europass

Christina Pagiatakis

Nationality: Greek **Date of birth:** 17/10/1986 **Phone number:** (+39) 0332421420

Email address: christina.pagiatakis@uninsubria.it

Work: Via J.H. Dunant 3, 21100 Varese (Italy)

WORK EXPERIENCE

University of Insubria – Varese, Italy

Assistant Professor (RTD-A) of Comparative Anatomy and Cytology

[01/03/2023 – Current]

IRCCS Humanitas – Milan, Italy

Post-Doctoral Fellow

[01/09/2015 – 02/2023]

York University, Department of Biology – Toronto, Canada

Research Fellow

[13/02/2015 – 30/08/2015]

York University, Department of Biology – Toronto, Canada

PhD Student

[01/09/2008 – 13/02/2015]

York University, Department of Biology – Toronto, Canada

BSc Honours Thesis

[01/04/2007 – 31/12/2007]

EDUCATION AND TRAINING

PhD in Cellular Biology

York University [01/09/2008 – 13/02/2015]

City: Toronto | **Country:** Canada

Bachelor of Science - Specialized Honours in Biochemistry

York University [01/09/2004 – 18/06/2008]

City: Toronto | **Country:** Canada

PUBLICATIONS

Statistics
H-index (Google Scholar): 15 **Total Citations** (Google Scholar): 1177
Scopus Author ID: 57210297605 **ORCID ID**: 0000-0002-9315-9648 **SciProfiles**: 1706988 **Loop profile**: 1869572

Tissue regenerative potential of human dental pulp mesenchymal stem cell conditioned medium in wound healing of the medicinal leech Marcolli G, Barone L, Baranzini N, Rossi F, Nebuloni AM, Pulze L, Sadia S, Zecca PA, **Pagiatakis C**, Papait R, Grimaldi A, Gornati R. Stem Cell Res Ther. 2025 Nov 28;16(1):673. doi: 10.1186/s13287-025-04683-x.

Nanostructured Scaffold, Combined with Human Dental Pulp Stem Cell Secretome, Induces Vascularization in Medicinal Leech Model Marcolli G, Baranzini N, Barone L, Rossi F, Pulze L, **Pagiatakis C**, Papait R, Grimaldi A, Gornati R. Micromachines (Basel). 2025 Oct 10;16(10):1150. doi: 10.3390/mi16101150.

Epigenetics: A link between toxicants and diseases Romanò A, **Pagiatakis C**, Gornati R, Bernardini G, Papait R. Epigenetics: A link between toxicants and diseases. iScience. 2025 May 8;28(6):112613. doi: 10.1016/j.isci.2025.112613.

Unravelling Plasma Extracellular Vesicle Diversity With Optimised Spectral Flow Cytometry Boselli D, Clemente F, Di Terlizzi S, **Pagiatakis C**, Papa L, Del Zotto G, Villa C, Ramirez GA, Maugeri N, Manfredi AA, Anselmo A. J Extracell Biol. 2025 Apr 25;4(4):e70045. doi: 10.1002/jex2.70045.

Dental pulp mesenchymal stem cell (DPSCs)-derived soluble factors, produced under hypoxic conditions, support angiogenesis via endothelial cell activation and generation of M2-like macrophages Barone L, Cucchiara M, Palano MT, Bassani B, Gallazzi M, Rossi F, Raspanti M, Zecca PA, De Antoni G, **Pagiatakis C**, Papait R, Bernardini G, Bruno A, Gornati R. J Biomed Sci. 2024 Nov 4;31(1):99. doi: 10.1186/s12929-024-01087-6.

