



Roberto Papait

WORK EXPERIENCE

 **University of Insubria** – Varese, Italy

Associate Professor of Comparative Anatomy and Cytology

[01/05/2021 – Current]

 **University of Insubria** – Varese, Italy

Tenured-track Assistant Professor

[01/05/2018 – 30/04/2021]

 **Institute for Genetic and Biomedical Research (IRGB) -CNR** – Milan, Italy

Researcher

[11/07/2011 – 30/04/2018]

 **IRCCS Humanitas** – Milan, Italy

Assistant Professor

[01/01/2012 – 30/04/2018]

 **IRCCS Multimedica** – Humanitas, Italy

Assistant Professor

[01/01/2009 – 30/06/2011]

 **Dialectica spin-off** – Milan,, Italy

Researcher

[01/09/2006 – 31/12/2008]

 **University of Insubria** – Varese, Italy

Researcher associate

[01/03/2004 – 30/08/2008]

 **University of Insubria** – Varese, Italy

PhD student in Evolutionary and Developmental Biology

[21/12/2001 – 31/12/2004]

 **European Institute of Oncology (IEO)** – Milan, Italy

Research fellow

[01/09/1998 – 28/02/2004]

EDUCATION AND TRAINING

Abilitazione Scientifica Nazionale: Italian National Habilitation for Full Professor in Comparative Anatomy and Cytology

Ministry of University and Research [27/09/2022 – Current]

City: Rome | Country: Italy

Associate Professor of Comparative Anatomy and Cytology

University of Insubria [01/05/2021 – Current]

City: Varese | Country: Italy

PhD in Evolutionary and Developmental Biology

University of Insubria [21/12/2001 – 31/12/2004]

City: Varese | Country: Italy

Master's Degree in General Biology with honors

University of Insubria [01/10/1992 – 18/02/2008]

City: Varese | Country: Italy

TEACHING

[2025 – Current]

Courses of Cytology Histology, Comparative Anatomy and Cell Biology of Life Processes

In the academic year 2025/2026, as an associate professor, you taught the course "Cytology and Histology" and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences and the course "Cell Biology of Life Processes" for Master's Degree in Biology and Sustainability.

[2024 – 2025]

Courses of Cytology Histology, Comparative Anatomy and Cell Biology of Life Processes

In the academic year 2024/2025, as an associate professor, you taught the course "Cytology and Histology" and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences and the course "Cell Biology of Life Processes" for Master's Degree in Biology and Sustainability.

[2023 – 2024]

Courses of Cytology Histology, Comparative Anatomy and Cell Biology of Life Processes

In the academic year 2023/2024, as an associate professor, you taught the course "Cytology and Histology" and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences and the course "Cell Biology of Life Processes" for Master's Degree in Biology and Sustainability.

[2022 – 2023]

Courses of Cytology and Histology and Comparative Anatomy

In the academic year 2022/2023, as an associate professor, you taught the course "Cytology and Histology" and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences

[2021 – 2022]

Courses of Cytology and Histology and Comparative Anatomy

In the academic year 2021/2022, as an associate professor, you taught the course "Cytology and Histology " and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences

[2020 – 2021]

Courses of Cytology and Histology and Comparative Anatomy

In the academic year 2020/2021, as a tenured-track assistant professor, you taught the course "Cytology and Histology" and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Science

[2019 – 2020]

Courses of Cytology and Histology and Comparative Anatomy

In the academic year 2019/2020, as an tenured-track assistant professor, you taught the course "Cytology and Histology " and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences

[2018 – 2019]

Courses of Cytology and Histology and Comparative Anatomy

In the academic year 2018/2019, as an tenured-track assistant professor, you taught the course "Cytology and Histology " and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences

[2017 – 2018]

Course of Cytology and Histology

In the academic year 2017/2018, as an adjunct professor , you taught the course "Cytology and Histology " and the course "Comparative Anatomy" for the Bachelor's Degree in Biological Sciences

