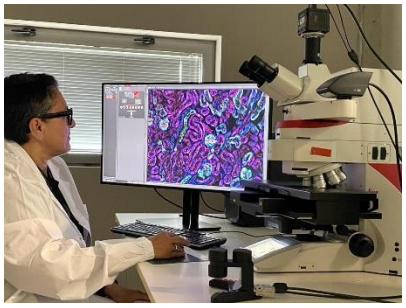
Prof. NICOLETTA GAGLIANO, PhD

Full Professor of Histology



1998: PhD degree, Physiopathology of Aging - University of Milan, Italy. Topic of the PhD thesis: Study of age-related kidney fibrosis in an in vivo experimental model.
1994-1998: PhD student in the Physiopathology of Aging PhD program - University of Milan, Italy. Main focus of the research activity: extracellular matrix remodeling and collagen turnover in age-related fibrosis.
1992: Bachelor's degree, Biological Sciences, University of Milan, Italy. Main focus of the research activity: study of lithostatin in chronic pancreatitis.

Positions and Employment
2023- : Full Professor of Histology, Department of Biomedical Sciences for Health, University of Milan, Italy
2020-2023: Full Professor of Human Anatomy, Department of Biomedical Sciences for Health, University of Milan, Italy
2010-2020: Associate Professor of Histology, Department of Biomedical Sciences for Health, University of Milan, Italy.
2002-2010: Assistant Professor of Human Anatomy, University of Milan, Italy.
2006: Adjunct Assistant Professor at the Department of Internal Medicine, Texas tech University Health Sciences Center, School of Medicine, Lubbock, TX, USA.
1999-2001: Post-doc fellow, University of Milan, Italy. Project: Ventricular dysfunction in age related fibrosis: role for angiotensin II receptors.
1999-2000: Post-doc fellow, University of Milan, Italy. Project: Polymorphism of vitamin D receptor in aging subjects.
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Editorial board
- **2007 - 2017** Editorial Board Open Dentistry Journal.
- **2015 - 2023** Editorial Board Pancreas-Open Journal.
- **2017 -** Editorial Board World Journal Gastrointestinal Pathophysiology
- **2019 -** Editorial Board and Academic Editor Cells (MDPI)

Guest Editor activity
- **2017:** Guest Editor and academic editor for the Special Issue "Extracellular Matrix Remodeling" published in Cells (MDPI) (ISSN 2073-4409). The reprints of the submitted papers were published in the book "Extracellular Matrix Remodeling", Ed. MDPI St. Alban-Anlage 664052 Basel, Switzerland, ISBN 978-3-03921-629-1 (PDF) e ISBN 978-3-03921-628-4 (Pbk).
- **2019:** Guest Editor and academic editor for the Special Issue "Extracellular Matrix Remodeling 2019": published in Cells (MDPI) (ISSN 2073-4409).
- **2020:** Guest Editor and academic editor for the Special Issue "The Cytoskeleton: Structural, Functional, and Pathological Aspects" published in Cells (MDPI).
- **2024:** Guest Editor and academic editor for the Special Issue "Imaging Methods in Cell Biology" published

in Cells (MDPI).

Grant reviewer activity

- **2017**: Reviewer for The Wellcome Trust, UK/India Alliance: Uncover the polycomb driven epigenetic regulation of EMT in pediatric malignancy neuroblastoma and its nanotherapeutic intervention. Grant Reference: IA/I/17/2/503296.
- **2020**: Reviewer for The Wellcome Trust, UK/India Alliance: Investigating alterations in epigenetic machinery, mechanosignalling and chromatin architecture in colorectal cancer cells during epithelial to mesenchymal transition. Grant Reference: IA_TSG_20_1_600035.
- **2021:** Reviewer for Medical Research Council (MRC): Understanding the role of fluoroquinolone antibiotics in tendon injury. Grant Reference: MR/W001748/1.

Professional memberships

1998-2012 Member, Italian Society of Gerontology and Geriatrics
2002- Member, Italian Society of Anatomy and Histology (SIAI)
2004- Member, Italian Society for the Study of Connective Tissue
2018- Member, International Society for Matrix Biology (ISMB)
2020-2023 Member of the scientific committee of the Interdisciplinary Centre for Nanostructured Materials and Interfaces (CIMAINA) of the Milan University.

