

Curriculum Vitae
Massimo M. Santoro

Current position

Full Professor in Cellular and Molecular Biology, Department of Biology, University of Padua, IT
Principal Investigator, Veneto Institute of Molecular Medicine, Padua, IT

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Education

1994 B.Sc. in Biology “*summa cum laude*” and Special Award, University of Torino (Italy)

1996 M.Sc in Biology and Biochemistry, University of Torino (Italy)

2001 Ph.D. in Cellular and Molecular Biology, Open University, London (UK)

Professional experience

1992-1996 Undergraduate student, Department of Biomedical Sciences and Oncology, University of Turin.

1996-2001 PhD student, Open University c/o Department of Biological and Technological Research (Dibit), University of Vita e Salute San Raffaele, HSR.

2001-2008 Assistant Professor, Faculty of Science, University of Piemonte Orientale "A. Avogadro".

2004-2008 Post-doc fellow, Department of Biochemistry and Biophysics, University of California, San Francisco, UCSF

2008-2013 Associate Professor, Dept. of Biotechnology and Health, University of Turin, Italy and Group Leader at Molecular Biotechnology Center, University of Turin, Italy

2013-2017 Full Professor, Dept of Oncology, KUL and Group Leader, VIB, Belgium

Since 2018 Full Professor, Dept. of Biology, University of Padua, Italy

Since 2020 Group Leader, Venetian Institute of Molecular Medicine (VIMM), Padova, Italy

Research Activities

- Metabolic basis of cardiovascular development and diseases.
- Lipid metabolism in breast and melanoma progression.
- Translation control and RNA modifications in cardiovascular diseases and cancer progression.

Supervision of graduate students and postdoctoral fellows

Since 2008, supported and supervised 17 PhD students and 27 post- docs. 90% of them have finished the experience in my lab publishing as co-authors at least one research/review article. 80% of them have also accomplished a first-author publication. 60% of the scientists supervised have or are pursuing successful academic careers (Professorships and Postdocs's positions) or work in private sectors (Pharmaceutical companies, Industries, etc).

Patent

- Patent number PCT/EP2011/051738. UBIAD1 for cellular coenzyme Q10 synthesis and cardiovascular oxidative protection.
- In vivo redox and metabolic endothelial biosensors (submitted).
- UBIAD1 inhibitors UBIAD1i@ (under evaluation).

International Awards and Honours

2024 Member of Academia Europaea

2015 ERC Consolidator Grant
2014 Odysseus FWO Awards
2010 Marie Curie Reintegration Award and Grant
2008 HFSP Career Developmental Award and Grant
2005 HFSP Long-term fellow
2004 EMBO Long-term fellow

