Curriculum Vitae

Massimo M. Santoro

Current position

Full Professor, Department of Biology, University of Padua, IT

Chair of Cell Biology, Department of Biology, University of Padua, IT

Education

1994	BS in Biology "s*umma cum laude*" and Special Award, University of Torino (Italy)
1996	Master 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".
2001-2004	Post-doc fellow, Department of Medical 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	Assistant Professor and Group Leader at Molecular Biotechnology Center, University of Turin, Italy
2013-2016	Associate Professor in Molecular Biology and Group Leader at Molecular Biotechnology Center University of Turin, Italy
2016-2017	Full Professor in Cellular and Molecular Biology, Dept. of Biotechnology and Health, University of Turin, Italy
2014-2017	Group Leader, VIB, Belgium

Research Activities

- Molecular and genetic basis of developmental angiogenesis and vascular maturation.
- Lipid metabolism in health and disease angiogenesis.
- Oxidative stress and ROS signaling in cancer progression.

International Awards and Honours

2015	ERC Consolidator
2014	Odysseus FWO Awards
2010	Marie Curie Reintegration Award and Grant

2008 HFSP Career Developmental Award and Grant

2004 HFSP Long-term fellow and EMBO Long-term fellow

1996 Open University and San Raffaele University merit-based fellow

Invited speaker at National or International meeting

2018 EZPM, Trento, IT. 7th Oxidative Stress, Calcium Signaling and TRP Channel World Congress Antalya, Turkey.

2017 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.

2016 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.

2015 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.

2014 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.

2013 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.

2012 Vesalius Research Center, VIB, Leuven, Belgium.

2010 ABCD meeting, Keynote lecture, Parma, Italy; Fondazione Guido Bernardini, Milano, Italia

2009 Fondazione Guido Bernardini, Milano, Italia**;** "6th European Zebrafish meeting", Cardiovascular workshop, Rome, Italy; 1st Italian Zebrafish meeting, Brescia, Italy.

2008 Angiogenesis: basi molecolari ed implicazioni terapeutiche III, Pontignano, Italy; FISV meeting, Stem cell and regeneration workshop, Riva del Garda, Italy.

2006 Gordon Conference on Endothelial Cell Behaviour, Maine, USA.

2005 BaStaG meeting USCF retreat, San Francisco, USA.

1998 FISV meeting, workshop on Signal Transduction of Cell Adhesion, Proliferation and Differentiation, Riva del Garda, Italy.

1997 FISV meeting, Workshop on Signal Transduction of Cell Adhesion, Proliferation and Differentiation, Riva del Garda, Italy.

1996 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

2018 IBPS, Paris, FR; Karolinska Institute, Stockholm, Sweden

2017 University of Padova, IT.

2016 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.

2015 Department of Anatomy, University of Basel, CH; Department of Biology, University of Padua, Italy. Department of Molecular Biology, Université Libre de Bruxelles, BE.

2014 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.

2013 IRIBHM- ULB, (Université Libre de Bruxelles), Brussels, Belgium; Lecture, Stazione Zoologica A. Dohr, Napoli, Italy

2012 IFOM-IEO Campus, Milan, Italy; VIB Vesalius Research Center, KU Leuven, Belgium.

2011 Yale University, School of Medicine, Cardiovascular Department, USA; University of Bordeaux, France; PARCC retreat, Keynote Lecture, Paris, France.

2010 University of Padova, Italy; Cardiovascular Network, Molecular Biotechnology Center, University of Torino, Italy.

2009 TIGEM, Napoli, Italy; Seminar, UNITre, Torre Pellice, Italy.

2008 Lecture, Stazione Zoologica A. Dohr, Napoli, Italy

2007 Faculty Candidate talk, Albert Einstein - Yoshiva University, New York, USA.

2006 PASS-UCSF, San Francisco, USA.

2005 DISCAFF, University of Piemonte Orientale, Novara, Italy; Department of Biology, University of Torino, Italy.

2003 Seminar, Regina Elena Cancer Institute, Rome, Italy

2000 Cancer Research UK London Research Institute, London, UK

Service to Professional and Academic Organization

2009 Chairman, Cardiovascular session, "6th European Zebrafish meeting", Rome, IT.

2009 Organizing committee "6th European Zebrafish meeting", Rome, IT 15-19th July 2009.

2008 PhD committee in Molecular Biology, Dept of Biology, University of Padua, IT.

2010-2014 Executive Board Member, Department of Biotechnology, University of Torino, IT.

2011 Chairman, Molecular Basis of Cardiovascular diseases, 36th FEBS Congress, IT.

2013-present Department of Oncology, Council Member, KU Leuven, BE.

