

The undersigned MARINA QUARTU, pursuant to articles 46 and 47 of Presidential Decree 445/2000, aware of the criminal sanctions provided for by article 76 of Presidential Decree 445/2000 and subsequent amendments and additions for the hypotheses of falsity in deeds and false declarations, declares under my own responsibility

## 1. Personal Information

Name / Surname	Marina Quartu
Structure	Department of Biomedical Sciences, Cytomorphology Section, University of Cagliari
Telephone	(office) 070 6754084
E-mail	(office) <a href="mailto:quartu@unica.it">quartu@unica.it</a>

## 2. Current position

Dec 23, 2019→ **Full Professor** (SSD BIO/16 - Human Anatomy), at the Department of Biomedical Sciences of the University of Cagliari.

## 3. Previous positions

- 1 April 2001-2019 **Associate Professor** (SSD BIO/16 - Human Anatomy), at the former Faculty of Pharmacy (until 2004) and of MM.FF.NN Sciences (2004-2012) and since 2012 at the Department of Biomedical Sciences of the University of Cagliari.
- 1999-2001 **Permanent Assistant Professor** (SSD BIO/16, Human Anatomy) at the former Faculty of Pharmacy and belonging to the Department of Cytomorphology of the University of Cagliari.
- 1994-1996 **Postdoctoral fellow** at the Department of Cytomorphology, Laboratory of Neurocytology and Neuroanatomy.
- May 1993 **PhD** in Morphological Sciences, curriculum: neuroanatomy and neurocytology, with a thesis entitled '*Neuropeptidergic characterization of the trigeminal system and the cuneate nucleus of humans by immunohistochemical techniques*', Tutor: Prof. Marina Del Fiacco (deposited at the National Central Library of Florence, [link](#))

## 4. Education

- 1988-89, 1990 **Visiting PhD student**, Laboratorio di Neuroanatomia, United Medical and Dental Faculty Guy's and St. Thomas's Hospital, University of London, London UK, directed by Prof. J.V. Priestley
- 1988-89 **Specialization course** in '*Movement Disorders*', at the Department of Neurological Sciences, V ° Neurological Clinic, University "La Sapienza"- Rome.
- 1988-89, 1990 **Visiting PhD student**, Laboratory of Neuroanatomy, United Medical and Dental Faculty Guy's and St. Thomas's Hospital, University of London, London UK, directed by Prof. J.V. Priestley
- 1986 **National qualification** to practice the profession of "senior" biologist.
- 1985-1986 Compulsory **post-graduate practical internship** at the Anatomy, Pathological Histology and Cytology Service and at the Hematology Division of the Businco Hospital in Cagliari.
- March 1985 University of Cagliari-**Master's degree** in Biological Sciences, Laurea Magna cum laude
- Jul 1980 **High Faculty Diploma- Classical ancient languages Ancient greek, latin**, Liceo Ginnasio Statale "G.M. Dettori", Cagliari

#### 4th. Continuous education regarding the Quality Systems Assurance at the University

2006-2024 Various courses on an annual/semester basis on the Quality Systems Assurance at the University

### 4. Institutional commitments

#### 4.1 Current institutional positions

From March 2022 **Internal member of the University Evaluation Board** in the quality of tenured professor expert of quality evaluation (DR 287/2022 of 17.03.2022; 312/2022 of 31.03.2022)

Lug 2012 → Member of the Faculty of Biology and Pharmacy Council

2024- Member of the faculty of the **PhD programme in Molecular and Translational Medicine**

Expansion 2024 → **Delegate of the Director** of the Dept. of Biomedical Sciences sitting at the **Faculty of Biology and Pharmacy Council**

#### 4.2 Previous institutional appointments

	University
December 2021 →	<b>Member of technical working groups</b> (W.P. Ethics and professional aspects) for the <b>HRS4R</b> strategy (DR 1411/2021 of 16.12.2021)
May 2021-Mar 2023	<b>Tenured professor representative for</b> Open Science, EDUC-SHARE project, WP 2.
2019-March 2022	<b>Member of the Gender-Hub</b> , within the framework of the project Unica-SUPERA (Supporting the Promotion and Equality in Research and Academia).
February 2021 →	<b>Scientific reference person</b> for the Laboratories of 'Anatomia Macroscopica' and 'Istologia e Anatomia Microscopica', part of the university interfaculty didactic laboratories (LDC).
2018 - 2021	<b>Member of the UNICApres Centre Council.</b>
March 2013	<b>Member</b> of the University Committee for the ANVUR Test on Generalist Skills – <b>TECO.</b>
14 March 2018	<b>Member of the university board</b> for the examination of <i>Honorary Degree</i> to Profs. Yung-Chi Cheng and Péter Mátjus (by decree of the President of the Faculty of Biology and Pharmacy, prot. 52728).
2015-2018 2018-2021	<b>Member of the University Quality Assurance Team</b> (D.R. no. 18, 7/10/2015; D.R. no. 967, 15/10/2018)
2010 - 2013 2013 - 2015	<b>Member of the University Quality Assurance Centre</b> , as an Expert in management of quality assurance systems (Note Prot. no. 29686 of 21.12.2012; S.A. resolution of 25.02.2014).
2008-2009	<b>Member of the University Working Group</b> within the <b>Campus-Unica Quality Project</b>
2008-2009	<b>Coordinator of the internal Auditors</b> of the University for the control of Quality Assurance in the degree courses, appointed by the Director of the Campus-Unica Quality Project
2011 →	Member of the <b>Team for Quality Assurance Evaluation and Control</b> of Degree Courses of the University of Cagliari, through a planned system of review procedures referred to the requested and compulsory documentation, appointed by the Quality Assurance Center, UniCA.

