

**Giovanna Donnarumma**  
***Curriculum Vitae et Studiorum***

<i>Nationality</i>	Italian
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2024 Full Professor Microbiology and Clinical Microbiology, University of Campania Luigi Vanvitelli; Naples, Italy.

2005 Associate Professor Microbiology and Clinical Microbiology, University of Campania Luigi Vanvitelli; Naples, Italy.

### **Education**

- 1986, degree in Biological Sciences, received from the University of Study "Federico II" of Naples, Italy. The relevant Thesis, prepared under the tutorship of Prof. M. Marcacci focused on the study of "Anemia Saturnina and Late Cutaneous Porphyrria: different expressions of an altered biosynthesis of the EME"
- 1991, Specialization degree in Microbiology, received from Faculty of Medicine and Surgery, University "Federico II" of Naples - Italy. The relevant Thesis, prepared under the tutorship of Prof. Piera Valenti focused on the study of " $\text{Fe}^{+++}$  transport in *Candida albicans*"
- 1995, Ph.D. degree in Mycobiological Sciences, received from Faculty of Medicine and Surgery, University "Federico II" of Naples - Italy. Coordinator Prof. Francesco Galdiero. Thesis: "Regulation of the release of cytokines from human monocytes stimulated with *Salmonella typhimurium* porins "

### **Fellowships**

- 1987-1991, Fellowship grant by Ministry of Scientific and Technological Research, for the attendance of the School of Specialization in Microbiology. The activity has been carried out at the Institute of Microbiology and Virology, Faculty of Medicine and Surgery, Second University of Naples, under the tutorship of Prof. Piera Valenti.
- 1990-1991 Fellowship, grant by the Planning Department of the Province of Naples for the project "Survey plan on the coastal lagoons of Campania" (Law 67 art.23 project No. 545/88)
- 1995-1996 Fellowship, grant by C.N.R. (notice n.201.19.1 of 15.03.1995 and 15.02.1996; Microbiology area) carried out at the Institute of Food Sciences of Avellino, Director Prof. Vincenzo Zappia.

### **Employment**

- 1996 *Research Assignment*, in the Research project CEE AIR2-CT94-1166 "Immunoprotective effects of bovine lactoferrin in human nutrition".

- 1997 - 1999 Junior Researcher for the Research project: "Medical and Agri-food Biotechnology " of the Scientific and Technological Park, in Metropolitan Area; for the following objective:  
" Development of laboratory methodologies susceptible of application in the oil and wine industry and in the production of foods and / or food supplements based on fibers "(CEINGE)
- 2000 - 2004 Research Assignment received from Second University of Naples-Italy, (law n.449 art.51 comma 6) within the research program "Molecular diagnostic of virulence and resistance of pathogen microorganisms"
- Starting from 2005 to today is Associate Professor of Microbiology and Clinical Microbiology (SSD-MED/07) at the Faculty of Medicine and Surgery of the University of Study of Campania "Luigi Vanvitelli" Naples, Italy

### **Clinical Responsibilities:**

Starting from 2005 to today is manager, at the "Department of Integrated Activity of Laboratory and Public Health Services", O. U. of Virology and Microbiology, Hospital agency of University of Campania "Luigi Vanvitelli" Naples, Italy. She is laboratory manager of the Molecular Biology Laboratory.

### **Academic Activity**

She is currently in charge of the course:

- Microbiology and Clinical Microbiology for the curriculum in Medicine and Surgery, School of Medicine and Surgery, University of Campania "Luigi Vanvitelli", Naples Italy.
- Microbiology for the curriculum Dentistry and Dental Prosthetics, School of Medicine and Surgery, University of Campania "Luigi Vanvitelli". Coordinator of the Integrated Course of Microbiology and Hygiene
- Microbiology for the curriculum Dental Hygiene, School of Medicine and Surgery, University of Campania "Luigi Vanvitelli". Coordinator of the Integrated Course of Etiopathogenesis of Diseases.
- Microbiology and Clinical Microbiology for the curriculum Prevention Techniques in Environments and Workplaces, School of Medicine and Surgery, University of Campania "Luigi Vanvitelli". Coordinator of the Integrated Course of Microbiology and Pathology
- Clinical Microbiology for the curriculum Biotechnologies, University of Campania "Luigi Vanvitelli"

### **Course and Affiliation**

National Interuniversity Consortium of Materials Science and Technology (INSTM)

Italian Society of Microbiology (SIM).

Italian Association of Clinical Microbiology (AMCLI).

American Society for Microbiology (ASM).

## **Current and past research activity**

LS6\_6 Mechanisms of infection (e.g. transmission, virulence factors, host defences, immunity to pathogens, molecular pathogenesis).

The research activity is based on the study of the complex interaction between microorganisms and host cell. She analysed the virulence bacterial factors, the molecular mechanisms that supported the bacterial adhesion and invasion, the signals transduction, and the immunomodulation. The ability of pathogens to interact with host cell functions depends on expression of virulence mechanisms specifically evolved by each microorganism. The host-pathogen interactions activate a cascade of intracellular signals, that can modulate the inflammatory and immune response. All processes, physiological and/or pathological, strongly influenced by the cellular response to microbial pathogens. The most recent research about the innate immunity regards the analysis of beta-defensins role in the defence of host mucous tissue against invasive microorganisms.

She has written many papers in international and national journals (ORCID 0000-0002-3087-1240) and presented findings at international and national congresses.

## **Collaboration and grant**

She participated as component of Operative Unit in different research grants from MIUR (PRIN 2002, FIRB 2001, PRIN 2003), Ministero della Salute (Ricerca Finalizzata 2003) and Regione Campania (Legge 41/94 1999, Legge 41/94 2000), Laboratoires Expanscience (Epernon, France)(2007-2010), L'OREAL (Paris France) (2010-2012); PON01\_01226, MIUR “PON Ricerca e Competitività 2007-2013; PON03PE\_00060\_3: “PON Ricerca e Competitività 2007-2013; Misura 3.5 del P.O. FEP della Regione Campania 2007-2013 and as head of scientific projects PRIN 2005, PRIN 2007 and PRIN2009, Mavi Cosmetics (Aprilia Italy) (2012-2015) and VitroScreen (Milano Italy) (2014-2015); Horizon 2020 UniNa2-INSTM (2017-2020)“High performance functional bio-based polymers for skin contact products in biomedical, cosmetic and personal care industry”(Polybioskin); EURONANOMED2017-177 UniNa2-INSTM (2018-2021) “NANOfabricated NANOcomposite NANObioactive and NANOfunctional rEplacements of tympanic membrane as advanced DRUG delivery and regenerative platforms” (4NanoEARDRM); DMS- Università della Campania “Luigi Vanvitelli”(2018-2020) “Antibiotico-resistenza: valutazione della prevalenza dei microrganismi antibiotico-resistenti e dell’appropriatezza dell’uso di antibiotici in ambito ospedaliero” Università della Campania “Luigi Vanvitelli”, Dipartimento di Medicina Sperimentale, (Bando per il Finanziamento della Ricerca Scientifica di Dipartimento 2019); PON «Imprese e competitività» 2014-2020 FESR-MISE, (2020- 36 months) “Integratori Innovativi per l’infiammazione”InCube; PNR 2015-2020 (Ente finanziatore MUR Decreto n. 1404/2020), (2020-30 months) Sviluppo di Nutraceutici da Fonti Naturali” – BIONUTRA.