2015-present VIB Group Leader Committee, BE

2016 PhD committee member in Molecular Life Sciences, IMLS, University of Zurich, CH.

2016 CNR, ERC PI centric event, Rome. IT

2017 Organizer and Chair, 1st Italian Zebrafish Meeting, Padova, IT

2017 Organizer and Chair, 5th International Metabolism Mini Symposium, Leuven, BE

2018 Organizer and Chair, Genome Engineering and Synthetic Biology, Bruges, BE

Editorial Activities

Editorial Board: Cardiovascular Research (Associate Editor), Frontiers in Cell and Developmental Biology (Associate Editor), Scientific Reports (Nature Publishing Group).

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), HFSP, Cancer Research UK, EMBO, Welcome Trust, MRC, AICR, Telethon, AIRC, FWO grant, Italian National Academy of Science, University of Padua, Australian National Grant Association, Czech Science Foundation.

Professional memberships

2017-present Executive Council Member EVBO

2010-present European Vascular Biology Organization (EVBO)

2005-present North American Vascular Biology Organization (NAVBO)

2005-present American Society Cell Biology (ASCB)

2002-present Italian Society of Biochemistry and Molecular Biology (SIBBM)

2000-present Italian Association of Biological and Cellular Differentiation (ABCD)

Patent

2011	Patent number PCT/EP2011/051738. UBIAD1 for cellular coenzyme Q10 synthesis and cardiovascular oxidative protection.
2016	In vivo redox and metabolic endothelial biosensors. Patent under submission.

Major Grants

2005-2007	PRIN, Italian Research Council, Italy €0.150 mio
2008-2010	Career Developmental Award HFSP, EU €0.300 mio
2008-2012	Marie Curie International Reintegration Grant, EU €0.100 mio
2010-2013	AIRC grant, Italy €0.100 mio
2011-2013	Telethon GGP101095, Italy €0.350 mio
2013-2016	AIRC IG Grant €0.400 mio
2014-2019	Odysseus Grant, Belgium €0.900 mio
2014-2018	VIB, Belgium €1.5 mio
2015-2018	Italian Ministry of Health €0.300 mio
2016-2021	ERC Consolidator €2.0mio
2017-2020	FWO Grant 0.500mio

Peer-reviewed publications (in reverse chronological order).

1. Sanjay Sinha and **Massimo M. Santoro**. NEW MODELS TO STUDY VASCULAR MURAL CELL EMBRYONIC ORIGIN: IMPLICATIONS IN VASCULAR DISEASES. *Cardiovascular Research*. Invited Review in press.

2. Emiliano Panieri, Carlo Milia and **Massimo M. Santoro**. IN VIVO REAL-TIME MONITORING AND IMAGING OF SUBCELLULAR H202 AND GLUTATHIONE REDOX POTENTIAL IN CARDIOVASCULAR TISSUES. *Free Radical Biology and Medicine*, 109, 189-200, 2017.

3. 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.

4. **Massimo M. Santoro**. MODELLING ANGIOGENESIS BY ROS SIGNALLING AND METABOLISM. *Seminars in Cell & Developmental Biology*, *invited review*, https://doi.org/10.1016/j.semcdb.2017.08.002.

5. 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 CONGENITAL CARDIOMYOPATHY IN TWO SIBLINGS. *PLOS Genetics*, 2017 in press.

6. 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.

7. Xiaowen Chen, Dafne Gays, Carlo Millia and **Massimo M. Santoro**. CILIA CONTROL VASCULAR MURAL CELL RECRUITMENT IN VERTEBRATES. *Cell Reports, 18,* 1-15, 2017.

8. 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.

9. 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 a5b1 INTEGRIN FIBRILLOGENESIS AND VASCULAR MORPHOGENESIS. *Nature Communications.* 7, 13546, 2016.

10. Xiaowen Chen, Dafne Gays, and **Massimo M. Santoro**. TRANSGENIC ZEBRAFISH. Methods in Molecular Biology In *Mitochondrial* 1464, pp. 107–114, 2016.

11. Raj Sewduth and **Massimo M. Santoro**. "DECODING" ANGIOGENESIS: NEW FACETS CONTROLLING ENDOTHELIAL CELL BEHAVIOR. *Frontiers in Physiology.* 306, 1-7, 2016.

12. Emiliano Panieri and **Massimo M. Santoro**. ROS HOMEOSTASIS AND METABOLISM: A DANGEROUS LIASON IN CANCER CELLS. *Cell Death & Disease.* e2253, 2016.

13. 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.

14. Emiliano Panieri and **Massimo M. Santoro**. REDOX SIGNALING IN ENDOTHELIAL CELLS. *Cell Mol Life Sci* May, 72: 3281-303, 2015.

15. 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.

