



Professor Carmen Mortellaro MD, DDS.

Full Professor of Stomatological Diseases at the Faculty of Medicine and Surgery “Amedeo Avogadro” University of East Piedmont.

Personal details Name: Carmen Mortellaro Place of Birth: Santo Stefano di Quisquina (AG) Italy,
Nationality: Italian, Marital Status: Married, Three Sons, Address: Strada Castelvecchio n.16
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CURRICULUM VITAE

Carmen Mortellaro gained her Bachelor of Arts degree from Turin University followed by a degree in Medicine and Surgery in 1983 from the same university.

In 1983 she started working as a Clinical Assistant at the Odontostomatological and Maxillofacial Surgery Clinic of the University of Turin where she obtained the Diploma of Specialisation in Odonto-stomatology in 1986 and in Orthognathic Surgery in 1991.

In 1987 she was granted two scholarships and directed a research team in the field of craniofacial growth.

In February 1991 she moved to the University Department of Odontostomatology and Maxillofacial Surgery at the San Luigi Gonzaga Hospital as Medical Director, where she was responsible for clinical practice in the sector of dento-skeletal alterations and craniofacial malformations until 2002.

From November 1997 until 2011 she was responsible for the Oral Physiopathology Unit for paediatric patients, mainly oncologic and syndromic patients and malformation syndromes at the Regina Margherita Children's Hospital of Turin.

In 2002 she became Full Professor of Stomatology at the Faculty of Medicine, Surgery and Health Science of the University of East Piedmont.

From 2002 Full Professor of:

- Stomatognathic apparatus and the oral cavity Diseases (Degree course in Medicine and Surgery)
- Dental Materials
- Orthognathic Surgery
- Paediatric Dentistry
- Oral Surgery
- Stomatological Diseases egree
- Semeiotics of Orofacial Area - School of Special Stomatological Surgery at the University of Turin (2002 – 2003)
- Anatomy - School of Special Stomatological surgery at the University of Turin (2004 – 2008)
- Surgical Exodontia School of Special Stomatological surgery at the University of Turin (2009 – 2011)

From 2019 Full Professor in Stomatology and Oral Surgery .Regenerative Medicine and Tissue Engineering Saint Camillus International University of Health and Medical Science

Since 1985 member of the Italian Society of Orthodontics (S.I.D.O.).

Since 1999 member of the National Bureau of the Union of Specialists in Orthodontics (S.U.S.O.).

Since 2000 member of the Board of Physicians and Orthodontists of the province of Turin on the “Continuing Education and Formative Accreditation” Commission.

Since 2002 regional representative for the O.C.I. (Italian Catholic Dental Surgeons).

In 2003 full member of the Board of Physicians and Orthodontists of the province of Turin on the “Continuing Education and Formative Accreditation” Commission.

In 2003 Director of the Italian Society of Presurgical Orthodontics.

Since 2004 President of FEDRA (Research Federation into Congenital Malformations and Related Syndromes).

In 2004 Board Member of SIdCO (Italian Society of Oral Surgery).

In 2004 University representative at the Regional Commission for Bachelor’s Degree with Specialisation.

In 2005 Treasurer for the Italian Society of Pre-surgical Orthodontics.

In 2006 President-elect of the Italian Society of Pre-surgical Orthodontics

From 2006 to 2009 member of the “Health Programming and Policy” Commission at the Board of Physicians and Orthodontists of the province of Turin.

From 2006 to 2009 member of the “Health Administration and Institutional Accreditation and Professional Programming Organisation” Commission of the same Board.

2008 President of SIDOP (Italian Society of Pre-Surgical Orthodontics).

2008 Board Member of SIOCMF (Italian Society of Odontostomatology and Maxillofacial Surgery).

2008 President-Elect of SIdCO (Italian Society of Oral Surgery)

From 2009 to 2011 Member of the Commission “Relations with other Boards and Organisations in the Healthcare Sector of the Board of Physicians and Orthodontists of the province of Turin.”

From 2009 to 2011 member of the Health Administration and Institutional Accreditation and Professional Programming Organisation Commission of the Board of Physicians and Orthodontists of the province of Turin.