RESEARCH GRANTS

[06/2024 – 06/2025]

National Recovery and Resilience Plan (PNRR)

The head of the research unit "Assessment of the therapeutic potential of eRNA PAMR in age-related cardiac dysfunction"- a sub-project of the National Center for Gene Therapy and Drugs Based on RNA Technology (CN RNA & Gene Therapy)- funded by the European Community through the PNRR project - 249769 € /1 year

[2024 – 2025]

PRIN Research projects of national interest

The head of the research unit for the project "The link between metabolism and epigenetics in myocardial diseases" (coordinated by Professor Gianluigi Condorelli, project number 20205X4C9E), funded by the Ministry of Education, University and Research through the PRIN 2020 call. 171,979/ 3 years

[2019 – 2021]

Fondazione Regionale per la Ricerca Biomedica

Project "Innovative Methods and Materials for Precision and Personalized Medicine, NEWMED". Coordination of the project's task related to the use of nanoparticles and microbubbles as carriers for epigenetic drugs in the treatment of heart failure. 134,000/2 years

[2016 – 2019]

Fondazione CARIPOLO

The head of the research unit for the project "Aging-mediated epigenetic changes modulate cardiac metabolism: implications for age-related cardiac malfunctioning" Fondazione Cariplo -150000 € /3 years..

[2012 – 2018]

Epigen Flag Project

The head of the research unit " The role of DNA methylation and histone modifications in governing gene expression changes underline of heart failure"- of Epigen Flag Project - Italian Ministry for Education, Universities and Research -380000 € /6 years

[2012 – 2018]

Aging Flag Project

The head of the research unit " Identification and characterization of the process of methylation involved in aging methylation" of Aging Flag Project of Italian Ministry for Education, Universities and Research -437250 € /6 years

PUBLICATIONS

Bibliometric indicators of Roberto Papait's publications. To date, Dr Papait has published 39 peer-reviewed manuscripts, and 5 book chapters publications. He has a: N of total Citations (Google Scholar): 3727 H index (Google Scholar): 25 I.F. tot: 362.346 I.F. average: 9.291
Google Scholar ID: <https://scholar.google.it/citations?user=eQyzFakAAAAJ> SCOPUS Author ID: 6506896136

Tissue regenerative potential of human dental pulp mesenchymal stem cell conditioned medium in wound healing of the medicinal leech Stem Cell Res Ther. 2025 Nov 28;16(1):673. doi: 10.1186/s13287-025-04683-x. IF: 7.3 Citations: 0

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. IF: 3 Citations: 0

Epigenetics: A link between toxicants and diseases. Romanò A, Pagiatakis C, Gornati R, Bernardini G, **Papait R**. iScience. 2025 May 8;28(6):112613. doi: 10.1016/j.isci.2025.112613. IF: 4.1 Citations: 1

Histone Methyltransferase SETD2: A Key Player in Cardiometabolic HFpEF- Editorial Serio S, **Papait R.** *Circ Res.* 2025 May 9;136(10):1096-1098. doi: 10.1161/CIRCRESAHA.125.326463.IF: 16.2; Citations: 0

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.IF: 9.0 ; Citations: 12

Cardiac Aging Is Promoted by Pseudohypoxia Increasing p300-Induced Glycolysis Serio S., Pagiatakis C., Musolino E, Felicetta A., Carullo P., Laura Francés J. , Papa L., Rozzi G., Salvarani N., Miragoli M., Gornati R., Bernardini G., Condorelli G. **Papait R.** *Circulation Research.* 2023;133:687–703; doi/10.1161/CIRCRESAHA.123.322676IF: 16.5 ; Citations: 37

Adipose mesenchymal stem cell-derived soluble factors, produced under hypoxic condition, efficiently support in vivo angiogenesis Barone, L., Palano, M.T., Gallazzi, M. Cucchiara M., Rossi F., Borgese M., Raspanti M., Zecca P.A., Mortara L., **Papait R.**, Bernardini G., Valdata L., Bruno A., Gornati R. *Cell Death Discov.* **9**, 174 (2023). doi.org/10.1038/s41420-023-01464-4IF: 7.113; Citations: 27

