

## **POSITION HELD**

2022-- Associate Professor of Human Anatomy, Department of Biomedical Sciences, University of Cagliari.

2017-- National Scientific Qualification (Italy) for the position of Associate Professor of Human Anatomy.

2004-2022 Research Assistant Professor of Human Anatomy, Faculty of Medicine, University of Cagliari.

## **EDUCATION**

2002 Ph.D in Morphological Sciences, University of Cagliari

Dissertation title: "Study of the immunospecific defense mechanisms in some human ocular adnexa by immunohistochemical techniques".

1996 University Training Course, "Technologies for the synthesis and development of biologically active molecules",

Department of Chemical Sciences, University of Cagliari, Italy

1995 Vocational training course, "Antiviral drugs design, validation and development"

Dissertation title: "HIV-1 proteases inhibitors".

Grant from Italian Ministero del Lavoro and University of Cagliari, Italy.

1994 Vocational training course, "Research methodology expert in the field of antiviral drugs"

Dissertation title: "HRV inhibitors".

Grant from Italian Ministero del Lavoro and University of Cagliari, Italy

1994 License to practice the profession of Biologist

University of Cagliari, Italy.

1993 M.Sc. degree in Biological Sciences, magna cum laude

University of Cagliari

Dissertation title: "Kinetics of the cycloaddition reaction between aryl nitrile oxides and 1,2-diazepines"

1986 Scientific High School Leaving Qualifications

## **RESEARCH EXPERIENCE**

2003-2004 Postdoctoral Fellow

Project: Melanocytic pigmented lesions in conjunctiva

Supervisor: Prof. Paola Sirigu

Department of Cytomorphology, University of Cagliari, Italy.

Feb 2003 Visiting Scientist, The Wistar Institute Melanoma Research Center (Prof. M. Herlyn, D.V.M., D. Sc). Presentation title: "Local immune system in normal human conjunctiva, pterygium and conjunctival melanoma. An immunohistochemical study".

2002-2003 Postdoctoral Fellow

Project: Immunological mechanism in the pathogenesis of pterygium

Supervisor: Prof. Paola Sirigu

Department of Cytomorphology, University of Cagliari, Italy.

Jan 2002-Apr 2002 Postdoctoral Fellow

Grant from the Bioanalisi Centro-Sud

Department of Cytomorphology, University of Cagliari. Italy.

1998-2002 Ph.D. student in Morphological Sciences  
Project: "Immunospecific defense mechanisms in human ocular adnexa".  
Grant from the Italian Ministry of University and Research (MIUR)  
Supervisor: Prof. Paola Sirigu  
Department of Cytomorphology, University of Cagliari, Italy.

1996-1998 Research Associate  
Project: "Human acute and chronic pancreatitis"  
Grant from the Regione Autonoma della Sardegna (RAS)  
Supervisor: Prof. Paola Sirigu  
Department of Cytomorphology, University of Cagliari, Italy

1993-1994 Post-graduate Student  
Institute of Normal Human Anatomy, and Institute of Microbiology  
University of Cagliari, Italy.

1992 Internship  
Department of Chemical Sciences  
University of Cagliari, Italy

## **MAIN TEACHING EXPERIENCE**

### **• SCHOOL OF MEDICINE, University of Cagliari, Italy**

#### **Master's degree in Medicine and Surgery**

2016/2017 Research Assistant Professor, Course of Anatomy 2: Lectures and exams  
2015-2017 Research Assistant Professor, Course of Anatomy 1: Lectures and exams  
2004-2016 Research Assistant Professor, Course of Anatomy: Lectures and exams  
2004-2017 Research Assistant Professor, Gross and Microanatomy: Lectures, practice, and exams

#### **Master's degree in Dentistry**

2015-2017 Research Assistant Professor, Gross and Microanatomy: Lectures, practice, and exams

#### **First level degree in Nursing**

2022- Associate professor, Course of Human Anatomy  
2008-2010, 2013-2022 Research Assistant Professor, Course of Human Anatomy

