

Advanced Computational Biostructural  
Research Collaboratory, Italy

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## Danilo Gullotto, Biological Sciences

[https://www.researchgate.net/profile/Danilo\\_Gullotto](https://www.researchgate.net/profile/Danilo_Gullotto)

### Education

*Oct 1999 – Dec 2004* **Math Physic and Natural Science University of Catania**  
Biological Sciences - Biomolecular specialization, Biology  
Catania, Italy

### Research Experience

- Nov 2014 – Feb 2015* **Research Scientist**  
Dr. Aita & Associated Inspectors Italia S.r.l.,  
Catania, Sicily, Italy  
  
Development of a diagnostic panel for the identification, quantification and monitoring of viral and bacterial pathogens that represent a risk factor for transplant patients.
- Jul 2013 – Sep 2014* **Research Scientist**  
Dr. Aita & Associated Inspectors Italia S.r.l.,  
Catania, Sicily, Italy  
  
Development of a multiplex platform for molecular diagnostics based on instrumental logic LAB\_ON\_CHIP for multiparametric applications in the field of infectious diseases
- Jan 2010 – present* **Research Director**  
Advanced Computational Biostructural Research Collaboratory,  
Zafferana Etnea , Sicily, Italy
- Jan 2010 – May 2012* **I.N.B.B. Catania, Chemistry Department of Catania and Discaff (Università del Piemonte Orientale)**  
Università degli Studi di Catania, Department of Chemical Sciences  
Catania, Italy  
  
Analysis of structural determinants modulating the redox potential of fungal laccases by in silico methods.
- May 2006 – Jan 2007* **A new hybrid template/based method for the prediction of tertiary structure of proteins**  
Università degli Studi di Siena, Department of Biotechnology, Chemistry and Pharmaceutical Sciences

Siena, Italy

Development of "A new hybrid template/based method for the prediction of tertiary structure of proteins"

*Nov 2005 – Jan 2006* **Bioinformatics data processing of enzymes for environment catalysis**

Università degli Studi di Catania, Department of Chemical Sciences  
Catania, Italy

*Apr 2005 – Oct 2005* **Molecular modelling of enzymes for environment catalysis**

Università degli Studi di Catania, Department of Chemical Sciences  
Catania, Italy

## Statistics

*RG Score* 9,5

*Publications* 16

*Reads* 5970

*Citations* 28

## Awards & Grants

*Jul 2007* Grant: Ministry of Health, Kenya - New Nyanza Provincial General Hospital - volunteering

## Skills & Activities

*Skills* Simulated Annealing, Visual Basic, Monte Carlo, Grid, Structure Prediction, Keyboard skills. Computing – knowledge of C++, Basic, Pascal, AWK (UNIX), Assembly Language for MPU (ST6 single chips). Expertise on using Molecular Dynamics, Docking and Protein Sequences Analysis Software such as the following modules: Builder, discover, Modeller, Homology, Expasy sequences analysis programs ([www.expasy.org](http://www.expasy.org)), DeepView Swiss-PDBViewer, UCSF Chimera, MOLMOL, Swiss-PdbViewer, PyMol.

Microsoft Office knowledge., Analysis and identification methods of clinical micro organism strains. Light Microscopy skills., MySQL Database, Python, Bioremediation, Structural Bioinformatics, Software Development, C++, DOS, MySQL, Protein Folding, Molecular Dynamics Simulation, Modeling and Docking, Structural Bioinformatics and Structural Biology, PCR Primer Design

*Languages* Italian, English, Spanish

*Interests* Volunteer for the African "Pamoja International Voluntary Services" (PIVS)

Organization – Nairobi – Kenya.

## Journal Publications

Danilo Gullotto: Fine tuned exploration of evolutionary relationships within the protein universe. *Stat Appl Genet Mol Biol* (2021). DOI: 10.1515/sagmb-2019-0039

Danilo Gullotto, Mario Salvatore Nolassi, Andrea Bernini, Ottavia Spiga, Neri Niccolai: *Probing the protein space for extending the detection of weak homology folds*. *Journal of Theoretical Biology* 12/2012; 320., DOI:10.1016/j.jtbi.2012.12.005

Maria Teresa Cambria, Danilo Gullotto, Silvia Garavaglia, Antonio Cambria: *In silico study of structural determinants modulating the redox potential of Rigidoporus lignosus and other fungal laccases*. *Journal of biomolecular Structure & Dynamics* 02/2012; 30(1):89-101., DOI:10.1080/07391102.2012.674275

Vito Librando, Antonio Cambria, Andrea Alparone, Danilo Gullotto: *Computational analyses of virtual proteolytic fragments generated by naphthalene 1,2-dioxygenase. In search of native-like conformation and function*. *Molecular Simulation* 03/2007; 33(3-3):231-237., DOI:10.1080/08927020601175400

Vito Librando, Danilo Gullotto, Zelica Minniti: *Automated molecular library generation of proteic fragments by virtual proteolysis for molecular modelling studies*. *In silico biology* 02/2006; 6(5):449-57.

Vito Librando, Danilo Gullotto, Zelica Minniti: *High throughput approach of leads selection for soil bioremediation*.

## Conference Proceedings

E Bolzacchini, L Ferrero, Lo Porto, Perrone, G de Gennaro, P Bruno, M Caselli, P.R Dambruoso, B.E Daresta, C.M Placentino, M Tutino, M Amodio, D Baldacci, M Stracquadanio, L Tositti, S Zappoli, D Gullotto, V Librando, Z Minniti, G Perrini, G Trincali, S Becagli, A Mannini, R Udisti, A Paradisi, A Tapparo, P Barbieri, L Capriglia, F Cozzi, E Maran, E Reisenhofer, V Sicardi, P Fermo, A Piazzalunga: *Concentration and the chemical characterization of PM10 and PM2.5 in all the Italian territory*. European Aerosol Conference digital handbook 2007; 01/2007

Vito Librando, Danilo Gullotto, Zelica Minniti: *Library generation and lead selection for optimal laboratory procedure of environmental biocatalysts*. The 230th ACS National Meeting; 08/2005

Vito Librando, Danilo Gullotto, Zelica Minniti: *Automatic molecular library generation of processed bioenzymes by proteolysis methods for bioremediation processes*. The 230th ACS National Meeting; 08/2005

Vito Librando, Danilo Gullotto, Zelica Minniti: *High throughput approach of leads selection for soil bioremediation*. 230th ACS National Meeting, Washington, DC, United States; 08/2005