- 2006-2011 Member of the Scientific Committee of the Scientific Area 05-Biological Sciences, for the allocation of local funding concerning the funds of the Ministry of Education, University and Research (former 60% share).
- 2024 **Examination Committee for the State Examination** of the biology graduates  
2006; 2012; Qualification to the profession of Biologist (president in 2019, 2024).  
2015; 2019

#### Faculties and Courses of Study

- 2012-14  
2018 - March **Point person of the Quality Assurance at the Faculty of Biology and Pharmacy**  
2022
- Dec 2019-March **Member of the Self-Evaluation Committee for Quality Assurance of the master's**  
2022 **degree Course in Medicina e Chirurgia**
- 2012--2018 **Coordinator of the degrees in Biological Sciences** for two three-year terms (D.R. n 535 of 30.05.2012; D.R. n 911 of 30.06.2015)
- March 2011-April **Vice Chairperson of the Vertical Class of Degrees in Biological Sciences** (Minutes of the  
2012 CoC 20.01.2012)
- 2012 – March **Quality assurance Self-Evaluation Committees of the L13/LM6 vertical class in**  
2022 **Biological Sciences**, Responsible (until 2018) and then Member (from 2018 to 2022)
- 2007–2011 **Head of the Self-Evaluation Group of the degree courses in Biology of the Faculty of**  
**Sciences MM.FF.NN.**
- 2012-2018 Point person of the **Quality Assurance of the Degree Course in Biology**
- 2012-2016 **Head of the Joint Teacher-Student Committee of the Vertical Class of Degrees in**  
**Biological Sciences**
- 2012-2018 **Teaching Resources Committee of the Vertical Class of Biology Degrees**
- 2010 → **Communication and Website Committee** of the Vertical Class of Degrees in Biology
- 2009 → Member and President (2012-2018) of the **Steering Committee of the Class of Degrees**  
**in Biological Sciences** of the Faculty of Biology and Pharmacy.

#### PhD

- 2019-2024 Member of the faculty of the **PhD in Neuroscience**
- 2013 Member of the faculty of the **PhD in Biomedical, Nutritional and Metabolic Sciences**
- 2010-2013 Member of the faculty of the **PhD in Morphological and Functional Sciences** of the  
Doctoral Faculty in Neuroscience and Morphological Sciences
- 2001-2010 Member of the faculty of the **PhD in Morphological Sciences**

#### Department

- 2008-2011 **Deputy Director of the Department of Cytomorphology** (D.R. 768, 22.05.2008; D.R. 86,  
09.11.2010)
- 2014 → **Head of the Cytomorphology Section** of the Department of Biomedical Sciences
- from 1 Jun **Head of the Neurocytology and Neuroanatomy Laboratory** of the Cytomorphology  
2014→ section of the Biomedical Sciences Dip.to, where she carries out her scientific activity  
with a permanent research group consisting of an associate professor and a laboratory  
technician, joined by doctoral students and three-year and master's students attending  
the internship for the thesis.
- 2020→ **Head of the Didactics Committee** of the Department of Biomedical Sciences

- 2021 → **Member of the Recruitment and Turnover Needs Committee** of the department of Biomedical Sciences
- 2014 → **Intermediate evaluator of the performance** of the technical-administrative staff of the Cytomorphology Section of the Department of Biomedical Sciences
- 2012-2016 **Chairperson of the Scientific Committee** of the Department of Biomedical Sciences for the attribution of the University Contribution for Research (CAR) and contributions for Projects of Significant Departmental Interest (PRID) regarding the funds of the Ministry of Education, University and Research (share ex 60%).