Unlocking cardiac motion: assessing software and machine learning for single-cell and cardioid kinematic insights Buratti ni M, Lo Muzio FP, Hu M, Bonalumi F, Rossi S, **Pagiatakis C**, Salvarani N, Fassina L, Luciani GB, Miragoli M. Unlocking cardiac motion: assessing software and machine learning for single-cell and cardioid kinematic insights. *Sci Rep*. 2024 Jan 20;14(1):1782. doi: 10.1038/s41598-024-52081-9

Cardiac Aging Is Promoted by Pseudohypoxia Increasing p300-Induced Glycolysis Serio S*, **Pagiatakis C***, Musolino E, Felicetta A, Carullo P, Laura Frances J, Papa L, Rozzi G, Salvarani N, Miragoli M, Gornati R, Bernardini G, Condorelli G, Papait R. Cardiac Aging Is Promoted by Pseudohypoxia Increasing p300-Induced Glycolysis. *Circ Res*. 2023 Sep 29;133(8):687-703. doi: 10.1161/CIRCRESAHA.123.322676.*Shared First Authorship

Iron Oxide Nanoparticles with and without Cobalt Functionalization Provoke Changes in the Transcription Profile via Epigenetic Modulation of Enhancer Activity Gamberoni F, Borgese M, **Pagiatakis C**, Armenia I, Grazù V, Gornati R, Serio S, Papait R, Bernardini G. Iron Oxide Nanoparticles with and without Cobalt Functionalization Provoke Changes in the Transcription Profile via Epigenetic Modulation of Enhancer Activity. Nano Lett. 2023 Oct 11;23(19):9151-9159. doi: 10.1021/acs.nanolett.3c01967.

Therapeutic Potential of EVs: Targeting Cardiovascular Diseases Laura Francés J*, **Pagiatakis C***, Di Mauro V, Climent M. Therapeutic Potential of EVs: Targeting Cardiovascular Diseases. *Biomedicines*. 2023 Jul 6;11(7):1907. doi: 10.3390/biomedicines11071907.*Shared First Authorship

A chromEM-staining protocol optimized for cardiac tissue Musolino E, **Pagiatakis C**, Pierin F, Sabatino D, Finzi G, Gornati R, Bernardini G, Papait R. A chromEM-staining protocol optimized for cardiac tissue. *Front Cell Dev Bio*l. 2023 Jul 5;11:1123114. doi: 10.3389/fcell.2023.1123114.

Non-Coding RNAs in Cell-to-Cell Communication: Exploiting Physiological Mechanisms as Therapeutic Targets in Cardiovascular Pathologies Laura Francés J, Musolino E, Papait R, **Pagiatakis C***. Non-Coding RNAs in Cell-to-Cell Communication: Exploiting Physiological Mechanisms as Therapeutic Targets in Cardiovascular Pathologies. *Int J Mol Sci*. 2023 Jan 22;24(3):2205. doi: 10.3390/ijms24032205.*Corresponding Author

The Yin and Yang of epigenetics in the field of nanoparticles Musolino E*, **Pagiatakis C***, Serio S, Borgese M, Gamberoni F, Gornati R, Bernardini G, Papait R. The Yin and Yang of epigenetics in the field of nanoparticles. *Nanoscale Adv*. 2022 Jan 10;4(4):979-994. doi: 10.1039/d1na00682g.*Shared First Authorship

The Emerging Role of Epigenetics in Therapeutic Targeting of Cardiomyopathies Pagiatakis C*, Di Mauro V*. The Emerging Role of Epigenetics in Therapeutic Targeting of Cardiomyopathies. *Int J Mol Sci.* 2021 Aug 13;22(16):8721. doi: 10.3390/ijms22168721.*Shared Authorship, Co-corresponding Authors

Myocardial hypoxic stress mediates functional cardiac extracellular vesicle release Anselmo A, Frank D, Papa L, Viviani Anselmi C, Di Pasquale E, Mazzola M, Panico C, Clemente F, Soldani C, **Pagiatakis C**, Hinkel R, Thalmann R, Kozlik-Feldmann R, Miragoli M, Carullo P, Vacchiano M, Chaves-Sanjuan A, Santo N, Losi MA, Ferrari MC, Puca AA, Christiansen V, Seoudy H, Freitag-Wolf S, Frey N, Dempfle A, Mercola M, Esposito G, Briguori C, Kupatt C, Condorelli G. Myocardial hypoxic stress mediates functional cardiac extracellular vesicle release. *Eur Heart J*. 2021 Jul 21;42(28):2780-2792. doi: 10.1093/eurheartj/ehab247.

