ID: 0000-0002-0636-7589; Scopus Author ID: 7005675316
- Courses**
- From a.y. 1999/2000, institutional teaching activity (over 1000 hours) as aggregate professor was divided into lectures and laboratory exercises within the degree courses in Pharmaceutical Biotechnology, Pharmaceutical Chemistry and Technology and Pharmacy, of the University of Milan.
 - From a.y. 2008/2009-2017/2018 Responsible for teaching of the courses of Medicinal Chemistry and Drug Analyses at Università Cattolica Nostra Signora del Buon Consiglio (UNIKZM) Tirana.
 - From a.y. 2012/2013, didactic activity for professional training courses (School of Specialization in Hospital Pharmacy).
- Projects**
- Scientific responsibility of unit of Pharmaceutical Sciences in peer-reviewed research project:

Fondazione Cariplo grant n. 2011-0277 *Materiali innovativi per dispositivi medicali basati su superfici biofunzionalizzate e con proprietà antivegetative.*
- Memberships**
- Division of Pharmaceutical Chemistry of the Italian Chemical Society.
- PhD school**
- Students Tutor of the PhD in Pharmaceutical Sciences (University of Milan).
PhD students Sonia Gattinoni, Lucrezia Paola Solano, Silvia Dell' Orto.
- Students Tutor for preparation of practice final dissertation (more than 40 Thesis) in Pharmacy and Pharmaceutical Chemistry and Technology
- Institutional activities**
- Secretary of Committee for the State Exams for the qualification to practice as a pharmacist.
- Member of the Supervisory Committee for the practical tests of dosing and recognition of drugs within the State Exams for the qualification to practice as a pharmacist.
- Publication List 2013-2019**
- 1) L. R. Chiarelli, M. Mori, G. Beretta, A. Gelain, E. Pini, J. C. Sammartino, G. Stelitano, D. Barlocco, L. Costantino, M. Lapillo, G. Poli, I. Caligiuri, F. Rizzolio, M. Bellinzoni, T. Tuccinardi, S. Villa, F. Meneghetti *New insight into structure-activity of furan-based salicylate synthase (MbtI) inhibitors as potential antitubercular agents, Journal of Enzyme Inhibition and Medicinal Chemistry, 2019, 34(1), 823-828.*
 - 2) A. Gelain, M. Mori, F. Meneghetti, F. Porta, L. Basile, G. Marverti, A. Asai, M. Hyeraci, A.N. Garcia-Argaez, L. Dalla Via, S. Guccione, S. Villa, "Exploring the biological activity of a library of 1,2,5-oxadiazole derivatives endowed with antiproliferative activity", *Anticancer Research, 2019, 39,1, 135-144*
 - 3) L.R. Chiarelli, M. Mori, D. Barlocco, G. Beretta, A. Gelain, E. Pini, M. Porcino, G. Mori, G. Stelitano, L. Costantino, M. Lapillo, D. Bonanni, G. Poli, T. Tuccinardi, S. Villa, F. Meneghetti. "Discovery and Development of Novel Salicylate Synthase (MbtI) Furanic Inhibitors as Antitubercular Agents" *Eur. J. Med. Chem. 2018, 155, 754-763.*
 - 4) C. Cattò, G. James, F. Villa, S. Villa, F. Cappitelli
"Zosteric acid and salicylic acid bound to a low density polyethylene surface successfully control bacterial biofilm formation"
Biofouling 2018, 34(4), 440-452
 - 5) S. Villa, L. Legnani, D. Colombo, A. Gelain, C. Lammi, D. Bongiorno, D.P. Ilboudo, K.E. McGee, J. Bosch, G. Grazioso.
"Structure-based drug design, synthesis and biological assays of *P. falciparum* Atg3-Atg8 protein-protein interaction inhibitors"
J. Comput. Aided Mol. Des., 2018, 32 (3), 473-486.

