

Curriculum Vitae Europass

Personal information

Name(s) / Surname(s) **Alessandro Nicois**

Address(esd)

Telephone(s)

Fax

E-mail

Citizenship

Date of birth

Sex

Work experience

Dates	September 2022 – Today
Occupation or position held	Post-graduate internship
Main activities and responsibilities	Collaboration to <i>in vivo</i> and <i>in vitro</i> studies on the neurodegenerative disorders related to obesity and the involvement of the endocannabinoid system in physiological and pathological conditions.
Name and address of employer	Institute of Biomolecular Chemistry (ICB) - National Research Council (CNR) (Cristino NeuroLab) Via Campi Flegrei, 34, 80078, Pozzuoli (NA), Italy
Type of business or sector	Electrophysiological studies; isolation of primary cell culture from different organs; maintenance of immortalized cell cultures; immunofluorescence imaging techniques..
Dates	September 2020 – July 2022
Occupation or position held	Master's thesis internship
Main activities and responsibilities	Collaboration to studies on the oxytocin involvement in the modulation of hippocampal and striatal circuits
Name and address of employer	University of Pavia Department of Biology and Biotechnology "Lazzaro Spallanzani" - Laboratory of Electrophysiology and Biophysics of ion channels (Toselli and Biella Laboratory) Via Forlanini, 6, 27100, Pavia (PV), Italy
Type of business or sector	Electrophysiology with patch-clamp technique in the hippocampus area CA1 and in the dorsal striatum of murine brain slices
Dates	February 2020 – May 2020
Occupation or position held	University part time
Main activities and responsibilities	Laboratory technician
Name and address of employer	University of Pavia Department of Pharmaceutical Sciences, Pharmaceutical Chemistry section – Unicosm Lab (Perugini Laboratory) Via Taramelli, 12, 27100, Pavia (PV), Italy
Type of business or sector	Preparation of workstations for practical tests of second level masters, Inventory of chemical substances and cosmetic products, over-the-counter preparations
Dates	September 2017 – March 2019
Occupation or position held	Bachelor's thesis internship
Main activities and responsibilities	Collaboration to studies on epigenetic markers and their role in adult neurodevelopment and pathophysiological conditions

Name and address of employer	University of Naples "Federico II" Department of Molecular Medicine and Medical Biotechnology, School of Medicine and Surgery – Laboratory of Epigenetics and Epigenomics (Chiariotti Laboratory) Via Tommaso de Amicis, 95, 80145, Naples (NA), Italy
Type of business or sector	Performing PCR on bisulphited DNA in order to execute NGS sequencing techniques (Illumina MySeq) to map epigenetic markers on genes related to neurogenesis and neuronal differentiation

Education and training

Dates	October 2019 – july 2022
Title of qualification awarded	Master's Degree in Neurobiology (LM-6)
Main subjects / occupational skills covered	Knowledge of the morpho-functional organization of the nervous system and of the molecular and cellular bases that underlie the functionality of the brain. Understanding of the mechanisms through which these functions are exercised at a systemic and behavioral level, in physiological and pathological conditions.
Organisation providing education and training	University of Pavia Faculty of Mathematics, Physics and Natural Sciences
Level in EQF or national classification	110/110 cum Laude
Dates	September 2016 – march 2019
Title of qualification awarded	Bachelor's Degree in General and Applied Biology (L-13)
Main subjects / occupational skills covered	Knowledge the hierarchy of complex biological structures and systems that define life; characterization of the chemical, biochemical and molecular processes related to human, animals and plants; application of numerous laboratory techniques including diagnostic techniques, forensic medicine and basic research protocols.
Organisation providing education and training	University of Naples "Federico II" Department of Biology
Level in EQF or national classification	105/110
Dates	2005 - 2010
Title of qualification awarded	Scientific Diploma ("Brocca" Project)
Main subjects / occupational skills covered	Knowledge related to the scientific high school path with strengthening in chemistry, physics, mathematics, biology, Latin and law.
Organisation providing education and training	"Eleonora Pimentel Fonseca" state high school in Naples
Level in EQF or national classification	77/100

Publications

Date	2023
Title	EARLY ENDOCANNABINOID-MEDIATED DEPolarization-INDUCED SUPPRESSION OF EXCITATION DELAYS THE APPEARANCE OF THE EPILEPTIC PHENOTYPE IN SYNAPSIN II KNOCKOUT MICE Nicola Forte, Alessandro Nicois , Brenda Marfella, Isabella Mavaro, Livia D'Angelo, Fabiana Piscitelli, Anna Scandurra, Paolo De Girolamo, Pietro Baldelli, Fabio Benfenati, Vincenzo Di Marzo, Luigia Cristino (Under Review)
Date	2023.
Title	THE SHORT-CHAIN FATTY ACID ACETATE REGULATES OREXIN/HYPOCRETIN NEURONS: A NOVEL MECHANISM IN THE GUT-BRAIN AXIS REGULATION OF ENERGY HOMEOSTASIS AND FEEDING Nicola Forte, Brenda Marfella, Alessandro Nicois , Letizia Palomba, Debora Paris, Andrea Motta, Maria Pina Mollica, Vincenzo Di Marzo, Luigia Cristino (Under Review)