#### 4.3. Third Mission Activities

- 2024, 2025 Participation in active orientation activities for high Faculty students in the PCTO PNRR DISB courses *From the visible to the invisible*
- 2024, 2025 Participation in active orientation activities for high Faculty students in PCTO PNRR courses PNRR 2024 Courses - *DISB Journey into biomedical sciences: how and why to study with the scientific method*
- 27 Sep 2024 Participation in Sharper Night with an interactive workshop on the anatomy of the human brain in the stand *A QUESTION OF CELLS: MANY STRUCTURES, MANY FUNCTIONS*, of the Department of Biomedical Sciences, UniCA
- November 12, 2023 FestivalScienza 2023, UniCA, EXMA terrace room, Participation in the setting up of an interactive laboratory of the Department of Biomedical Sciences aimed at the territory, with a stand on the anatomy of the human brain.
- 2023, 2024, 2025 Participation in laboratory training activities for high Faculty students during the **Master Class "Women and Girls in Science"**, recurring annually on February 11th
- 2021 Participation as a speaker in the **Master Class day "Women and Girls in Science"** 8-11 February 2021, with a lecture entitled 'Studying the nervous system through the identification of specific proteins'  
(<https://sites.unica.it/plsunica/files/2021/01/Programma-2021-PLS-Biologia.pdf>).
- 2019, 2016, 2015 **High School-Work alternation** through an agreement between the University//*IS De Sanctis – Deledda, technical and technological institute of Cagliari*: training course for groups of 2-4 students in the last two years of high school, hosted for four weeks (for a total of 160 hours) for the purpose of orientation to the conscious choice of university path.
- 2019 **High School-Work alternation** through an agreement between the University//*IS Minerario "Asproni" – ITCG "Fermi" of Iglesias*: training course for 6 students in the last two years of high school, hosted in groups for 4 days (for a total of 24 hours) for the purpose of orientation to the conscious choice of the university path.
- May 2018 **Presentation of the educational offer of the Faculty of Biology and Pharmacy** as part of the Orienta Oristano 2018 event, Chiostro del Carmine, Oristano.
- 2017 **High School-Work alternation** through an agreement between the University//*IS Minerario "Asproni" – ITCG "Fermi" of Iglesias*: training course for 9 students in the last two years of high school, hosted in groups for 9 days (for a total of 72 hours) for the purpose of orientation to the choice of university path.
- Complete 2016 Adhesion as a member of the Laboratory of Neurocytology and Neuroanatomy to the scientific dissemination event "**European Researchers' Night 2016 – MADE IN SCIENCE**" with practical laboratory demonstrations regarding "*The study of man*".
- 2015-16 **Member of the Scientific Committee for the Preparation and Orientation course**
- 2016-17 "PREPARATION FOR ADMISSION TESTS TO THE DEGREE COURSES OF THE FACULTY OF MEDICINE AND SURGERY"  
([http://facolta.unica.it/medicinaechirurgia/files/2016/05/CPO\\_2016\\_17\\_Programma\\_finale\\_sito.pdf](http://facolta.unica.it/medicinaechirurgia/files/2016/05/CPO_2016_17_Programma_finale_sito.pdf))

- Sep 2015 **"European Researchers' Night 2015 - Culture, Research, Innovation"**: adhesion as a member of the Laboratory of Neurocytology and Neuroanatomy to the scientific dissemination event with practical laboratory demonstrations regarding *"The study of man"*.
- 2014 **Co-author of the article:**  
Peretti D, Quartu M, The contribution of the participants: examples of experimentation, pp 68-74, in the volume "TEACHING DISCIPLINES, LEARNING TO WORK, IN UNIVERSITY CONTEXTS - THE CAGLIARI EXPERIENCE AND THE MODEL OF PEDAGOGICAL QUALITY", CRUI Foundation, April 2014  
(<https://www.cruai.it/images/allegati/pubblicazioni/2014/MDUQP.pdf>).
- 2013-2017 **Orientation activities dedicated to undergraduates for the informed choice of the master's degree** directed to students of the three-year degree in Biology through the presentation of the three LM-6 courses of the vertical class of degrees in Biological Sciences.
- 2010 -2012 **Teaching activities on Quality Assurance of training services**  
Speaker at the seminar *"Evaluation of an area of the Self-evaluation Reports (of Degree courses at Unica) and Analysis and correction of the papers in the classroom"* (5 hours) as part of the "Training course for Representatives of the Socio-Economic System of Sardinia", Cagliari, 14 May-18 June 2012, organized by the University Quality Centre.  
Speaker at the seminar/intensive training course *"Evaluation of the areas of a RAV of the course of study"* (4 hours) for Representatives of the Socio-Economic System of Sardinia, organized at the University Quality Center on 19/10/2012.  
Speaker relating about *"Quality of teaching in the University of Cagliari"* as part of the Seminar "Quality in universities. Situation, perspectives and good practices", organised by the University Quality Centre, Cagliari, 26-27 October 2010.
- 2009-2010 **"Excellence-Transition"** agreement project between the university and the high school *Agricultural Technical Institute "Duca degli Abruzzi" of Elmas* (prov CA), 18 hours distributed over 6 weeks. Participation with practical activities carried out at the Laboratory of Neurocytology and Neuroanatomy and the Laboratory of Histology of the Dip.to of Cytomorphology.