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* *Nano Lett.*2023, 23, 19, 9151–9159; doi.org/10.1021/acs.nanolett.3c01967* Corresponding AuthorsIF: 10.8 Citations: 10

Human Dental Pulp Mesenchymal Stem Cell-Derived Soluble Factors Combined with a Nanostructured Scaffold Support the Generation of a Vascular Network In Vivo Barone, L.; Gallazzi, M.; Rossi, F.; **Papait, R.**; Raspanti, M.; Zecca, P.A.; Buonarrivo, L.; Bassani, B.; Bernardini, G.; Bruno, A. Gornati R. Human Dental Pulp Mesenchymal Stem Cell-Derived Soluble Factors Combined with a Nanostructured Scaffold Support the Generation of a Vascular Network In Vivo. *Nanomaterials* 2023, 13, 2479. doi.org/10.3390/nano13172479.IF: 5,719 Citations: 8

Highly connected 3D chromatin networks established by an oncogenic fusion protein shape tumor cell identity Sanalkumar R, Dong R, Lee L, Xing YH, Iyer S, Letovanec I, La Rosa S, Finzi G, Musolino E, **Papait R**, Chebib I, Nielsen GP, Renella R, Cote GM, Choy E, Aryee M, Stegmaier K, Stamenkovic I, Rivera MN, Riggi N. *Sci Adv.* 2023 Mar 31;9(13):eabo3789. doi: 10.1126/sciadv.abo3789.IF: 14.136 Citations: 35

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. *Int J Mol Sci.* 2023 Jan 22;24(3):2205. doi: 10.3390/ijms24032205.IF: 5.6 Citations: 11

A chromEM-staining protocol optimized for cardiac tissue Musolino E, Pagiatakis C, Pierin F, Sabatino D, Finzi G, Gornati R, Bernardini G, **Papait R.** *Frontiers in Cell and Developmental Biology*, 2023, 11, 1123114 doi: 10.3389/fcell.2023.1123114.IF: 5.5 Citations: 0

Human Adipose-Derived Stem Cell-Conditioned Medium Promotes Vascularization of Nanostructured Scaffold Transplanted into Nude Mice Barone L, Rossi F, Valdatta L, Cherubino M, **Papait R**, Binelli G, Romano N, Bernardini G, Gornati R. *Nanomaterials (Basel).* 2022 Apr 30;12(9):1521. doi: 10.3390/nano12091521.IF: 5.51 Citations: 8

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.** *Nanoscale Adv.* 2022 Jan 10;4(4):979-994. doi: 10.1039/d1na00682g.IF : 4.95 Citations: 30

Epigenetics of aging and disease: a brief overview. Pagiatakis C, Musolino E, Gornati R, Bernardini G, **Papait R.** *Ageing Clin Exp Res.* 2021 Apr;33(4):737-745. doi: 10.1007/s40520-019-01430-0. Epub 2019 Dec 6. IF: 2.232 Citations: 175

Role of the Epigenome in Heart Failure **Papait R***, Serio S, Condorelli G*. *Physiol Rev.* 2020 Oct 1;100(4):1753-1777. doi: 10.1152/physrev.00037.2019.* Corresponding Author IF: 37.312 Citations: 98

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*. *iScience.* 2020 Sep 6;23(9):101539. doi: 10.1016/j.isci.2020.101539.*Corresponding Author IF: 5.74 Citations: 14

Effect of Nanostructured Scaffold on Human Adipose-Derived Stem Cells: Outcome of In Vitro Experiments Borgese M, Barone L, Rossi F, Raspanti M, Papait R, Valdatta L, Bernardini G, Gornati R. *Nanomaterials (Basel).* 2020 Sep 12;10(9):1822. doi: 10.3390/nano10091822. IF: 0.919 Citations: 10