Epigenetics of aging and disease: a brief overview. Pagiatakis C, Musolino E, Gornati R, Bernardini G, Papait R. Epigenetics of aging and disease: a brief overview. *Aging Clin Exp Res*. 2021 Apr;33(4):737-745. doi: 10.1007/s40520-019-01430-0.

Local hyperactivation of L-type Ca2+ channels increases spontaneous Ca2+ release activity and cellular hypertrophy in right ventricular myocytes from heart failure rats Medvedev RY, Sanchez-Alonso JL, Mansfield CA, Judina A, Francis AJ, **Pagiatakis C**, Trayanova N, Glukhov AV, Miragoli M, Faggian G, Gorelik J. Local hyperactivation of L-type Ca^{2+} channels increases spontaneous Ca^{2+} release activity and cellular hypertrophy in right ventricular myocytes from heart failure rats. *Sci Rep*. 2021 Mar 1;11(1):4840. doi: 10.1038/s41598-021-84275-w.

Divergent transcription of the nkx2-5 locus generates two enhancer rnas with opposing functions Salamon I, Serio S, Bianco S, **Pagiatakis C**, Crasto S, Chiariello AM, Conte M, Cattaneo P, Fiorillo L, Felicetta A, di Pasquale E, Kunderfranco P, Nicodemi M, Papait R, Condorelli G. Divergent Transcription of the *Nkx2-5* Locus Generates Two Enhancer RNAs with Opposing Functions. *iScience*. 2020 Sep 6;23(9):101539. doi: 10.1016/j.isci.2020.101539.

Long non-coding RNA H19: a new avenue for RNA therapeutics in cardiac hypertrophy? Pagiatakis C, Hall IF, Condorelli G. Long non-coding RNA H19: a new avenue for RNA therapeutics in cardiac hypertrophy? *Eur Heart J*. 2020 Sep 21;41(36):3475-3476. doi: 10.1093/eurheartj/ehaa663.

Single-Cell Sequencing of Mouse Heart Immune Infiltrate in Pressure Overload-Driven Heart Failure Reveals Extent of Immune Activation Martini E, Kunderfranco P, Peano C, Carullo P, Cremonesi M, Schorn T, Carriero R, Termanini A, Colombo FS, Jachetti E, Panico C, Faggian G, Fumero A, Torracca L, Molgora M, Cibella J, **Pagiatakis C**, Brummelman J, Alvisi G, Mazza EMC, Colombo MP, Lugli E, Condorelli G, Kallikourdis M. Single-Cell Sequencing of Mouse Heart Immune Infiltrate in Pressure Overload-Driven Heart Failure Reveals Extent of Immune Activation. *Circulation*. 2019 Dec 17;140(25):2089-2107. doi: 10.1161/CIRCULATIONAHA.119.041694.

The RNA methylome blackboard: METTL3 and FTO, two epigenetic writers and erasers regulating cardiac homeostasis through epitranscriptome modification Pagiatakis C, Condorelli G. The RNA Methylome Blackboard. *Circulation*. 2019 Jan 22;139(4):546-548. doi: 10.1161/CIRCULATIONAHA.118.038166.

Histone methyltransferase G9a is required for cardiomyocyte homeostasis and hypertrophy Papait R*, Serio S*, **Pagiatakis C***, Rusconi F, Carullo P, Mazzola M, Salvarani N, Miragoli M, Condorelli G. Histone Methyltransferase G9a Is Required for Cardiomyocyte Homeostasis and Hypertrophy. *Circulation*. 2017 Sep 26;136(13):1233-1246. doi: 10.1161/CIRCULATIONAHA.117.028561.*Shared First Authorship

TGFβ-TAZ/SRF signalling regulates vascular smooth muscle cell differentiation Pagiatakis C, Sun D, Tobin SW, Miyake T, McDermott JC. TGFβ-TAZ/SRF signalling regulates vascular smooth muscle cell differentiation. *FEBS J*. 2017 Jun;284(11):1644-1656. doi: 10.1111/febs.14070.

Fibroblast Senescence as a Therapeutic Target of Myocardial Fibrosis: Beyond Spironolactone? Condorelli G, Jotti GS, **Pagiatakis C**. Fibroblast Senescence as a Therapeutic Target of Myocardial Fibrosis: Beyond Spironolactone? *J Am Coll Cardiol*. 2016 May 3;67(17):2029-31. doi: 10.1016/j.jacc.2016.02.048.

