

## CV Lucia Nencioni

### Academic titles

- 2023 Full Professor of Microbiology and Clinical Microbiology (SSD MED/07), Sapienza University of Rome
- 2015 Associate Professor of Microbiology and Clinical Microbiology (SSD MED/07), Sapienza University of Rome
- 2006 Assistant Professor of Microbiology, Sapienza University of Rome
- 2003 Contract Researcher (SSD MED/07), Sapienza University of Rome
- 2002 Contract Researcher (SSD MED/07), University of Rome Tor Vergata
- 2002 PhD in Neuroscience, University of Rome Tor Vergata
- 1993 Master's Degree in Biological Sciences, University of Florence

### Professional experience

- 2017 Visiting Professor at Department of Biology, Queens College City University of New York, NY, USA.
- 1997 Fellowship in the project "Study of signal transduction of nerve growth factor in memory B lymphocytes. CNR, Institute of Experimental Medicine, Rome
- 1995 Fellowship in the project "Purification of an autocrine growth factor in myeloma cells", Department of Clinical Physiopathology, University of Florence
- 1993 *Post lauream* stage in the project "Study of modulation of macrophage colony stimulating factor receptor after cytokine treatment", Institute of General Pathology, University of Florence

### Academic appointments for scientific purposes

- 2022-2025 Coordinator of Microbiology Section, Department of Public Health and Infectious Diseases, Sapienza University of Rome

### Main research aims

- Study of the molecular mechanisms involved in regulation of viral replication and host cell response (death/survival; inflammatory and immune response);
- Study of relationship between intra/extracellular redox state and viral infection and evaluation of antiviral effect of redox-modulating compounds *in vitro* and *in vivo* models.
- Study of new antiviral strategies aimed at inhibiting host cell pathways, rather than viral structure, that are essential for replication of different viruses ("host cell-targeted approaches"). Identification and characterization of new synthesized or natural antiviral compounds.
- Evaluation of antiviral/antiinflammatory activity of new synthesized or natural molecules *in vitro* and *in vivo* models.
- Study of cooperation between different pathogens (bacteria and viruses) in the pathogenesis of acute and chronic diseases.

### Awarded research grants

Project RiPREI-ISS 2022: project title "Gaining insight into COVID-19 neuropathogenesis: a closer look to SARS-CoV-2 infection and driven neuroinflammation in the neuron/microglia axis", 2 years. Principal Investigator (PI) Sapienza Research Unit

Progetti di Rilevante Interesse Nazionale (PRIN)-MUR:

PRIN PNRR 2022: project title "Dual acting rEdox- modulating thiol molecules targeting Viral rEplication and inflLammatory respOnse in resPiratory virus infections (DEVELOP)" 2 years. Coordinator of the project and PI of Sapienza Research Unit

PRIN 2022: project title “Dissecting the host cellular response to develop novel host-targeted approaches against RNA viruses”, 2 years. Principal Investigator (PI) Sapienza Research Unit

PRIN 2017: project title “ORIGINALE CHEMIAE in Antiviral Strategy - Origin and Modernization of Multi-Component Chemistry as a Source of Innovative Broad Spectrum Antiviral Strategy”, 3 years. Principal Investigator (PI) Sapienza Research Unit

PRIN 2010-2011: project title “Tecnologie OMICS e Systems Biology per la definizione di nuove strategie finalizzate al controllo delle infezioni virali”, 3 years. PI Sapienza Research Unit

Project PNRR Investimento 1.3 Partenariati estesi-MUR 2022: project title “One Health Basic and Translational Research Actions addressing Unmet Needs on Emerging Infectious Diseases”, 3 years. Component of Spoke 1 (massa critica).