Invited speaker at National or International meeting

10th international CoQ10 conference, Copenhagen, DN; IVBM 2024, Amsterdam, NL; 4th Joint Dutch-German Vascular Biology Meeting in Groningen; IVBM, San Francisco, USA; Gordon Conference, Endothelial Cell Phenotypes in Health and Disease, Barcelona, SP; Cell death and Disease, Villa Vigoni, IT; Cardiac Regeneration and Vascular Biology, Venice, IT. 11th International Kloster Seeon Meeting 'Angiogenesis': Molecular Mechanisms and Functional Interactions"; Seeon, DE. SFRR Symposia, Belgrade, SE. GfMVB, Heidelberg, DE. Angiogenesis Gordon Conference, Maine, US. EVBO-ESM Meeting, Maastricht, NL. Fusion Conference in Cell Death, Cell Stress and Metabolism, Puerto Vallarta, ME. Dutch German vascular biology meeting, Amsterdam, NL. European Zebrafish PI Meeting, Trento, IT. 7th Oxidative Stress, Calcium Signaling and TRP Channel World Congress Antalya, Turkey. Dutch German Vascular Biology meeting, Amsterdam, NL. International Munich ROS Meeting, Munich, DE. APVBO Guangzhou, China. Cardiovascular Meeting, ESC, Padua, IT. EMBO Redox Meeting, Moscow, RU. Redox Biology Meeting, Paris, FR. EVBO meeting, Geneva, CH; 10th Zebrafish European Meeting, Budapest, HU. CRISPR-based Genome Engineering Meeting, Leuven, BE; YUM Meeting, Velen, DE; Gordon Conference in Redox Biology, Vermont, USA; Gordon Conference in Endothelial Cell Phenotype, Spain; Cancer Metabolism, San Francisco, USA. Cell Symposia Multifaceted Mitochondria, Chicago, USA; XVII Telethon Convention, Trento, Italy; Angiogenesis: Basi molecolari ed implicazioni terapeutiche VI, Pontignano, Italy; Gordon Conference on Endothelial Cell Behaviour, Rode Island, USA; 8th international CoQ10 conference, Bologna, Italy; 83rd EAS Congress, Glasgow, Scotland. 8th International Kloster Seeon Meeting "Angiogenesis", Seeon, Germany; 4th International Conference on Ophthalmology, Maryland, USA; International Vascular Biology Meeting, Kyoto, Japan; Keystone Symposia on Metabolism and Angiogenesis, USA. NAVBO meeting, Vascular Biology, Hyannis, MA, USA; 8th European Zebrafish meeting, Barcelona, Spain; ABCD meeting, Ravenna, Italy; Angiogenesis: Basi molecolari ed implicazioni terapeutiche V, Pontignano, Italy. Vesalius Research Center, VIB, Leuven, Belgium, ABCD meeting, Keynote lecture, Parma, Italy; Fondazione Guido Bernardini, Milano, Italia, Fondazione Guido Bernardini, Milano, Italia; "6th European Zebrafish meeting", Cardiovascular workshop, Rome, Italy; 1st Italian Zebrafish meeting, Brescia, Italy. Angiogenesis: basi molecolari ed implicazioni terapeutiche III, Pontignano, Italy; FISV meeting, Stem cell and regeneration workshop, Riva del Garda, Italy. Gordon Conference on Endothelial Cell Behaviour, Maine, USA. BaStaG meeting USCF retreat, San Francisco, USA. FISV meeting, workshop on Signal Transduction of Cell Adhesion, Proliferation and Differentiation, Riva del Garda, Italy. FISV meeting, Workshop on Signal Transduction of Cell Adhesion, Proliferation and Differentiation, Riva del Garda, Italy. Structures and Function of Interacting Protein Domains in Signal and Energy Transduction, NATO Conference, Napoli, Italy; ABCD-AGI-SIBBM Conference, S. Giminiano, Italy.

Invited lectures at Institute or University

ECAS, Heidelberg, DE; EVBO Seminars; GIGA, Liege, FR; University of Udine, Udine, IT. Linkoping University, Linkoping, Sweden. IBPS, Paris, FR; Karolinska Institute, Stockholm, Sweden. University of Padova, IT. Pasteur Institute, Paris, FR; International Centre for Genetic Engineering and Biotechnology (ICGEB), Trieste, IT; Institute Curie, Pole de Biologie du Développement et Cancer, Paris, FR; BHF Centre for Cardiovascular Science, University of Edinburgh, UK. Department of

Anatomy, University of Basel, CH; Department of Biology, University of Padua, Italy. Department of Molecular Biology, Université Libre de Bruxelles, BE. Department of Biology, University of Milan, Italy; Max Planck Institute for Heart and Lung Research, Bad Nauheim, Germany; Institute of Molecular Life Sciences Universität Zürich UZH, Swiss; NIH, Bethesda, Maryland, USA; KU Leuven Medical School, Stem Cell Instituut, Leuven, Belgium. IRIBHM- ULB, (Université Libre de Bruxelles), Brussels, Belgium; Lecture, Stazione Zoologica A. Dohr, Napoli, Italy. IFOM-IEO Campus, Milan, Italy; VIB Vesalius Research Center, KU Leuven, Belgium. Yale University, School of Medicine, Cardiovascular Department, USA; University of Bordeaux, France; PARCC retreat, Keynote Lecture, Paris, France. University of Padova, Italy; Cardiovascular Network, Molecular Biotechnology Center, University of Torino, Italy. TIGEM, Napoli, Italy; Seminar, UNITre, Torre Pellice, Italy. Lecture, Stazione Zoologica A. Dohr, Napoli, Italy. Faculty Candidate talk, Albert Einstein - Yoshiva University, New York, USA. PASS-UCSF, San Francisco, USA. DISCAFF, University of Piemonte Orientale, Novara, Italy; Department of Biology, University of Torino, Italy. Seminar, Regina Elena Cancer Institute, Rome, Italy. Cancer Research UK London Research Institute, London, UK.