UHRF1 epigenetically orchestrates smooth muscle cell plasticity in arterial disease. Elia L, Kunderfranco P, Carullo P, Vacchiano M, Farina FM, Hall IF, Mantero S, Panico C, **Papait R**, Condorelli G, Quintavalle M. *J Clin. Invest.* 2018 Jun 1;128(6):2473-2486. doi: 10.1172/JCI96121. IF: 13.251 Citations: 94

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*. *Circulation* 2017 Sep 26;136(13):1233-1246. doi: 10.1161/CIRCULATIONAHA.117.028561.* Corresponding Author IF: 19.309 Citations: 118

Epigenetic regulation of the extrinsic oncosuppressor PTX3 gene in inflammation and cancer Rubino M, Kunderfranco P, Basso G, Greco CM, Pasqualini F, Serio S, Roncalli M, Laghi L, Mantovani A, **Papait R***, Garlanda C*. *Oncoimmunology.* 2017 May 30;6(7):e1333215. doi: 10.1080/2162402X.2017.1333215.* Corresponding Author IF: 7.719 Citations: 64

T cell costimulation blockade blunts pressure overload-induced heart failure Kallikourdis M, Martini E, Carullo P, Sardi C, Roselli G, Greco CM, Vignali D, Riva F, Ornbostad Berre AM, Stølen TO, Fumero A, Faggian G, Di Pasquale E, Elia L, Rumio C, Catalucci D, **Papait R**, Condorelli G. *Nat Commun.* 2017 Mar 6;8:14680. doi: 10.1038/ncomms14680. IF: 11.329 Citations: 207

DNA hydroxymethylation controls cardiomyocyte gene expression in development and hypertrophy. Carolina M. G., Kunderfranco P, Rubino M, Larcher V, Carullo P, Anselmo A, Kurz K, Carell T, Angius A, Latronico MVG, **Papait R**, Condorelli G. *Nat Commun.* 2016 Aug 4;7:12418. doi: 10.1038/ncomms12418. IF: 11.329 Citations: 184

It's time for an epigenomics roadmap of heart failure. **Papait R**, Corrado N, Rusconi F, Serio S, V G Latronico M. *Curr Genomics.* 2015 Aug;16(4):237-44. doi: 10.2174/1389202916666150505183624. F: 2.342 Citations: 21

PTX3 is an extrinsic oncosuppressor regulating complement-dependent inflammation in cancer. Bonavita E, Gentile S, Rubino M, Maina V, **Papait R**, Kunderfranco P, Greco C, Feruglio F, Molgora M, Laface I, Tartari S, Doni A, Pasqualini F, Barbati E, Basso G, Galdiero M.R, Nebuloni M, Roncalli M, Colombo P., Laghi L., Lambris J.D, Jaillon S, Garlanda C, Mantovani A. *Cell* 2015 Feb 12;160(4):700-14. doi: 10.1016/j.cell.2015.01.004. IF: 28.710 Citations: 452

DOT1L-mediated H3K79me2 modification critically regulates gene expression during cardiomyocyte differentiation. Cattaneo P, Kunderfranco P, Greco C, Guffanti A, Stirparo GG, Rusconi F, Rizzi R, Di Pasquale E, Locatelli SL, Latronico MV, Bearzi C, **Papait R**, Condorelli G. *Cell Death Differ.* 2016 Apr;23(4):555-64. doi: 10.1038/cdd.2014.199. IF: 8.184 Citations: 93

Genome-wide analysis of histone marks identifying an epigenetic signature of promoters and enhancers underlying cardiac hypertrophy. **Papait R***, Cattaneo P, Kunderfranco P, Greco C, Carullo P, Guffanti A, Viganò V,

Stirparo G. G, Latronico M. V, Hasenfuss G, Chen J, Condorelli G*. *Proc Natl Acad Sci U S A*. 2013 Dec 10;110(50):20164-9. doi: 10.1073/pnas.1315155110. Epub 2013 Nov 27.*Corresponding AuthorsIF:9.809 Citations: 274