Istituto Pasteur-Fondazione Cenci-Bolognetti 2019: project title “Role of Glucose-6-phosphate dehydrogenase (G6PD) in regulating influenza virus replication and host response to infection”. Principal Investigator (PI)

Ministry of Health 2022: title of third mission project “Informazione agli operatori per il corretto utilizzo e approvvigionamento dei disinfettanti da impiegarsi in ambito sanitario e ospedaliero”, Principal Investigator (PI)

ITALIA-USA project 2012 (ISS): project title “Discovery of influenza A virus non-structural protein 1 (NS1) inhibitors”, Principal Investigator (PI)

Sapienza Ateneo grants:

Anno 2023, title of departmental project “Innovative approaches to improve diagnosis, outcome, surveillance, epidemiology and therapy of infectious diseases”, PI for the thematic “Pathogenic mechanisms and innovative therapies for multiple-pathogen infections”

Ateneo 2022, project title “Outcomes of uropathogenic *Escherichia coli* and virus co-infection in in vitro genitourinary cell lines”, Head of virological studies

Ateneo 2021, project title “Redox-modulating compounds in the treatment of influenza virus and coronavirus infections”. Principal Investigator (PI)

Ateneo 2020 (3 years), project title “The role of redox state in modulating ACE2 expression: a cell targeting based-approach for the treatment of SARS-CoV2 pathogenesis and inflammation”, Principal Investigator (PI)

Ateneo 2018, project title “Hop and echinacea extracts as antiviral agents to prevent influenza virus infection”, Principal Investigator (PI)

Ateneo 2017, project title “Antiviral activity of frog-skin antimicrobial peptides on DNA and RNA enveloped viruses”, Principal Investigator (PI)

Ateneo 2015, project title “Evaluation of antiviral activity of frog-skin antimicrobial peptides and derivatives”, Principal Investigator (PI)

### **Other activities**

- Coordinator of Microbiology Section, Department of Public Health and Infectious Diseases, Sapienza University of Rome (2022-2025)
- Member of the Executive Board of the New Italian Society of Pharmaceutical Microbiology ets (SIMIF ets)
- Member of the Italian Society of Virology (SIV)
- Member of the Italian Society of Microbiology (SIM)
- Member of the Italian Society of Pharmaceutical Microbiology (SIMIF)
- Member of the Editorial Board of the following international scientific journals: Antibiotics, Frontiers in Microbiology – associated editor in Virology, Austin Virology and Retrovirology
- Referee for the following international scientific journals: Antiviral Research, Antioxidants and Redox Signaling, Biomedicine & Pharmacotherapy, British Journal of Pharmacology, Emerging Microbes & Infections, Evidence-Based Complementary and Alternative Medicine, FASEB J, Frontiers, Heliyon, International Journal of Antimicrobial Agents, Journal of Medical Virology,

Journal Cellular Physiology, Journal of Global Antimicrobial Resistance, Marine Drugs, Pathogens and Disease, Scientific Reports, Trends Microbiology, Virology Journal, Virus Research.

- Guest Editor for International Journal of Molecular Sciences (IJMS), Special issue “Novel antivirals against Respiratory viruses”, deadline 20 Sep 2023.
- Reviewer for Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca (ANVUR)
- Reviewer for Ministry of University and Research (MUR)

### **Teaching**

- Virology module, Master’s degree in Medicine, Sant’Andrea Hospital, Sapienza University of Rome (a.a. 2018-2019 - to date)
- Microbiology, Master’s degree in CTF, Sapienza University of Rome (a.a. 2021-2022 - to date)
- Pharmaceutical Microbiology, Master’s degree in CTF, Sapienza University of Rome (a.a. 2012-2013 - to date)
- Microbiology, Degree course in Obstetrics, Umberto I° Hospital, Sapienza University of Rome (a.a. 2014-2015 - to date)
- Microbiology, Degree course in Dietetics, Umberto I° Hospital, Sapienza University of Rome (a.a. 2017-2018 - to date)
- Microbiology of Food, Degree course in Dietetics, Umberto I° Hospital, Sapienza University of Rome (a.a. 2020-2021 - to date)
  
- Teaching assignment for the II-level Master in Molecular Virology, lesson on “Influenza viruses versus Parainfluenza viruses” (a.a 2020-2021; 2021-2022)
- Virology module, School of Specialization in Hospital Pharmacy (a.a. 2007-2008; 2008-2009)
  
- Member of the Teaching board of PhD in Life Sciences, Sapienza University of Rome
- Member of the Teaching board of National PhD in Innovation in the diagnosis, prevention and treatment of infections at epidemic-pandemic risk, University of Siena