Service to Professional and Academic Organization

Organizer and Chair, 4th Italian Zebrafish Meeting, Palermo, IT 2024. Chair, 12th European Zebrafish Meeting 2023 Krakow, Poland; Chair, IVBM, San Francisco, 2022; Organizer and Chair, 3th Italian Zebrafish Meeting, Naples, IT 2022. Organizer and Chair, 16th SIBBM Seminar: Frontiers in Metabolic Research, 2021, Padua, Italy. Chair, 11th European Zebrafish Meeting, Prague, Czech Republic. Organizer and Chair, 1st Italian Zebrafish Meeting, Pisa, IT. Chair, EVBO Meeting, Maastricht, NL. Chair, International Munich ROS Meeting, Munich, DE. Chair, European Zebrafish PI Meeting, Trento, IT. Chair, 7th Oxidative Stress, Calcium Signaling and TRP Channel World Congress Antalya, Turkey. Organizer and Chair, Genome Engineering and Synthetic Biology, Bruges, BE. Organizer and Chair, 5th International Metabolism Mini Symposium, Leuven, BE. Organizer and Chair, 1st Italian Zebrafish Meeting, Padova, IT. CNR, ERC PI centric event, Rome. IT. PhD committee member in Molecular Life Sciences, IMLS, University of Zurich, CH. VIB Group Leader Committee, BE. Department of Oncology, Council Member, KU Leuven, BE. Chairman, Molecular Basis of Cardiovascular diseases, 36th FEBS Congress, IT. Executive Board Member, Department of Biotechnology, University of Torino, IT. PhD committee in Molecular Biology, Dept of Biology, University of Padua, IT. Organizing committee "6th European Zebrafish meeting", Rome, IT. Chairman, Cardiovascular session, "6th European Zebrafish meeting", Rome, IT.

Editorial Activities

Editorial Board: Cell Death & Disease (Associate Editor), Cardiovascular Research (Associate Editor), Frontiers in Cell and Developmental Biology (Associate Editor), Scientific Reports (Associate Editor), Cancers (Editorial Board Member)

Solicited reviewer for: Science, Developmental Cell, Cell Reports, Nature Communications, EMBO Molecular Medicine, ATVB, Cardiovascular Research, Science Signaling, Developmental Biology, Experimental Cell Research, Mechanism of Development, Zebrafish, British Journal of Pharmacology, Science Signaling, PLOS One, Scientific Reports.

Solicited reviewer of grants and Ad Hoc Study Sections for: European Research Council (ERC and SYNERGY), CRIS Cancer Foundation, HFSP, Cancer Research UK, EMBO, Wellcome Trust, MRC, Swedish Research Council, AICR, Telethon, AIRC, FWO grant, Italian National Academy of Science, University of Padua, Australian National Grant Association, Czech Science Foundation.