A novel RhoA/ROCK-CPI-17-MEF2C signaling pathway regulates vascular smooth muscle cell gene expression Pagiatakis C, Gordon JW, Ehyai S, McDermott JC. A novel RhoA/ROCK-CPI-17-MEF2C signaling pathway regulates vascular smooth muscle cell gene expression. *J Biol Chem*. 2012 Mar 9;287(11):8361-70. doi: 10.1074/jbc.M111.286203.

Protein kinase A-regulated assembly of a MEF2-HDAC4 repressor complex controls c-Jun expression in vascular smooth muscle cells Gordon JW, **Pagiatakis C**, Salma J, Du M, Andreucci JJ, Zhao J, Hou G, Perry RL, Dan Q, Courtman D, Bendeck MP, McDermott JC. Protein kinase A-regulated assembly of a MEF2{middle dot}HDAC4 repressor complex controls c-Jun expression in vascular smooth muscle cells. *J Biol Chem*. 2009 Jul 10;284(28):19027-42. doi: 10.1074/jbc.M109.000539.

LANGUAGE SKILLS

Mother tongue(s): Greek | English

Other language(s): Italian | French

BOOK CHAPTERS

Epigenetics of Heart Development and Disease

Pagiatakis C, Gornati R, Bernardini G, Papait R. (2026). *"Epigenetics of Heart Development and Disease"* in Epigenetics - Role in Development and Pathogenesis. (invited contribution to RP. IntechOpen.

The role of epigenetics in cardiovascular disease

Farina FM*, Hall IF*, **Pagiatakis C***, Climent M* and Elia L. **(2024)** "The role of epigenetics in cardiovascular disease" in Epigenetics in Human Disease. (Invited contribution to LE). Elsevier. Third Edition. Chapter 23, p717-759 ***equal contribution.**

Epigenetics of Aging

Pagiatakis C and Papait R. **(2023)**. "Epigenetics of Aging" in Translational Epigenetics: Epigenetics in Organ Specific Disorders. (Invited contribution to RP) Elsevier. Volume 34. Chapter 10, p213-234

Using Epigenetics as a Pharmacological Tool in Heart Regeneration

Pagiatakis C, Serio S, Papait R. **(2019).** "Using Epigenetics as a Pharmacological Tool in Heart Regeneration" in Epigenetics and Regeneration. (Invited contribution to RP) Elsevier. Volume 11. Chapter 12, p287-307

Molecular mechanisms of smooth muscle and fibroblast phenotype conversions in the failing heart

Pagiatakis C, and McDermott JC. **(2015).** "*Molecular mechanisms of smooth muscle and fibroblast phenotype conversions in the failing heart*" in Cardiac Fibrosis and Heart Failure: Cause or effect? (Invited contribution to JCM). Springer. Volume 13. p167-179

TEACHING

[01/03/2023 – Current]
Anatomy and Comparative Anatomy

Bachelor's Degree Program: Biotechnology

University of Insubria

[01/11/2022 – Current]
Cytology and Histology

Bachelor's Degree Program: Biotechnology

University of Insubria

[01/09/2008 – 30/06/2015]
Courses: Biological Sciences, Introductory Biology, Cell Biology and Biochemistry I&II, Research Methods in Cell and Molecular Biology, Advanced Biochemistry and Molecular Genetics Laboratory, Biotechnology.

Teaching Assistant

York University, Toronto, Canada

CONFERENCES AND SEMINARS

[10/06/2025 – 13/06/2025]
70° Convegno GEI – Gruppo Embriologico Italiano

Oral Presentation: Exploring Epigenetic Regulation in the Aging Process: Insights and Implications

[11/06/2024 – 14/06/2024]
69° Convegno GEI – Gruppo Embriologico Italiano

Oral Presentation: Epigenetic Regulation of Enhancers Regulating Aging

[15/01/2024 – 15/01/2024]
COST Action - AtheroNet

Invited Oral Talk: Cardiac Aging Is Promoted by Pseudohypoxia Increasing p300-Induced Glycolysis

[05/06/2023 – 08/06/2023]
68° Convegno GEI – Gruppo Embriologico Italiano

Oral presentation: The Role of TAZ in the Epigenetic Maintenance of Cardiomyocyte Homeostasis

[12/09/2021 – 12/09/2021]
TRAINHEART, Marie Curie Expert Teaching Lectures - Milano, Italy

Invited Oral Presentation: Epigenetics and Cardiovascular Disease: mechanisms involved in cardiomyocyte homeostasis and hypertrophy.