## 5. Research Projects eligible for funding on a competitive basis

- 2024 **Member of the Research Unit** of the international project *'Epigenomics of a translational genetic rat model of schizophrenia-linked traits: effects of enriched or impoverished early experience (epischizorat).'*. Coordinator Prof. A.F. Teruel, as part of the Spanish State Plan for Scientific-Technical Research and Innovation 2021-2023 (BOE 30/12/2023), funded by Agencia Estatal de Investigación, Spain.
- 2024 **Member of the Research Unit** of the annual project entitled *"SIASD- Social isolation during pregnancy as a risk factor for autism spectrum disorders: insights from a non genetic animal model"*, funded as part of the PNRR, MNESYS SPOKE N 1 cascade projects, year 2024.
- 2023 **Member of the Research Unit** of the biennial PRIN-PNRR 2022 project entitled: *"Protecting Autologous Free Flaps from Ischemia/Reperfusion Damage with cold storage: a randomized controlled trial (PAFFIRD study)"* funded by the MUR.
- 2023 **Member of the Research Unit** of the biennial PRIN 2022 project entitled: *"Role of ADAM10 signaling pathway and its pharmacological modulation in preclinical models of epilepsy and neuropsychiatric comorbidities"*, funded by the MUR.

- 2022 **Member of the Research Unit** of the biennial project entitled: "*Role of the orexin neuropeptide system in the pathophysiology of anorexia nervosa: preclinical study in the Activity-Based Anorexia (ABA) animal model.*" funded by the Sardinia Foundation, year 2021.
- 2019 **Member of the research unit** of the biennial project entitled: "*Concomitant binge drinking of Alcoholic Beverages and Energy drinks (Alcohol Mixed Energy Drinks: AMED) during adolescence: from an abnormal age-restricted behavior to a permanent behavioral impairment? A psychobehavioral, neurochemical and functional study in rats from adolescence to adulthood.*" funded by the Sardinia Foundation, year 2018.
- 2014-2016 **Scientific Coordinator** of the Research Unit of the biennial project entitled: "*Neurobiological mechanisms involved in resilience and vulnerability to stress and depression*" funded by the Autonomous Region of Sardinia under Regional Law 7/2007, year 2013, "Promotion of scientific research and technological innovation in Sardinia", prot. CRP-59842.
- 2013 **Scientific coordinator** of the multidisciplinary project entitled: "*Natural compounds of the Sardinian flora to prevent alterations from cerebral ischemia/reperfusion*" eligible for funding from the Autonomous Region of Sardinia under Regional Law 7/2007, year 2012, "Promotion of scientific research and technological innovation in Sardinia", CRP-59664.

## 6. Participation in research projects entrusted by qualified institutions

- 2016 **Scientific coordinator** of the project entitled "*Role of epigenetic mechanisms in resilience and vulnerability to stress and depression*", for which a six-month research grant has been implemented (Call n. 4/2016 of the Department of Biomedical Sciences, University of Cagliari), carried out in collaboration with the section of Neuroscience and Clinical Pharmacology of the Department of Biomedical Sciences, University of Cagliari and with the Department of Life and Environmental Sciences, University of Cagliari.
- 2013-2015 **Scientific Coordinator** of the research activities (biennial) of the Unit of the University of Cagliari ("Head of test facility") related to the immunochemical studies of a multidisciplinary experimental study entitled "*Efficacy study of CR4056 vs buprenorphin and gabapentin in an animal model of peripheral neurotoxicity induced by bortezomib*", conducted in international collaboration with the research groups of Prof. Guido Cavaletti (University of Milan Bicocca) and Prof. Susan G. Dorsey (University of Maryland - Baltimore), entrusted by the pharmaceutical company Rottapharm Biotech s.r.l.
- 2013 **Scientific coordinator** of the project entitled "*Identification of markers of biochemical and structural alterations induced by cerebral ischemia and prevention of neuronal damage by feeding with natural compounds of the Sardinian flora*", funded by the Banco di Sardegna Foundation (FBS), Prot. N. U656.2013/AI.580.MGB of 13.05.2013, year 2013, carried out in collaboration with the sections of Neuroscience and Clinical Pharmacology and Physiology of the Department of Biomedical Sciences of the University of Cagliari.