Professional memberships

2024-now Member of Academia Europaea
2017-2021 Executive Council Member EVBO

Since 2010 European Vascular Biology Organization (EVBO)
2005-2016 North American Vascular Biology Organization (NAVBO)
2005-2010 American Society Cell Biology (ASCB)
Since 2002 Italian Society of Biochemistry and Molecular Biology (SIBBM)
Since 2000 Italian Association of Biological and Cellular Differentiation (ABCD)

Major Grants

2005-2007 PRIN, Italian Research Council, Italy €150.000
2008-2010 Career Developmental Award HFSP, EU €300.000
2008-2012 Marie Curie International Reintegration Grant, EU €100.000
2010-2013 AIRC grant, Italy €100.000
2011-2013 Telethon GGP101095, Italy €350.000
2013-2016 AIRC IG Grant €400.000
2014-2019 Odysseus Grant, Belgium €800.000
2014-2018 VIB, Belgium €1.5 mio
2015-2018 Italian Ministry of Health, Italy €300.000
2016-2022 ERC Consolidator Rendox 647057, EU €2.0 mio
2017-2020 FWO Grant, Belgium €0.500 mio
2018-2022 AIRC IG Grant €700.000
2021-2022 ERC-PoC 963865, €150.000
2021-2023 Telethon Grant, €238.000
2022-2024 PRIN Grant, €270.000
2023-2028 AIRC IG Grant €890.000
2023-2026 "Melanoma Associazione Piccoli Punti" Grant €300.000
2024-2026 PRIN-PNRR Grant, €240.000

List of publications

Peer-reviewed publications (in reverse chronological order).

1. Giovanni Tosi, Alessandro Paoli, Gaia Zuccolotto, Emilia Turco, Manuela Simonato, Daniela Tosoni, Francesco Tucci, Monica Giomo, Nicola Elvassore, Antonio Rosato, Paola Cogo, Salvatore Pece, and **Massimo M. Santoro**. CANCER CELL STIFFENING VIA CoQ10 AND UBIAD1 REGULATES ECM SIGNALING AND FERROPTOSIS RESISTANCE IN BREAST CANCER. *Nat Commun.* 2024 18;15(1):8214. doi: 10.1038/s41467-024-52523-y. IF= 17.00.
2. Massimo Andrezzaoli , Francesco Argenton, Bertolucci C, Finazzi D, Chiara Gabellini Marina Mione Anna Pistocchi , Massimo M. **Santoro** , Paolo Sordino, Vincenzo Cavalieri. ZEBRAFISH FROM THE ALPS TO SICILY: THE 4TH ITALIAN ZEBRAFISH. *Zebrafish* 2024, 21(4), pp. 275–278. doi:10.1089/zeb.2024.0140 IF=1.4
