

DR. SSA ILARIA PIERPAOLA DAL PRÀ

CURRICULUM VITAE ET STUDIORUM

Place and date of birth.

Vicenza, 29/06/1965.

Identification

- **Web of Science Researcher ID:** R-3534-2017.
- **Scopus ID:** 6602285251,
- **Google Scholar:** Ilaria Dal Prà
- **Orcid ID no.:** 0000-0001-5523-4910

Qualifications and Education

- **Degree in Biological Sciences** at the University of Milan (1992) obtained by discussing the experimental thesis: "*Characterization of the N, N-methyltransferase enzyme in the synthesis of N,N-dimethylsphingosine*".
- **Trainee** (October 1991-March 1992) in the Department of Chemistry and Clinical Biochemistry Faculty of Medicine and Surgery of the University of Milan (Director: Professor Guido Tettamanti), then (April-September 1992) at the Laboratories of the Chair of Histology and Embryology (Director: Prof. Ubaldo Armato) of the Faculty of Medicine and Surgery of the University of Verona.
- **A scholarship holder of the Gigi Ghirotti** Foundation, she spent 1994 working at the Department of Hematology of the Vicenza Hospital learning and applying biochemical and cyto-fluorimetry techniques, while maintaining collaborative relationships with the Chair of Histology and Embryology (Director: Prof. U. Armato) of the Faculty of Medicine and Surgery of Verona.
- **A scholarship holder of the Gigi Ghirotti** Foundation for a second time, she spent the period January 1995-February 1996 at the Institute of Biological Sciences of the National Research Council of Canada (NRC; Ottawa, Ontario, Canada) learning advanced techniques of biochemistry and molecular biology, starting to deal with programmed cell death (apoptosis) and continuing to collaborate with the Chair of Histology and Embryology (Director: Prof. U. Armato) of the Faculty of Medicine and Surgery of Verona.
- **A scholarship holder of the Cariverona Foundation** (March 1996-October 1997), she resumed his research at the Chair of Histology and Embryology (Director: Prof. U. Armato) of the University of Verona.
- **Head of the "Laboratory for the Culture of Tissues and Cells"** of the Section of Histology and Embryology of the Department of Biomedical and Surgical Sciences (DSBC) from March 1998 to date.
- **PhD student** in the **PhD of Molecular and Cellular Biology and Pathology** from November 1997 to November 2001 (administrative offices first in Verona then in Padua and, finally, again in Verona), she worked as such at the Section of Histology and Embryology of the Department of Biomedical and Surgical Sciences (DSBC) of the University of Verona.

- **PhD in Molecular and Cellular Biology and Pathology** (13 February 2002) at the University of Padua, discussing an experimental thesis on the role of PKC- β II in etoposide-induced apoptosis (VP-16) in polyomavirus-transformed Pyf111 fibroblasts (published in the *Journal of Biological Chemistry* 2002).
- **Research fellow** from 1 October 2002 to 14 September 2004, with a project entitled "*Role of protein kinase C in apoptosis*", he continued to work at the Section of Histology and Embryology of the Department of Biomedical and Surgical Sciences (DSBC) of the University of Verona.
- **Co-responsible of the "Basic and Clinical Proteomics Laboratory"** of the Histology and Embryology Section of the DSBC, together with Dr. Anna Maria Chiarini, from August 2004 to date.
- **Technical-administrative officer Cat. D1:** after being the winner of the public competition no. 2/2004 organized by the University of Verona and carried out on 23 and 30 March 2004, she was hired as "*non-fungible*" on 15 September 2004 and assigned to the Section of Histology and Embryology of the DSBC.
- **Winner of a national competition for a position of University Researcher with an open-ended contract on 1 October 2008:** that is, one of the 16 positions assigned by the MIUR for merits of scientific excellence to the University of Verona.
- **University Researcher Confirmed with an open-ended contract following a national comparative evaluation in 2011.**
- **National Qualification as Associate Professor (2017-2028) for the SSD BIO/17 Histology** obtained in March 2017.
- **Following the approval of his application** (decree of the Rector no. 1100/2023 of 8 February 2023) from 1 October 2023 he has worked in the **Scientific Disciplinary Sector MED/50, Competition Sector 06/N1**, which became **MEDS/26D**.
- **National Qualification as Associate Professor (2023-2034) for the SSD MED50, now MEDS/26D, Applied Technical Medical Sciences**, obtained in December 2023.
- **Associate Professor starting from 1 October 2025 for the scientific disciplinary sector MEDS/26D Medical and Applied Technical Sciences.**
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Professional refresher courses for teaching