From 2009 member of the Ministry of Health Commission for the definition of Guidelines and Clinical Recommendations in the field of dental and maxillofacial surgery.

From 2009 honorary member of the Chirone Academy

From 2010 member of Nedcommunity, Italian association for enhancing, supporting and developing the role of non executive members of board of directors and supervisory boards.

In 2011 President of SIdCO (Italian Society of Oral Surgery) for the 2012-2013 term.

From 2013 to date associate professor at the CNR National Research Council

2015 -2018 member SIOCMF (Italian Society of Odonto-stomatology and Maxillofacial Surgery).

2015 -2017 President of ANTHEC (Academy of Non Transfusional Hemo-Components)

2015 -2017 member of the Italian College of Surgery /CIC

2018/2019 Master director “Blood components and other cells for regenerative medicine

Awards

Prof Mortellaro has received prizes and awards for the career from the following:

Piedmont Dentistry Group – 1992

Bosio-Fidas-Olivero-Ribero - Turin – 1996 Research and Assistance award

Dental Day - City of Turin – 1997

Association of Dental Companies – 1999

ATO – Orthodontic Technicians’ Association – 2000

SERMIG – Ernesto Olivero for Solidarity in Medicine - 2008

FNOMCEO Ethics in Healthcare 2010

TUEOR Edizioni 2017

Lectures

Prof Mortellaro sits on numerous Scientific Committees and has been called to speak at many International Conferences. Including

5th European Dentistry Convention – Latina, Italy 25-28 March 1992 “The role of bacteremia in the pathogenesis of infective endocarditis as regards the oral cavity” – “use of osseointegrated implants, clinical aspects and personal experience”

The 11th Congress of the International Association of Dentistry for the Handicapped – Venice, 26-30 July 1992 “Radiological evaluation in disabled patients”

16th Kongres sekcji chirurgii szczekowo-Twarzowej i Stomatologicznej PTS – Krakow (Polonia), 19-20 May 1994 “Surgical prevention treatment of skeletal malformation II molar class” – “Surgical assisted rapid palatal expansion”.

European Day for the Prevention and Treatment of Cranio-maxillofacial Dysmorphisms – Turin, 29-31 May 1997 “Treatment of sleep-apnea in maxillo-mandibular hypoplasia” –

“Congenital Malformation Syndromes: Sotos Syndrome”

- “Craniofacial structural alterations in Marfan syndrome” –

“Clinico-somatic characteristics in cleidocranial dysostosis” - “Surgery Prediction in Orthognathic Surgery” – “Polymalformative hypoglossia-hypodactylia syndrome” – “OPT re-evaluation in preliminary diagnosis of cervicocranial mandibular dysfunctions” – “Familiarity with skeletal class IIIs” – “Open bite in juvenile rheumatoid arthritis” – “Morphofunctional alterations in acromegalic patients” – “Manipulative treatment of dysfunctions of the stomatognathic apparatus” –

“craniofacial skeletal alterations in β-thalassemia” – “Crouzon syndrome: oro-maxillo-facial clinical aspects” – “Gonial angle and intermaxillary divergence in disgnathic patients”

III International World Congress on Maxillo-facial Surgery – Turin, 17-20 June 1998 “Presurgical Prostheses for Congenital Cavities”.

II Congress of the Polish Society of Oral and Maxillo-facial Surgery – Kracow (Poland), 20-22 May 1999 “Long term assessment of bone regenerated integrated implants” – “Paradental Assessment of patients with increased upper maxillary transversal diameters”.

VII Congress of the Polish Society of Plastic, Reconstructive and Aesthetic Surgery – Polanica (Poland), 27-29 May 1999 “Rapid surgical expansion of the palate: tooth and skeletal increase and long term stability” – Craniomandibular problems in the disgnathic patient under orthodontic surgical treatment”.

XVII International SIDO Congress – Rimini, Italy 1-4 October 2003 “Use of the Wilson 3D lingual arch in the advancement of incisors – Recovery of teeth in adults: prognosis and therapy”.

II International Conference and ICOI Meeting – Sorrento, Italy 16-18 June 2005 “Implantology: the state of the art and new perspectives”.

