Simona Rodighiero CV

With a master degree in Biology and a PhD in Physiology at the University of Milan, Simona's scientific interests during her thesis and PhD included the study of the response of mammalian cells to osmotic stress by means of biochemical and electrophysiological techniques. During the PhD she started to study the same scientific problems by performing optical microscopy, the latter becoming from that time her main methodological approach to address scientific questions. In 2005 she became the responsible of the confocal microscopy at the Interdisciplinary Centre for Nanostructured Materials and Interfaces (CIMalNa) of the University of Milan, where she was collaborated with colleagues in a interdisciplinary environment. Thanks to the experience in optical microscopy gained in that years, in 2009 Simona moved to the Molecular and Cellular Imaging Platform of Fondazione Filarete (www.fondazionefilarete.com) in Milan as microscopy technologist. There her main duties included general maintenance of confocal microscopes, project planning, experimental design, imaging, data analysis and reporting, together with microscopy users assisting and training. During the 6 years spent in Fondazione Filarete, she had the opportunity to collaborate on different research projects, including nanoparticle internalization in tumor cells, cell adhesion and differentiation on new synthetic materials for cell culture, proteinprotein interaction, ionic transmembrane transports, ion channel activity, regulation and mobility endocytic pathways in plant cells. She had the opportunity to consolidate her experience in confocal microscopy and specific techniques like Fluorescence Resonance Energy Transfer (FRET) and Fluorescence Recovery After Photobleaching (FRAP) and to deal also with Electron Microscopy to study of biological samples.

In 2015 Simona joined the Scientific Center for Optical and Electron Microscopy of ETH in Zurich as staff scientist and lecturer, where she set up and lead the Microscopy training Program (MTP ETHZ), by organizing and teaching optical and electron microscopy courses. As main responsible of two Scanning Electron Microscopes and two Transmission Electron Microscopes, she gained experience in analyzing both soft and hard materials, and in correlative light and electron microscopy.

Since July 2018 Simona joined the Department of Experimental Oncology (DEO) of the European Institute of Oncology as coordinator of the Imaging Unit. In that capacity she strongly with DEO researchers in their cutting-edge projects in oncological research.