#### **Other First level degrees**

2023-2025 Associate Professor, Course of Human Anatomy  
First level degree Biomedical Laboratory Techniques  
2019-2020 Research Assistant Professor, Course of Specific Anatomy of The Pneumatic-Phone-Articulator System and The Ear  
First level degree in Speech and Language Therapy  
2011-2013 Research Assistant Professor, Course of Human Anatomy  
First level degree in Health Assistance  
First level degree in Dental Hygiene  
2011/2012 Research Assistant Professor, Course of Human Anatomy  
First level degree in Environment and Workplace Prevention Techniques  
2005-2007 Research Assistant Professor, Course of Human Anatomy  
First level degree in Orthoptic and Ophtalmologic Assistance

#### **Residency Programs**

2015/16- Ophthalmology  
2008/09- 2024/15 Physical Medicine and Rehabilitation

2004-2015 Anesthesiology

• **SCHOOL OF BIOLOGY AND PHARMACY, University of Cagliari, Italy**

2014/15 Research Assistant Professor, Course of Human Anatomy,  
First level degree in Toxicology,

• **SCHOOL OF ENGINEERING AND ARCHITECTURE, University of Cagliari, Italy**

2023-2025 Associate Professor, Course of Human Anatomy,  
First level degree in Biomedical Engineering

### **OTHER TEACHING EXPERIENCES, University of Cagliari, Italy**

In agreement with the Professors of the courses, she has carried out the following teaching activities in the official teaching courses:

2005-2008 Lectures, Course Human Anatomy, First level degree in Physiotherapy

2002-2004 Training activity, Gross Anatomy, First Level degree in Biology

2002-2004 Training activity, Gross Anatomy, First Level degree in Natural Sciences

1998-2004 Training activity, Gross and Microanatomy, Master degree in Medicine and Surgery

### **OFF-CAMPUS COURSES**

1996-1999 Research Associate, Human Anatomy Applied to Physical Education, Istituto Superiore di Educazione Fisica (ISEF) Cagliari, Italy

### **Ph.D COMMITTEE**

2013-2019 Innovation Sciences and Technologies, University of Cagliari, Italy

2010-2012 Biomedical Engineering, University of Cagliari, Italy

2008/2009 Morphological Sciences, University of Cagliari, Italy.

### **TRAINING ACTIVITY IN Ph.D. COURSES**

2022-2024 Support activities as Co-Supervisor for the preparation of the Thesis in the Master's Degree Course (CLM) in Cellular and Molecular Biology (Dr. Federica Perra).  
Dissertation title: "Telocytes: mesenchymal progenitor cells with an involvement in the pathogenesis of pterygium? Immunohistochemical and ultrastructural study".

2020-2022 Support activities as Co-Supervisor for the preparation of the Thesis in the Master's Degree Course (CLM) in Cellular and Molecular Biology (Dr. Eleonora Greco).  
Dissertation title: "Role of Insulin-like Growth Factor-2 and Insulin-like Growth Factor Receptor-1 in the pathogenesis of pterygium".

2013 Biomedical Engineering, University of Cagliari, Italy. Supervisor: Prof. Ing. G. Cao

2004-2015 Morphological Sciences, University of Cagliari, Italy. Supervisor: Prof. M.T. Perra

## **PUBLIC ENGAGEMENT**

- 2023-2025 Participation, as a teacher, in orientation courses for high school students.  
Title of the project: "From the visible to the invisible: journey through the human body".  
The course was organized and financed by the University of Cagliari as part of the National Recovery and Resilience Plan (PNRR).

## **RESEARCH ACTIVITY**

Her work is characterized by national and international collaboration and is supported by 119 scientific papers (40 full length papers in peer reviewed and indexed Journals, 1 book chapter and 78 abstracts of national and international congress). Her main research interest is focused on the study of normal and pathological mucosae and skin, with a special attention to the pathogenesis of pterygium, a benign bulbar conjunctiva lesion with tumor-like features and unknown origin. Moreover, further research lines are based on the identification of tumor biomarkers for an early diagnosis of melanoma and breast cancer. Recently her research activity has been addressed to the study of miRNAs involved in prostate and mammary gland oxidative stress biomineralization in the diabetic condition.

