CURRICULUM VITAE

Annarita Poli

EDUCATION

--21st July 1997. Degree in Biology the with top marks (110/110 Summa cum Laude) at "Università degli Studi di Napoli, Federico II". Experimental thesis presented: "Un enzima ADP-ribosilante in *Sulfolobus solfataricus*: purificazione e caratterizzazione".

--December 2000, PhD in Animal Biology at the "Università degli Studi della Calabria" discussing a thesis entitled "Biosynthesis and functional role of the nitric oxide in *Sepia officinalis*."

--2001 Post-doctoral fellowship at the Zoological Station "Anton Dohrn" of Naples.

PRESENT POSITION

December 2001 –February 2020 Researcher at the Institute of Biomolecular Chemistry of C.N.R. in Pozzuoli (Naples). Present position: since March 2020 Dr. Poli is a Senior Researcher.

Since December 2015, Member of ICB-CNR Institute Council.

Since June 2015, Member of the UNIVERSITY RESEARCH CENTER FOR THE STUDY OF EXTREME ENVIRONMENTS AND EXTREMOFILES, Director Prof. Concetta Gugliandolo, at the Department of Biological and Environmental Sciences of the University of Messina.

Since September 2019, Member of Arctic Microbiomes (Action Group) within T-MOSAiC-Terrestrial Multidisciplinary distributed Observatories for the Study of Arctic Connections.

EXPERTISE

Taxonomical studies of novel microbial species; Isolation, chemical, biochemical and genetic characterization of extremophilic bacteria; Development and optimization of fermentation processes to design high-yield production lines; Identification and high level expression of novel enzymes from extremophiles; Influence of heavy metals on enzyme activities; Use of Extremophiles in bioremediation actions; Traditional and non-conventional extraction methods to achieve best quality products as well as economical evaluation and profitability; Valorization of lignocellulosic waste by extremozymes; Evaluation of vegetable wastes or their byproducts as fermentation substrates for the eco-friendly and economical recovery of microbial biomass; Production, purification and chemical studies of microbial Exopolysaccharides (EPS); Recovery of biopolymers and anti-oxidant compounds from vegetable industrial wastes and crops residues and their chemical characterization; Identification of bioactive compounds from vegetables and their biological activities.

Funding ID

--2001-2005- Operational Unity of the **MIUR Project** "Innovative Biomaterial" for the formation of a scientific laboratory net.

--2002- Operational Unity of the Project "Tomato and health", **Provincia di Salerno** in collaboration with Istituto Agrario of Eboli.

--**Principal Investigator** and Scientific Responsible of the Research Project: "Recovery of bioactive substances from tomato waste", **Campania Regional Law n.5**, 28/5/02.

--2006-2007- Participation to the Project of the **Joint Bilateral Agreement CNR-TUBITAK** entitled: "Extremophiles as sources of polysaccharides".

--2006-2009- Participation to the **Joint Research Project (Italy-Bulgaria**) entitled: "Production of exopolysaccharides by thermophilic bacteria, isolated from Bulgarian and Italian thermal springs".

--2006-2009- Participation to the **FIRST EXECUTIVE PROGRAMME OF THE AGREEMENT BETWEEN THE GOVERNMENT OF THE REPUBLIC OF ITALY AND THE GOVERNMENT OF THE REPUBLIC OF TURKEY ON SCIENTIFIC AND TECHNICAL COOPERATION**, entitle: "Bioethanol: a source of renewable energy from extremophiles".

--March 2008: she has attended **to Short Term Mobility 2008** CNR-Program. Research Visiting at the Cambridge University, Department of Biochemistry. Project title: "Development of recombinant microorganisms able to excrete high-levels of amylolytic extremozymes for bioethanol production".

--1st December 2010-1st December 2012- **International Consultant in the Turkey project** entitle "Extremophiles as sources of natural products useful for biotechnological applications: studies of osmoregulation strategies by engineering tools", coordinator Prof. Dilek Kazan of Marmara University (Istanbul).

--2011-2013. Participation to National Operational Project for Research and Competitiveness 2007-2013. **PON 01_01966 ENERBIOCHEM**. Title "Eco-compatible processes of eNERgy and BIO-CHEMicals production from renewable sources and for the land valorisation".

--2014-2016. **Scientific Responsible** for ICB-CNR the Project to National Operational Project for Research and Competitiveness**, BioPoliS PON03PE_00107_1** "Development of green technologies for production of BIOchemicals and their use in preparation and industrial application of POLImeric materials from agricultural biomasses cultivated in a sustainable way in Campania region".

--2016-2018. **Principal Investigator Bilateral Agreement BAS/CNR Joint Projects** "Exopolysaccharide from halophiles: production, chemical characterization and their possible biotechnological applications".

--2018-2019 **Scientific Responsible** of the research contract between ICB-CNR and Dipartimento di Scienze Chimiche, Biologiche, Farmaceutiche e Ambientali, dell'Università di Messina, (ChiBioFarAm): "Production and chemical-physical analysis of the culture supernatant of the *Bacillus licheniformis* T14 strain" in toto "and production and chemical-physical analysis of EPS".

--2018-2019. **Co-PI with prof. Warwick F. Vincent**, Professor of Biology & Canada Research Chair

Member: Centre for Northern Studies (CEN), ULaval, for the project "Artic biofilms: sentinels of environmental change and microbial reservoirs of novel biomolecules" in the frame of **UMI-Laval agreement.**

--2018-2023 **Co-PI with Prof Denis Roy**. Project title: Nordic berries as sources of polyphenols and indigenous lactic acid bacteria for the development of unique symbiotic and postbiotic products. In the frame of JIRU-MicroMeNuC (Joint International Research Unit between the CNR and Université Laval for Chemical and Biochemical Research on the Microbiome and its Impact on Metabolic Health and Nutrition).

-2019-2021 **Principal Investigator Bilateral Agreement BAS/CNR Joint Projects** "Isolation and characterization of pectin degrading enzymes from extremophilic microorganisms for potential biotechnological application".

-2019-2020. **Scientific responsible in Commercial Contract** with the company PROGRE 's.r.l. for the execution of the research project: Use of plant biomass for the cosmetic industry (WASTE 4 SKIN).

-2019-2024 **Scientific Responsible in Commercial Contract** with the company Lubrizol Advanced Materials Inc./LIPOTEC S.A.U. for the execution of the research project: ExtreMophiles exploratiOn for new generaTIon COsmetics and dermatological solutioNS (EMOTICONS).

-2020-2021 Scientific Responsible for the following research project: The use of Effective Microorganisms (EM) for the treatment of water and organic waste in an eco-sustainable manner and in compliance with the principles of protecting ecosystems, seas and the circular economy, Funding by Fondazione Armani.

Bibliography (SCOPUS):
Published research articles: 107
Sum of the Times Cited: > 2700
h-index : 30
Book Chapters: 16