- Course "*English-Medium of Instruction*" (EMI; 2024).
- Course: "*Between Innovation and Reforms of the bachelor's and master's Degree Courses in the Health Professions*" (A.Y. 2024/25).

Organizational activity

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- **Coordinator** of the Section of Histology and Embryology, Department of Biomedical and Surgical Sciences of the University of Verona from October 2013 to October 2015.
- **Coordinator** of the Section of Histology and Embryology, Department of Neurological Sciences, Biomedicine and Movement, from November 2015 to November 2019.
- **Coordinator** of the Section of Histology and Embryology, Department of Surgical, Odontostomatological and Maternal and Child Sciences from November 2019 to 30 September 2023.

- It merged into the Section of Maxillofacial Surgery and Odontostomatology, of the Department of Odontostomatological and Maternal and Child Surgical Sciences from 1 October 2023, i.e. after the transition to the disciplinary sector 06N1 / MED 50, now MEDS26D.
- Head of the **Basic and Applied Research Laboratory of the Section of Maxillofacial Surgery and Odontostomatology, Department of Odonto-Stomatological and Maternal and Child Surgical Sciences of the University of Verona from 1 October 2023 to date.**

As Responsible and Co-Responsible ensured the operation of the laboratories for tissue and cell cultures at very high levels *in vitro* and basic and clinical proteomics, helping to define its structure and suggesting the purchase of equipment that has proved essential for scientific production.

In addition, he has personally developed and/or applied or had applied by undergraduates and research fellows **Research methods:** (the) for the crop *in vitro* with success of highly differentiated and metabolically demanding normal (untransformed) adult and mammalian human cells, such as hepatocytes, astrocytes, keratinocytes, fibroblasts, and tumor cells of various types; (ii) for the separation of proteins; (iii) for the analysis of the activity of protein kinase C (PKC) isoforms, *mitogen-activated protein kinase* (MAPK) and nitric oxide synthases (NOS); (iv) for the evaluation of multiple parameters of apoptosis (programmed cell death); e (v) for the analysis of peptides in MALDI-TOF/mass spectrometry (MS) and for their subsequent identification through the consultation of databases *online* and its validation through *Western Immunoblotting*.

Institutional positions

Delegate of the Department of Surgical, Odontostomatological and Maternal and Child Sciences to the **RUS** Commission (Sustainable Universities Network) October 2024 to date.

Teaching activity

- From A.Y. 1998/99 to A.Y. 2012/13, as an Expert in the Subject, she worked as **an Official Member of the Commission for the Examination of Cytology and Histology** later renamed **Examination of Histology and Embryology** of the Degree Course in Medicine and Surgery of the University of Verona and actively participated in the performance of the sessions of the related exam.
- From A.Y. 1998/99 to A.Y. 2012/2013 she worked as **an Official Member of the Commissions for the Histology Examination** (Integrated Course of Histology and Anatomy) in the Bachelor's Degree Courses in **Cardiocirculatory Pathophysiology and Cardiovascular Perfusion Techniques** [Verona campus] and **Nurse** [Legnago campus]) of the Faculty of Medicine and Surgery of the University of Verona and took an active part in carrying out the related exams.
- From A.Y. 1997/98 to A.Y. 2012/13 she voluntarily carried out: **Integrative Teaching Activity** (lectures, exercises, seminars) both in the **Degree Course in Medicine and Surgery** and in the Professional Short Degree Courses of **Cardiocirculatory Pathophysiology and Cardiovascular Perfusion Techniques** [Verona campus] and **Nurse** [Legnago campus] of the Faculty of Medicine and Surgery of the University of Verona.
- In the academic year 2005/06 the University of Verona officially assigned her the paid position of **Teacher and Designer** as part of the 1st and 2nd edition of the **Training Intervention:**

"Technician Course: Technical and Biotechnological Area" entitled **"Proteomics and apoptosis"** of the Faculty of Medicine and Surgery of the University of Verona.

