

AVAILABLE POSITIONS

GENOMIC MEDICINE RESEARCH AREA

Principal Investigators involved	GIUSEPPE CASTALDO VALERIA D'ARGENIO ACHILLE IOLASCON FRANCESCO SALVATORE
Institute of Affiliation	CEINGE Biotechnologie Avanzate Franco Salvatore

PROJECT INFO	
Title of the proposed project:	Human genetics, genomics and molecular diagnosis
Short description of the project	This project area focuses on the molecular and genomic basis of human genetic diseases, with an emphasis on diagnosis, genotype–phenotype correlation, and translational applications. Research topics include cystic fibrosis, inherited red cell disorders, multifactorial and neoplastic diseases, and broader applications of predictive genomic medicine. Students will be exposed to modern approaches in molecular diagnostics, clinical genomics, variant interpretation, and disease-oriented omics, with the goal of understanding how genetic information can be translated into improved diagnosis, risk prediction and patient stratification.
Main research area for the project	
Second research area for the project	
3 key words for the project	Genomic Medicine - Molecular Diagnostics - Genotype–Phenotype Correlation

LAB INFO	
Institutional page links	Giuseppe Castaldo: https://www.ceinge.unina.it/en/castaldo-giuseppe Valeria D'Argenio: https://www.ceinge.unina.it/en/dargenio-valeria Achille Iolascon: https://www.ceinge.unina.it/en/iolascon-achille Francesco Salvatore: https://www.ceinge.unina.it/en/salvatore-francesco

AVAILABLE POSITIONS

MOLECULAR AND CELLULAR BIOLOGY RESEARCH AREA

Principal Investigators involved	LORENZO CHIARIOTTI DOMENICO GRIECO CATERINA MISSERO ALESSANDRO USIELLO MASSIMO ZOLLO
Institute of Affiliation	CEINGE Biotechnologie Avanzate Franco Salvatore

PROJECT INFO	
Title of the proposed project:	Disease mechanisms in cancer, development, epigenetics, skin and neuroscience
Short description of the project	This project area addresses fundamental mechanisms underlying human disease, with particular attention to gene regulation, epigenetics, cell-cycle control, neurodevelopment, cancer and tissue-specific pathology. Projects may explore how altered transcriptional and epigenomic programs contribute to neurodevelopmental disorders and cancer, how mitotic regulation is disrupted in tumorigenesis, how molecular pathways control skin homeostasis and disease, and how neuronal signaling pathways affect development and neuropsychiatric-relevant processes. The common objective is to connect molecular mechanisms with disease phenotypes and identify biologically meaningful targets for future therapeutic intervention.
Main research area for the project	
Second research area for the project	
3 key words for the project	Gene Regulation - Neurodevelopment - Cancer Biology

LAB INFO	
Institutional page link	Lorenzo Chiariotti: https://www.ceinge.unina.it/en/chiariotti-lorenzo Domenico Grieco: https://www.ceinge.unina.it/en/grieco-domenico Caterina Missero: https://www.ceinge.unina.it/en/missero-caterina Alessandro Usiello: https://www.ceinge.unina.it/en/usiello-alessandro Massimo Zollo: https://www.ceinge.unina.it/en/zollo-massimo

AVAILABLE POSITIONS

MOLECULAR THERAPY RESEARCH AREA

Principal Investigator	CLAUDIA DE LORENZO STEFANO GUIDO LUCIO PASTORE NICOLA ZAMBRANO
Institute of Affiliation	CEINGE Biotechnologie Avanzate Franco Salvatore

PROJECT INFO	
Title of the proposed project:	Therapeutic innovation, biological drugs and preclinical platforms
Short description of the project	This project focuses on advanced therapeutic and technological platforms, including human antibody engineering, gene and cell therapy, biological therapeutics, and micro-scale bioengineering approaches. The project integrates microfluidics, lab-on-chip systems, advanced microscopy, image analysis and biorheology to investigate cell behavior and transport phenomena in complex biological fluids such as blood, collagen gels and mucus. The overall aim is to develop and validate innovative diagnostic, therapeutic and preclinical platforms.
Main research area for the project	
Second research area for the project	
3 key words for the project	Cellular Therapies - Genetics therapies - Translational Bioengineering Platforms

LAB INFO	
Institutional page links	Claudia De Lorenzo: https://www.ceinge.unina.it/en/de-lorenzo-claudia Stefano Guido: https://www.ceinge.unina.it/en/stefano-guido Lucio Pastore: https://www.ceinge.unina.it/en/pastore-lucio Nicola Zambrano: https://www.ceinge.unina.it/en/zambrano-nicola

AVAILABLE POSITIONS

IMMUNOLOGY RESEARCH AREA

Principal Investigator	ROBERTO BERNI-CANANI
Institute of Affiliation	CEINGE Biotechnologie Avanzate Franco Salvatore

PROJECT INFO	
Title of the proposed project:	Microbiome, exposome and postbiotics in chronic disease and immune tolerance
Short description of the project	This project investigates how microbiome-derived products, postbiotics, environmental exposures and epigenetic mechanisms regulate epithelial barrier function, inflammation, metabolism and immune tolerance. Using multiomics, human cellular models, organoids, microbiome platforms, animal models and machine-learning approaches, the project aims to identify molecular pathways and biomarkers relevant to chronic non-communicable diseases and pediatric allergic disorders. The ultimate goal is to develop targeted preventive and therapeutic strategies based on microbiome and exposome modulation.
Main research area for the project	
Second research area for the project	
3 key words for the project	Microbiome – Exposome - Immune tolerance

LAB INFO	
Main topic/s of the lab	PI: Roberto Berni-Canani
Institutional page link	Roberto Berni-Canani: https://www.ceinge.unina.it/en/berni-canani-roberto