- 2012-2014 **Scientific coordinator** (from 01.06.2014) and member of the research group (Scientific coordinator Prof. Marina Del Fiacco until 31.05.2014) for the project entitled "*Human and Experimental Chemical Neuroanatomy*" relating to the funding of a research grant pursuant to art. 24 L.240/2010 for n. 1 position of RTDa researcher, competition sector 05/H1 - Human Anatomy (SSD BIO/16 profile)(announced with D.R. n. 499 of 28.05.2012 - D.R. approval of acts n.85 of 15.10. 2012) as part of the strategic objectives of the Sardinia Region, Axis IV Human Capital, Operational Objective I.3 Line of Activity I.3.1 of the ROP Sardinia ESF 2007/2013.
- 2012 **Scientific coordinator** of the project entitled "*Study of brain damage induced by ischemia/reperfusion and effect of preventive treatment with Pistacia Lentiscus L. essential oil and  $\omega$ -3 polyunsaturated fatty acids*", funded by the Autonomous Region of Sardinia (Master & Back Program, P.O.R. FSE 2007-2013 - Return Paths - Year 2011; Prot.n, 19082 of 2.04.11; Code PRR. MAB-A2011-19082).
- 2011-2013 **Scientific coordinator** of the project entitled "*Identification of markers of biochemical and structural alterations induced by cerebral ischemia and prevention of neuronal damage by feeding with essential oil of Pistacia lentiscus L.*", funded by the Banco di Sardegna Foundation (FBS), Prot. N. 946/2011-1033 of 20.06.2011, year 2011, carried out in collaboration with the Department of Neuroscience and the Department of Experimental Biology, University of Cagliari.
- 2009-2011 **Scientific coordinator** of the project entitled "*Identification of markers of biochemical and structural alterations of neuronal damage induced by cerebral ischemia*", funded by the Banco di Sardegna Foundation (FBS), Prot. n. 1330/2009.0998 of 10/07/2009, year 2009, carried out in collaboration with the Departments of Neuroscience and Experimental Biology, University of Cagliari; Nutriscience s.r.l. company, Science and Technology Park of Sardinia.
- 2003 **Scientific coordinator** of the project entitled "*Neuroprotection and neurorepair in the human nervous system: anatomical bases for new therapeutic strategies in neurodegenerative diseases*", funded by the Banco di Sardegna Foundation (FBS), Prot. 612/4752 of 23.06.2003, year 2003.

## 7. Scientific Associations

- 2022-2026 Elected member of the **Board of Directors of the Italian Group for the Study of Neuromorphology (GISN)**.
- 2024 → Auditor of the Italian Society of Anatomy and Histology
- 2019 → Member of the **Board of Teachers of Human Anatomy**
- 2017-2019 **Member of the FIPAT (Federative International Programme for Anatomical Terminology) Group - Officers, Coordinators and Advisors of within the Latin Subcommittee** (<http://www.ifaa.net/committees/anatomical-terminology-fipat/fipat-officers-coordinators-and-advisors/>).
- 2017 → **Italian Society of Neuroscience**
- 2014-2018 Elected member of the **Board of Directors of the Italian Group for the Study of Neuromorphology (GISN)**
- 2018-2022 **Board of Directors of the Italian Group for the Study of Neuromorphology (GISN)**
- 2005 → **Italian Society of Anatomy and Histology (SIAI)**
- 1991 → **Italian Group for the Study of Neuromorphology** from 19-09-1991 to today
- 1990-2004 **Italian Society of Anatomy (SIA)**

## 8. Awards and recognitions for scientific activity

- 2021 **Cover image** in the journal *Brain Structure and Function*, vol. 226 Jan 2021, taken from the article she co-authored "Basile GA, Quartu M, Bertino S, Serra MP, Boi M, Bramanti A, Anastasi GP, Milardi D, Cacciola A. Red nucleus structure and function: from anatomy to clinical neurosciences" *Brain Struct Funct.* 2021; 226(1): 69-91.
- 2017 **Co-author of the winner poster** - International Scientific Faculty 'Novel Psychoactive Substances (NPS): new frontiers in addiction', sponsored by the Mediterranean Neuroscience Society, Sardinia Ricerche\_Pula, 10-13 October 2017 (<http://sites.unica.it/issnps/>). Authors: Serra MP, Pintori N, Carai A, Paribello F, Demontis R, Quartu M, De Luca MA. Title: Cardiac injury after repeated administration of JWH-018 in rats.
- 2014 **Invited Lecture - Centre for Neuroscience and Trauma, The Blizard Institute, Queen Mary University of London**, Whitechapel, London UK, at the international symposium "Prof. Emeritus JV Priestley Retirement Symposium - Pied Beauty", 6 June 2014, Bearsted Lecture Theatre, Barts and The London Faculty of Medicine and Dentistry Educational Academy, Royal London, Dental Hospital, London, Regno Unito.
- 2012 **Co-author of winner poster** - XXVI National Congress of the Italian Society for the Study of Headaches, PHARMACOLOGICAL THERAPIES AND BEYOND, Modena, 26-28 October 2012. Authors: M. Del Fiacco, M. Quartu, M. Boi (Cagliari), R. Boccaletti (Sassari), E. Shevel (Johannesburg), C. Cianchetti (Cagliari), Title: TRPV1, CGRP and SP in the arteries of the scalp of patients suffering from chronic migraine.
- 2011 **Prize for projects of national importance** (positively evaluated, not funded), awarded for PRIN2008 (prot.: 2009M955PE) by the RAS - Autonomous Region of Sardinia (LR 7/2007)
- 1990 **Winner of a national scholarship for the attendance to highly specialized research** activities abroad, to be used at the Laboratory of Neuroanatomy, United Medical and Dental Facultys Guy's and St. Thomas's Hospital, University of London, UK, directed by Dr. J.V. Priestley, announced by the Ministry of University and Scientific and Technological Research (M.U.R.S.T.) (Competition announced by Ministerial Decree 29.01.1987).

