



UNIVERSITÀ  
DEGLI STUDI  
DELL'AQUILA



DISCAB  
Dipartimento di Scienze  
Cliniche Applicate  
e Biotecnologiche

## CURRICULUM VITAE

PERSONAL INFORMATION	Fabrizia Brisdelli Department of Biotechnological and Applied Clinical Sciences Via Vetoio - Coppito 2 67100 L'Aquila, Italy fabrizia.brisdelli@univaq.it
CURRENT POSITION	Researcher (Biochemistry SSD BIO/10) at the University of L'Aquila
EDUCATION OTHER QUALIFICATIONS	1995: PhD in Experimental Medicine with a thesis on "Cytogenetics of non-small-cell lung cancer" at the University of L'Aquila. 1990: Graduate in Biological Sciences cum laude at the University of L'Aquila.
ACADEMIC APPOINTMENTS	2007 to date: Researcher in Biochemistry, Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila. 1997-2007: Technician in Biochemistry Laboratory, University of L'Aquila. 1996-1997: Post-Doctoral fellowship on "Oncological cytogenetics" at the University of L'Aquila
CLINIC APPOINTMENTS	



TEACHING EXPERIENCE	<p>Teaching at University of L'Aquila</p> <p>2011 to date: Biochemistry (Degree course in Physiotherapy)</p> <p>2008 to date: Biochemistry (Degree course in Dental Hygiene)</p> <p>2008-2011: Clinical Enzymology (Postgraduate Specialisation in Clinical Biochemistry); Biochemistry (Degree course in Prevention Techniques in the Environment and in the Workplace)</p> <p>2008-2009: Laboratories of Biochemistry (Degree Course in Biomedical Laboratory Techniques)</p> <p>2007-2008: Biochemistry (Degree course in Nursing)</p>
RESEARCH ACTIVITIES	<p>Study of anti-cancer, antioxidant, antibacterial and anti-inflammatory activity of secondary metabolites produced in nature.</p> <p>Study of catalytic mechanisms of beta-lactamases.</p>
RESPONSIBILITY IN ACADEMIC ACTIVITIES	<p>2014-2023: Member of the Board of the PhD in Experimental Medicine, University of L'Aquila.</p> <p>2010-2013: Member of the Board of the PhD in Biochemical Sciences and Neurosciences, University of L'Aquila.</p>
EDITORIAL BOARD, EDITORIAL ACTIVITIES, SOCIETY MEMBERSHIP	<p>2023: Organisation of international meeting "14<sup>th</sup> Beta lactam and beta lactamase meeting", 2-4 June, l'Aquila, Italy</p> <p>2011: Contributed to the translation of the 28<sup>th</sup> e 29<sup>th</sup> edition of the book "Harper's Biochimica Illustrata" Edizioni Mediche Scientifiche Internazionali (EMSI), Roma</p>
SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS	<p><b>Scopus Author ID: 6602946643 <a href="http://orcid.org">http://orcid.org</a> 0000-0002-9193-2393</b></p>
SELECTED PUBLICATIONS	<ul style="list-style-type: none"><li>- N. Bognanni, F. Brisdelli, A. Piccirilli, L. Basile, L. La Piana, S. Di Bella, L. Principe, G. Vecchio, M. Perilli. New polyimidazole ligands against subclass B1 metallo-<math>\beta</math>-lactamases: Kinetic, microbiological, docking analysis. J Inorg Biochem. 242:112163, 2023.</li><li>- L. Basile, A. Piccirilli, F. Brisdelli, M. Perilli, N. Bognanni, L. La Piana, L. Principe, S. Di Bella, G. Vecchio. The in vitro inhibitory activity of polypyridine ligands towards subclass B1 metallo-<math>\beta</math>-lactamases.</li></ul>



