CURRICULUM VITAE

Carla Agata Erika Loreto, MD

CURRENT ACADEMIC POSITION

Carla Loreto is Full Professor of Anatomy (BIO/16) at Department of Biomedical and Biotechnological Sciences, University of Catania (Catania, Italy). Currently, she is the head of Organ Functional Anatomy Laboratory at the same Department. Since 2021 she is President of the degree course in dentistry and dental prothesis of Catania University.

EDUCATION AND TRAINING

2012-2013 - Visiting Professor at Cranfield University, England.

2002- Specialization in Occupational Medicine, University of Messina, Italy.

1998 - Degree in Medicine and Surgery, University of Catania, Italy.

RESEARCH ACTIVITIES

Professional experiences

2003 Research fellow in Anatomy, University of Catania, Italy.

Visiting scientist at the Department of Urology - School of Medicine - University Children'

Hospital, University of Belgrade, Serbia.

Visiting scientist at the basis science and histopathological laboratories of St Peter's Andrology,

University College London Hospitals, London, England.

Research activities and scientific collaborations

Her research activity is oriented towards functional organ anatomy, also paying attention to microscopic and biomolecular aspects. These scientific interests led her to establish fruitful collaborations, which are still active, with colleagues from the Dental Clinic of several Universities. Thanks to her specialized studies in Occupational Medicine, she further expands her scientific skills. Subsequently, as a visiting scientist, she carried out internships at some foreign universities, among which the Urological Clinic of the University of Belgrade, the section of Urology of the University College London Hospitals in London, England and the University of Cranfield, England deserve mention.

On this basis, Prof. Loreto has developed research activities which are summarized below:

- -As part of the research oriented to the cranio-facial district, her studies were conducted using immunohistochemical techniques, cell cultures and molecular biology, to evaluate the expression of molecules involved in embryological development and in pathological conditions affecting the temporomandibular joint and other organs, in order to identify the pathogenetic mechanisms underlying organ-specific pathologies. Such researches were conducted both in vivo and in vitro.
- -As part of the collaboration with the Occupational Medicine colleagues, she has been involved in the study of morphological alterations associated with occupational pathologies. Prof. Loreto has carried out biomolecular studies, in vivo and in vitro, on the mechanisms of signal transduction, relating to the respiratory system exposed to asbestiform fibers. More recently, she evaluated the role of epigenetic modulation induced by occupational xeniobiotic exposure by demonstrating which miRNAs are involved in lung and pleural tumor development.
- -In collaboration with the Physiology and Pharmacology Sections of the Department of Biomedical and Biotechnological Sciences of the University of Catania, Prof. Loreto carried out microscopic, immunohistochemical and molecular anatomical studies on mouse aging models.
- -Prof. Loreto has collaborated scientifically with Anatomists of the University of Bucharest, Romania with whom she has carried out anatomical studies of angiology and immunohistochemistry on the trigeminal ganglion from a human cadaver.
- -Relating to the collaboration with the Urologists, through aspects of surgical anatomy and organ, she studied "Peyronie's disease", an organ-specific pathology object of considerable scientific interest in the context of current urological surgery as the etiopathogenetic mechanisms are still poorly understood. As part of the

aforementioned scientific collaboration, Prof. Loreto has also dealt topographical anatomy studies on surgical patients and on cadaver.

Participation in the activities of a research group

Proponent Professor and member of the scientific committee of the following Research Centers of Catania University: Research Center for the Study of the Prevention, Diagnosis and Treatment of Tumors (C.R.S. Pre.Di.C.T), Research and Consultation Center on HTA and Drug Regulatory Disciplines (CERD), Research Center on Motor Activities - CRAM (Research Center on Motor Activities).

Participation in the following international boards of scientific journals and in evaluating committees of national and international agencies

Associate Editor of Edorium Journal of Anatomy and Embryology, Associate Editor of Infection Diseases and Tropical Medicine, Designated Referee for the evaluation procedure of research projects of Foggia University, Italy. Guest Editor of Applied Sciences MDPI.

INSTITUTIONAL ACTIVITIES

Study Program Coordination

2015-2021 President of the Degree Course in Hearing Aid Techniques, University of Catania.

2019-2020 Director of the Second-level Master's Degree "Expert in Business Management and Compliance (EGCA)," University of Catania.

2020-2021 Vice President of the Degree Course in Dentistry and Dental Prosthetics at the University of Catania. 2021-present President of the Degree Course in Dentistry and Dental Prosthetics at the University of Catania.

2021-present Member of the Quality Assurance and Teaching Commissions of the Degree Course in Hearing Aid Techniques, University of Catania.

Other Academic Positions

2022-present Member of the Working Group on the Core Curriculum for Master's Degrees in Medicine and Surgery of the College of Human Anatomy Teachers.

2010-present Member of Guarantee Committees and/or Committee Member for Selective Admission Exams in Medicine and Surgery and Healthcare Professions Master's Degree Programs and Degree Courses in Healthcare Professions at the University of Catania.