- From A.Y. 2005/06 to 2012/13 he held, in collaboration with Prof. U. Armato, the **Elective Course** entitled **"Proteomics in Cancer and Diagnosis"** (50 credits) in the Degree Course in Medicine and Surgery of the University of Verona.
- **Lecturer in Histology** in the **Degree Courses in Nursing** [Verona campus] in the A.Y. 2012/13 (odd-numbered freshmen) of the Faculty of Medicine and Surgery of the University of Verona.
- **Lecturer in Histology** in the **Degree Course in Nursing** [Legnago campus] from A.Y. 2009/10 to 2020/2021 of the Faculty of Medicine and Surgery of the University of Verona.
- **Lecturer in Histology** from A.Y. 2012/2013 to 2022/2023 in the Degree Courses in **Physiotherapy** and **Psychiatric Rehabilitation Technicians** [Rovereto (TN) campus] of the Faculty of Medicine and Surgery of the University of Verona.
- **Lecturer in Histology** at the A.S. A 2012/13 to 2022/2023 in the Degree Course for **Psychiatric Rehabilitation Technicians** [Verona campus] of the Faculty of Medicine and Surgery of the University of Verona.
- **Lecturer in Histology** from A.Y. 2010/11 to 2015/16 in the **Master's Degree Course in Bioinformatics and Medical Biotechnology**, University of Verona.
- In 2014 and 2022 he worked as a **lecturer** in the **Cell and Tissue Biology Course** of the Tandem Project of the Faculty of Medicine and Surgery of the University of Verona.
- **Lecturer** in the course on **Transversal Skills** at the University of Verona entitled "How to stem the Alzheimer's epidemic" in 2022-first and second semester and in 2023.
- **Lecturer** in **Evidence base practice applied to Oral Hygiene** in the A.Y. 2025-2026 in the **Degree Course in Dental Hygiene**.
- **Lecturer in translational research: from basic research to clinical research in the A.Y. A 2025-2026 Master's Degree in Health Sciences of Technical Health Professions**

Co-supervisor and Tutor at Degree Thesis

- **Co-supervisor** of the **degree thesis**: "Development of immunoenzymatic assays for the validation of antibodies directed to the recognition of the NS-3 protein of the BVDV virus in MDBK cells". Graduate: Noemi Maria Licciardi. **Master's Degree in Bioinformatics and Medical Biotechnology**, A.Y. 2014/15.
- **Co-supervisor** of the **Master's Degree thesis in Dentistry and Dental Prosthetics**: "Proliferation and inflammatory response to two different bioglasses for bone regeneration: pilot study on HACAT cells". Graduate: Federica Melloni, A.Y. 2023/24.
- **Co-supervisor** of **Master's Degree Thesis in Dentistry and Dental Prosthetics**: "The effect of cross-linked hyaluronic acid on clot stability: *in vitro* study." Graduate: Samira Brahimi, A.Y. 2024/25.

Participation in the board of professors of MUR accredited PhDs

- **Lecturer** in the PhD Course in **Clinical and Experimental Biomedical Sciences** from 2009 to 2024.
- **Lecturer** in the PhD Course in **Regenerative Medicine, Technological and Translational Surgery** from 2024 to date.
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Tutor and Co-supervisor in the PhD in Clinical and Experimental Biomedical Sciences of the following PhD theses:

1. Dottorando: Dajsong Liu: " *Differentiation of Human fibroblasts is affected by culture on silk fibroin films as revealed by changes in focal adhesions and CD44.*" XXVIII ciclo.
2. Dottorando: Peng HU: " *Exosomes from human fibroblasts and HaCaT cocultured on 3D silk fibroin nonwovens electrospun hybrids stimulate neoangiogenesis and regulate inflammation in vitro*" INVITE Project-2020. XXXVI ciclo.
3. Dottorando: Jun Wu: " *Both spectral imaging and histological measurements provide a consistent evaluation of burn wounds depth—A prospective, single-center, parallel design clinical study*" XXXVIII ciclo.
4. Dottorando: Meifang Yin: " *Studies on human skin engineering and regeneration using nonwoven silk fibroin scaffolds for burns therapy*". XXXIX ciclo in corso.
5. **Chairman of the Commission for the final examination of the PhD in Clinical and Experimental Biomedical Sciences** of the PhD student Tianhua Zhang; thesis title: " *The Calcium Sensing Receptor Role in Cervical Cancer Cells*". 2025. XXXVII cycle.