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- A. Piccirilli, S. Cherubini, G. Celenza, G.M. Rossolini, F. Brisdelli, B. Segatore, L. Principe, F. Luzzaro, L. Andriani, G. Amicosante, M. Perilli. A Two Amino Acid Duplication, L167E168, in the  $\Omega$ -Loop Drastically Decreases Carbapenemase Activity of KPC-53, a Natural Class A  $\beta$ -Lactamase. *Antimicrob Agents Chemother*, 66(6): e0240221, 2022.
- Piccirilli A, Criscuolo E, Brisdelli F, Mercuri PS, Cherubini S, De Sciscio ML, Maccarrone M, Galleni M, Amicosante G, Perilli M Exploring the Role of L10 Loop in New Delhi Metallo- $\beta$ -lactamase (NDM-1): Kinetic and Dynamic Studies. *Molecules*, 26(18): 5489, 2021.
- L. Fagnani, L. Nazzicone, F. Brisdelli, L. Giansanti, S. Battista, R. Iorio, S. Petricca, G. Amicosante, M. Perilli, G. Celenza, P. Bellio. Cyclic and Acyclic Amine Oxide Alkyl Derivatives as Potential Adjuvants in Antimicrobial Chemotherapy against Methicillin-Resistant *Staphylococcus aureus* with an MDR Profile. *Antibiotics (Basel)*, 10(8):952, 2021.
- A. Piccirilli A, P.S., Mercuri, B. Segatore, M. Galleni, F. Brisdelli, F. Kerff, G. Amicosante, M. Perilli. Laboratory Variants GES<sup>G170L</sup>, GES<sup>G170K</sup>, and GES<sup>G170H</sup> Increase Carbapenem Hydrolysis and Confer Resistance to Clavulanic Acid. *Antimicrob Agents Chemother*, 65(6): e01931-20, 2021.
- A. Piccirilli, B. Segatore, F. Brisdelli, G. Amicosante, M. Perilli. Potent inhibitory activity of taniborbactam towards NDM-1 and NDM-1<sup>Q119X</sup> mutants, and in vitro activity of cefepime/taniborbactam against MBLs producing Enterobacterales. *Int J Antimicrob Agents*, 57: 106228, 2021.
- A. Piccirilli, F. Brisdelli, J.D. Docquier, M. Aschi, S. Cherubini, F. De Luca, A. Matagne, G. Amicosante, M. Perilli. *Catalysts*, 10, 1474, 2020.
- T. Cafaro, V. Carnicelli, G. Caprioli, F. Maggi, G. Celenza, M. Perilli, A. Bozzi, G. Amicosante, F. Brisdelli. Anti-apoptotic and anti-inflammatory activity of *Gentiana lutea* root extract. *Adv Tradit Med*, 20: 619-630, 2020.



- F. Brisdelli, L. Di Francesco, A. Giorgi, A.R. Lizzi, C. Luzi, G. Mignogna, A. Bozzi, M.E. Schininà. Proteomic analysis of quercetin-treated K562 cells. *Int J Mol Sci*, 21: 32, 2020.
- A. Piccirilli, F. Brisdelli, M. Aschi, G. Celenza, G. Amicosante, M. Perilli. Kinetic Profile and Molecular Dynamic Studies Show that Y229W Substitution in an NDM-1/L209F Variant Restores the Hydrolytic Activity of the Enzyme toward Penicillins, Cephalosporins, and Carbapenems. *Antimicrob Agents Chemother*. 63: e02270-18, 2019
- G. Caprioli, F. Maggi, H. Bendif, M.D. Miara, B. Cinque, A.R. Lizzi, F. Brisdelli, G. Celenza. *Thymus lanceolatus* ethanolic extract protects human cells from t-BHP induced oxidative damage. *Food Funct*, 9: 3665-3672, 2018.
- C. Di Nicola, F. Marchetti, C. Pettinari, R. Pettinari, F. Brisdelli, M. Crucianelli, C. Lelii, A. Crispini. Synthesis and characterization of a new alkyne functionalized bis(pyrazolyl)methane ligand and of its Pd(II) complexes: Evaluation of their in vitro cytotoxic activity. *Inorg Chim Acta*, 455: 677-682, 2017.
- A. Sabatini, F. Brisdelli, G. Celenza, F. Marcocchia, M. Colapietro, M.M. Tavío, A. Piccirilli, G. Amicosante, M. Perilli. Interaction of carbapenems and  $\beta$ -lactamase inhibitors towards CTX-M-15 and CTX-M-15<sup>G238C</sup> mutant. *J Glob Antimicrob Resist*, 10: 95-100, 2017.
- P. Bellio, L. Di Pietro, A. Mancini, M. Piovano, M. Nicoletti, F. Brisdelli, D. Tondi, L. Cendron, N. Franceschini, G. Amicosante, M. Perilli, G. Celenza. SOS response in bacteria: Inhibitory activity of lichen secondary metabolites against *Escherichia coli* RecA protein. *Phytomedicine*, 29:11-18, 2017.
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