First Italian Conference – Taormina, Italy 29 July 2006 “Health, the environment and interaction with genes”.

International Workshop of Paediatric Surgery – Turin, 16-19 May 2007 “Osteolytic jaw lesion: importance of exact diagnosis and therapeutic choice”.

III International Congress IFUNA – Turin, 1-4 October 2009.

XXII International SIDO Congress – Florence, 24-27 November 2010 “The needs of the ortho-surgical patient: innovative treatment proposals”.

SENAME ICOI SIDCO International Conference – Naples, 31 March – 2 April 2011

“Multidisciplinary approach to oral surgery: from endodontic surgery to the aesthetic aspect in implantology”.

The EPS Global International Paediatrics Summit - Nanjing, China 15-16 October 2010

“Odontogenic tumors in childhood: a retrospective study of 86 treated cases. Importance of a correct histopathologic diagnosis”.

The 3rd Chongqing International Clinical Neuroscience Forum & NeuroDrug Conference - Chongqing, China 21-23 October 2011 “Saldino-Mainzer syndrome: nephronophthisis, retinitis pigmentosa, and cone-shaped epiphyses” invited to speak .

EPS Montreal International Gene Conference - Montreal, Quebec, Canada 3-4 November 2011 “Diagnosis and treatment of familial cherubism characterized by early onset and rapid development” invited to speak.

I° National Symposium of Videosurgery, 12-14 Luglio 2012 Taormina ,Chair.

The Mediterranean Congress of Odontostomatological Disciplines of Taormina 12.13 Luglio 2013

International Congress SIDCO The Challenge Of Horizon 2020:Excellence In Osteological Science Torino 30-31 Maggio 2014 Chair

Hemocomponents for non-transfusional use: from theory to clinical practice 16-17 Ottobre 2015 Cremona Italy.Chair

International Congress ANTHEC Implantology of the latest generation with the aid of autologous platelet concentrates in ridge augmentation and soft tissue healing 8-9 Luglio 2016 Taormina Chair

National Symposium Surgical Treatments and Implantology in the patient affected by serious systemic pathologies 7 Aprile 2017 Milano .Chair

National Meeting Multidisciplinary regenerative medicine: focus on growth factors 25 Febbraio 2017 Torino Chair

Clinical Research and Innovation in Regenerative Medicine Closed Meeting 25 Novembre 2017,Turin .Chair

Prosthetic Connection Catania 20 .09.2018 Co/Chair

Technological innovations and experimental protocols in periodontology and oral surgery. Use of growth factors, clinical relevance and perspectives Bari, 28 e 29 settembre 2018 .Eventual role of the circRNA realeased by platelet during the wound healing

Andi Congress Catania 19/20 .10.2018 Regen/oss collagen hidroxyapatite in the regeneration of the jaws

International Congress Technological innovations and experimental protocols in periodontology and oral surgery. Use of growth factors, clinical relevance and perspectives. Bari, 13 and 14 September 2019. Biologically guided repair and healing process

Areas of scientific interest and research fields:

Alterations in crano-maxillo-facial growth, the genetics of malformations and rare diseases (biomarkers for molecular alteration, epigenetic damage, genetic predisposition)

Study of risk factors of industrial pollution in the etiopathogenesis of congenital dimorphisms, exposure to teratogenic agents and effects on foetal development.

Evaluation of the therapeutic value of human and animal stem cells derived from amniotic fluid and dental tissue osteogenically and neurogenically differentiated.

Development and features of biomaterials.

Engineering of bone tissue, teeth and mesenchymal tissue in general.

Development of magnetic nanoparticles for the diagnosis and therapy of oncological illnesses.

Development and features of drug delivering and scaffolds for tissue engineering.

Use of blood components for non-transfusion purposes in bone regeneration, in healings and difficult wounds, in patients with systemic diseases.

Use of tissue concentrates in the regeneration of hard and soft tissues and in volumetric increases.

Development of technologies to regenerate musculoskeletal tissues in a functional way or to develop implantable prosthetic devices: cartilage, bone, ligaments, tendons, with very diversified approaches and all the necessary tools including 3D models in vitro and in vivo, manufacturing technologies, diagnostics for custom and precision application.