Department Committees and Degree Courses:

1. **Commissioner** in the evaluation of HIF-2023 projects on Department of Excellence funds. (2023-2027)
2. **Commissioner** in the tests of Degree Courses in the Health Professions year 2013
3. **Commissioner** in the tests of Degree Courses in the Health Professions year 2014.
4. **Substitute for** the commission of the admission test to the master's degree courses in the health professions year 2024

Scientific activity congruent with the SSD MEDS26/D

She has carried out basic research and applied research in Translational and Precision Medicine, whose main topics have been and are:

- production, *banking* and use of skin auto- and xenotransplants for the treatment of severe burns and those with chronic skin ulcers.
- preparation of new models of human artificial skin and dermis.
- investigations on innovative types of *protein scaffolds* for the engineering/regeneration and vascularization of skin tissues and connective tissue in general.
- studies on the molecular mechanisms underlying the therapeutic effects of the water of the Terme di Comano (Trentino) using psoriatic and normal human keratinocytes as experimental models.
- application of MALDI-TOF/MS for the identification of "*smart drugs*" in "*herbal blends*" in Forensic Medicine.
- identification by proteomic investigations of protein species present in the urine of healthy patients suffering from various diseases.

- preparation of a test based on three protein *markers* that allows the early determination of the real risk of developing cervical cancer in patients infected with high-risk oncogenic strains of human papillomaviruses (*Human Papilloma Viruses*);
- development of diagnostic *kits* for veterinary and human use in collaboration with the company AB-Analitica S.r.l. (Advance in Biomedicine) of Padua.
- identification of a new potential therapeutic approach to Alzheimer's disease based on preclinical studies conducted on astrocytes and normal cortical neurons of adult humans cultured *in vitro*;
- effects of cross-linked hyaluronic acid on blood clot formation steps and its properties in combination with platelet-rich plasma as a biomaterial that promotes wound healing and tissue regeneration;
- studies on the mechanisms of lysis of laminae, proteins of the nuclear cytoskeleton, during apoptosis from chemotherapy drugs;
- biochemical and proteomic investigations on the role of Protein kinase C (PKC) isoforms in drug apoptosis in cancer cells;
- proteomic investigations on the mechanisms of damage induced *in vitro* in human neurons and activation of normal cortical astrocytes in adult humans by β -Amyloid peptides and various pro-inflammatory cytokines;
- analysis of the mechanisms mediating the induction of nitric oxide synthase-2 (NOS-2) by (i) inflammatory cytokines; (ii) $Ab_{(25-35)}$; (iii) basic myelin protein, and (iv) prion protein (106-126) in normal cortical astrocytes of adult humans in *in vitro culture*;
- analysis of the mechanisms mediating the induction, endogenous production and secretion of Vascular Endothelial Growth Factor (VEGF)-A and $A\beta_{(x-42)}$ peptides by (i) pro-inflammatory cytokines and (ii) exogenous $Ab_{(25-35)}$ in normal adult human cortical astrocytes cultured *in vitro*.
- preclinical studies on the role of the *Calcium-sensing Receptor* (CaSR) in the development of Alzheimer's disease using astrocytes and untransformed neurons of the temporal cerebral cortex of adult humans cultured *in vitro* and treated with $\beta_{\text{exogenous}} A_{(25-35)}$;
- analysis of the signaling mechanisms of the primary cilium of the granular neurons of the *gyrus dentatus* of the dorsal hippocampus and of the consequences of their alteration in the development of Alzheimer's disease;
- proteomic investigations on the molecular mechanisms operating in non-syndromic aneurysms of the ascending tract of the human aorta;
- proteomic investigations on the molecular mechanisms of maladaptation of the root of the pulmonary artery transplanted into the aortic site thanks to Ross surgery;

