# Manuela Antonioli

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## **Education and training**

2025 MD in Microbiology and Virology 2011 PhD in Cellular and Molecular Biology 2007 MSc in Cellular and Molecular Biology, 110 cum laude 2005 BSc in Biotechnology, 110 cum laude



#### **Positions**

2023-present Researcher for the Joint Research Platform Agreement between Tor Vergata University and the INMI,

IRCCS L. Spallanzani (Rome, Italy)

2022-present Assistant professor at the Biology department at Tor Vergata university of Rome

2017-2022 Research scientist at the National Institute for Infectious Diseases, L. Spallanzani in Rome

2017 Guest researcher at the university of Fribourg, (Switzerland)
2015-2016 Junior scientist at the FRIAS, university of Freiburg (Germany)

2013-2015 post-doc at the dept. of Biology (Tor Vergata)

2011-2013 post-doc at INMI L. Spallanzani

#### **Teaching**

2023- present Member of the Ph.D. Committee of the Cellular and Molecular Biology school at Tor Vergata

University of Rome (Biology department)

2023-present Comparative Anatomy at the BSc in Biological Sciences (Tor Vergata university).

2022-2023 Developmental Biology at the BSc in Biological Sciences (Tor Vergata university).

### **Research interests**

Since 2022, Dr. Manuela Antonioli has been serving as an Assistant Professor at the Department of Biology of the University of Rome "Tor Vergata", where she is actively involved in both teaching and scientific research. In parallel, she is also conducting her research at the Cellular Biology and Electron Microscopy laboratories of the National Institute for Infectious Diseases (INMI) "Lazzaro Spallanzani" in Rome—a leading centre for research in infectious diseases and hostpathogen interactions. Her scientific work is characterized by a strong focus on the cellular and molecular mechanisms regulating protein homeostasis, cell stress responses, and autophagy in both physiological and pathological contexts, including cancer and infectious diseases (Antonioli et al., 2020; Cianfanelli et al., 2014; Corazzari et al., 2015; Vescovo et al., 2020). Expert in cellular and molecular biology, she obtained the Ph.D.in Cellular and Molecular Biology at Tor Vergata university in Rome, unveiling new molecular aspects in autophagy regulation by AMBRA1 and its interactors, DDB1-CUL4 E3-ubiquitin ligase complex (Antonioli et al., 2014). During her post-doc in Germany at the Freiburg Institute for Advanced Studies, she further developed her expertise in proteomics, thus acquiring new transversal skills for the molecular characterization of the intra- and inter-cellular elements' communication (Altuntas et al., 2015; Antonioli et al., 2014 and 2017; Mellows et al., 2017; Mitchell et al., 2019; Reali et al., 2015). Among the most relevant research results, she has characterized how the stability of the proautophagic protein, AMBRA1 is controlled by the HPV16 protein, E7, highlighting its relevance in the development of Oropharyngeal Squamous Cell Carcinomas (OPSCC) and in the cellular response to cell death stimuli (Antonioli et al., 2020). During the SARS-CoV-2 pandemic, she was working at the INMI, L. Spallanzani in Rome, thus giving her contribution on characterizing cellular response to SARS-CoV-2 infection, and thus leading to Covid-19 pathology (Bordoni et al., 2022; Ciccosanti et al., 2022; Messina et al., 2021; Montaldo et al., 2021) More recently, she is focusing her independent research activity aimed at unveiling the cellular mechanism behind the cross-talk between autophagy and the ubiquitin proteasome system, both in physiological and pathological conditions (e.g. Colorectal Cancer).

#### **Publications**

Manuela Antonioli is co–author of 35 papers in international Journals indexed by PubMed (H index 22). For details visit: <a href="https://www.scopus.com/authid/detail.uri?authorId=57200747534#">https://www.scopus.com/authid/detail.uri?authorId=57200747534#</a>