3. Stefano Biffo, Davide Ruggero and **Massimo M. Santoro**. THE CROSSTALK BETWEEN METABOLISM AND TRANSLATION. *Cell Metabolism.* 2024 Sep 3;36(9):1945-1962. doi:10.1016/j.cmet.2024.07.022. IF=27.7.
4. Clair M. Kelley, Nicole O. Glenn, Dafne Gays, **Massimo M. Santoro**, and Wilson K. Clements. SCLEROTOME-DERIVED VASCULAR SMOOTH MUSCLE PROGENITORS CONTRIBUTE TO THE HAEMATOPOIETIC STEM CELL SPECIFICATION NICHE. bioRxiv preprint, doi:10.1101/2023.08.09.552695.
5. Munise Merteglou and **Massimo M. Santoro**. EXPLOITING THE METABOLIC VULNERABILITY OF CIRCULATING TUMOUR CELLS. *Trends Cancer.* 2024 Jun;10(6):541-556. doi:10.1016/j.trecan.2024.03.004. IF=18.4.
6. Massimo Busin, **Massimo M Santoro**, JS Weiss. PERIPHERAL CENTER SPARING PRESENTATION OF SCHNYDER CORNEAL DYSTROPHY. *Ophthalmology* S0161-6420(23)00702-9, 2023. doi:10.1016/j.ophtha.2023.09.024. IF=12.8.
7. Matteo Astone, Roxana E. Oberkersch, Giovanni Tosi, Alberto Biscontin, and **Massimo M. Santoro**. THE CLOCK TICKS IN THE ENDOTHELIUM: THE CIRCADIAN CLOCK PROTEIN BMAL1 PROMOTES ANGIOGENESIS. *Cardiovascular Research*, 2023, 119(10):1952-1968. doi:10.1093/cvr/cvad057. IF=13.08.
8. Cristina A. Recatalá, **Massimo M Santoro**. THE GLUCOSE-TO-ACETATE METABOLIC FLUX THAT DRIVES ENDOTHELIAL-TO-MESENCHYMAL TRANSITION VIA TGF-B SIGNALING. *Cell Metabolism.* 35(7):1093-1095, 2023. doi:10.1016/j.cmet.2023.06.006. IF=31.03.
9. Cristina Arce Recatalá, Mattia Albiero and **Massimo M. Santoro**. EVALUATION OF POST-NATAL ANGIOGENESIS IN A MOUSE HIND LIMB ISCHEMIA MODEL. *STARS Protocols*, 4(2):102232. doi:10.1016/j.xpro.2023.102232. IF=1.35.
10. Brian G. Coon, Sushma Timalisina, Matteo Astone, Minhwan Chung, Jennifer Fang, Jinah Han, Karen Hirschi, Louis-Eric Trudeau, **Massimo M. Santoro**, Martin A. Schwartz. SHEAR STRESS INDUCTION OF KLF2 THROUGH MITOCHONDRIAL REMODELING. *Journal of Cell Biology*, 2022, 221(7):e202109144. doi:10.1083/jcb.202109144. IF= 8.007
11. Roxana E. Oberkersch and **Massimo M. Santoro** YAP/TAZ-TEAD LINK ANGIOGENESIS TO NUTRIENTS. *Nat Metab.* 2022 Jun;4(6):645-646. doi:10.1038/s42255-022-00579-9. IF=19.865

