



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4721

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di Scienze Farmaceutiche (DISFARM)

Scientist- in - charge: Prof. Giulio Vistoli

Silvia Gervasoni

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Gervasoni
Name	Silvia
Date of birth	08/01/1991

PRESENT OCCUPATION

Appointment	Structure
Unemployed	

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree (BSc)	Biotechnologies	Università degli Studi di Milano-Bicocca	2014
Degree (MSc)	Pharmacological Biotechnologies	Università degli Studi di Milano	2017
Specialization			
PhD	Pharmaceutical Sciences	Università degli Studi di Milano	I finished the three years of PhD, and I will have the PhD defense in January 2021
Master			
Degree of medical specialization			
Degree of European specialization			
Other			



FOREIGN LANGUAGES

Languages	level of knowledge
English	B2 (IELTS 02/12/2015, overall score 6.5)

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2017	Postgraduate scholarship (2 months) - Drug Design Laboratory, Università degli Studi di Milano, department of Pharmaceutical Sciences
2018-2020	PhD scholarship

TRAINING OR RESEARCH ACTIVITY

Lines of research: (1) Computational treatment of metal ions in biological systems, (2) Structure-based drug discovery.

(1) Development of HDAC inhibitors; study of carnosine analogue binding on CN1 and identification of new inhibitors; prediction of the binding mode of metallo- β -lactamase inhibitors for antibiotic resistance; modelling of metallo-organic reactivators of AchE.

(2) Virtual screening campaigns combined with rescoring and MD simulation. Targets: ion channel TRPM8, SARS-CoV2 functional proteins.

I was actively involved on the research activities conducted by the scientific group under the project "EXaSCale smArt pLatform Against paThogEns for Corona Virus - Exscalate4CoV" funded by the EU's H2020-SC1-PHE-CORONAVIRUS-2020 call, as documented by the paper "A Comprehensive Mapping of the Druggable Cavities within the SARS-CoV-2 Therapeutically Relevant Proteins by Combining Pocket and Docking Searches as Implemented in Pockets 2.0" (Authors: Gervasoni S, Vistoli G, Talarico C, Manelfi C, Beccari AR, Studer G, Tauriello G, Waterhouse AM, Schwede T, Pedretti A. Int J Mol Sci 2020; 21(14):5152)

CONGRESSES AND SEMINARS

Date	Title	Place
November 26th-27th 2019	Multiscale approach to predict the binding mode of metallo β -lactamase inhibitors (poster)	German workshop on structural predictions of membrane proteins - From ion channels to G-protein coupled receptors; Jülich
September 15th-20th 2019	Multiscale approach to predict the binding mode of metallo β -lactamase inhibitors (poster)	EUROPIN Summer School on Drug Design; Vienna
July 16th-19th 2019;	Multiscale approach to predict the binding mode of metallo β -lactamase inhibitors (oral presentation by Silvia Gervasoni)	XXVI National Meeting in Medicinal Chemistry (NMMC); Milan



April 8th-12th 2019	Structural insight into the effect of saccin mutation by MD simulation studies (poster)	CECAM school "Hybrid Quantum Mechanics / Molecular Mechanics (QM/MM) Approaches to Biochemistry and Beyond; Losanne
March 28th-29th 2019	Structural insight into the effect of saccin mutation by MD simulation studies (poster)	Computationally Driven Drug Discovery Meeting (CDDD); Rome