Biomimetic and Tissue Engineering

Over 350 publications in scientific magazines and international conference papers.

Editor in chief Italian Supplement The Journal Craniofacial Surgery.

Member of the editorial board of the following magazines: Journal of Osseointegration, Minerva Stomatologica, Minerva Ortognatodontica, Doctor Os, The Journal Craniofacial Surgery, Cancer Surgery , European Journal of biomedical and pharmaceutical Sciences.

Books and book chapters

Rare Diseases, Genetic Diseases and Oro-Cranio-Facial Area as its Domain ISBN: 9788846737052 Anno: 2013 Edizioni ETS

Odontostomatological materials and technologies for dental hygienist Codice ISBN 978-88-908159-7-3 Editore: Ariesdue Srl Edizione: II 2013 .

Odontostomatological Surgery Editore: Minerva Medica Anno edizione: 2015 EAN: 9788877117854 :

Pharmacological therapy in oral surgery ISBN: 978-88-7711-785-4 ₩ 2014 – ed. Minerva Medica

Dental inclusions ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Treatment of eruption anomalies ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Benign neoformations of the hard tissues of the jaws ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Oral pathology ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Biomaterials used in bone regeneration ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Hemocomponents for non-transfusional use in oral and implant surgery ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Elements of forensic odontology in oral surgery ISBN: 978-88-7711-785-4 ₩ 2014 – Ed. Minerva Medica

Autologous blood components as stimulants of tissue healing Editore Tueor Servizi Ed. Edizione 2017 ISBN 978-88-940334-9-6

Tissue Engineering: Use of Growth Factors in Bone Regeneration DOI 10.5772/intechopen.69875 In book: Biomaterials in Regenerative Medicine License CC BY4.0 February 2018

Innovative Procedures in polyspecialistic Regenerative Medicine and Surgery. Tissue engineering: use of autologous growth factors in bone regeneration. Editor SIMCRI 2018

Permanent working partnerships:

Tampa Bay Craniofacial Center (USA) Dr. Mutaz Habal

Department of Neuroscience Mayer Hospital, Florence

Department of Physiology and Epidemiology National Research Centre Pisa

Institute of Sciences and Techniques of Ceramic Materials (ISTEC-CNR)

University D'Annunzio Chieti.

Re.Ga.In - Galeazzi Institute Center for Regenerative Medicine Milan, Italy

Department of Biomedical, Surgical and Dental Sciences - Galeazzi Institute I.R.C.C.S Milan, Italy

Oral Rehabilitation Department of Tel Aviv University, Israel

DISCO Department, Marche Polytechnic, Ancona, Italy

Recent publications on current research C. Mortellaro et al.

Autophagy drives osteogenic differentiation of human gingival mesenchymal stem cells
December 2019 Cell Communication and Signaling 17(1)

Cortical bone lamina approach for mandibular large cystic defect: a case report November 2019
Journal of Biological Regulators and Homeostatic Agents

In vitro interface changes of two vs three narrow-diameter dental implants for screw-retained bar under fatigue loading test November 2019 Journal of Biological Regulators and Homeostatic Agents

PRGF® endoret injections for temporomandibular joint osteoarthritis treatment: a one-year follow-up November 2019 Journal of Biological Regulators and Homeostatic Agents

Computer-based quantification of an atraumatic sinus augmentation technique using CBCT
November 2019 Journal of Biological Regulators and Homeostatic Agents

Chronic migraine-cephalgia related to trigeminal artery: a case report of innovative regenerative approach November 2019 Journal of Biological Regulators and Homeostatic Agents

Evaluation of the effectiveness and safety of peppermint peel (PMP) soft peeling for skin ageing
November 2019 Journal of Biological Regulators and Homeostatic Agents

Soft tissue augmentation by means of silicon expanders prior to bone volume increase: a case series
November 2019 Journal of Biological Regulators and Homeostatic Agents

Short implants and platelet-rich fibrin for transcrestal sinus floor elevation: a prospective multicenter clinical study November 2019 Journal of Biological Regulators and Homeostatic Agents