Adult c-kit(pos) Cardiac Stem Cells Are Necessary and Sufficient for Functional Cardiac Regeneration and Repair. Ellison GM, Vicinanza C, Smith AJ, Aquila I, Leone A, Waring CD, Henning BJ, Stirparo GG, Papait R, Scarfò M, Agosti V, Viglietto G, Condorelli G, Indolfi C, Ottolenghi S, Torella D, Nadal-Ginard B. *Cell*. 2013 Aug 15;154(4):827-42. doi: 10.1016/j.cell.2013.07.039.IF:33.116 Citations: 633

Long Noncoding RNA: a New Player of Heart Failure? Papait R*, Kunderfranco P, Stirparo GG, Latronico MV, Condorelli G*. Long noncoding RNA: a new player of heart failure? *J Cardiovasc Transl Res*. 2013 Dec;6(6):876-83. doi: 10.1007/s12265-013-9488-6. Epub 2013 Jul 9.*Corresponding AuthorsIF:2.95 Citations: 138

Epigenetics: a new mechanism of regulation of heart failure? Papait R*, Greco C, Kunderfranco P, Latronico MV, Condorelli G*. Epigenetics: a new mechanism of regulation of heart failure? *Basic Res Cardiol*. 2013 Jul;108(4):361. doi: 10.1007/s00395-013-0361-1. Epub 2013*Corresponding AuthorsIF:5.955 Citations: 89

Post-natal cardiomyocytes can generate iPS cells with an enhanced capacity toward cardiomyogenic re-differentiation. Rizzi R, Di Pasquale E, Portararo P, **Papait R**, Cattaneo P, Latronico MV, Altomare C, Sala L, Zaza A, Hirsch E, Naldini L, Condorelli G, Bearzi C. *Cell Death Differ*. 2012 Jul;19(7):1162-74. doi: 10.1038/cdd.2011.205. Epub 2012 Jan 20.IF:9.05 Citations: 78

Epigenetics in heart failure Papait R, Condorelli G. Epigenetics in heart failure. *Ann N Y Acad Sci*. 2010 Feb;1188:159-64. doi: 10.1111/j.1749-6632.2009.05096.x.IF:2.51 Citations: 30

Adaptation of NS cells growth and differentiation to high-throughput screening compatible plates Garavaglia A, Moiana A, Camnasio S, Bolognini D, **Papait R**, Rigamonti D, Cattaneo E. *BMC Neurosci*. 2010 Jan 19;11:7. doi: 10.1186/1471-2202-11-7.IF:1.5 Citations: 20

Novel approaches on epigenetics. Papait R, Monti E, Bonapace IM. *Curr Opin Drug Discov Devel*. 2009 Mar;12(2):264-75.IF:1.5 Citations: 24

Temozolomide and carmustine cause large-scale heterochromatin reorganization in glioma cells. Papait R, Magrassi L, Rigamonti D, Cattaneo E. Temozolomide and carmustine cause large-scale heterochromatin reorganization in glioma cells. *Biochem Biophys Res Commun*. 2009 Feb 6;379(2):434-9. doi: 10.1016/j.bbrc.2008.12.091. Epub 2008 Dec 29.IF:3.52 Citations: 36

The PHD Domain of Np95 (mUHRF1) is involved in large-scale reorganization of pericentromeric heterochromatin. Papait R, Pistore C, Grazini U, Babbio F, Cogliati S, Pecoraro D, Brino L, Morand AL, Dechampsme AM, Spada F, Leonhardt H, McBlane F, Oudet P, Bonapace IM. *Mol Biol Cell*. 2008 Aug;19(8):3554-63. doi: 10.1091/mbc.e07-10-1059. Epub 2008 May 28.IF:5.29 Citations: 81