RESPONSIBILITY AND PARTICIPATION IN SCIENTIFIC STUDIES AND RESEARCH ENTRUSTED BY QUALIFIED PUBLIC AND PRIVATE INSTITUTIONS:

- **Cute Fund:** services on behalf of third parties for the Integrated University Hospital of Verona (1995-2009): supply of autologous human keratinocyte laminae and sterile and living neonatal porcine skin for the treatment of severe burns and chronic ulcers.
- **Fondazione Cariverona:** 1999-2002: *Health Project 1999-2002*, "The mechanisms of action of $A\beta$ s and microglial cytokines on human neuroblastoma cells". Componente dell'unità di ricerca.
- **Terme di Comano** (Comano, TN) 2003: Research Contract on "*Effects of Comano thermal water on the proliferation, differentiation and expression of cytokines and chemokines by human keratinocytes in vitro*". Component of the research unit

- **Fondazione Cariverona** 2007-2008: Cardiovascular Disease Projects 2007 and 2008, *"The proteomics effects of continuous or pulsatile perfusion on human adult skeletal muscle and of Vascular Assist Devices on myocardiocytes"*. Componente dell'unità di ricerca.
- **ESF (European Social Fund)** 2010: *"Development of innovative diagnostic kits for the early assessment of predictive markers of the actual risk of cervical cancer in patients infected with human papillomavirus (HPV)"*. Member of the research unit.
- **ESF (European Social Fund)** 2012: *"Design and development of Lateral Flow Immuno-Assay (LFIA) tests for veterinary use for the rapid control of BVDV infection in cattle farms."* Member of the research unit.
- **Friuli-Venezia Giulia Region** 2013: Contract for third parties. Rep.476/2013 Protocol 30/07/2013: *"Innovative biotechnologies for advanced viral diagnostics"*. Component of the research unit
- **Biotechnology Co., Ltd.** (Chongqing, Sichuan Province, P. R. China): **Scientific Advisor** from 2013 to date.
- **Silk Biomaterials** (Como) 2017-2019: consultancy contract on *"Biocompatibility of vascular prosthetic constructs made of silk fibroin in vitro and histopathological analysis of these constructs in vivo."* Principal investigator.
- **University of Verona**. HIF (Health Innovation Factory) Project 2023-2026 on the funds of the Department of Excellence ('23-'27) (Funded): *"Effects of cross-linked hyaluronic acid on the stages of blood clot formation and its properties in combination with platelet-rich plasma as a biomaterial promoting wound healing and tissue regeneration"*. Coordinator Prof. Daniele De Santis. Member of the research unit.

Scientific responsibility and participation in national, European and international research projects, admitted to funding on the basis of competitive calls for peer review.

- **PRIN 1999** Ministry of University and Scientific and Technological Research: *"Validation of simple or composite silk fibroin scaffolds for human tissue engineering."* Member of the research unit.
- **PRIN 2005** Ministry of University and Scientific and Technological Research *"Proteomics of human non-syndromic aneurysms of the ascending aorta"*. Member of the research unit.
- **PRIN 2020** Ministero dell'Università e della Ricerca Scientifica e Tecnologica: *"Does Amyloid- β •Calcium-sensing Receptor Signalling Promote Neuroinflammation by Activating NLRP Inflammasomes in Nontumorigenic Adult Human Cortical Neural Cells?"* Principal Investigator. Valutato positivamente.
- **Joint Project 2014**: Università di Verona-AB Analitica S.r.l. Advances in Biomedicine (Padova). Assegnato: *"Design and production of a new diagnostic kit revealing or excluding the HR-HPV-driven active tumor progression based on new biomarkers identified via the proteomic analysis of cervical cells samples."* Principal Investigator.
- **Joint Project 2018**: University of Verona-C.M.S.R. Veneto Medica SRL (Altavilla, VI). Assigned: *"Proteomic analysis of early precancerous biomarkers in CIN1 cervicovaginal cells infected with oncogenic subtypes of the human papilloma virus (HPV)"*. Principal Investigator.

