

Dr. Emily Schifano graduated with honors in Biology and Cellular Technologies from Sapienza University of Rome in 2014 and received her Ph.D. in Cell and Developmental Biology in 2020. From 2020 to 2021, she worked at the CREA – Research Centre for Food and Nutrition in Rome, contributing to research on food-associated microbiomes and food microbiome–gut microbiome interactions. Since 2021, she has been conducting research at Sapienza University of Rome in the fields of microbiology, biotechnology and nanotechnology, using *Caenorhabditis elegans* as an in vivo model and investigating probiotic microorganisms and bioactive compounds.

A significant part of her research has been devoted to the application of nanotechnology to cultural heritage conservation, with particular emphasis on the antimicrobial properties of carbon-based nanomaterials against microorganisms involved in the biodeterioration of cultural heritage materials. Her activities have also included the isolation and characterization of microorganisms responsible for the degradation of historical and cultural substrates, and the investigation of strategies based on engineered nanomaterials for controlling microbial deterioration.

Since November 2025, Dr. Schifano has been a Researcher (RTD-A) at the Department of Well-Being, Health and Environmental Sustainability (BeSSA), Sapienza University of Rome. Her current research includes the development of innovative biosensors and bio-based sensing systems, with an interdisciplinary approach combining microbiology, biotechnology and advanced materials.