16. Giulia Garaffo, Daniele Conte, Paolo Provero, Daniela Tomaiuolo, Zheng Luo, Patrizia Pinciroli, Clelia Peano, Ilaria Ilaria D'Atri, Yorick Gitton, Talya Etzion, Yoav Gothilf, Dafne Gays, **Massimo M. Santoro**, Giorgio Roberto Merlo. THE DLX5 AND FOXG1 TRANSCRIPTION FACTORS, LINKED VIA MIRNA-9 AND -200, ARE REQUIRED FOR THE DEVELOPMENT OF THE OLFACTORY AND GNRH SYSTEM. *Mol Cell Neurosci.* 68:103-119, 2015.

17. Sonia Mercurio, Sara Petrillo, Deborah Chiabrando, Zuni Irma Bassi, Dafne Gays, Annalisa Camporeale, Andrei Vacaru, Barbara Miniscalco, Giulio Valperga, Lorenzo Silengo, Fiorella Altruda[1], Margaret H Baron, **Massimo M. Santoro** and Emanuela Tolosano. HEME EXPORTER FLVCR1 REGULATES EXPANSION AND DIFFERENTIATION OF COMMITTED ERYTHROID PROGENITORS BY CONTROLLING INTRACELLULAR HEME ACCUMULATION. *Hematologica,* 100(6): 720-9, 2015.

18. Elisa De Luca, Gian Maria Zaccaria, Maura Hadhoud, Giovanna Rizzo, Roberto Ponzini, Umberto Morbiducci and **Massimo M. Santoro**. ZEBRABEAT: A FLEXIBLE PLATFORM FOR THE ANALYSIS OF THE CARDIAC RATE IN ZEBRAFISH EMBRYOS. *Scientific Reports.* 4, 4898, 2014.

19. **Massimo M. Santoro.** ZEBRAFISH AS A MODEL TO EXPLORING CELLULAR METABOLISM AND METABOLIC DISEASES. *Trends in Endocrinology and Metabolism.* 10, 546-54. 2014.

20. **Massimo M. Santoro.** ANTI_ANGIOGENIC CANCER DRUGS USING THE ZEBRAFISH MODEL. Focus series on "New Advancement on the Regulation of Angiogenesis. *Arteriosclerosis, Thrombosis, and Vascular Biology,* 34, 1846, 2014.

21. Giulia Garaffo, Paolo Provero, Ivan Molineris, Patrizia Pinciroli, Clelia Peano, Cristina Battaglia, Daniela Tomaiuolo, Talya Etzion, Yoav Gothilf, **Massimo M. Santoro**, and Giorgio R. Merlo. PROFILING, BIOINFORMATIC, AND FUNCTIONAL DATA ON THE DEVELOPING OLFACTORY/GNRH SYSTEM REVEAL CELLULAR AND MOLECULAR PATHWAYS ESSENTIAL FOR THIS PROCESS AND POTENTIALLY RELEVANT FOR THE KALLMANN SYNDROME. *Frontiers in Endocrinology*, *4*, 203. 2014.

22. Thomas R. Whitesell, Regan M. Kennedy, Alyson D. Carter, Evvi-Lynn Rollins, Sonja Georgijevic, **Massimo M. Santoro** and Sarah J. Childs. A SMOOTH MUSCLE ACTIN (ACTA2/ASMA) ZEBRAFISH TRANSGENIC LINE MARKING VASCULAR MURAL CELLS AND VISCERAL SMOOTH MUSCLE CELLS. *PloS One* 9(3), e90590. 2014.

23. Vera Mugoni, Annalisa Camporeale and **Massimo M. Santoro**. EXPLORING OXIDATIVE STRESS IN ZEBRAFISH EMBRYOS. *JoVe 89,* 2014.

24. Vera Mugoni, Claudio Medana and **Massimo M. Santoro**. ^{13}C-ISOTOPE BASED PROTOCOL FOR PRENYL LIPID METABOLIC ANALYSIS IN ZEBRAFISH TISSUES. *Nature Protocols*, 8, 2337-2347, 2013.

25. Carlo Follo, Matteo Ozzano, Claudia Montalenti, **Massimo M. Santoro** and Ciro Isidoro. KNOCK-DOWN OF CATHEPSIN D IN ZEBRAFISH FERTILIZED EGGS DETERMINES CONGENITAL MYOPATHY. *BioScience Report*, 33, 371-378, 2013.

26. **Massimo M. Santoro** and Stefania Nicoli. miRNAs IN ENDOTHELIAL CELL SIGNALING: The endomiRNAs. *Experimental Cell Research*, 319, 1324-1330, 2013.