Np95 is implicated in pericentromeric heterochromatin replication and in major satellite silencing. Papait R, Pistore C, Negri D, Pecoraro D, Cantarini L, Bonapace IM. *Mol Biol Cell*. 2007 Mar;18(3):1098-106. doi: 10.1091/mbc.e06-09-0874. Epub 2006 Dec 20.IF:4.99 Citations: 114

Np95 is a histone-binding protein endowed with ubiquitin ligase activity. Citterio E*, **Papait R***, Nicassio F, Vecchi M, Gomiero P, Mantovani R, Di Fiore PP, Bonapace IM. *Mol Cell Biol*. 2004 Mar;24(6):2526-35. doi: 10.1128/MCB.24.6.2526-2535.2004.*co-first authorshipIF:7.822 Citations: 238

Np95 is regulated by E1A during mitotic reactivation of terminally differentiated cells and is essential for S phase entry. Bonapace IM, Latella L, **Papait R**, Nicassio F, Sacco A, Muto M, Crescenzi M, Di Fiore PP. *J Cell Biol*. 2002 Jun 10;157(6):909-14. doi: 10.1083/jcb.200201025. Epub 2002 Jun 10.IF: 9.90 Citations: 117

Epigenetics of Heart Development and Disease

C Pagiatakis, R Gornati, G Bernardini, **R Papait**, 2026, IntechOpen

Thermal tuning of enzyme activity by magnetic heating. Chapter 5 of book Bionanocatalysis : from Design to Applications

Armenia I, Bussolari F, Sanchez M, Gallo-Cordova A, Ovejero JG, Macedo de Melo E, Gamberoni F, Borgese M, Serio S., Guisán-Seijas J.M, de la Fuente J.M., **Papait R**, Gornati R, Bernardini G, Cassinelli N, Rother D, Puerto Morales M., Lopez-Gallego F, Grazu V, Elsevier/Academic Press, 2023 doi.org/10.1016/B978-0-323-91760-5.00012-9

Epigenetics of aging. Chapter 10 of book Epigenetics in Organ Specific Disorders

Pagiatakis, C; Gornati, **Papait, R**. Elsevier/Academic Press, 2022 <https://dx.doi.org/10.1016/B978-0-12-823931-5.00004-9>

Using epigenetics as a pharmacological tool in heart regeneration. Chapter 24 of book Epigenetics and Regeneration eds Daniela Palacios

Pagiatakis C, Serio S, **Papait R**. Elsevier/Academic Press 2019, <https://dx.doi.org/10.1016/B978-0-12-814879-2.00012-1>

Epigenetics in cardiovascular biology. Chapter 24 of book Muscle, eds Hill J. And Olson E.R

Papait R, Cattaneo P, Latronico M.V.G., and Condorelli G. Elsevier/Academic Press, 2012 <https://dx.doi.org/10.1016/B978-0-12-381510-1.00025-9>

CONFERENCE

[05/2019]

Gordon Research Conferences (GRC) "Epigenetic Regulation of Cardiovascular Disease"

Title of the poster presentation: "Enhancers regulate anaerobic glycolysis in old cardiomyocytes"

[06/2018]

64° Convegno GEI - Gruppo Embriologico Italiano

Title of the oral presentation: "Do aging-mediated epigenetic changes cause metabolic remodelling during cardiac aging?"

[10/2017]

XVI CONGRESSO REGIONALE SISA-XI CONGRESSO NAZIONALE SITeCS

Title of the oral presentation: "Epigenetics and Metabolism: Implications in Elderly Heart Failure"

[06/2017]

63° Convegno GEI - Gruppo Embriologico Italiano

Title of the oral presentation: "Do aging-mediated epigenetic changes cause cardiac aging?"

