

Curriculum vitae

Name: **Prof. Giovanna Cacciapuoti**
Date of birth: September 27, 1951
Place of birth: Naples, Italy
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Education:

1974 degree in Biological Sciences summa cum laude at the University of Naples "Federico II"
1975-1980 PhD in Biochemistry at the Institute of Biochemistry of Macromolecules, School of Medicine, University of Naples "Federico II"

Academic career:

1980-1992 University Researcher at the Institute of Biochemistry of Macromolecules, University of Naples "Federico II"
1992-2006 Associate Professor of Biochemistry at the Department of Biochemistry and Biophysics "F. Cedrangolo" School of Medicine, Second University of Naples, now University of Campania "Luigi Vanvitelli"
2007-today Full professor of Biochemistry at the Department of Precision Medicine, School of Medicine, University of Campania "Luigi Vanvitelli"

Academic and coordination activities

- Educational coordinator of the integrated course of Biochemistry of the Faculty of Medicine and Surgery of the Second University of Naples.
- Member of the Faculty Board of the PhD in "Cellular Biochemistry" since its activation and of the PhD in "Biochemical and Biotechnological Sciences" University of Campania "L. Vanvitelli".
- Member of Selection Boards for admission competitions and final exams for the award of the Ph.D. and for the comparative assessment procedure for Researcher and University Professor positions.
- Member of the Technical Didactic Planning Commission of the Faculty of Medicine and Surgery
- Member of the Regional Center of Expertise in Industrial Biotechnology - BioTekNet transformed into a joint stock company in December 2007

Teaching activity

Biochemistry courses at the School of Medicine of Second University of Naples, now University of Campania "Luigi Vanvitelli"

- Biochemistry, Master's Degree in Medicine and Surgery
- Biochemistry at the School of Specialization in Biochemistry and Clinical Chemistry
- Applied Biochemistry at the Degree Course in Medicine and Surgery
- Nucleic acids Biochemistry Degree course in Biomedical Laboratory Technician (TSLB)
- Biochemistry at the Degree Course for Medical Scientific Informant
- course "Guide to critical reading of scientific papers" for PhD students in "Cellular Biochemistry" and for PhD students in "Biochemistry and Molecular and Cellular Biology"
- "Structure and function of proteins" for PhD students in "Cellular Biochemistry, in" Biochemistry and Molecular and Cellular Biology and in "Biochemical and Biotechnological Sciences"
- Supervisor of degree thesis in Biological Sciences and in Pharmacy
- Lecturer and supervisor of PhD thesis in Cellular Biochemistry and in Biochemical and Biotechnological Sciences
- Food Science at the School of Specialization in Food Science
- Biochemistry in the Integrated Course of Physiology, Pathology and Biochemistry of the Degree Course in Medical Radiology for Imaging and Radiotherapy (TRMIR)
- Biochemistry at the School of Specialization in Clinical Biochemistry and Clinical

Pathology of the University of Campania "Luigi Vanvitelli"

Research:

- Principal investigator Unit of the MURST Project "Liveprotein II, Levels of structural organization of proteins"
- Principal investigator Unit of the MURST Project "Liveprotein II, Enzymatic Biotechnologies"
- Principal investigator of the Research Unit of the PRIN project "Structure, Mechanisms and Engineering of Proteins"
- Principal investigator of the Research Unit of the PRIN project "Polynucleotides, nucleotides and structural analogs as metabolic regulators chemical signals and potential drugs".
- Principal investigator of the Research Unit of the Regione Campania project "Biotechnological applications of purine nucleoside phosphorylase from *Archaea* in gene therapy of tumors".
- Principal investigator of the Research Unit of the PRIN project "5'.Cytosolic nucleotidases, nucleoside phosphorylases and nucleoside hydrolase in the regulation of the metabolism and in the synthesis of new analogs with pharmacological potential"

Scientific activity

The scientific activity is documented by more than 70 works in extenso published in peer-reviewed journals, 20 contributions in books of international importance and numerous communications at national and international conferences. He participated as "speaker" at national and international conferences. Intense "referee" activity for high impact international journals

Main scientific interests:

a) S-adenosylmethionine and natural sulfur-nucleoside metabolism in *Eukarya*, *Bacteria* and *Archaea*; b) identification of new polyamines in *Archaea* and elucidation of their biosynthetic pathways; c) studies on the structure/function/stability relationship in proteins from hyperthermophilic *Archaea* and analysis of disulfide bonds as molecular stabilization strategy against the extreme temperatures. Current research projects deal with the following fields: 1) biochemical and structural characterization of purine nucleoside phosphorylases from *Archaea* as biotechnological tools in gene therapy and in the enzymatic synthesis of pharmacological molecules; 2) role of homocysteine on endothelial dysfunction and cardiovascular diseases; 3) Role of S-Adenosylmethionine and *Annurca* apple polyphenols in cell growth, apoptosis and cancer.

Scientific collaborations with national and international research laboratories

- Laboratory for the Chemistry of Molecules of Biological Interest of the CNR of Naples
- Section of Biochemistry, Molecular and Cell Biology of Cornell University, Ithaca, New York.
- Department of Biophysics, Institute of experimental Physics, University of Warsaw, Poland
- Department of Biochemistry & Molecular Biology "of the University of Georgia
- Laboratory of Bioinformatics and Computational Biology, Institute of Food Science of CNR Avellino.
- Unit of Bio-crystallography Fondazione San Raffaele, Milan

Scientific societies

Italian Biochemical Society
National Institute of Biostructures and Biosystems