[13/02/2021 – 13/02/2021]
Humanitas Seminar Series - Milano, Italy

Invited Oral Presentation: Novel role of Wwtr1 (TAZ) in cardiomyocyte hypertrophy.

[26/05/2019 – 31/05/2019]
Epigenetic Regulation of Cardiovascular Disease; Chromatin Signaling in Heart and Vascular Diseases; Gordon Research Conference - Hong Kong

Selected Oral Presentation: TAZ: a new player in the epigenetic regulation of cardiomyocyte hypertrophy

Poster: Novel mechanisms regulating the epigenetic landscape of hypertrophic cardiomyocytes

[14/05/2019 – 16/05/2019]
ERA-Net on Cardiovascular Diseases (ERA-CVD); ERA-CVD Symposium of the Joint Transnational Calls - Riga, Latvia

Poster: The novel long non-coding RNA *Chheaf-1* regulates early-phase cardiac hypertrophy

[05/04/2019 – 05/04/2019]
Humanitas Seminar Series - Milano, Italy

Invited Oral Presentation: Molecular Mechanisms Regulating Cardiomyocyte Hypertrophy

[15/09/2018 – 17/09/2018]
2nd Cardiovascular Epigenetics Symposium - Freiburg, Germany

Poster: The novel long non-coding RNA *Chheaf-1* regulates early-phase cardiac hypertrophy

Poster: The histone methyltransferase G9a defines the epigenetic landscape underlying the homeostasis of the heart and cardiac hypertrophy

[12/05/2016 – 12/05/2016]
Humanitas Clinical Institute Research Day - Milano, Italy

Poster: The role of Histone methyltransferase G9a in heart homeostasis and cardiac hypertrophy: a potential therapeutic target for heart failure

[09/07/2014 – 11/07/2014]

European Society of Cardiology; Frontiers in Cardiovascular Biology - Barcelona, Spain

Poster: A novel TGF beta-dependent signaling pathway regulating vascular smooth muscle cell differentiation

EDITORIAL ACTIVITY

Activity:

Review Editor:

Cardiovascular Biologics and Regenerative Medicine (Frontiers).

Guest Associate Editor:

Integrative Physiology (Frontiers)

Reviewer Activity:

Oxidative Medicine and Cellular Longevity

American Journal of Hypertension

International Journal of Molecular Sciences

Cardiovascular Research

Frontiers in Cardiovascular Medicine

FUNDING AND AWARDS

[01/01/2024 – Current]

BANDO PER L'EROGAZIONE DEL FONDO PER RICERCATORI A TEMPO DETERMINATO (FAR) - 2023

Project Title: Epigenetic regulation of cardiac hypertrophy: understanding the role of TAZ

Funding: €25.000,00

[01/05/2024 – Current]

PROPOSTE DI FINANZIAMENTO DI N. 30 ASSEGNI DI RICERCA DI ATENEO POST-DOTTORATO ANNUALI (FAR) - 2024

Project Title: The lincRNA Chheaf-1 controls cardiomyocyte homeostasis by epigenetically regulating the promoter of Rtn4

Funding: University Post-Doctoral Fellowship, 1 year contract: €19.367,00

MEMBERSHIPS AND NETWORKS

[01/05/2024 – Current]

COST Action - European Cooperation in Science and Technology

Network for implementing multiomic approaches in atherosclerotic cardiovascular disease prevention and research (AtheroNET)

[01/04/2023 – Current]

Gruppo Embriologico Italiano - Società Italiana dello Sviluppo e della Cellula

---

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV.

Milano, 06/02/2026