12. Jacopo Lidonnici, **Massimo M. Santoro** Roxana E. Oberkersch. CANCER-INDUCED METABOLIC REWIRING OF TUMOR ENDOTHELIAL CELLS. *Cancers* 2022 14(11). doi:10.3390/cancers14112735. IF=6.568
13. Roxana E. Oberkersch, Giovanna Pontarin, Matteo Astone, Emiliano Panieri, Marianna Spizzotin, Liasian Arslanbaeva, Giovanni Tosi, Emiliano Panieri, Sara Ricciardi, Maria Francesca Allega, Alessia Brossa, Paolo Grumati, Benedetta Bussolati, Stefano Biffo, Saverio Tardito, and **Massimo M. Santoro**. ASPARTATE METABOLISM IN ENDOTHELIAL CELLS ACTIVATES THE mTORC1 PATHWAY TO INITIATE TRANSLATION DURING ANGIOGENESIS. *Developmental Cell*, 1241-1256.e8. doi:10.1016/j.devcel.2022.04.018. 2022. IF=13.417
14. Liaisan Arslanbaeva, Giovanni Tosi, Marco Ravazzolo, Manuela Simonato, Francesco Tucci, Salvatore Pece, Paola Cogo, and **Massimo M. Santoro**. UBIAD1 AND COQ10 PROTECTS MELANOMA CELLS FROM LIPID PEROXIDATION-MEDIATED CELL DEATH. *Redox Biology* 51, doi.org/10.1016/j.redox.2022.102272, 2022. IF=10.787
15. Nicola Facchinello, Matteo Astone, Marianna Spizzotin, Matteo Audano, Enrica Calura, Mihaela Crisan, Nico Mitro, and **Massimo M. Santoro**. OXIDATIVE PENTOSE PHOSPHATE PATHWAY CONTROLS VASCULAR MURAL CELL COVERAGE BY REGULATING EXTRACELLULAR MATRIX COMPOSITION. *Nature Metabolism*, 2022, 4(1):123-140. doi.org/10.1038/s42255-021-00514-4, 2022. IF=19.865
16. Chiara Camillo[§], Nicola Facchinello[§], Dafne Gays, Noemi Gioelli, Matteo Astone, Roxana Oberkersch, Chiara Sandri, Giulia Villari, Luca Tamagnone, Donatella Valdembri, **Massimo M. Santoro**^{*} and Guido Serini[†]. LATROPHILIN 2 CONTROLS VASCULAR MORPHOGENESIS AND FUNCTION BY INHIBITING ENDOTHELIAL CELL ADHESION AND YAP/TAZ MECHANOSIGNALING. *Journal Cell Biology*, 220; doi:10.1083/jcb.202006033, 2021. [§] co-first author, ^{*}co-senior and corresponding authors. IF= 8.007
17. Michael Donadon and **Massimo M. Santoro**. ORIGIN AND MECHANISMS OF SMOOTH MUSCLE CELLS DEVELOPMENT IN VERTEBRATES. *Development*, 148: dev197384 doi:10.1242/dev.197384, 2021. IF=6.872
18. Matteo Astone and **Massimo M. Santoro**. TIME TO FIGHT: TARGETING THE CIRCADIAN CLOCK MOLECULAR MACHINERY IN CANCER THERAPY. *Drug Discovery Today*, 37,101753, 2021. doi:10.1016/j.drudis.2021.01.023 IF=8.369
19. Nicola Facchinello, Claudio Laquatra, Lisa Locatello, Giorgia Beffagna, Raquel Brañas Casas, Chiara Fornetto, Alberto Dinarello, Laura Martorano, Andrea Vettori, Giovanni Risato, Rudy Celeghin, Giacomo Meneghetti, **Massimo Santoro**, Agnes Delahodde, Francesco Vanzi, Andrea Rasola, Luisa Dalla Valle, Maria Berica Rasotto, Tiziana Lodi, Enrico Baruffini, Francesco Argenton, and Natascia Tiso. EFFICIENT CLOFILUM TOSYLATE-MEDIATED RESCUE OF POLG-RELATED DISEASE PHENOTYPES IN ZEBRAFISH. *Cell Death & Disease*, 12, 100, 2021. doi:10.1038/s41419-020-03359-z IF=9.685
20. Liasian Arslanbaeva and **Massimo M. Santoro**. ADAPTIVE REDOX HOMEOSTASIS IN CUTANEOUS MELANOMA. *Redox Biology*, 37, 2020. doi.org/10.1016/j.redox.2020.101753 IF=10.787
21. **Santoro, M. Massimo**. THE ANTIOXIDANT ROLE OF NON-MITOCHONDRIAL COQ10: MYSTERY SOLVED! *Cell Metabolism*, 31(1), 13–15. 2020. doi: org/10.1016/j.cmet.2019.12.007 IF=31.373

