Dr. Silke Krol graduated in Chemistry and received her PhD in Munster, Germany. She started in 2001 as one of the pioneers in Nanomedicine at the Department of Physics, at the University of Genoa, Italy developing nanoencapsulation strategies for living cells, i.e. pancreatic islets for the transplantation in patients with type 1 diabetes and drug delivery through the blood brain barrier (BBB). Then she funded a new Nanomedicine lab at a SME in Trieste, where she continued the work on the BBB delivery and designed delivery systems for DNA and RNA into tumor cells. Next, she funded and headed the Nanomed lab for Fondazione IRCCS Istituto Neurologico “Besta”, Milan. Here the research focus was on nanomaterials as antivirals and in general their interaction with different viruses. Moreover, she studied nanomaterials for diagnosis as contrast agent or in small devices. Since 2016 she started another lab on translational Nanotechnology at Istituto Tumori “Giovanni Paolo II” in Bari to study exosomes and their interaction with nanoparticles for early diagnosis and in response to chemotherapy. She published around 50 papers in international journals, filed 7 patent applications, and received national and European funding to support her work.