

Curriculum Vitae et Studiorum

Name: Adriana Erica Miele

Date of Birth: 20th April 1972

Place of Birth: Cassino (Fr) - Italy

Nationality: Italian

Marital Status: married, one child

Work address: UMR5280 Institute of Analytical Sciences – CNRS – UCBL, 5 rue de la Doua, Villeurbanne, France

Telephone number: +33(0)4 3742 3546

e-mail address: adriana.miele@univ-lyon1.fr

Spoken Languages: Italian (mother tongue), English (C2), French (C1).

ORCID: 0000-0002-4637-2606

Scopus ID: 35509603200

EDUCATION AND WORK EXPERIENCE:

2016 – present: Professor of Biochemistry and Biophysics, Université Claude Bernard Lyon 1 (F).

2007-2016: Associate Professor of Biochemistry, “Sapienza” University of Rome (I).

2003-2007: University Researcher, University of Rome “La Sapienza” (I).

2001-2003: Wellcome Trust post-doctoral fellow at the MRC – Laboratory of Molecular Biology of Cambridge (UK).

1999-2000: Post-doctoral fellow at the Pasteur Institute - Fondazione Cenci Bolognetti, Rome (I).

1996-2000: PhD In Biochemistry, University of Rome "La Sapienza".

1996: Starting Grant for graduate students from the Foundation “A. Villa Rusconi”.

1995: Laurea (110/110 *cum laude*) in Biology with specialisation in Molecular Biology.

TECHNICAL SKILLS:

Biochemical techniques for production, purification and functional characterisation of proteins, protein-small molecules and DNA/protein complexes.

Biophysical and computational methods for kinetic and thermodynamic analysis of macromolecular complexes and enzymes and for macromolecular quality control.

Bioinformatics techniques for data mining, multiple alignment of macromolecular sequences and structures, molecular modelling of protein structures.

Structural biology: theory and practice of X-Ray diffraction and small angle scattering; macromolecular crystallography; theory and practice of transmission electron microscopy.

Knowledge of Unix, Linux, MacIntosh and MSWindows based programs.

Conference organisation.

Guest editor of three special issues (MDPI Molecules; Frontiers in Biomolecular Sciences; European Biophysical Journal).

PUBLICATIONS (a selection from a total of 54 papers published in JCR journals, of which 11 as first author and 11 as last and corresponding author)

h-index: 29 (total of 2851 citations)

- 1: Andretto V, et al. Peptide-Based Hydrogel for Nanosystems Encapsulation: the Next Generation of Localized Delivery Systems for the Treatment of Intestinal Inflammations. **Adv Healthc Mater.** 2024; 13(16): e2303280. doi: 10.1002/adhm.202303280.
- 2: Nedvědová Š, De Stefano D, Walker O, Hologne M, Miele AE. Revisiting *Schistosoma mansoni* Micro-Exon Gene (MEG) Protein Family: A Tour into Conserved Motifs and Annotation. **Biomolecules.** 2023;13(9):1275. doi: 10.3390/biom13091275.
- 3: Miele AE, Badaoui S, Maugliani L, Salza R, Boumis G, Chichiarelli S, Duclos B, Ricard-Blum S. A comparative analysis of secreted protein disulfide isomerases from the tropical co-endemic parasites *Schistosoma mansoni* and *Leishmania major*. **Sci Rep.** 2019; 9(1):9568. doi:

Collège A2 – Section 18 – soutien “SNCS-FSU et SNESUP-FSU”

10.1038/s41598-019-45709-8.

- 4: Gourlay LJ, Angelucci F, Baiocco P, Boumis G, Brunori M, Bellelli A, Miele AE. The three-dimensional structure of two redox states of cyclophilin A from *Schistosoma mansoni*. Evidence for redox regulation of peptidyl-prolyl cis-trans isomerase activity. **J Biol Chem** 2007; 282, 24851-24857. doi: 10.1074/jbc.M702714200.
- 5: Miele AE, Watson PJ, Evans PR, Traub LM, Owen DJ. Two distinct interaction motifs in amphiphysin bind two independent sites on the clathrin terminal domain beta-propeller. **Nature Struct Mol Biol** 2004; 11, 242-248. doi: 10.1038/nsmb736.

International Collaborations:

2021-2024, 2024-2027: President elected of the Association of Resources for Biophysical Research in Europe (ARBRE).

2020-2025: Representative of the structural biology users of ESRF synchrotron.

2016-2020: H2020 – COST Action 15126 Molecular Biophysics in Europe (MOBIEU). Co-chair of the WG3 Training and innovation capacity. Network of 230 laboratories from 31 countries.

Since 2009: Prof David L. Williams – Rush Medical School, Chicago, IL (USA).

Since 2015: Dr Patrick England – Head Biophysics Facility of Institut Pasteur Paris (F).

Since 2018: Prof. Martino Bolognesi – Facility for CryoEM at the University of Milan (I).

2015-2019: Deputy BAG coordinator of the Italian MX and SAXS community at ESRF synchrotron (F).

Funded Projects:

June 2024 – June 2029. Coordinator of Horizon-EU MSCA-COFUND Doctoral Programme Architecture Function and dynamics in Life Sciences, “ArchiFun”.

Jan 2023 – Dec 2024. Coordinator of CNRS 80PRIME – DetectSchisto: When analytical sciences meet molecular parasitology.

Jan 2019 – June 2021. Coordinator of Région Auvergne-Rhone-Alpes SCUSI-2018 “Nouvelle coopération scientifique entre Lyon et Milan autour des enjeux science-santé en infectiologie”.

Jan. - Dec. 2017. Programme Avenir Lyon-St Etienne Impulsion 2017 “Comparative Mapping of host-pathogen interactions in Leishmania and Schistosoma” – PI.

May 2016 – April 2020. EU-H2020 Deputy National Management committee Member of the COST Action “Between Atom and Cell: Integrating Molecular Biophysics Approaches for Biology and Healthcare” CA15126. Co-leader of the WG3 – Training

Jan. 2014 – Dec. 2015: BioMérieux “Schistosomiasis collaborative initiative” – PI.

2012–2013: EU-FP7 BiostructX-1223, and 3959. Project leader for collecting macromolecular crystallographic data at European synchrotron facilities.

Dec. 2010 – Nov. 2012: Fondazione Roma for Healthcare “Rational Approach to the specific inhibition of *Plasmodium falciparum* and *Schistosoma mansoni*” – partner.

Nov. 2008: Coordinator of EU-FP7 “From information to function”, a Science-in-Society stand at the European City of Science at the Grand Palais, Paris (France).