22. **Santoro, M. Massimo**, Beltrame M., Panáková D., Siekmann A. F. Tiso, N., Venero Galanternik M., Hyun Min Jung and Brant M. Weinstein. ADVANTAGES AND CHALLENGES OF CARDIOVASCULAR AND LYMPHATIC STUDIES IN ZEBRAFISH RESEARCH. doi: 10.3389/fcell.2019.00089 *Frontiers in Cell and Developmental Biology*, 7, 946, 2019. IF=6.081
23. Roxana E. Oberkersch and **Massimo M. Santoro**. ROLE OF AMINO ACID METABOLISM IN ANGIOGENESIS. *Vascular Pharmacology*, 17-23, 2019. doi: 10.1016/j.vph.2018.11.001 IF=5.738
24. Thomas Dickmeis, Yi Feng, Maria Caterina Mione, Nikolay Ninov, **Massimo Mattia Santoro**, Herman P Spaink, Philipp Gut. NANO-SAMPLING AND REPORTER TOOLS TO STUDY METABOLIC REGULATION IN ZEBRAFISH. *Frontiers Cell and Developmental Biology*, 7, 1-9. 2019. doi: org./10.3389/fcel.2019.00015 IF=6.081
25. Dougall Norris and **Massimo M. Santoro**. BEFORE THE PUMP. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 38, 2763–2764, 2018. doi: org/10.1161/ATVBAHA.118.31189 IF=10.51
26. Oliver A. Stone, Mohamed El-Brolosy, Kerstin Wilhelm, Xiaojing Liu, Ana M. Romão, Elisabetta Grillo, Jason K.H. Lai, Stefan Günther, Sylvia Jeratsch, Carsten Kuenne, I-Ching Lee, Thomas Braun, **Massimo M. Santoro**, Jason W. Locasale, Michael Potente and Didier Y.R. Stainier. LOSS OF PYRUVATE KINASE M2 LIMITS GROWTH AND TRIGGERS INNATE IMMUNE SIGNALING IN ENDOTHELIAL CELLS. *Nature Communications* 9, 4077-4087, 2018. doi: org/10.1038/s41467-018-06406-8 IF=17.694
27. Rupel, K., Zupin, L., Colliva, A., Kamada, A., Poropat, A., Ottaviani, G., Margherita Gobbo, Lidia Fanfoni, Rossella Gratton, **Massimo M. Santoro**, Roberto Di Lenarda, Matteo Biasotto, and Serena Zacchigna. PHOTOBIMODULATION AT MULTIPLE WAVELENGTHS DIFFERENTIALLY MODULATES OXIDATIVE STRESS IN VITRO AND IN VIVO. *Oxidative Medicine and Cellular Longevity*, 2, 1–11, 2018. doi: org/10.1155/20148/6510159 IF=7.31
28. Zulato E., Ciccarese F., Agnusdei V., Pinazza M., Nardo G., Iorio E., Curtarello M., Silic-Benussi M., Rossi E, Venturoli C., Panieri E., **Santoro M. Massimo**, Quintieri L., Ciminale V, Indraccolo S. LKB1 LOSS IS ASSOCIATED WITH GLUTATHIONE DEFICIENCY UNDER OXIDATIVE STRESS AND SENSITIVITY OF CANCER CELLS TO CYTOTOXIC DRUGS AND γ -IRRADIATION. *Biochem Pharmacology*, 156, 479-490, 2018. doi: 10.1016/j.bcp.2018.09.019 IF=5.585
29. Sanjay Sinha and **Massimo M. Santoro**. NEW MODELS TO STUDY VASCULAR MURAL CELL EMBRYONIC ORIGIN: IMPLICATIONS IN VASCULAR DISEASES. *Cardiovascular Res.* 114(4):481-491, 2018. doi: 10.1093/cvy005 IF=10.71
30. Jacoba J. Louw, Ricardo Nunes Bastos, Xiaowen Chen, Céline Verdood, Anniek Corveleyn, Yaojuan Jia, Jeroen Breckpot, Marc Gewillig, Hilde Peeters, **Massimo M. Santoro**, Francis Barr, Koenraad Devriendt: COMPOUND HETEROZYGOUS LOSS-OF-FUNCTION MUTATIONS IN *KIF20A* ARE ASSOCIATED WITH A NOVEL LETHAL CONGENITALCARDIOMYOPATHY IN TWO SIBLINGS. *PLOS Genetics*, 22;14 (1):e1007138, 2018. doi: 10.1371/journal.pgen.1007138 IF=6.02
31. **Massimo M. Santoro**. FASHIONING BLOOD VESSELS BY ROS SIGNALLING AND METABOLISM. *Seminars in Cell & Developmental Biology*, 80, 35-42, 2018. doi:org/10.1016/j.semcdb.2017.08.002 IF=7.5
32. Emiliano Panieri, Carlo Milia and **Massimo M. Santoro**. REAL-TIME QUANTIFICATION OF SUBCELLULAR H2O2 AND GLUTATHIONE REDOX POTENTIAL IN LIVING CARDIOVASCULAR TISSUES. *Free Radical Biology and Medicine*, 109, 189-200, 2017. Doi.org/10.1016/j.freeradbiomed.2017.02.22 IF=8.101