## 9. Scientific research activities

### Chemical neuroanatomy and odology of the human nervous system

Objectives:

- To draw neurochemical maps of tissue and cellular localization of specific neuronal markers
- To investigate the variations in expression of neuronal markers at different moments of ontogeny
- To study the neurochemical phenotype of trigeminal primary sensory neurons involved in the processing of pain sensory information
- Morphometric characterization

Topics, molecules and areas of interest: Neurotrophic factors and their receptors in the human nervous system (Hippocampal formation; Cerebellum and precerebellar nuclei; Brain stem; Peripheral nervous system); Peptide neuromediators and receptors of sensory and nociceptive transmission (Trigeminal sensory system of man; Study of extracranial arterial vasculature; Cytoarchitectonics and neurochemical anatomy of posterior cord nuclei in human medulla oblongata).

## Experimental Chemical Neuroanatomy

Objectives:

- To draw neurochemical maps of tissue and cellular localization of specific neuronal markers
- Correlate changes in expression of neuronal markers in relation to neuronal injury or depressive pathology
- To study the neurochemical phenotype of primary sensory neurons involved in the processing of sensory pain information
- Morphometric and densitometric characterization

Topics, molecules and areas of interest: Biochemical study and neurochemical anatomy of the cerebral cortex in an animal model of brain damage induced by transient global hypoperfusion; Role of neurobiological mechanisms involved in resilience and vulnerability to stress in an experimental model of depression (Meso-cortico-limbic system; Formation of the hippocampus; Meso-corticolimbic system); Neural plasticity in models of the study of male sexual behavior (Meso-cortico-limbic system; Formation of the hippocampus); Dynamic modifications of the expression of neuropeptides and receptors involved in algogenic transmission in experimental models of peripheral neuropathy induced by antitumor drugs (Spinal Sensory System).

## 10. Institutional Teaching Activity

### 10.1 Frontal teaching activity

Lecturer of various courses of the scientific disciplinary sector BIO/16 – Human Anatomy at the Faculties of Biology and Pharmacy and Medicine and Surgery of the University of Cagliari. In particular, he teaches Human Anatomy for the degree course in Biology, Human Neuroanatomy for the Master's degree courses in Medicine and Surgery (even channel), Dentistry and Dental Prosthetics (alternate years) and Master's degree in Neuropsychobiology and for the Specialization Faculty in Child Neuropsychiatry and Psychiatry; co-professor of Anatomy 2 (odd channel, LMcu in Medicine and Surgery). She has also been a teacher of Human Anatomy for the Master's degree courses in Pharmacy and Chemistry and Pharmaceutical Technologies and a professor of Molecular Cytology and Human Embryology in the Master's degree course in Cellular and Molecular Biology.

### 10.2 Supervision/Tutoring

**Scientific Tutor** of Fixed-term Researchers type a/ research fellows (Master & Back Project, Sardinia Region) / research fellows at the Department of Biomedical Sciences of the University of Cagliari. Tiziana Melis (with two projects of a) Human and Experimental Chemical Neuroanatomy and b) Study of ischemia/reperfusion-induced brain damage and effect of preventive treatment with Pistacia Lentiscus L. essential oil and type -3 polyunsaturated fatty acids  $\omega$ ); Laura Poddighe (with the projects: a) Natural compounds of the Sardinian flora to prevent alterations from cerebral ischemia/reperfusion; b) Role of epigenetic mechanisms in resilience and vulnerability to stress and depression); Marcello Trucas, Fixed-term Researcher type a (March 2022-February 2025) on human and experimental neuroanatomy topics

**Supervisor in the PhD** programme in Morphological and Functional Sciences, curriculum Neurocytology and Neuroanatomy, University of Cagliari, whose experimental activity has also been conducted in collaboration with foreign institutions:

