Federico Benetti has a degree in Biology and a PhD in Molecular Physiology and Structural Biology, both obtained at the University of Padua. He later joined the Laboratory of prion biology at SISSA (International School for Advanced Studies, Trieste).

Since 2011, he has focused his research on the sustainable development of nanotechnologies at ECSIN (European Centre for the Sustainable Impact of Nanotechnology), where he currently holds the position of Laboratory Executive Director. During his career he has published more than 50 scientific publications in highly rated international journals, and attended conferences and workshops as invited speakers. He worked on several European projects on nanosafety and governance, and he contributes to working groups on nanomaterials as an expert.