33. Emiliano Panieri and **Massimo M. Santoro**. DATA ON METABOLIC-DEPENDENT ANTIOXIDANT RESPONSE IN THE CARDIOVASCULAR TISSUES OF LIVING ZEBRAFISH UNDER STRESS CONDITION. *Data in Brief*, 12, 427-432, 2017. Doi: 10.1016/j.dib.2017.04.034 IF=1.83
34. Dafne Gays, Christopher Hess, Annalisa Camporeale, Ugo Ala, Paolo Provero, Christian Mosimann and **Massimo M. Santoro**. AN EXCLUSIVE CELLULAR AND MOLECULAR NETWORK GOVERNS INTESTINAL SMOOTH MUSCLE CELLS DIFFERENTIATION IN VERTEBRATES. *Development*, 144, 1-15, 2017. Doi. 10.1242/dev.133926 IF=6.872
35. Xiaowen Chen, Dafne Gays, Carlo Millia and **Massimo M. Santoro**. CILIA CONTROL VASCULAR MURAL CELL RECRUITMENT IN VERTEBRATES. *Cell Reports*, 18, 1-15, 2017. Doi:10.1016/j.celrep.2016.12.044 IF=9.995
36. Saravana K. Ramasamy, Anjali P. Kusumbe, Maria Schiller, Dagmar Zeuschner, M. Gabriele Bixel, Carlo Milia, Jaba Gamrekelashvili, Anne Limbourg, Alexander Medvinsky, **Massimo M. Santoro**, Florian P. Limbourg, and Ralf H. Adams. BLOOD FLOW CONTROLS BONE VASCULAR FUNCTION AND OSTEOGENESIS. *Nature Communications*. 7, 13601, 2016. Doi:10.1038/ncomms13601 IF=17.694
37. Giulia Mana, Fabiana Clapero, Emiliano Panieri, Valentina Panero, Hui-Yuan Tseng, Federico Saltarin, Elena Astanina, Mark Morgan, Martin J. Humphries, **Massimo M. Santoro**, Guido Serini, and Donatella Valdembri. PPFIA1 DRIVES ACTIVE $\alpha 5 \beta 1$ INTEGRIN FIBRILLOGENESIS AND VASCULAR MORPHOGENESIS. *Nature Communications*. 7, 13546, 2016. Doi:10.1038/ncomms13546 IF=17.694
38. Raj Sewduth and **Massimo M. Santoro**. "DECODING" ANGIOGENESIS: NEW FACETS CONTROLLING ENDOTHELIAL CELL BEHAVIOR. *Frontiers in Physiology*. 306, 1-7, 2016. Doi:org/10.3389/fphys2016.00306 IF=4.755
39. Emiliano Panieri and **Massimo M. Santoro**. ROS HOMEOSTASIS AND METABOLISM: A DANGEROUS LIASON IN CANCER CELLS. *Cell Death & Disease*. e2253, 2016. Doi:10.1038/cddis.2016.105 IF=9.685
40. Martano Chiara, Mugoni Vera, Dal Bello Federica, **Santoro M. Massimo** and Medana, Claudio. RAPID HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY-HIGH RESOLUTION MASS SPECTROMETRY METHODOLOGY FOR MULTIPLE PRENOL LIPIDS ANALYSIS IN ZEBRAFISH EMBRYOS. *Journal of Chromatography A*, 1412, 59-66, 2015. Doi: 10.1016/j.chroma.2015.07.115 IF=4.759
41. Emiliano Panieri and **Massimo M. Santoro**. ROS SIGNALING AND REDOX BIOLOGY IN ENDOTHELIAL CELLS. *Cell Mol Life Sci May*, 72: 3281-303, 2015. DOI: 10.1007/s00018-015-1928-9 IF=9.261
42. Vitor Fortuna, Luc Pardanaud, Isabelle Brunet, Roxana Ola, Emma Ristori, **Massimo M. Santoro**, Stefania Nicoli, Anne Eichmann. VASCULAR MURAL CELLS INSTRUCT NORADRENERGIC DIFFERENTIATION OF EMBRYONIC SYMPATHETIC NEURONS. *Cell Reports*, 11: 2211-1247, 2015. DOI: 10.1016/j.celrep.2015.05.028 IF=9.995
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