- 1) Francesca Mascia, Trophins of the GDNF family and their receptors in the human brainstem, XVIII cycle
- 2) Viviana Ibba, Regeneration of peripheral nerves through silk ducts, 2005-07, XXI cycle.
- 3) Laura Poddighe, Neurochemical characterization of primary sensory neurons in a rat model of bortezomib-induced peripheral neuropathy. 2011-13, XXVI cycle.
- 4) Cristina Picci, Exploitation of new pharmacological targets for the relief of neuropathic pain, 2012-14, XXVII cycle

**Thesis supervisor of undergraduates in** Pharmacy, Biological Sciences, Biology, Cellular and Molecular Biology, Neuropsychobiology **master's and bachelor's** degree courses of the University of Cagliari. All the

theses (over 90) are experimental, following a period ranging from three months (for bachelor's degrees) to 18 months (for master's degrees) of attendance by students at the Laboratory of Neurocytology and Neuroanatomy, or at external structures on topics consistent with the themes of SSD BIO/16 and mainly focused on neuroscience research topics concerning my research activity.

## 11. National and international evaluation activities

- 2024 **Member of the Board of Experts** for the scientific evaluation of cascading calls for the project "AdvaNced Technologies for Human-centrEd Medicine" – ANTHEM (Code PNC\_0000003) Spoke 2 for industrial research and experimental development activities addressed to Research Organizations and for industrial research and experimental development activities in collaboration between companies and research organizations under the National Complementary Plan – PNC
- 2023 **External Evaluator of an International Research Project** in the field of neuroscience on behalf of the Agencia Nacional de Investigación Y Innovación, Clemente Estabel Fund, Uruguay, within the Panel: NZ7 (Diagnostic tools, therapies and public health)
- 2022 **External Evaluator of an International Research Project** in the field of neuroscience on behalf of the Polish Academy of Sciences, within the Panel: NZ7 (Diagnostic tools, therapies and public health)
- 2020 **External evaluator of Research project for the University of Perugia**
- 2018 **External evaluator** of PhD thesis (The role of organic cation transporters 1 and 2 in platinum drugs-induced peripheral neurotoxicity, Dr S. Semperboni) at the University of Milano-Bicocca
- 2015 **Member of the Register of Expert Peer Reviewers** (REPRISE) del MIUR
- 2014→ **Evaluator of research project** on behalf of Translational & Clinical Research Grants 2014, University of Belgium.

## 12. Editorial Activities & Scientific Committees of the Congress

### 12.1 Co-author of essays and academic textbooks of national and international prestige

- 2023-24 **Co-editor and coordinator of the translation of the Neuroanatomical Terminology compiled by the FCAT** (Federative Committee on Anatomical Terminology; published by Stuttgart: Thieme) carried out in collaboration between the Italian Group for the Study of Neuromorphology and the Italian Society of Anatomy and Histology (online publication scheduled for May 2025).
- 2022 **Co-curator of the Italian translation of the fourth edition of Netter's Atlas of Neuroscience** (EDRA 2022), edited by F. Cappello, G: Carpino, M. Papa, M. Quartu, September 2022, ISBN 8821456293.
- 2013 **Co-author of the university textbook Cytology, Histology and Microscopic Anatomy**, Book + DVD, edited by D. Zaccheo and M. Pestarino, 2013, Pearson. ISBN: 8871929446.
- 2011 **Co-author of the university textbook FUNCTIONAL HUMAN ANATOMY**, Minerva Medica 2011. ISBN: 978-88-7711-671-0.
- 2011 **Co-author of a university textbook FUNCTIONAL ANATOMY OF THE HUMAN NERVOUS SYSTEM**, Genova University Press, 2011 ISBN: 978-88-905492-1-2
- 2010 **Co-author of university papers** related to the competition sector: Bentivoglio M, Bertini G, Cavaletti GA, Del Fiacco M, Esposito V, Geuna S, Giacobini G, Giannetti S, Granato A, Maffione AB, Marmiroli PL, Ottani V, Papa M, Passiatore C, **Quartu M**, Raspanti M, Robecchi MG, Rosate A, Savio T, Toesca A, Valentino B, Vercelli A, Zancanaro C (2010). HUMAN ANATOMY AND HISTOLOGY. ISBN: 978-88-77-1167-03.

### 12.2 Participation as Editor in international journals:

Cfr: <https://publons.com/researcher/1234209/marina-quartu/>

### 12.3 Reviewer activity for numerous international journals

Cfr: <https://publons.com/researcher/1234209/marina-quartu/>

### 12.4 Congress Organizing Committees

- 2013 Member of the Organizing Committee of the XXIII National Conference of the Italian Group for the Study of Neuromorphology, 22-23 November 2013, Cagliari, Italy.
- 1997 Member of the Scientific Secretariat of the XXVII Congress of the Italian Society of Histochemistry, 5-8 June 1997, Chia Laguna (CA), Italy.
- 1991 Member of the Organizing Committee of the First National Conference of the Italian Group for the Study of Neuromorphology, 19-20 September 1991, Cagliari, Italy.