- **European Union “Invite Project” Horizon 2020:** Research and Innovation Program under Marie Skłodowska-Curie Grant Agreement. Titolo del Progetto: “*Mechanisms underlying hypertrophic scar formation.*” Supervisore.

International cooperation activities

- The **funding** of his **COOPERINT 2016 Project** allowed, in July 2017, the permanence for research and teaching purposes at the University of Verona of Prof. JUN WU, Director of the Institute of Burns Research, Southwest Hospital, Third Military Medical University, Chongqing, Sichuan Province, P. R. China.
- **Promoter**, together with Prof. Ubaldo Armato, Dr. Anna Maria Chiarini and Prof. Pietro Minuz, of an **International Collaboration Agreement** for the three-year period **2017-2019** between the PhD Course in Clinical and Experimental Biomedical Sciences of the Doctoral School in Life and Health Sciences of the University of Verona and the University Hospital of ZunYi, Guizhou Province, P. R. China. This agreement has been **renewed for the three-year period 2020-2023**. Under this agreement, two of Professor Minuz's residents spent a three-week period at the ZunYi University Hospital, and three Chinese students from Zunyi University became PhDs in Biomedical and Experimental Sciences at the University of Verona. Another Chinese student is working in the last year of the same PhD. Three of the four scholarships that supported the stay of Chinese students were and are paid by Chinese institutions.
- The **funding** of her **COOPERINT 2018 Project** allowed Prof. KAI YU NIE of ZunYi Medical College Affiliate Hospital, University of ZunYi, Guizhou Province, P. R. China, to stay in October 2018 at the University of Verona for research and teaching purposes.
- He served as a “**Tutor**” of the **PhD student** in Biomedical and Experimental Sciences (UNIVR) of Dr. PENG HU, surgeon of the Medical College Affiliate Hospital, University of ZunYi, Guizhou, P. R. China. Dr. Hu was the winner of a three-year scholarship announced by the INVITE PROJECT 2018 between the University of Verona, the European Union and the Veneto Region.
- **Promotrice**, insieme con il Prof. Ubaldo Armato e la Dott.ssa Anna Maria Chiarini, del “**Memorandum of Understanding for Research Collaboration**” between the Histology & Embryology Section, Department of Surgery, Dentistry, Pediatrics & Gynecology, Verona University, Italy, and the Department of Burns, diretto dal Prof. Jun Wu, della Sun Yat-Sen University, Guangzhou, China (2019).
- **Promoter**, together with Prof. Daniele De Santis, Dr. Anna Maria Chiarini, and Prof. Ubaldo Armato and Prof. Pier Francesco Nocini **of the International Collaboration Agreement** between the University of Verona and the University of ZunYi and the hospitals affiliated to it (2024).

- **Promoter**, together with Prof. Daniele De Santis, Dr. Anna Maria Chiarini, and Prof. Ubaldo Armato and Prof. Pier Francesco Nocini of the **International Collaboration Agreement** between the University of Verona and the University of Shenzhen, Guangdong Province, P. R. China. (2024).
- **Moderator** in the First Symposium Italy China Austria PhD in Surgical and Cardiovascular Sciences, after signing of the two agreements by the Rector of the University of Verona and the representatives of Zunyi and Shenzhen. May 24, 2024.
- On the basis of these last two agreements, and the previous agreement, six Chinese students have been hosted and are still present and working at the University of Verona, financed with annual scholarships from the **"Special Project of Talent Training in Western Region/Local Cooperation Project,"** sponsored by the **China Scholarship Council (CSC)**.
- Also under the same agreement, a Summer School entitled **"Zhi & Xing Guizhou Summer Camp for Medical Students"** was held at ZunYi University between 16 and 24 June 2025. Six students from the Medicine and Surgery and Dentistry courses of the University of Verona participated in the initiative. The event was funded for Chinese culture courses and accommodation for Italian students by the University of ZunYi.
- Based on the agreement with Shenzhen University and its affiliated hospital, a congress entitled: **"Marco Polo Medicine forum 2025: Reconstruction Part I: Good cure, Surgery Treated"** 28 to 30 August 2025 in Shenzhen, Guangdong Province, P.R. China. The Shenzhen Medical College has borne the expenses for eight *junior doctors* (under 45 years of age) of the University of Verona.