- 6) E. Pini, G. Poli, T. Tuccinardi, L. R. Chiarelli, M. Mori, A. Gelain, L. Costantino, S. Villa, F. Meneghetti, D. Barlocco.
 “New chromane-based derivatives as inhibitors of Mycobacterium tuberculosis salicylate synthase (MbtI): preliminary biological evaluation and molecular modeling studies”
 Molecules, 2018, 23, 1506-1520.
- 7) S. Dell’orto, C. Cattò, F. Villa, F. Forlani, E. Vassallo, M. Morra, F. Cappitelli, S. Villa, A. Gelain,
 “Low density polyethylene functionalized with antibiofilm compounds inhibits Escherichia coli cell adhesion”
 Journal of Biomedical Materials Research - Part A 2017, 105, 3251-3261.
- 8) F. Porta, G. Facchetti, N. Ferri, A. Gelain, F. Meneghetti, S. Villa, D. Barlocco, D. Masciocchi, A. Asai, N. Miyoshi, S. Marchianò, B.-M. Kwon, Y. Jin, V. Gandin, C. Marzano, I. Rimoldi.
 “An in vivo active 1,2,5-oxadiazole Pt(II) complex: a promising anticancer agent endowed with STAT3 inhibitory properties”
 Eur. J. Med. Chem. 2017, 131:196-206.
- 9) F. Porta, A. Gelain, D. Barlocco, N. Ferri, S. Marchianò, V. Cappello, L. Basile, S. Guccione, F. Meneghetti, S. Villa
 “A field-based disparity analysis of new 1,2,5-oxadiazole derivatives endowed with antiproliferative activity”
 Chem. Biol. Drug Des. 2017, 90, 820-839.
- 10) C. Cattò, G. Grazioso, S. Dell’Orto, A. Gelain, S. Villa, V. Marzano, A. Vitali, F. Villa, F. Cappitelli, F. Forlani
 “The response of Escherichia coli biofilm to salicylic acid”
 Biofouling 2017, 33(4), 235-251.
- 11) E. Gabriele, F. Porta, G. Facchetti, C. Galli, A. Gelain, F. Meneghetti, I. Rimoldi, S. Romeo, S. Villa, C. Ricci, N. Ferri, A. Asai, D. Barlocco, A. Sparatore.
 “Synthesis of new dithiolethione and methanethiosulfonate systems endowed with pharmaceutical interest”
 Arkivoc 2017, (ii), 235-250.
- 12) L. Legnani, D. Colombo, A. Venuti, C. Pastori, L. Lopalco, L. Toma, M. Mori, G. Grazioso, S. Villa.
 “Diazabicyclo analogues of maraviroc: synthesis, modeling, NMR studies and antiviral activity”
 MedChemComm. 2017, 8, 422-433.
- 13) F. Meneghetti, S. Villa, A. Gelain, D. Barlocco, L. R. Chiarelli, M. R. Pasca, L. Costantino.
 “Iron acquisition pathways as targets for antitubercular drugs”
 Curr. Med. Chem. 2016, 23, 4009-4026.
- 14) F. Meneghetti, S. Villa, D. Masciocchi, D. Barlocco, L. Toma, D.C. Han, B.-M. Kwon, N. Ogo, A. Asai, L. Legnani, A. Gelain.
 “Ureido-Pyridazinone Derivatives: Insights into the Structural and Conformational Properties for STAT3 Inhibition”
 Eur. J. Org. Chem. 2015, 22, 4907-4912.
- 15) L. Fanzani, F. Porta, F. Meneghetti, S. Villa, A. Gelain, A. P. Lucarelli, E. Parisini.
 “Mycobacterium tuberculosis low molecular weight phosphatases (MPtpA and MPtpB): from biological insight to inhibitors”,
 Curr. Med. Chem. 2015, 22, 3110-3132.
- 16) S. Dell’Orto, D. Masciocchi, S. Villa, F. Meneghetti, G. Celentano, D. Barlocco, D. Colombo, L. Legnani, L. Toma, Y. J. Jeon, B.-M. Kwon, A. Asai, A. Gelain.
 “Modeling, synthesis and NMR characterization of novel chimera compounds targeting STAT3”
 MedChemComm. 2014, 5, 1651-1657.
- 17) A. Gelain, L. Rizzi, L. Legnani, A. Pacini, K. Spyridaki, V. Karageorgos, G. Liapakis, S. Villa.
 “Novel peptidomimetics related to gonadotropin-releasing hormone (GnRH)”
 MedChemComm. 2015, 6, 1656-1665.
- 18) C. Cattò, S. Dell’Orto, F. Villa, S. Villa, A. Gelain, A. Vitali, V. Marzano, S. Baroni, F. Forlani, F. Cappitelli.
 “Unravelling the structural and molecular basis responsible for the anti-biofilm activity of zosteric acid”
 PLoSone, 2015, 10, Article number 0131519
- 19) F. Villa, S. Villa, A. Gelain, F. Cappitelli
 “Sub-lethal Activity of Small Molecules from Natural sources and their synthetic”
 Topics in Medicinal Chemistry, 2013, 13, 3184-3204.

- 20) F. Meneghetti, D. Masciocchi, A. Gelain S. Villa.
"3-(3-oxo-4,4a,5,6-tetrahydro-3H-benzo[h]cinnolin-2-yl-propionic acid"
Acta Cryst. 2014, E70, o1088-o1089.
- 21) D. Masciocchi, A. Gelain, F. Porta, F. Meneghetti, A. Pedretti, G. Celentano, D. Barlocco, L. Legnani, L. Toma, B.-M. Kwon, A. Asai, S. Villa.
"Synthesis, structure-activity relationships and stereochemical investigations on new tricyclic pyridazinone derivatives as potential STAT3 inhibitors"
MedChemComm. 2013, 4, 1181-1188.
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Personal information

I authorize the handling of personal information in this curriculum, according to D.Lgs n. 196/03 and following modifications and Regulations EU 679/2016 (General Regulations concerning Data Protection or GRDP) and art. 7 of University Regulations concerning protection of personal information.

I authorize, according to D.lgs 14/03/2013 n. 33 concerning transparency, in case of conferment of the position and of the fellowship, the publication of this curriculum in the web site of Università degli Studi di Milano in the section "Amministrazione trasparente", "Consulenti e collaboratori

Milan, 20/03/2019