Early postextraction implants may achieve osseointegration in the absence of primary stability. A pilot study November 2019 Journal of Biological Regulators and Homeostatic Agents

Autologous Tooth Graft after Endodontically Treated Used for Socket Preservation: A Multicenter Clinical Study
December 2019 Applied Sciences

Autophagy drives osteogenic differentiation of human gingival mesenchymal stem cells
December 2019 Cell Communication and Signaling 17(1)

Bovine pericardium membrane as new tool for mesenchymal stem cells commitment
July 2019 Journal of Tissue Engineering and Regenerative Medicine

Predictability of Mandibular Autorotation After Le Fort I Maxillary Impaction in Case of Vertical Maxillary Excess

April 2019 Journal of Craniofacial Surgery 30(4):1

Histologic and Radiographic Characteristics of Bone Filler Under Bisphosphonates
March 2019 The Journal of craniofacial surgery 30(4)

Medication-Related Osteonecrosis of the Jaw: The Use of Leukocyte-Platelet-Rich Fibrin as an Adjunct in the Treatment

March 2019 The Journal of craniofacial surgery

Prospective Clinical and Histologic Evaluation of Alveolar Socket Healing Following Ridge Preservation Using a Combination of Hydroxyapatite and Collagen Biomimetic Xenograft Versus Demineralized Bovine Bone

Mar 2019 - Journal of Craniofacial Surgery

Histological Evaluation of The Effect of Growth Factors in a Fibrin Network on Bone Regeneration
Mar 2019 - Journal of Craniofacial Surgery

Poly D,L/ Lactide /Co/glycolic Acid Grafting Materials in Sinus Lift

Jan. 2019 - Journal of Craniofacial Surgery

Dental Implants With a Platform-Switched Morse Taper Connection and an Osteo Growth Induction Surface

Nov - 2018 - Journal of Craniofacial Surgery

Osteotomy in Genioplasty by Piezosurgery

Oct 2018 Journal of Craniofacial Surgery

Bilateral Hyperplasia of The Coronoid Process in Pediatric Patients: What is the Gold Standard for Treatment?

Oct 2018 - Journal of Craniofacial Surgery

In Vitro Effect of Bromelain on the Regenerative Properties of Mesenchymal Stem Cells Oct 2018
of Journal of Craniofacial Surgery

Osteotomy in Genioplasty by Piezosurgery Oct 2018 Journal of Craniofacial Surgery

Three-dimensional microarchitecture and local mineralization of human jaws affected by bisphosphonate-related osteonecrosis Jul 2018 Oral Oncology

Miniaturized Electromagnetic Device Abutment Improves Stability of the Dental Implants July 2018
Journal of Craniofacial Surgery

Near infrared low-level laser therapy and cell proliferation: The emerging role of redox sensitive signal transduction pathways May 2018 Journal of Biophotonics

Bisphosphonate-related osteonecrosis of the human jaw: A combined 3D assessment of bone descriptors by histology and synchrotron radiation-based microtomography May 2018 Oral Oncology

Intense, Instantaneous, and Shooting Pain During Local Anesthesia for Implant Surgery
Apr 2018 Journal of Craniofacial Surgery

Short Implants: Analysis of 69 Implants Loaded in Mandible Compared With Longer Implants
Apr 2018 Journal of Craniofacial Surgery

Evaluation of Fibrin Clot Attachment on Titanium Laser-Conditioned Surface Using Scanning Electron Microscopy
Mar 2018 Journal of Craniofacial Surgery

Prosthetic Complications Affecting Single-Tooth Morse-Taper Connection Implants
Mar 2018 Journal of Craniofacial Surgery

Upper Eyelid Blepharoplasty With Voltaic Arc Dermabrasion Mar 2018 Journal of Craniofacial Surgery

Three-Dimensional Virtual Treatment Planning: Presurgical Evaluation Mar 2018 Journal of Craniofacial Surgery

Tissue Engineering: Use of Growth Factors in Bone Regeneration Chapter Feb 2018

Scanning Electron Microscopy Evaluation of Root Surfaces After Instrumentation With Two Piezoelectric Devices Feb 2018 Journal of Craniofacial Surgery

