

MARIA CIARAMELLA

Curriculum vitae

March 6, 1958 - December 2, 2018

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Research Gate https://www.researchgate.net/profile/Maria_Ciaramella

h-index (Google Scholar): 23

total citations (Google Scholar): 1517

POSITION

Research Director, Group leader, Head of the Naples Secondary Branch, Institute of Biosciences and BioResources (IBBR), National Research Council (CNR)

STUDIES 12-18-1980 Degree in Biological Sciences, magna cum laude, University of Naples "Federico II".

Speaker: Prof. John F. Pulitzer

a.s. 1975-66 Classical high school diploma, 60/60, "Vittorio Emanuele II" State High School, Naples

MAIN SCIENTIFIC INTERESTS:

- Molecular mechanisms of genomic stability maintenance, response to DNA damage and DNA repair mechanisms in mesophilic and thermophilic model organisms.
- Role of genomic instability in genetic diseases and cancer.
- Structure and topology of DNA and their role in gene regulation and genomic stability.
- Structural and functional studies of mesophilic and thermophilic proteins and enzymes involved in the metabolism of nucleic acids and sugars and their biotechnological applications.
- Molecular biodiversity
- Molecular mechanisms of the adaptation of organisms to the life under extreme conditions.

Study Topics:

- from 2013 to present: Biochemistry and genetics of genomic stability and response to DNA damage in the model organism *C. elegans* and in mammals; implications in carcinogenesis, resistance to chemotherapeutic agents and genetic diseases.
- from 2011 to present: Structural and functional studies on the DNA repair protein alkyltransferase by the hyperthermophilic archaeon *Saccharolobus solfataricus* and by the pathogenic bacterium *Mycobacterium tuberculosis*. Biotechnological applications.
- from 2004 to present: DNA topoisomerase and control of DNA structure; implications in carcinogenesis and resistance to chemotherapeutic agents.
- 2003-2006: DNA damage response, DNA repair and genome protection in thermophilic microorganisms.
- 1997-2003: Structure and function of DNA binding proteins and transcriptional regulators thermophilic archaea.
- 1992-2002: Structural and functional studies of enzymes involved in sugar metabolism from hyperthermophilic Archaea and their biotechnological applications.
- from 1993 to today: Molecular biodiversity and adaptation of organisms to high temperatures; molecular mechanisms of stabilization of proteins, enzymes, nucleic acids.

- 1990-1992: Biotechnological applications prokaryotic and eukaryotic organisms for production and engineering of thermostable enzymes.
- 1986-1990: Genetic and biochemical analysis of transcription regulation in yeast *Saccharomyces cerevisiae*.
- 1982-1985: Genetic analysis of host-virus interactions during infection of T₄ bacteriophage in *E. coli*.

PROFESSIONAL ACTIVITY

- from 2014 to present: Research Director and group leader, Institute of Biosciences and BioResources (IBBR), National Research Council (CNR), Naples Branch
- 1999-2013: Senior Researcher and group leader, Institute of Protein Biochemistry (IBP), CNR
- 1992-1999: Third level researcher, Institute of Protein Biochemistry (IBP), CNR
- 1989-1992: Third level researcher, International Institute of Genetics and Biophysics (IIGB), CNR
- 1982-1989: Fellow ex-lege 285, CNR, International Institute of Genetics and Biophysics (IIGB), CNR
- 1991-1992: post-graduate internship at the Department of Biochemistry, National Institute of Tumors G. Pascale, Naples

DIRECTIONS, RESPONSIBILITIES, DUTIES

- From 25/9/2015 to date Head of the Naples Secondary Office of the Institute of Biosciences and Bioresources of the CNR, Prot. N. 0008047.
- Delegation of administrative/accounting, technical/operational, safety and personnel management.
- From 3/3/2010 to 12/31/2013 Responsible of the project "Adaptation to stress and biodiversity", Department of Life Sciences and Department of Biomedical Sciences, CNR, resolution of the Board of the CNR Number: 33/2010 of 03/03/2010
- From 01/01/2005 to 02/03/2010 Project Manager "Molecular bases of the adaptation of cells and proteins to extreme conditions: applicative aspects" of the Institute of Protein Biochemistry, belonging to the Department of Life Sciences of the CNR
- 2014 -2015 Member elected in the Institute Council of the IBBR-CNR
- From 04/03/2002 to 12/31/2013 Supervised Area Supervisor: IBP Naples Act of contribution: IBP Protocol N 112/02
- From 01/03/2002 to 01/10/2009 Member elected in the Institute Council of the IBP-CNR
- From 01/04/1997 to 01/12/2001 Elected member of the Scientific Council of the IBPE-CNR
- From 01/01/1993 to today Head of Research Group IBPE-IBP –IBBR-CNR