Direction or participation in the activities of a research group characterized by collaborations at national and international level

She has had and/or has in place collaborative research projects with:

- l'Institute for Biological Sciences del National Research Council (NRC) of Canada (Ottawa, Ontario, Canada)
- the German Textile Institute (ITV; Denkerdorf, Germany)
- la Ditta NPS Pharmaceuticals (Toronto, Ontario, Canada)
- l'Institute of Burn Research, Southwest Hospital, Third Military Medical University, Chongqing, Sichuan Province, China
- l'Affiliated Hospital della ZunYi Medical University, Guizhou Province, P. R. China.
- il Department of Burns, Sun Yat-Sen University, Guangzhou Province, P. R. China
- il Department of Burn and Plastic Surgery, Shenzhen Institute of Translational Medicine, The First Affiliated Hospital of Shenzhen University (o Shenzhen Second People's Hospital), Shenzhen, Guangdong Province, P. R. China
- il Department of Neurology, Southwest Hospital, Chongqing, Sichuan Province, P. R. China.
- l'Engelhardt Institute of Molecular Biology, Akademy Nauk (Accademia delle Scienze), Moskwa, Federazione Russa
- the Burn Center of the First Plastic Surgery of the Maggiore Hospital in Verona

- the Institute of Biochemistry of the University of Verona
- the Department of Materials of the University of Trento
- the Institute of General Pathology of the University of Verona
- the Section of Dermatology and Venereology of the Department of Biomedical and Surgical Sciences of the University of Verona
- the Cardiac Surgery Section of the Department of Biomedical and Surgical Sciences of the University of Verona
- the Nephrology Section of the Department of Biomedical and Surgical Sciences of the University of Verona
- the Neurology Section of the Department of Neurological, Vision and Movement Sciences of the University of Verona
- the Experimental Station for Silk, later called Innovhub (Milan)
- the Department of Bioengineering of the Politecnico di Milano
- the Section of Forensic Medicine of the Department of Public Health of the University of Verona
- the Research Centre of the Terme di Comano (Trentino)
- the Microbiology and Virology Laboratory of the San Bortolo Hospital in Vicenza.
- the company Silk Biomaterials (now called Klisbio) S.r.l. of Como.

Assistance activities:

From 1997 until February 2008 he collaborated with the Burn Center of the First Division of Plastic Surgery of the Maggiore Hospital in Verona, providing on request adequate quantities of:

- **human keratinocyte laminae** cultured *in vitro* for autotransplantation on severe burns; and
- ***Sterile and living split-skin flaps of newborn pigs used as temporary skin bandages*** that have been applied to over 400 very extensively burned patients, saving the lives of the most serious ones, accelerating their healing and reducing the incidence after healing of retracting hypertrophic scars and keloids. The same *flaps* have also been applied to wearers of chronic skin ulcers of various etiologies.

Formal assignment of teaching or research assignments and *fellowships* at universities and qualified foreign or supranational research institutes:

She has worked as:

- **Guest worker** at the National Research Council of Canada (NRC; Ottawa, Ontario, Canada) in the period January 1995-February 1996 taking advantage of the second scholarship awarded to her by the Gigi Ghirotti Foundation of Vicenza.
- **Guest worker** presso il Proteomics Laboratory dell'Institute of Burn Research, Southwest Hospital, Third Military Medical University, Chongqing, Sichuan Province, P. R. China, nei mesi di Aprile e Maggio 2012.

- **Scientific Consultant** dal Gennaio 2020 al 2024 del Department of Burns, The Second People Hospital, dell'Università di Shenzhen (Guangdong Province, P. R. China)

Scientific societies

She has been and/or is a member of the following Scientific Societies:

- ***International Society of Biochemistry***
- ***Italian Society of Biomaterials.***
- ***Italian Society of Histology and Embryology***

Reviewer/Referee

She has repeatedly worked as a reviewer/referee for scientific journals:

- *Human Genetics and Embryology*
- *Neurological Research*
- *Journal of Applied Polymer Science*
- *NeuroMolecular Medicine*
- *Experimental Neurology*
- *Tissue Engineering*
- *Experimental and Therapeutic Medicine*
- *Oncology Reports*
- *Molecular Immunology*
- *Heliyon*
- *eBiomedicine*

Direction or participation in scientific committees and editorial groups of journals.