2011-2020 Member of the Steering Committee of the Urology Specialization School, University of Catania, Messina, and Catanzaro.

2012-2013 Elected Member of the Teaching Committee of the Department of Biomedical Sciences, University of Catania, for the four-year period.

2012-2016 as a Tenured Researcher.

2012-2016 Elected Member of the Council of the Department of Biomedical Sciences, as a tenured researcher, University of Catania.

2016-2018 Elected Member of the Joint Committee of the School called "Faculty of Medicine" for the four-year period.

2016-2020 (Decree Rectoral 4122 of November 9, 2016), University of Catania.

2017-present Member of the Teaching Committee – Degree Course in Dentistry and Dental Prosthetics, University of Catania.

2017-present Member of the Steering Committee of the Audiology Specialization School, University of Catania.

2017-present Member of the Steering Committee of the Otorhinolaryngology Specialization School, University of Catania.

2017-2018 Elected Member of the Council of the Department of Biomedical and Biotechnological Sciences of the University of Catania as an Associate Professor, for the four-year period

2014/2018, University of Catania.

2018 Member of the Evaluation Committee for the "Dentistry" professional qualification exams – 2018 session.

2018-present Member of the degree score pre-evaluation committee - Medicine and Surgery Master's Degree Course - University of Catania.

2019-present Member of the Quality Committee (AQ) – Degree Course in Dentistry and Dental Prosthetics, University of Catania.

2019-2020 Member of the register of disciplinary experts for AVA evaluation - National Agency for the Evaluation of the University System and Research (National Agency for the Evaluation of the University System - ANVUR).

2021-present Member of the Steering Committee of the Urology Specialization School, University of Catania. 2021-present Appointment as departmental contact, student ombudsman at the University of Catania. 2022 Member of the Selection Committee for the public competition for the award of 16 type A) research fellowships, as per Rectoral Decree no. 2903 of 01/09/2022.

Teaching Activities

Teaching Activities in Degree Programs Engaged in numerous teaching roles, including frontal and integrative teaching (lectures, exercises, laboratories), as well as coordinating exam committees, serving as a thesis supervisor and co-supervisor. The following are teaching assignments in the following degree programs:

2004-2009 Medicine and Surgery - Teaching Anatomy II - Module I

2012-present Medicine and Surgery - Teaching Anatomy II – Module I

2008-2010 LM Nursing and Midwifery Sciences - Teaching Demoethnoanthropology

2008-2010 Techniques of Cardiorespiratory Physiopathology and Cardiovascular Perfusion - Teaching Anatomy

2013-2015 Techniques of Cardiorespiratory Physiopathology and Cardiovascular Perfusion - Teaching Anatomy

2010-2011 Medicine and Surgery - Teaching Anatomy I

2012-2014 Medicine and Surgery - Teaching Anatomy III - Module II

2012-2013 Technical Assistance Professions Sciences - Teaching Human Anatomy

2010-2017 Biomedical Laboratory Techniques - Teaching Human Anatomy

2012-present Hearing Aid Techniques - Teaching Human Anatomy

2013-present Dentistry and Dental Prosthetics - Teaching Human Anatomy

2019-2020 Speech Therapy – Teaching Human Anatomy

2022-2023 Prevention Techniques in the Environment and Workplace – Teaching Human Anatomy

Teaching Activities in Doctoral Programs Member of the teaching faculty in the following doctoral programs: 2010-13 Advanced Multidisciplinary Research in Transplantation cycle XXVI, University of Catania 2013 Translational Biomedicine cycle XXIX, University of Catania

2016-present Basic and Applied Biomedical Sciences cycles XXXII - XXXIV - XXXVII, University of Catania

Teaching Activities in Medical Specialization School Courses

2007-present Specialization School in Audiology and Phoniatrics

2008-present Specialization School in Orthodontics

2009-present Specialization School in Urology

2012-present Specialization School in Medical Physics

2017-present Specialization School in Otorhinolaryngology

Editorial Series and Books

2011 Collaborated with Prof. Maria Luisa Carnazza on the scientific supervision of the volume "Sobotta Atlas of General Anatomy and Musculoskeletal System," Publisher Elsevier, published in 2012.

2014 Collaboration on the updating and revision of "Prometeus Atlas of Anatomy – single volume," Publisher Edises srl.

2015 Editor of the volume "Netter Radiological Anatomy 2nd ed.," Publisher Edra S.p.A.

2016 Editor of the treatise "Gray's Anatomy 41st edition," Publisher Edra S.p.A.

2017 Contributed to the chapter on Surgical and Topographic Anatomy of the Breast in the treatise on Senology (Rovera, Bonifacino, Panizza, Peccatori). Chapter: "Surgical-Topographic Anatomy of the Breast" (F. Caruso, C. Loreto, I. Cannata). Publisher Edra S.p.A.

2019 Editor for the update of the "Sobotta Atlas of Anatomy," Publisher Edra S.p.A. 2020 Editor of the "Kert-Sobotta Anatomy Coloring Book," Publisher Edra S.p.A.