Research interest

Nicoletta Gagliano, PhD, is the director of the Extracellular Matrix Lab at the Department of Biomedical Sciences for Health of the University of Milan, Italy.
She is a molecular biologist with high experience in cell cultures, gene and protein expression analysis, and morphologic methods.
The field of research is focused on three main topics:

1) study of the expression of genes and proteins involved in extracellular matrix remodeling and collagen turnover in different pathological conditions, such as fibrosis, gingival overgrowth and tumor invasion.

2) study of extracellular matrix remodeling and collagen turnover tendons and tenocytes in physiological and pathological conditions, and after treatment with medical devices.

3) study of epithelial-to-mesenchymal transition (EMT) mechanisms carcinomas and characterization of the effect of extracellular matrix components and 3D arrangement on the expression of EMT markers in tumor progression.

Author information and bibliometric indexes

Scopus ID: 6701720160
ORCID: 0000-0002-3393-3144
Researcher ID: L-1485-2016
h-index: 31 (scopus)
N. of publications: 103 (scopus)

Research Support

- **2024**: Research funding by Contrad Swiss SA. Role: PI. Research on the effect of ST500® on human tenocytes.
- **2023**: PRIN PNRR 2022. (PI: Dr. Francesca Bianchi). Exosomal non-coding RNAs as triggers of type I interferon-mediated autoimmune diseases: Aicardi Goutières syndrome as a paradigm.
- **2023**: Unimi grant for “progetti Linea2”. Role: Co-PI. IroN and epiThELiaL to mEsenChymal Transition: partners in crime in enhancing pancreatic ductal adenocarcinoma aggressiveness? [INTELLECT]
- **2021**: Grandi Sfide di Ateneo (GSA) “HEBE Project - Healthy aging versus inflamm-aging: the role of physical Exercise in modulating the Biomarkers of age-associated and Environmentally determined chronic

diseases". PI: Prof. Mario Clerici.

- **2021**: Pierrel Pharma s.r.l.: Research on extracellular matrix remodeling of gingival connective tissue.
- **2021**: AIRC (PI: Prof. Lucia Sfondrini). Targeting pulmonary microbiota by aerosol: a new strategy to hit tumor cells in the lung.
- **2020**: Grant Unimi project Linea2. Role: PI. Collagen turnover pathways in primary muscle fibroblasts obtained from a Dystrophic Mouse Model of Duchenne Muscular Dystrophy and cross-talk with the skeletal muscle cells.
- **2020:** Grant SEED - Linea 3 del Piano di Sostegno alla Ricerca 2020 (Seal of Excellence - SoE SEED 2020). Title: A conversation between 3D melanoma models and human neutrophils: deciphering the role of tumor-derived exosomes on neutrophil switch (MELanoma And Neutrophils INteraction) – MELANIN.
- **2020:** Research funding by Guna S.p.A. Role: PI. Characterization of the role of mechanotransduction on the morphology and collagen turnover pathways of human tenocytes cultured on fibrillary collagen.
- **2017:** Research funding by Guna S.p.A. Role: PI. Characterization of collagen turnover in human tenocytes cultured on fibrillary collagen.
- **2017:** Grant Unimi project Linea2. Role: PI. Characterization of cell heterogeneity in cultured human pancreatic ductal adenocarcinoma cells in relation to migration, invasion and the expression of epithelial-to-mesenchymal markers.
- **2015**: Grant Unimi project Linea2. Role: PI. Tumor-stroma cross-talk in pancreatic ductal adenocarcinoma: focus on the effect of extracellular matrix on tumor cell phenotype.
- **2014**: Grant Unimi project Linea B. Role: PI. Characterization of the effect of the tumor-stroma cross-talk on pancreas adenocarcinoma cell phenotype.
- **2009**: Fondazione Don Gnocchi. Role: co-PI. Morphologic and molecular study of biocompatibility and inflammation markers in an in vivo experimental model after treatment with a microneedle device.
- **2005-2008:** Ariel Foundation. Role: PI. Study of the effect of spasticity on the expression of genes and proteins involved in tendon connective tissue remodeling in patients affected from cerebral palsy.
- **2005-2008:** Nowicky Pharma (Vienna, Austria). Role: PI. Study of the effect of Ukrain on extracellular matrix remodeling, tumor invasion and epithelial-to-mesenchymal transition in glioblastoma, renal carcinoma and pancreatic ductal adenocarcinoma cells.
- **2005:** Sinclair Pharmaceuticals (UK). Role: co-PI. Study of the protective effect of a lotion to treat radiation dermatitis in a 3D experimental model of human skin organotypic cultures.