Member of the *Editorial Board* of scientific journals:

- *Heliyon (Cell Press)*
- *Oncology Letters.*
- *Molecular Medicine Reports*
- *HSOA Journal of Cytology & Tissue Biology*
- *Frontiers in Neurosciences: Neurodegeneration section*
- *Regenesis Repair Rehabilitation*

Reviewer on behalf of MIUR (Italian Ministry of University and Research)

- She has worked as **Official Reviewer of PRIN Research Projects** submitted to the MUR in the years 2012, 2013, 2019 and 2020.
- **REPRISE** has been registered since 2021 (register of scientific experts established at the MUR).
- 2021 Revisore: del Grant programme: Dementia research programme. Dementia Fellowships-Olanda.

Biographical Quotes

Her biographical notes are given in *Who's Who in Science and Engineering*, 7th ed., 2003 and 8th ed. 2004-05 of MARQUIS Who's Who®.

Official awards and recognitions:

1. **Winner of a national competition for a PTA position cat. D1 for non-fungible figure** (30 March 2004).
2. **Winner of a national comparative evaluation** of one of the 16 positions of **Permanent University Researcher** assigned by the MIUR to the University of Verona for merits of scientific excellence (2008).
3. **Best poster 1st place at the 7th International Congress on Vascular Dementia**, Riga, Latvia, Ottobre 2011.
4. **One-off incentive bonus** in 2014 provided for by Article 29, paragraph 19 of Law no. 240 of 30 December 2010 following a positive evaluation of his university activity.
5. **Funding for basic research**, obtained following evaluation by ANVUR of the publications presented in 2017.
6. Five distinct **Certificates of Excellence in Reviewing** awarded by Spandidos Publications (2017-present).
7. **Start Cup Lombardia 2018 Award of the Lombardy Region** for an innovative therapy project for Alzheimer's disease.
8. **"Bright future Ideas AWARD"** obtained at the **PNI 2018 of the Star Cup Verona 2018** awarded by the **International Trade & British Consulate General in Milan** for an innovative therapy project for Alzheimer's disease.

Innovation and patents

1. She is one of the inventors of the **Italian Patent ITN:102019000010428** of 28 June 2019 entitled: "*In vitro cell culture system under aerobic conditions suitable for physiological, pathological, pharmacological and toxicological preclinical investigations*" Approved.
2. She is one of the inventors of the **European Patent EU:20743589.2** of 29-06-2020 entitled: "*In vitro cell culture system under aerobic conditions suitable for physiological, pathological, pharmacological and toxicological investigations*". Approved.
3. She is one of the inventors of an **International Patent (International Patent Publication No. WO02029141, Appl. No. PTC/IT0100501; April 11, 2002)** entitled: "*Bio-artificial substrate for the production of animal and, in particular, human tissue and organs*" on a new type of nonwoven (*nonwoven*) based on a silk protein (fibroin) of *Bombyx mori* that is suitable for use in tissue engineering and/or regeneration. Approved.
4. She is one of the inventors of an **International Patent WIPO/ PCT WO 2013/098588 A1** entitled: "*Use of calcilytic drugs as a pharmacological approach to the treatment and prevention of Alzheimer's Disease, Alzheimer's disease-related disorder, and Down's Syndrome Neuropathies*".
5. She is one of the inventors of an **Italian Patent for Industrial Invention No. 0130945** entitled: "*Bioartificial substrate for the production of animal tissues and organs, in*

particular human" filed on October 1, 1999. Ranking C12N005. Granted on 23 January 2002 (patent certificate from the Ministry of Productive Activities).

6. She is one of the inventors of the **Italian Patent No. IT/01/00501** entitled "*Silk fibroin tissue for biomedical applications.*" Filed 02 October 2000. Granted on 13 May 2003 (patent certificate from the Ministry of Productive Activities)