

Curriculum Vitae

PAOLA CATTANEO

CF: CTTPLS83P50F205Z
paola.cattaneo@irgb.cnr.it
paolal.cattaneo@gmail.com
<https://it.linkedin.com/in/paola-cattaneo>
Birth: Milan, Italy - 10th September 1983
Nationality: Italian



Education

- 09/2018: **Italian Professorship Habilitation:** Associate Professor in Applied Biology (Italian ASN 05/F1 from 18/09/2018 to 18/9/2024).
- 07/2015: **microMBA** at University of California San Diego (UCSD) Rady School of Management (USA)
- 02/ 2013: **PhD In Molecular Medicine** at University of Milan (Italy).
Supervisors: Prof. Gianluigi Condorelli and Prof. Mario Clerici
Thesis: Epigenetics during heart development: the role of the histone methyltransferase Dot1L in cardiac commitment
- 01/2009: **State Examination for Pharmacist** profession (official qualification).
University of Milan and Italian Pharmacist Society (Italy)
- 03/ 2008: **Master Degree In Pharmaceutical Chemistry And Technology**
Specialization in Pharmacology
University of Milan (Italy) - Supervisor: Prof. Alberico L Catapano
Thesis title: "The atheroprotective role of the androgen derivate 3beta-Adiol. Study of the inflammatory response in vitro and in vivo.

Research Training

- 09/2017– to date **Tenured Assistant Professor**
(Ricercatore III Livello a Tempo Indeterminato)
National Research Council (CNR) -Institute of Genetic and Biomedical Research (IRGB), and Humanitas Clinical and Research Center, Milan, Italy
- 09/2018 – to date **Visiting Researcher**
Institute of Cardiovascular Regeneration, Goethe University, Frankfurt, Germany
- 01/2015 – 09/2017 **Marie Curie International Outgoing Post-Doctoral Fellow** at University of California San Diego (UCSD) Department of Medicine and Skaggs School of Pharmacy, La Jolla (CA), US. “Laboratory of Developmental Cardiology” – Supervisor: Prof. Sylvia Evans.
Outgoing: UCSD (US); Incoming: CNR-IRGB (Ita).

- Sep 2012 – Dec 2014: **Post-Doctoral Research Scholar** at University of California San Diego (UCSD) Department of Medicine and Skaggs School of Pharmacy, La Jolla (CA), US. “Laboratory of Developmental Cardiology” – Supervisor: Prof. Sylvia Evans
- Nov 2009 – Aug 2012: **PhD Student In Molecular Medicine** at University of Milan (Italy). Training in the “Laboratory of Molecular Cardiology”, Multimedica Research Hospital and IRGB-CNR Milan (Italy). Supervisor: Prof. Gianluigi Condorelli
- Mar 2009 – Nov 2009: **Research Fellow** at FIRC Institute of Molecular Oncology and European Institute of Oncology, IFOM-IEO Campus, Milan, (Italy) - “Laboratory of cell adhesion and signaling in tumor progression and angiogenesis” - Supervisor: Dr. Ugo Cavallaro
- Mar 2007 – Mar 2008: **Research Intern** at University of Milan (Italy) – Department of Pharmacological Science – “Laboratory of Lipoprotein and Atherosclerosis”. Supervisor: Prof. Alberico L Catapano
- Jan 2006 – Jul 2006: **Erasmus Research Student** at Karolinska Institutet, Stockholm (Sweden) – Center for Molecular Medicine – “Atherosclerosis Research Unit” – Supervisor: Prof. Per Eriksson

Grants, Fellowships and Academic Honors

- 2020: DZHK “Excellence Programme: Promotion of women scientists” - PI (80,000 euro/1 years)
- 2019: ERA-CVD “Transnational Cardiovascular Research Projects driven by Early Career Scientists” – PI (FIBER; 250,000 euro/3 years)
- 2018: Grant CARIPLO “Biomedical Research Grant for Young investigator– PI (ID# 2017-0811; 250,000 euro/3years).
- 2014: Awarded – MARIE CURIE International Outgoing Fellowship for Career Development (IOF) – Seventh Framework Programme of the European Union (“The Cardiac Code” PIOF-GA-2013-623739)
Outgoing Phase: University of California San Diego (USA)
Incoming Phase: CNR-IRGB (Italy)
(261,175 euro/3 years)
- 2014: Awarded - American Heart Association AHA WSA Winter 2014 Postdoctoral Fellowship (AHA Award Number: 14POST20380294)
- 2013: Awarded - Fondazione Umberto Veronesi Post-doctoral Fellowship
- Sep 2010 – Sep 2013: Research Fellowship (Assegnista di Ricerca) – University of Milan Bicocca (Italy)
- Jan 2006 – Jul 2006: Erasmus Fellowship – University of Milan (Italy) and Karolinska Institutet Stockholm (Sweden)

Selected further activities

Supervision of graduate students and postdoctoral fellows

09/2017 – to date 1 PhD Student, Humanitas Clinical and Research Center, Milan (Italy)
 01/2014 – 08/2017 2 PhD Students (Jonathan Grinstein, Raymond Wang) and 3 Undergraduate Students
 (co-supervision), University of California San Diego (United States).