Three-Dimensional Virtual Treatment Planning: Presurgical Evaluation Mar 2018 Journal of Craniofacial Surgery

Erbium Yttrium–Aluminum–Garnet Laser Versus Traditional Bur in the Extraction of Impacted Mandibular Third Molars: Analysis of Intra- and Postoperative Differences May 2018 Journal of Craniofacial Surgery

Peripheral Giant Cell Granuloma Associated With Dental Implants Article Jan 2018 Journal of Craniofacial Surgery

Scanning Electron Microscopy Evaluation of Root Surfaces After Instrumentation With Two Piezoelectric Devices Aug 2017 Frontiers in Physiology

Reconstructive and Regenerative Therapy of Atrophic Jaws with New Implant Techniques: Preclinical and Clinical Studies Article Mar 2017 Hindawi BioMed Research International Volume 2017, ID 8252383

Socket Preservation Using a Biomimetic Nanostructured Matrix and Atraumatic Surgical Extraction Technique Feb 2017 The Journal of craniofacial surgery

National and international research in progress

Histological and digital evaluation of extraction sockets treated with biomaterials and rehabilitated with dental implants

Role of exosomes produced by platelets in the tissue regeneration process

Characterization and optimization of biomaterials for tissue regeneration through the use of platelet-rich plasma

Nanoparticles coated with CGF: a new approach to the treatment of cutaneous wounds

Osteogenesis and inflammatory response of scaffolds of biomaterials engineered with stem cells and enriched with Platelet Rich Plasma (PRP) on animal model

PLA matrices Biocompatible poly-lactic acid enriched with CGF for bone regeneration in dentistry

Laser biomodulation and tissue regeneration: the effect of diode laser (645nm) in stem cells and PRP

Use of L-PRF Block in the treatment of 2nd class bone defects

PRGF on human osteoblast-like cells in view of its activity on bone regeneration

Multi-center, randomized controlled clinical study on the application of CGF in the treatment of difficult wounds.

Preservation of post-extraction alveolar ridge by L-PRF: clinical and histological evaluation

Application of Fibrin Rich in Leucocytes and Platelets for the prevention and therapy of osteonecrosis of the maxillary bones by drugs

Effectiveness of the PRGF in the maxillary sinus augmentation procedure in case of perforation or total removal of the sinus mucosa.

LIQUID PHASE CGF ... analysis and characterization of the liquid phase

Use of Autologous Platelet Gel in the treatment of facial aging and soft tissue

Evaluation of the effectiveness of joint infiltrations with PRGF in the treatment of TMJ arthrosis

Topical application of autologous PRF, in Oral Surgery, in patients on anticoagulant therapy (Cumadin)

Bone tissue regeneration-induced by resveratrol from gingival stem cells: role of autophagy in cellular remodeling

Brevi informazioni aggiuntive

La Prof. Carmen Mortellaro , Professore Ordinario presso la Scuola di Medicina dell'Università del Piemonte Orientale e Professore Aggiunto al CNR Di Faenza , ha effettuato più di 3.000 interventi come primo operatore oltre che nella struttura di Novara , presso il San Luigi Gonzaga di Orbassano (Univ.di Torino) e presso il reparto di Chirurgia Generale dell'Ospedale Infantile Regina Margherita di Torino, prevalentemente su pazienti sindromici , malformati ,oncologici e con malattie sistemiche.

Inventore della tecnica chirurgia di disgiunzione mascellare con distacco del setto nasale negli incrementi del diametro trasverso.

Precursore della disinserzione dei muscoli buccinatori nelle micrognazie mandibolari in età evolutiva.

Precursore dell'utilizzo degli emocomponenti autologhi e dei fattori di crescita liberati dalle piastrine nella rigenerazione dei mascellari , nelle guarigioni difficili in pazienti diabetici oncologici , radio trattati , in soggetti in terapia con bifosfonati e rischio di osteonecrosi.

Autore dello studio preclinico e clinico sullo scaffold biomimetico di nanocristalli di mangnesio e idrossiapatite in fibre di collagene nella rigenerazione del tessuto osseo dei mascellari.

Torino 20 Gennaio 2020