## **RESEARCH SKILLS**

Immunohistochemistry, Immunocytochemistry, Immunofluorescence  
Bright Field and Fluorescence Microscopy,  
Microscope Image Acquisition and Processing  
Cell culture, molecular biology  
Statistical analysis

## **AREAS OF EXPERTISE**

Human anatomy, histochemistry and immunohistochemistry, histopathology, cellular basis of diseases.  
Conjunctival melanocytic pigmented lesions, pterygium, melanoma, breast cancer  
Stem cell biology, cancer stem cells, telocytes biology  
Apoptosis, oxidative stress, angiogenesis  
miRNAs linked to oxidative stress biomineralization in the diabetic condition

## **PARTICIPATION IN EDITORIAL COMMITTEES OF MAGAZINES, EDITORIAL COLLECTIONS, ENCYCLOPEDIAS AND TREATIES**

- 2022 Editor for the Italian version and updating of the text:  
Gilroy, MacPherson and Wikenheiser – Prometheus, Atlante di Anatomia (IV italian ed.)  
EdiSES Edizioni srl
- 2021 Co-author of the texts:  
AA.VV - ANATOMIA UMANA - Basi Anatomiche per la Semeiotica  
(ISBN 978-88-3623-0488)  
AA.VV - ANATOMIA UMANA - Basi Anatomiche per la Fisiopatologia  
(ISBN 978-88-3623-0433)  
AA.VV - ANATOMIA UMANA - Basi Anatomiche per le Neuroscienze  
(ISBN 978-88-3623-0525)  
EdiSES Edizioni srl
- 2019 Co-author of the text: AA.VV. – Anatomia Umana, Elementi  
(ISBN 978-88-7051-541-1), Edi.Ermes

- 2014 Italian edition of 2 chapters of the text: Martini/Hober/Nath/Bartholomew/Petti - Visual Anatomy and Physiology (Martini/Hober/Nath/Bartholomew/Petti - VISUAL, Anatomia e Fisiologia EDISES (ISBN 978 88 7959 9139)
- 2013 Guest editor for the “Proceedings of the 35th National Congress of the Italian Society of Histochemistry”
- 2010 Reviewer for Acta Histochemica (Elsevier), Cornea (Wolters Kluwer), Experimental Eye Research (Elsevier), Current Eye Research (Taylor & Francis Online), Molecular Vision (Emory University), Journal of Cellular and Molecular Medicine (JCMM) (Wiley Online), Journal of Clinical Medicine (MDPI), Cells (MDPI), Biomedicines (MDPI), Zoological Letters (BMC, part of Springer Nature), European Journal of Histochemistry (PAGEPress), Therapeutic Advances in Chronic Disease (SAGE Journals), Journal of Ophthalmology (Hindawi), BioMed Research International (Hindawi), International Ophthalmology (Springer), Arquivos Brasileiros de Oftalmologia (SciELO), European Journal of Ophthalmology (SAGE Journals), Clinical Ophthalmology (Dove Press), Journal of Current Ophthalmology, (JOCO) (Medknow, Wolters Kluwer), Clinical and Translational Medicine (Wiley Online), International Journal of Medical Sciences (Ivyspring International Publisher), Journal of International Medical Research (JIMR) (SAGE Journals).
- 1997 Reviewer of the scientific contributions of the 27th National Congress of the Italian Society of Histochemistry.

### **SOCIETIES' MEMBERSHIP**

- 2023-- Human Anatomy Teaching Board  
 2000-- Italian Society of Histochemistry (SII)  
 2000-- Italian Society of Anatomy and Histology (SIAI)

### **CONGRESS ORGANIZING**

- 2013 35th National Congress of the Italian Society of Histochemistry (SII).  
 1997 27th National Congress of the Italian Society of Histochemistry (SII).

### **AWARDS, HONORS AND GRANTS**

- 2011 Best poster Award, LXV National Congress of the Italian Society of Anatomy and Histology, Padova: Piras F, et al. Association of nestin with anti-apoptotic and tumor suppressor factors in human breast cancer.
- 2010 Journal front-cover, Oncology Reports: Piras F, et al. The stem cell marker nestin predicts poor prognosis in human melanoma. [2010; 23 (1):17-24. DOI: 10.3892/or-00000601].
- 2006 Rotary International Grant within the program "Group Study Exchange (GSE)".
- 1999 Grant from the Italian Society of Histochemistry to attend the XI International Congress of Histochemistry and Cytochemistry (ICHC 2000) (York, 3-8 Sept. 2000).
- 1999 “Young Histochemist Award” by the International Federation of Histochemistry and Cytochemistry (IFSHC).