[05/2016]

Annual meeting of the EPIGENOMIC Flagship Project (EPIGEN)

Title of the oral presentation: "Genome-wide analysis of histone marks identifying an epigenetic "

[07/2015]

33RD Annual Meeting of the European Section of ISHR

Title of the oral presentation: "Altered epigenetic profiles at enhancers and promoters during cardiac hypertrophy"

[04/2015]

Annual meeting of the EPIGENOMIC Flagship Project (EPIGEN)

Title of the oral presentation: "Genome-wide analysis of histone marks identifying an epigenetic signature of promoters and enhancers underlying cardiac hypertrophy"

[02/2014]

Annual meeting of the EPIGENOMIC Flagship Project (EPIGEN)

Title of the oral presentation: "Role of DNA Methylation and Histone Modifications in Regulating Changes in Gene Expression Underlying Heart Failure."

[04/2013]

Annual meeting of the EPIGENOMIC Flagship Project (EPIGEN)

Title of the oral presentation: "Role of DNA Methylation and Histone Modifications in Regulating Changes in Gene Expression Underlying Heart Failure."

EDITORIAL BOARD AND GRANT REVIEWER

Reviewer Activity:

- Cardiovascular Biologics and Rigenerative Medicine (Frontiers in Cardiovascular Medicine)
- Cellular Biochemistry (Frontiers in Molecular Bioscience)
- Circulation Research
- Cardiovascular Research
- Epigenomics
- Aging Clinical and Experimental Research (ACER)
- Frontiers in Bioscience-Landmark (FBL)
- Scientific Reports

Editorial Board

- Associate Editor in Cardiovascular Biologics and Rigenerative Medicine (Frontiers in Cardiovascular Medicine (2021-))
- Review Editor in Cellular Biochemistry (Frontiers in Molecular Bioscience) (2021-)
- Editorial board member of Circulation Research (2025-)

Grant Reviewer

- The Israel Science Foundation (2021)
- The Israel Science Foundation (2020)

Scientific Research

The research activity of Dr. Roberto Papait has focused primarily on the study of the role of epigenetics in cellular differentiation and the maintenance of cardiac homeostasis.

During his PhD (2001-2004), Dr. Papait studied the cellular processes by which the Np95 protein regulates the cell cycle, demonstrating that Np95 is an essential protein for cellular proliferation and that its silencing is required for the differentiation of myoblasts into myotubes. As a post-doc at the Department of Structural and Functional Biology of the University of Insubria (2005-2006), Dr. Papait continued his studies on the Np95 protein, demonstrating that Np95 is a protein capable of ubiquitinating histones, and is essential for the replication of heterochromatin regions and their correct spatial organization.

Subsequently (2006-2008), Dr. Papait, as a researcher at Dialectica, a spin-off of the University of Milan, contributed to the creation of neuronal stem cell models to be used in drug screenings through the monitoring of neuronal differentiation. At the same time, he studied the mechanism of action of two anti-cancer drugs, Temozolomide and Carmustine, normally used for the treatment of glioblastoma. This study showed that these drugs promote apoptosis and senescence through alterations of heterochromatin regions.

As a researcher, first at the IRCCS MultiMedica of Milan (2008-2011) and then as a researcher on a fixed-term contract (art.23) (2011-2016) at the Institute of Genetic and Biomedical Research of the National Research Council (CNR), Dr. Papait Roberto has dedicated himself to the study of the role of epigenetics in regulating the differentiation of cardiomyocytes and the activity of cardiac cells in the adult heart, under normal conditions and after stress.

Thanks to the combination of genomic-scale approaches for the study of transcriptional profiles (RNA-seq) and for the characterization of chromatin structure (ChIP-seq) with the most traditional methodologies used to study the activity and differentiation of cardiomyocytes, Dr. Papait has demonstrated that the correct epigenetic information in cardiomyocytes is essential for the correct differentiation and for the maintenance of cardiac homeostasis under physiological conditions and under stress.

Since 2018, Dr. Papait has been working at the Department of Biotechnology and Life Sciences of the University of Insubria, where, initially as a tenured-track assistant professor and subsequently as an associate professor, he coordinates a project on the study of the role of histone modifications in cardiac aging.