Editorial Responsibilities:

Reviewer for the following journals: *Circulation, Cardiovascular Research, Stem Cell International*. Assistance in manuscript reviewing for multiple high-profile journals (*JCI, Circ. Res., Nature, Nature Medicine, Nature Communications, Cell Stem Cell, Dev Cell, Plos Genetics*).

Member of Scientific Society: American Heart Association (AHA)

Languages: Italian: Native level
 English: Excellent level

Career breaks:

From 06/06/2019 to 06/11/2019 (5 months) Maternity leave (2 babies born on 25/06/2019)
 From 12/04/2018 to 15/06/2018 (2 months) Medical reasons

List of Publications

Researcher Profiles:

Google Scholar: <https://scholar.google.com/citations?user=4Im6aUwAAAAJ&hl=en>

Scopus Author Id: 55833702100

Researcher ID: J-4003-2016

ORCID ID: orcid.org/0000-0001-9987-5285

Publication Metrics:

Total Number of original publications in peer reviewed journal = 18

Total number of citations = 1038

H-Index = 11

Average IF = 11.35

Peer Reviewed Journals:

1. Zhang Q, Carlin D, Zhu F, **Cattaneo P**, Ideker T, Evans SM, Bloomekatz J, Chi NC. - *Unveiling unexpected complexity and multipotentiality of early heart fields*. **bioRxiv** - **2021** 2021.01.08.425950; doi:<https://doi.org/10.1101/2021.01.08.425950>
2. 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** <https://doi.org/10.1016/j.isci.2020.101539>. (IF 4.447)
3. **Cattaneo P***, Mukherjee D, Spinozzi S, Zhang L, Larcher V, Stallcup WB, Kataoka H, Chen J, Dimmeler S, Evans SM and Guimarães-Camboa N. (***Equally contributed**) - *Parallel lineage-tracing studies establish fibroblasts as the prevailing in vivo adipocyte progenitor*. **Cell Reports** – **2020** Jan 14;30(2): 571–582. IF 7.815
4. Wang RM, **Cattaneo P**, Camboa N, Braden R, Luo C, Evans S, Christman KL - *Myocardial matrix material supports a proliferative microenvironment for cardiomyocytes*. - **bioRxiv** - **2020** 2020.07.31.231845; doi:<https://doi.org/10.1101/2020.07.31.231845>