Posters

Date	December, 15, 2022 X Meeting, Neapolitan Brain Group (NBG), CESEV, Naples, Italy
Title	OREXIN IMPAIRS EPISODIC MEMORY IN OBESE MICE BY PROMOTING TAU PHOSPHORYLATION IN CA1-CA3 HIPPOCAMPAL PYRAMIDAL NEURONS VIA ENDOCANNABINOID-DERIVED LYSOPHOSPHATIDIC ACID <u>Nicois Alessandro</u> , Forte Nicola, Fernández-Rilo Alba Clara, De Risi Maria, Palomba Letizia, Boccella Serena, Marfella Brenda, Piscitelli Fabiana, De Girolamo Paolo, Di Costanzo Alfonso, Maione Sabatino, De Leonibus Elvira, Di Marzo Vincenzo, Cristino Luigia
Dates	October 11-13, 2022 5th UMI International meeting, Rome, Italy
Title	THE SHORT-CHAIN FATTY ACID ACETATE REGULATES OREXIN/HYPOCRETIN NEURONS: A NOVEL MECHANISM IN THE GUT-BRAIN AXIS REGULATION OF ENERGY HOMEOSTASIS AND FEEDING Nicola Forte, Brenda Marfella, <u>Alessandro Nicois</u> , Letizia Palomba, Debora Paris, Andrea Motta, Maria Pina Mollica, Vincenzo Di Marzo, Luigia Cristino
Dates	September 22-23, 2022 Next generation neurobiology training: a new era begins at university of Pavia
Title	EFFECTS OF OXYTOCIN ON ACTION POTENTIAL AND NEURAL CODING OF NEURONS IN HIPPOCAMPAL CA1 AND DORSAL STRIATUM IN MICE A.N. Castagno, F. Talpo, C. Maniezzi, P. Spaiardi, <u>A. Nicois</u> , N. Mattiello, F. Raffin and G. R. Biella
Dates	September 14-16, 2022 72nd SIF National Congress (The Italian Society of Physiology). Bari, Italy.
Title	EFFECTS OF OXYTOCIN ON ACTION POTENTIAL AND NEURAL CODING OF NEURONS IN HIPPOCAMPAL CA1 AND DORSAL STRIATUM IN MICE A.N. Castagno, F. Talpo, C. Maniezzi, P. Spaiardi, <u>A. Nicois</u> , N. Mattiello, F. Raffin and G. R. Biella. Presented by prof. Gerardo R. Biella (UNIPV)

Training courses and certificates

Dates	May – june 2023, AORN Antonio Cardarelli, Naples (NA), Italy
Title	Passing the training course "Science and technology applied to animals used for scientific purposes for personnel with functions A-B-C-D (Mouse - Rat)"
Date	May, 17, 2021, University of Pavia (PV), Italy
Title	Passing the general training course on "laboratory safety" Legislative Decree 81/08
Date	May, 17, 2021, University of Pavia (PV), Italy
Title	Passing the general training course on "safety and health in the workplace" Legislative Decree 81/08
Date	May, 17, 2021, University of Pavia (PV), Italy
Title	Passing general training course on the "European regulation on the protection of personal data" Article 29 and 32 par 4 of EU regulation 2016/679
Date	june 2010
Title	Passed Trinity College English language exam level 10 equivalent C1.1 CEFR

Congresses

Date	May, 18, 2023
Title	"Scientific café: B2B between biomolecular chemistry institute (ICB) and neuroscience institute (IN)", CNR of Pozzuoli (NA), Italy
Date	February, 14, 2023
Title	How to publish in Nature Communications" tenuto dal Telethon Institute of Genetics and Medicine (TIGEM), Pozzuoli (NA), Italy
Date	November, 3, 2022
Title	"Neurovascular coupling: novel insights from studies in awoken head-fixed and anesthetized mice" online course from InsideScientific
Date	May, 5, 2022
Title	Participation as speaker on the "neurobiological basis of addiction" at the ITIS Alessandro Volta, Naples (NA), Italy
Date	April, 27, 2022
Title	Participation as speaker on the "neurobiological basis of nutrition" at the ITIS Alessandro Volta, Naples
Dates	November, 14-15-16, 2022
Title	Participation to the 2nd edition of the "Brain" congress at the Negri institute in Milan (MI), Italy
Date	May, 10, 2017
Title	Participation to the "Autism a changing school" organized by the Lions Club International association, at the Salerno Cathedral, Salerno (SA), Italy
Date	October, 10, 2017
Title	Participation to the 1st conference on Down syndrome "From diagnosis to therapy" at the Second Polyclinic of Naples (NA), Italy

Personal skills

Mother tongue(s) **Italian**

Foreign language(s) **English**

Self-assessment

European level (*)

English

Understanding		Speaking		Writing			
Listening		Reading		Spoken Interaction		Spoken Production	
	C1.1		C1.1		C1.1		C1.1