## 13. Scientific collaborations

### - National collaborations

A. ARGIOLAS, M.R. MELIS and F. SANNA, UniCa [neural plasticity induced by sexual experience]; S. BANNI, UniCa [early biochemical alterations and concentration of endocannabinoids and polyunsaturated lipids in vivo models of cerebral ischemia]; A. CACCIOLA, University of Messina [imaging and morphology studies of the human brain]; G. CAVALETTI, Dip.to Surgery and Translational Medicine, University of Milano-Bicocca [neurotoxicity and neuronal alterations in peripheral sensory neuropathy induced by treatment with anticancer drugs]; C. CIANCHETTI, Child Neuropsychiatry Section, AOU, Cagliari and R. BOCCALETTI, Div. Neurochirurgia, ASL N. 1, Sassari [neurochemical and morphometric characterization of the innervation of the arteries of the scalp in cephalalgia]; M. DEL FIACCO, UniCa (mentor and most represented co-author)[human and experimental chemical neuroanatomy] UNICA; M.A. DE LUCA, UniCa [toxicity of body systems after treatment with synthetic cannabinoids]; M. DEL ZOMPO, UniCA [synaptic recapture in isolated dopaminergic vesicles]; R. DEMONTIS, 'Duilio Casula' University Hospital, Forensic Medicine Unit [studies of morphology of the human brain]; F. DERIU, UniSs [induction of early genes in the brain of epileptic rats following peripheral stimulation of the trigeminal nerve]; G. FAA, M.L. LAI AND R. AMBU, Pathological Anatomy, and R. Demontis, Forensic Medicine, UniCa [chemical neuroanatomy on the human nervous system]; P. FADDA AND M. COLLU, Neuroscience and Clinical Pharmacology Section, Dip.to Biomedical Sciences, UniCa [neuromodulation of molecular systems in eating disorder pathologies]; A. FIGUS AND F. BORIANI, 'Duilio Casula' University Hospital, Plastic Surgery and Microsurgery Unit [immunochemical studies on autologous skin transplants]; P. FOLLESA, UniCa and M.G. Pisu, CNR, Cagliari [immunochemical studies on trophic factors]; O. GIORGI AND M.G. CORDA, UniCa [neurobiological mechanisms involved in resilience and vulnerability to stress and depression]; M.S. LANTINI and F. LOY, Electron Microscopy, UniCa [for studies on the ultrastructure of salivary glands]; A.M. LISCIA, UniCa [neurochemistry of the nervous system of the phytophagous moth *Lymantria dispar*, L.]; G.MEREU, UniCa [role of neuroleptic drugs on mesencephalic dopaminergic neurons]; D. MILARDI, University of Messina [imaging and morphology studies of the human brain]; R. MONTISCI, Surgical Sciences, UniCA [chemical neuroanatomy of the ganglia of the autonomic nervous system]; R. PUSCEDDU, Dip.to Surgery and Odontostomatological Sciences, Otorhinolaryngology Clinic, UniCa [morphological and neurochemical studies on human salivary glands]; E. TRAMONTANO, Unica [molecular characterization studies of virus-infected cells by immunofluorescence].

### - Collaborations abroad

J.V. PRIESTLEY (until 2023), University of London (mentor during PhD period abroad) [experimental chemical neuroanatomy with light and electron microscopy]; S.G. DORSEY, Dept Pain and Translational Symptom Science, , University of Maryland, Baltimore, USA [neuronal alterations in peripheral sensory neuropathy induced by anticancer drug treatment]; A.T. MICHAEL TITUS, Lead of Centre for Neuroscience and Trauma, The Blizzard Institute, Queen Mary University of London, UK [mechanisms of neuronal regeneration in experimental models of injury]; A. SEGAWA, Kitasato University, Kanagawa, Japan [regulation of cytoskeleton in salivary secretion]; J. EKSTRÖM, University of Gothenburg, Sweden [morphology and neurochemistry of

salivary glands]; E. SHEVEL, Headache Clinic, Johannesburg, South Africa [innervation of the arteries of the scalp in cephalalgia]; A. FERNANDEZ TERUEL, Universidad Autonoma de Barcelona, Spain [influence of social interaction in neurobiological mechanisms involved in resilience and vulnerability to stress and depression].

## 14. Publications

Co-author of 81 publications in international journals, 6 articles in books or proceedings, about 200 communications at national and international congresses (update 7 February 2025).

ID ORCID: <https://orcid.org/0000-0002-1884-3597>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=6603418104>

I authorize the processing of my personal data present in the C.V. pursuant to art. 13 of Legislative Decree no. 196 of 30 June 2003 "Personal Data Protection Code" and art. 13 of the GDPR (EU Regulation 2016/679).

Read confirmed and signed.

Cagliari, February 2025

Signature  
Marina Quartu