CV of Blasco Morozzo della Rocca, PhD

Born in Rome, Italy on October 5th 1973
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EDUCATION AND POSITIONS

2006-present University Researcher of Molecular Biology, Department of Biology, University of Roma Tor Vergata, Italy

2004-2006 Post-Doctoral fellow in the Biology Department, Università degli Studi "Tor Vergata" of Rome.

2000-2004 PhD degree in the "Biochemistry and Molecular biology" PhD Program in the Department of Experimental Medecine, Faculty of Medicine, Università degli Studi "Tor Vergata" of Rome.

1999 Physics Degree - Major in Biophysics - Università degli Studi "La Sapienza"in Roma, Italy.

RESEARCH ACTIVITIES

His research activity includes the study of proteins and biomacromolecules in general using biophysical approaches and in particular spectroscopy. UV-Visible absorption, circular dichroism and Electronic Paramagnetic Resonance are some of the techniques used on soluble and membrane proteins to investigate the relationship between structure, function and dynemics.
He has dealt with the spectroscopic characterization of proteins by both intrinsic and extrinsic probes. The emission properties of proteins with single tryptophan have been used to monitor the folding state, such as for Azurin encapsulated in glassy matrices of sol-gel origin, but also to monitor the oligomerization state of copper-zinc superoxide dismutase to. Part of his research activity is focused membrane proteins and in particular the mitochondrial carrier of ossoglutarate (OGC). Through direct spin site marking, a procedure developed and used for the first time in Europe, the secondary structure of some transmembrane segments of the carrier was identified.
At the same time it has deepened its knowledge and use of computer simulation techniques under various aspects, such as homology modelling, molecular dynamics and docking. These have been used on various systems such as ADP/ATP carrier, Topoisomerase 1B, Glutathione Transferase 1-p, alpha Hemolysin. Currently he is working on nanopore approaches to protein sequencing. He is also involved in developing machine learning approaches to complex biological problems. He collaborates with national and European research groups.

TEACHING ACTIVITIES

Since AA 2014/15 he holds the Bioinformatics course for the BA degree in Biotechnology.
Since AA 2012/13 he holds the course of "Molecular Recognition mechanisms and Protein Identifiation" for the Bachelor's degree in Biotechnologies.
He taught the course of "Molecular Recognition Methods" for the Master's Degree in Cellular and Molecular Biology. He was co-author of the course "Membranes and Transport" and taught in the course of "Structural Biology", both part of the Master's Degree in Cellular and Molecular Biology at the Faculty of Science, University of Rome Tor Vergata. He has followed with tutoring activities various thesis, for the Bachelor's and Master's degrees.