PUBLICATIONS

Articles in peer-reviewed indexed journals		
Pedretti A, Mazzolari A, <u>Gervasoni S</u> , Fumagalli L, and Vistoli G. "The VEGA suite of programs: a versatile platform for cheminformatics and drug design projects". <i>Bioinformatics</i> 2020; <i>Accepted for publication</i>		
Cincinelli R, Musso L, Guglielmi MB, Porta I La, Fucci A, Luca D'Andrea E, Cardile F, Colelli F, Signorino G, Darwiche N, <u>Gervasoni S</u> , Vistoli G, Pisano C, Dallavalle S. "Novel adamantyl retinoid-related molecules with POLA1 inhibitory activity". <i>Bioorg Chem</i> 2020; 104:104253.		
Mazzolari A, <u>Gervasoni S</u> , Pedretti A, Fumagalli L, Matucci R, Vistoli G. "Repositioning Dequalinium as Potent Muscarinic Allosteric Ligand by Combining Virtual Screening Campaigns and Experimental Binding Assays". <i>Int J Mol Sci</i> 2020; 21(17):5961.		
<u>Gervasoni S</u> , Vistoli G, Talarico C, Manelfi C, Beccari AR, Studer G, Tauriello G, Waterhouse AM, Schwede T, Pedretti A. "A Comprehensive Mapping of the Druggable Cavities within the SARS-CoV-2 Therapeutically Relevant Proteins by Combining Pocket and Docking Searches as Implemented in Pockets 2.0". <i>Int J Mol Sci</i> 2020; 21(14):5152.		
Gilardoni E, <u>Gervasoni S</u> , Maspero M, Dallanoce C, Vistoli G, Carini M, Aldini G, Regazzoni L. "Development of a direct LC-ESI-MS method for the measurement of human serum carnosinase activity". <i>J Pharm Biomed Anal</i> 2020; 189:113440.		
Talarico C, <u>Gervasoni S</u> , Manelfi C, Pedretti A, Vistoli G, Beccari AR. "Combining Molecular Dynamics and Docking Simulations to Develop Targeted Protocols for Performing Optimized Virtual Screening Campaigns on The hTRPM8 Channel". <i>Int J Mol Sci</i> 2020; 21(7):2265.		
Zuccolo M, Kunova A, Musso L, Forlani F, Pinto A, Vistoli G, <u>Gervasoni S</u> , Cortesi P, Dallavalle S. "Dual-active antifungal agents containing strobilurin and SDHI-based pharmacophores". <i>Sci Rep</i> 2019; 9(1):11377.		
Soares Romeiro LA, Costa Nunes JL da, Oliveira Miranda C de, Simões Heyn Roth Cardoso G, Oliveira AS de, Gandini A, Kobrlova T, Soukup O, Rossi M, Senger J, Jung M, <u>Gervasoni S</u> , Vistoli G, Petralla S, Massenzio F, Monti B, Bolognesi ML. "Novel Sustainable-by-Design HDAC Inhibitors for the Treatment of Alzheimer's Disease". <i>ACS Med Chem Lett</i> 2019; 10(4):671-676.		
Bisceglia F, Seghetti F, Serra M, Zusso M, <u>Gervasoni S</u> , Verga L, Vistoli G, Lanni C, Catanzaro M, Lorenzi E De, Belluti F. "Prenylated Curcumin Analogues as Multipotent Tools To Tackle Alzheimer's Disease". <i>ACS Chem Neurosci</i> 2019; 10(3):1420-1433.		
Pedretti A, Mazzolari A, <u>Gervasoni S</u> , Vistoli G. "Rescoring and Linearly Combining: A Highly Effective Consensus Strategy for Virtual Screening Campaigns". <i>Int J Mol Sci</i> 2019; 20(9):2060.		
Vistoli G, Mantovani C, <u>Gervasoni S</u> , Pedretti A, Aldini G. "Key factors regulating protein carbonylation by α,β unsaturated carbonyls: A structural study based on a retrospective meta-analysis". <i>Biophys Chem</i> 2017; 230:20-26.		

OTHER INFORMATION

Computational chemistry software: VEGA ZZ, NAMD, PLANTS, VMD, Amber, Gaussian, Modeller, AutoDock, GOLD, ChemShell, PyMOL



Python and Java programming languages

HPC system used: Indaco (University of Milan), BlueCrystal (University of Bristol), Marconi100 (Cineca)

Master Thesis co-supervisor:

P. Perazzoni, S. Gervasoni, A. Pedretti; “M.I.M.I.R. - Un approccio computazionale per la predizione metabolica” (Academic year: 2019/2020)

S. Azzali, S. Gervasoni, G. Vistoli; “Anticorpi monoclonali anti-pd-1/pd-l1 e nuovi inibitori in fase di sviluppo: progressi nell’immunoterapia oncologica” (Academic year: 2019/2020)

E. Zacchetti, S. Gervasoni, G. Vistoli; “Sviluppo di un nuovo modello d’omologia *in silico* per il recettore-canale *hTRPM8* e sua esaustiva validazione” (Academic year: 2018/2019)

A. Scaccabarozzi, S. Gervasoni, A. Pedretti; “Predizione del metabolismo di xenobiotici mediante apprendimento automatico supervisionato basato su alberi decisionali” (Academic year: 2017/2018)

S. Merlotti, S. Gervasoni, A. Pedretti; “Predizione *in silico* della reazione metabolica di coniugazione col glutatione mediante tecniche di *machine learning*” (Academic year: 2017/2018)

G. Zampetti, S. Gervasoni, A. Pedretti; “Progettazione *in silico* di nuovi inibitori delle istone deacetilasi mediante *fragment based drug design*” (Academic year: 2017/2018)

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Milan, 01/10/2020

SIGNATURE

Silvia Gervasoni