

SELF PRESENTATION

Dr. Lorella Paparo is a biologist, PhD, specialist in Clinical Biochemistry and Molecular Biology that, in the last years, has focused her researcher activity in the area of pediatric food allergy, gastroenterology, and nutrition. She received her PhD and degrees from University of Naples "Federico II", Naples, Italy. She is member of the Immunonutrition research group at CEINGE-Advanced Biotechnologies.

She is author of 36 publications among scientific paper on international journals, chapters of books and reviews and 60 abstract published on international journals. H-index score: 10. Total impact factor score: 144.871.

She is member of the Italian Society of Pediatric Gastroenterology Hepatology and Nutrition (SIGENP) (2015-2019). She has obtained scientific prizes for the research activity: -special award for the best scientific research carried out at 22nd Congress SIGENP (2015); -award for the best scientific research at 4th Pediatric Allergy & Asthma (2015); winner of the ESPGHAN Summer School Prize in Basics and Translational Research (Cambridge, UK, 2018).

She is involved in research activity of Task Force on Microbiome of University of Naples Federico II.

Dr. Paparo has focused her research activity on basic and translation science, based on an interdisciplinary research and a highly integrated research clinical program to better understand the pathogenic mechanisms of food-induced diseases and provide the best care for children affected by these disorders. The research activity is based on the study of basic aspects of human nutrition and selected food-induced diseases, aiming to move disease biology from the laboratory to clinical practice. The main study aim of the

research activity is focused on the identification of best immune-nutritional strategies to induce immune tolerance in children affected by food allergy, to limit autoimmunity and other chronic non-communicable disorders, and infectious diseases. A bench to bedside approach is used to investigate pathophysiological basis of pediatric nutrition and food-induced diseases including animal models, human peripheral blood cells culture, epigenetics biomarkers, gut microbiota structure and function, short chain fatty acids and essential fatty acids metabolism. She coordinates a team of biologists, biotechnologists, PhD students, graduating students.

Her technical skills and competences in cell biology (primary cell cultures, murine and human cell lines) and animal models of food allergy, obesity and obesity-related disorders, and inflammatory bowel diseases. She is able to use different methods for separation of cell populations through columns of magnetic selection and gradient of Ficoll and Percoll. She has also excellent ability to develop protocols for transfection and silencing in suspension cells and adherent cells to assess the expression of genes or specific cells markers. She has excellent skills in techniques of cloning and molecular biology: mini and maxi preparation of plasmidic DNA; DNA and RNA extraction by different human tissues, mammalian cells and all biological fluid. cDNA synthesis, PCR, nested PCR, qReal Time-PCR and great experience in data analysis. Remarkable skills in the study of epigenetics mechanisms, such as DNA methylation and microRNA analysis,

gene sequences and transcribed elements by the use of bioinformatic databases and tools. Regarding biochemistry techniques, she has competences in total proteins or Nuclear/Cytosolic proteins extraction, proteins analysis by SDS-PAGE and Western Blot. She has also experience in the study of transepithelial fluid transport using the Ussing Chamber model and molecular diagnosis of hereditary colon cancers. Dr.Paparo participated and coordinated national and international funded research projects. Dr.Paparo is involved in local and international academic research collaborations with major Companies involved in human nutrition.