## MANAGEMENT ACTIVITIES - INSTITUTIONAL ASSIGNMENTS

### MANAGEMENT POSITIONS AND ACADEMIC BOARDS AT THE UNIVERSITY OF CAGLIARI

A.A. 2024-25	Member of the Committee for teaching tutoring assignment SSD BIOS-12/A - Human Anatomy First level degree in Biomedical Engineering. Faculty of Engineering and Architecture, University of Cagliari
10/01/2024 - present	Member of the Self-Assessment Committee for the Quality Assurance System Master's degree in Nursing and Midwifery Sciences Faculty of Medicine and Surgery, University of Cagliari
10/01/2024 - present	Member of the Student Practices Commission Master's degree in Nursing and Midwifery Sciences Faculty of Medicine and Surgery, University of Cagliari
10/01/2024 - present	Member of the Educational Offer Council Master's degree in Nursing and Midwifery Sciences Faculty of Medicine and Surgery, University of Cagliari
03/24/2023 - present	Member of the Steering Committee Master's degree in Nursing and Midwifery Sciences Faculty of Medicine and Surgery, University of Cagliari
10/01/2023 - present	Member of the Student Practices Commission First level degree in Biomedical Laboratory Techniques Faculty of Medicine and Surgery, University of Cagliari.
09/16/2022	Member of the Committee for research grants assignment Code.34A-22. D.R. 25.07.2022 n. 669, (08.03.2022) S.C. 06/F2 - S.S.D. MED/30 Scientific supervisor: Prof. Maurizio Fossarello University of Cagliari.
September 2022	Member of the Committee for admission to the Health Care First level degree Faculty of Medicine and Surgery, University of Cagliari.
06/16/2022 07/01/2024	Member of the Committee for teaching assignment SSD BIO/17 – Histology Department of Biomedical Sciences, University of Cagliari
2013 - present	Member of the Educational Offer Council First level degree in Nursing Faculty of Medicine and Surgery, University of Cagliari
07/01/2021-09/30/2024	Member of the Joint Commission Faculty of Medicine and Surgery, University of Cagliari
From 10/01/2019 – present	Co-Head of the Histochemistry and Immunohistochemistry Lab Department of Biomedical Sciences, University of Cagliari
09/13/2018 – present	Member of the Self-Assessment Committee for the Quality Assurance System First level degree in Nursing Faculty of Medicine and Surgery, University of Cagliari

09/13/2018 - present	Member of the Student Practices Commission First level degree in Nursing Faculty of Medicine and Surgery, University of Cagliari
A.A. 2013-2016	Member of the Committee for teaching tutoring assignment SSD BIO/16 - Human Anatomy Master's degree in Medicine and Surgery Faculty of Medicine and Surgery, University of Cagliari
A.A. 2015/16	Member of the Committee for teaching tutoring assignment SSD BIO/16 - Human Anatomy First level degree in Biomedical Engineering. Faculty of Engineering and Architecture, University of Cagliari
A.A. 2013/14	Member of the Committee for teaching assignment SSD BIO/16 – Neuroanatomy and Anatomy of the Musculoskeletal System First level degree in Physiotherapy Faculty of Medicine and Surgery, University of Cagliari
A.A. 2013/14	Member of the Committee for teaching assignment SSD BIO/16 – Neuroanatomy and Anatomy of Ear (Pneumo-Phono-Articulatory System) First level degree in Speech and Language Therapy Faculty of Medicine and Surgery, University of Cagliari
A.A. 2012/13	Member of the Committee for teaching assignment SSD BIO/16 – Human Anatomy First level degree in Nursing Faculty of Medicine and Surgery, University of Cagliari
A.A. 2011/12	Member of the Committee for teaching assignment SSD BIO/16 – Human Anatomy and the Stomatognathic System  First level degree in Dental Hygiene Faculty of Medicine and Surgery, University of Cagliari
A.A. 2011/12	Member of the Committee for teaching assignment SSD BIO/16 – Human Anatomy   First level degree in Sport and Exercise Science Faculty of Medicine and Surgery, University of Cagliari

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