(*) [Common European Framework of Reference for Languages](#)

Communication skills

In adulthood I have often volunteered for an association of adult children suffering from autism spectrum disorder, called "Autismo vivo". From the assiduous work of the parents of the boys and of the boys themselves, I have learned to make myself useful for the community and I have realized how important a collective is. The united intentions of all the participants, patience and mediation, are essential qualities for group work and, in the years in which I have participated as a volunteer, I have been able to learn how to relate to others even in the most delicate cases

Organisational / managerial skills	<p>I use the tutoring technique to guide university and high school students in taking exams or in their normal course of study.</p> <p>I participated in student councils during my years at the Federico II University of Medicine and Surgery in Naples coordinating student council elections in collaboration with my colleagues.</p> <p>Over the years, I have participated in the organization of numerous football and volleyball sports events in collaboration with Partenope Volleyball.</p> <p>I participated as an organizer of events in the regional territory in my years of activity as an entertainer.</p>
Job-related skills	<ul style="list-style-type: none"> - NGS sequencing using Illumina MySeq (at Chiariotti Lab); - Affinity chromatography (at Federico II University); - Enzymatic assays (ELISA) (at Federico II University); - PCR and real time PCR (at Chiariotti Lab); - Extraction of DNA from blood, feces and use of the extract for genotyping techniques (at Chiariotti Lab); - DNA bisulfitation and DNA purification through magnetic beads (at Chiariotti Lab); - Use of optical microscopy, confocal microscopy and in particular use of Zeiss Axioskop 2 and Leica DMI6000-b microscope for acquisition of preparations in Immunofluorescence and subjected to Golgi reaction (at ICB-CNR, Cristino Lab); - Spectroscopic analyzes using a spectrophotometer (at Federico II University); - Preparation of agarose gel (at Chiariotti Lab); - Preparation of basic solutions for electrophysiology (at Biella and Toselli lab); - Cerebral perfusion and dissection on mouse (at Biella and Toselli lab); - Forging microcapillaries in borosilicate glass with Sutter Instruments puller (at Biella and Toselli lab); - Patch Clamp with whole cell setting, Patch Clamp with cell attached setting, use of synaptic blockers in electrophysiological recordings (at Biella and Toselli lab); - Vibratome cutting of brain slices, cryostat cutting of brain slices (at Biella and Toselli lab); - Preparation of brain slices in formalin and freezing in liquid nitrogen (at ICB-CNR, Cristino Lab); - Preparation and maintenance of electrophysiology set up (at Biella and Toselli lab); - Immunofluorescence assay preparation (at ICB-CNR, Cristino Lab); - Preparation of Golgi-Cox silver impregnation reaction (FD Neuroscience), (at ICB-CNR, Cristino Lab); - Electrophysiology data analysis using Clampfit (at Biella and Toselli lab); - Preparation and maintenance of Primary (Microglia) and Immortalized (SHSY 5Y Neuroblastoma and BV2 microglia) cell cultures (at ICB-CNR, Cristino Lab); - Use of chemical and biological hoods (at ICB-CNR, Cristino Lab); - Preparation of cellular media for microglia and neurons (at ICB-CNR, Cristino Lab); - Acquisition of Live Action images through IncuCyte (Sartorius) (at ICB-CNR, Cristino Lab);
Computer skills	<p>Use of spreadsheets (excel), Data Mining analysis using the ORANGE software, data analysis using the Origin software, ISI analysis, net current analysis, phase plan analysis, passive neuronal property analysis, potential kinetic analysis, quantifications on immunofluorescence micrographs (ImageJ, Leica LAS X), skeletonization analysis (ImageJ), Golgi-Cox reaction quantification and neurotracking (ImageJ, NeuroLucida), statistical analysis and graphing (GraphPad Prism 8)</p>
Artistic skills	<p>I took part in cartooning courses and I am a fairly good amateur designer, I have experience in wood carving, in the use of two-component epoxy resins and I have dedicated years to modeling.</p>

Other skills

I carried out a year of preparation at the Varcaturu headquarters of the civil protection, acquiring skills in basic dog training and human search practices in wooded areas.

I took care of several animals becoming an expert in the care of reptiles (chameleons and turtles) and rodents (cavia porcellus and common hamsters)

Competitive sporting activity (volleyball) health card of the athlete NA1-DSBJI, at:

Partenope Volleyball; with participation in the championships:

Under 14, Under 16, Under 18, Division II, Division I, Serie C

VB Flyer; with participation in the championship:

I Division

Liberamente; with participation in the championship:

II Division

Driving licence

B/A3

Additional information

Participation and placement in the "Natural Science Olympics", 2007 edition, as EIGHTH classified at the regional level, representing the Eleonora Pimentel Fonseca institute

Participation in the "Natural Science Olympics" 2006 edition at national level, at the Città della Scienza, representing the Eleonora Pimentel Fonseca institute

Participation and winnings at the "Natural Science Olympics", 2006 edition, as THIRD classified at regional level, representing the Eleonora Pimentel Fonseca institute

Signature