

# ESRF USER ORGANISATION COMMITTEE (UOC)

Election November 2020

## CANDIDATES to represent the scientific community of STRUCTURAL BIOLOGY

**Adriana Erica Miele**, [adriana.miele@univ-lyon1.fr](mailto:adriana.miele@univ-lyon1.fr)

*Affiliation:* Université Claude Bernard Lyon 1, Villeurbanne (FR)

Adriana E. Miele is professor of Biochemistry and Biophysics at the Institute of Chemistry and Biochemistry of Molecular and Supramolecular assemblies of Université Claude Bernard Lyon-1 (<http://www.icbms.fr/aspe>) since September 2016. Her research focuses on the 3D mapping of the host-pathogen interactions between the human extracellular matrix and excreted/secreted (glyco)proteins of *Schistosoma mansoni* and *Leishmania major*. At ICBMS-UCBL she is co-manager of the "Interaction Platform" for the biophysical analysis of macromolecular complexes.

After obtaining her PhD in Biochemistry at the University of Rome "Sapienza" (Italy) in 2000, Dr. Miele had a large international research experience, always focused on the study of structure/function relationships in biomedical relevant proteins. Dr Miele worked at Institut Pasteur (Rome, Italy), then at the MRC Laboratory of Molecular Biology (Cambridge, UK) as Research Associate (Wellcome Trust International Travelling Fellow), and as university researcher in the Dept. Biochemical Sciences of University of Rome "Sapienza" (Italy). This is where in 2007 she became associate professor of Biochemistry, while pursuing a structural genomics research project on thiol-mediated redox metabolisms of *Schistosoma mansoni* and *Plasmodium falciparum*. At that time, she managed the crystallogenes (BioCrystal Facility, nowadays part of Instruct-IT) and the bacterial recombinant protein production platforms.

**Silvia Morante**, [silvia.morante@roma2.infn.it](mailto:silvia.morante@roma2.infn.it)

*Affiliation:* University of Roma Tor Vergata, Department of Physics, Roma (IT)

Silvia Morante took her PhD in Physics cum laude at the University of Rome "La Sapienza" in 1977. She was first appointed as Associated Researcher by the University of Trento in 1980 and in 1984 by the University of Rome "Tor Vergata", where since then she leads the Biophysics group of the Physics Department. In 1999 she was appointed as Associate Professor and since September 2010 she is Full Professor at the University of Rome "Tor Vergata". She is responsible of the Master in "Physics of Biosystems" and she is teaching "Biophysics". From 2008 to 2012 she was the President of the Italian National Society of Pure and Applied Biophysics and member of the Commission on Biological Physics of the International Union of Pure and Applied Physics. In the last three years she served as a member of the Beam Time Allocation Panel C04. Her scientific activity is focused on understanding the role of metals in mis-folding and aggregation processes, which appear to be at the root of many devastating neuro-degenerative diseases (like Alzheimer and Parkinson disease). Such investigations require both structural experimental information of the metal coordination site, and ab initio simulations. She has given key contributions in biophysics (cooperativity, structure-function relation, molecular recognition, etc.) both using innovative experimental techniques (synchrotron radiation X-ray absorption spectroscopy) and advanced numerical methods of statistical and soft matter physics (like Monte Carlo and multi-canonical methods, Car-Parrinello Molecular Dynamics).