5. Liu C, Spinozzi S, Chen JY, Fang X, Feng W, Perkins G, **Cattaneo P**, Guimarães-Camboia N, Dalton ND, Peterson KL, Wu T, Ouyang K, Fu XD, Evans SM, Chen J. - *Nexilin is a New Component of Junctional Membrane Complexes Required for Cardiac T-Tubule Formation*. - **Circulation** - **2019** Apr 15. doi: 10.1161/CIRCULATIONAHA.119.039751. (IF: 23.054)
6. Zhang Z, Mu Y, Zhang J, Zhou Y, **Cattaneo P**, Veevers J, Peter AK, Manso AM, Knowlton KU, Zhou X, Evans SM, Ross RS, Chen J. - *Kindlin-2 Is Essential for Preserving Integrity of the Developing Heart and Preventing Ventricular Rupture* - **Circulation**. **2019** Mar 19;139(12):1554-1556. doi: 10.1161/CIRCULATIONAHA.118.038383. (IF: 23.054)
7. Moore-Morris T*, **Cattaneo P***, Guimarães-Camboia N, Bogomolovas J, Cedenilla M, Banerjee I, Ricote M, Kisseleva T, Zhang L, Gu Y, Dalton ND, Peterson KL, Chen J, Puceat M, Evans SM. (***Equally contributed**) - *Infarct Fibroblasts Do Not Derive From Bone Marrow Lineages* - **Circ Res** - **2017** Dec 21. pii: CIRCRESAHA.117.311490. doi: 10.1161/CIRCRESAHA.117.311490. (IF: 13.965)
8. Guimarães-Camboia N, **Cattaneo P**, Sun Y, Moore-Morris T, Gu Y, Dalton ND, Peterson KL, Stallcup WB, Chen J, Evans SM - *Pericytes do not evidence mesenchymal stem cell behavior in vivo*— **Cell Stem Cell** - **2017** Mar - 20(3), 345-359. doi: 10.1016/j.stem.2016.12.006 PMID:28111199 (IF: 22.27)
9. Hirai M*, **Cattaneo P***, Chen J, Evans SM (***Equally contributed**) - *Revisiting Preadolescent Cardiomyocyte Proliferation in Mice* - **Circ Res** - Commentary - **2016** Mar 18;118(6):916-9. doi: 10.1161/CIRCRESAHA.115.308101. PMID: 26987912 (IF: 11.02)
10. Moore-Morris T, **Cattaneo P**, Puceat M, Evans SM - *Origins of cardiac fibroblasts*. - **J Mol Cell Cardiol** - Review - **2016** Feb;91:1-5. doi: 10.1016/j.yjmcc.2015.12.031. PMID: 26748307 (IF: 4.66)
11. Miragoli M, Sanchez-Alonso JL, Bhargava A, Wright PT, Sikkell M, Schobesberger S, Diakonov I, Novak P, Castaldi A, **Cattaneo P**, Lyon AR, Lab MJ, Gorelik J - *Microtubule-Dependent Mitochondria Alignment Regulates Calcium Release in Response to Nanomechanical Stimulus in Heart Myocytes*. - **Cell Rep** - **2016** Jan 5;14(1):140-51. doi: 10.1016/j.celrep.2015.12.014. PMID: 26725114. (IF: 8.36)
12. Liang X*, Zhang Q*, **Cattaneo P**, Zhuang S, Gong X, Spann NJ, Jiang C, Cao X, Zhao X, Zhang X, Bu L, Wang G, Chen HS, Zhuang T, Yan J, Geng P, Luo L, Banerjee I, Chen Y, Glass CK, Zambon AC, Chen J, Sun Y, Evans SM. (***Equally contributed**) - *Transcription factor ISL1 is essential for pacemaker development and function*. - **J Clin Invest** - **2015** Aug 3;125(8):3256-68. doi: 10.1172/JCI68257. PMID: 26193633. (IF: 13.22)
13. Guimarães-Camboia N., Stowe J., Aneas I., Sakabe N., **Cattaneo P.**, Henderson L., Kilberg M.S., Johnson R.S., Chen J., McCulloch A.D., Nobrega M.A., Evans S.M., Zambon A.C. *HIF1 α Represses Cell Stress Pathways to Allow Proliferation of Hypoxic Fetal Cardiomyocytes*. **Dev Cell** - **2015** Jun 8;33(5):507-21. doi: 10.1016/j.devcel.2015.04.021. PMID: 26028220 (IF: 9.71)
14. **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 and Condorelli G – *DOT1L-mediated H3K79me2 modification critically regulates gene expression during cardiomyocyte differentiation*. – **Cell Death and Differentiation** – **2014** Dec 19 Epub – 2016 Apr;23(4):555-64. doi: 10.1038/cdd.2014.199. PMID 25526092. (IF: 8.18)
15. Papait R, **Cattaneo P**, Kunderfranco P, Greco C, Carullo P, Guffanti A, Viganò V, Stirparo GG, Latronico M, Hasenfuss G, Chen J and Condorelli G – *Genome wide analysis of histone marks identifying an epigenetic signature of promoters and enhancers underlying cardiac hypertrophy* – **PNAS** – **2013** Dec 10;110(50):20164-9. doi: 10.1073/pnas.1315155110 – PMID:24284169. (IF: 9.81)
16. Rizzi R, Di Pasquale E, Portararo P, Papait R, **Cattaneo P**, Latronico MVG, Altomare C, Sala L, Zaza A, Hirsch E, Naldini L, Condorelli G and Bearzi C – *Post-natal cardiomyocytes can generate iPSC cells with an enhanced capacity toward cardiomyogenic re-differentiation* - **Cell Death and Differentiation** **2012** Jul;19(7):1162-74. doi: 10.1038/cdd.2011.205. Epub 2012 Jan 20 - PMID: 22261617. (IF: 8.37)
17. Norata GD*, **Cattaneo P***, Poletti A, Catapano AL. (***Equally contributed**). *The Androgen derivate 5 α -androstane-3 β ,17 β -diol inhibits tumor necrosis factor alpha and lipopolisaccharide induced inflammatory response in human endothelial cells and in mice aorta*. **Atherosclerosis**, **2010**

Sep;212(1):100-6. doi: 10.1016/j.atherosclerosis.2010.05.015. PMID: 20557886. (IF: 4.09)

18. Francavilla C, **Cattaneo P**, Berezin V, Bock E, Ami D, de Marco A, Christofori G, Cavallaro U. *The binding of NCAM to FGFR1 induces a specific cellular response mediated by receptor trafficking.* **J Cell Biol**, 2009 Dec 28;187(7):1101-16. doi: 10.1083/jcb.200903030.PMID:20038681. (IF: 9.58)

Book Chapters:

Papait R, **Cattaneo P**, Latronico MVG and Condorelli G - "Muscle: Fundamental Biology and Mechanisms of Disease." - Ed. Joseph Hill and Eric Olson – **Elsevier**. Book Chapter: *Epigenetics In Cardiovascular Biology*.

Participation in Scientific Conferences

- May 2019: ERA-CVD Symposium – Riga (Letvia)
- Mar 2017: Keystone Symposia Conference – Molecular Mechanisms of Heart Development Keystone, Colorado (USA)
- Dec 2015: 76 Conference Italian Society of Cardiology (SIC), Rome (Italy)
- May 2012: Weinstein Cardiovascular Development Conference, Chicago, Illinois (USA)
- Feb 2011: Keystone Symposia Conference - Mechanisms of Cardiac Growth, Death and Regeneration Keystone, Colorado (USA)
- Oct 2010: Foundation Leducq Transatlantic Network of Excellence
MicroRNAs as therapeutic targets in heart failure, Zurich (Swiss)
- Oct 2008: VIII SISA Lombardia - Basic and Clinical Research in Cardiovascular Area, Milan (Italy)

"In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned decree."