

Eleonora Colantoni

PERSONAL INFORMATION



ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development Department for Sustainability Via Anguillarese 301, Santa Maria di Galeria, 00123 Roma

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- https://bioagro.sostenibilita.enea.it/

Sex F | Date of birth 05/02/1987 | Nationality Italian

Enterprise	University	EPR
☐ Management Level	☐ Full professor	Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
☐ Mid-Management Level	☐ Associate Professor	
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	☐ Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

November 2023 - to present

Researcher

ENEA Casaccia Research Center, Agri-food Sustainability, Quality and Safety Lab (Rome, Italy). Identification, characterization and quality control of the ENEA microbial collection and insertion into the database within the scope of the SUS-MIRRI.IT project.

September 2021 - November 2023

Research fellow

ENEA Casaccia Research Center, Biomedical Technologies Laboratory (Rome, Italy).

Molecular mechanisms of the gut-brain axis and neurodegenerative diseases with the identification of therapeutic efficacy markers following a novel magnetic stimulation treatment using in vitro models and serum samples from patients.

January 2020 - September 2021

Research fellow

University of Rome Sapienza, Department of Molecular Medicine (Rome, Italy).

Molecular mechanisms of chronic inflammatory diseases, the influence of the microbiota in the gutliver-brain axis, effects of natural extracts and probiotics grown in anaerobic conditions in inflammatory diseases.

January 2018 - December 2019

Research fellow

University of Rome Sapienza, Department of Maternal Pediatric and Urological Sciences - (Rome, Italy) in collaboration with ENEA Casaccia Research Center, Biomedical Technologies Laboratory (Rome, Italy).

Molecular mechanisms of the inflammatory bowel diseases, bacterial involvement, the identification of diagnostic and therapeutic targets and the study of anti-inflammatory effects of probiotics and extracts of natural origin.

EDUCATION AND TRAINING

November 2023 Training Course "Isolation, cultivation, preservation and

characterization of bacteria, fungi and viruses".

Project SUS-MIRRI.IT, ENEA Casaccia Research center (Rome, Italy).

April 2023

Qualification to practice as a biologist University of Rome Tor Vergata (Rome, Italy).

February 2023

Training and Updating Course for the Protection of Laboratory Animals in Scientific

Research, 7th Edition.

Catholic University of the Sacred Heart (Rome, Italy).

November 2014 - March 2018

PhD in Biomedical Techniques in Clinical Medicine

Department of Internal Medicine and Medical Specialties, University of Rome Sapienza (Rome, Italy).

October 2011 - December 2013

Master's Degree in Applied Biology for Biomedical Research

University of Rome Sapienza, Rome (Italy).

October 2006 - December 2011

Bachelor's Degree in Biological Sciences

University of Rome Sapienza, Rome (Italy).

PERSONAL SKILLS

Mother tongue Italian

Other language(s)

English level B1

Job-related skills

Replace with any job-related skills not listed elsewhere.

Handling of bacterial cell cultures, fermentation, gentamicin protection assay, adhesion/invasion assay

and bacterial transformation.

Handling of human cell cultures, primary cells, organ cultures from bioptic samples, isolation of mononuclear cells from peripheral blood; transient and stable transfection of human cell lines and cell

viability assays.

Use of molecules of natural origin and products of fermentation to test their anti-inflammatory effects.

Molecular techniques: western blot, ELISA, RNA extraction, RT-PCR, PCR and gel electrophoresis.

Immunofluorescence.

Mouse handling and organ explants, fixation and paraffin embedding. Preparation of slides using the

microtome, hematoxylin and eosin staining and immunohistochemistry.

Digital skills

Competent with Microsoft Office programmes and with software for statistical data analysis as InStat

and Graphpad.

Other skills

Good communication and organizational skills gained through the participation at several research

project with different work's groups. Good problem solving and team working skills.



ADDITIONAL INFORMATION

Total number of publications in peer-review journals: 14 H-Index: 6 (Scopus)
Scopus ID: 57189868906

Scopus ID: 57189868906 ORCID ID: https://orcid.org/0000-0003-1301-2492

Publications

Colantoni E., Palone F., Cesi V., Leter B., Sugoni G., Laudadio I., Negroni A., Vitali R. Stronati L. "Innovative method to grow the probiotic Lactobacillus reuteri in the omega3-rich microalga Isochrysis galbana". Sci. Rep. 2022.

Negroni A., Colantoni E., Vitali R., Palone F., Pierdomenico M., Costanzo M., Cesi V., Cucchiara S., Stronati L. "NOD2 induces autophagy to control AIEC bacteria infectiveness in intestinal epithelial cells" Inflammation research 2016.

Costanzo M., Cesi V., Palone F., Pierdomenico M., Colantoni E., Leter B., Vitali R., Negroni A., Cucchiara S., Stronati L. "Krill oil, vitamin D and Lactobacillus reuteri cooperate to reduce gut inflammation", Beneficial Microbes 2018.

Fiaschini N, Mancuso M, Tanori M, Colantoni E, Vitali R, Diretto G, Lorenzo Rebenaque L, Stronati L, Negroni A. Liver Steatosis and Steatohepatitis Alter Bile Acid Receptors in Brain and Induce Neuroinflammation: A Contribution of Circulating Bile Acids and Blood-Brain Barrier. Int J. Mol Sci., 2022.

Stronati L, Palone F, Negroni A, Colantoni E, Mancuso AB, Cucchiara S, Cesi V, Isoldi S, Vitali R. "Dipotassium Glycyrrhizate improves intestinal mucosal healing by modulating extracellular matrix remodeling genes and restoring epithelial barrier functions", Front Immunol. 2019.

Projects

Strengthening the MIRRI Italian Research Infrastructure for Sustainable Bioscience and Bioeconomy" SUS MIRRI.IT, European Commission NextGenerationEU Mission 4 "Education and Research".

"Dosimetria di un nuovo trattamento rTMS in colture 3D della malattia di Alzheimer per l'identificazione di marcatori di efficacia terapeutica DTA"DTA", Regione Lazio, P rogetti di Gruppi di ricerca

2020.

"Evidenze scientifiche sulla cancerogenicità dei campi elettromagneti e a radiofrequenza" BRIC INAIL Piano di attività della ricerca 2016 2018.

Rome, 31/01/2024