27. Vera Mugoni, Ruben Postel, Valeria Catanzaro, Elisa De Luca, Giuseppe Digilio, Emilia Turco, Lorenzo Silengo, Michael P. Murphy, Claudio Medana, Didier Y. Stainier, Jeroen Bakkers and **Massimo M. Santoro**. UBIAD1 IS AN ANTIOXIDANT ENZYME THAT REGULATES eNOS ACTIVITY BY CoQ10 SYNTHESIS. *Cell 152*, 504–518, 2013.

28. Dafne Gays and **Massimo M. Santoro**. THE AD-MIR-ABLE ADVANCES IN CARDIOVASCULAR BIOLOGY THROUGH THE ZEBRAFISH MODEL SYSTEM. *Cell Mol Life Sci* 70, 2489-2503, 2013.

29. **Massimo M. Santoro**. "FISHING" FOR ENDOTHELIAL MICRORNA FUNCTIONS AND DYSFUNCTION. *Vascular Pharmacology*, 5, 60-68, 2011.

30. Juanita Lopez, Sidonie Wicky John, Tencho Tenev, Gilles J. P. Rautureau, Mark G. Hinds, Floriana Francalanci, Rebecca Wilson, Meike Broemer, **Massimo M. Santoro**, Catherine L. Day and Pascal Meier.

CARD-MEDIATED AUTOINHIBITION OF CIAP1'S E3 LIGASE ACTIVITY SUPPRESSES CELL PROLIFERATION AND MIGRATION. *Molecular Cell,* 42: 569–583, 2011.

31. Carlo Follo, Matteo Ozzano, Vera Mugoni, Roberta Castino, **Massimo M. Santoro** and Ciro Isidoro. KNOCK-DOWN OF CATHEPSIN D AFFECTS THE RETINAL PIGMENT EPITHELIUM, IMPAIRS SWIM-BLADDER ONTOGENESIS AND CAUSES TO PRAECOX DEATH IN ZEBRAFISH. *PLOS One*, 6(7):e21908, 2011.

32. Adrian C. Grimes, Ana Carmen Durán, Valentin Sans-Coma, Danyal Hami, **Massimo M. Santoro** and Miguel Sanchez Torres. THE SECONDARY HEART FIELD AND CARDIAC OUTFLOW TRACT STRUCTURE: A PROPOSED COMMON THEME AMONG VERTEBRATES. *Evolution & Development,* 12:6, 552 –567, 2010.

33. **Massimo M. Santoro**, Gabriella Pesce and Didier Y Stainier. CHARACTERIZATION OF VASCULAR MURAL CELLs DURING ZEBRAFISH DEVELOPMENT. *Mechanisms of Development,* 126: 638-49, 2009. . ***IF= 2.8***. *Highlighted in Faculty of 1000*.

34. Jason E. Fish, **Massimo M. Santoro**, Sangho Yu, Didier Stainier and Deepak Srivastava. MIR-126, AN ENDOTHELIAL-SPECIFIC MICRORNA, REGULATES ANGIOGENESIS AND VASCULAR INTEGRITY BY TARGETING SPRED-1. *Developmental Cell,* 15: 272-284, 2008

35. Mads Gyrd-Hansen, Maurice Darding, Maria Miasari, **Massimo M. Santoro**, Tencho Tenev, Paula da Fonseca, Marketa Zvelebil, Janusz M. Bujnicki, John Silke and Pascal Meier. IAPs CONTAIN AN EVOLUTIONARILY CONSERVED UBIQUITIN-BINDING DOMAIN THAT REGULATES NF-KB AS WELL AS CELL SURVIVAL AND ONCOGENESIS. *Nature Cell Biology* 10, 1309-1317, 2008.

36. **Massimo M. Santoro**, Temesgen Samuel, Tracy Mitchel, John C. Reed and Didier Y. Stainier. BIRC2/IAP1 REGULATES ENDOTHELIAL CELL INTEGRITY AND BLOOD VESSEL HOMEOSTASIS. *Nature Genetics* 39, 1397 – 1402, 2007. *News & views in Nature Genetics.*

37. Federica Chianale, Santina Cutrupi, Elena Rainero, Gianluca Baldanzi, Paolo E Porporato, Sara Traini, Nicoletta Filigheddu, Viola Gnocchi, **Massimo M. Santoro**, Ornella Parolini, Wim van Blitterswijk, Fabiola Sinigaglia and Andrea Graziani. DIACYLGLYCEROL KINASE-{ALPHA} MEDIATES HGF-INDUCED EPITHELIAL CELL SCATTER BY REGULATING RAC ACTIVATION AND MEMBRANE RUFFLING. *Molecular Biology of the Cell* 18, 4859 – 4871, 2007.

38. Suk-Won Jin, Wiebke Herzog, **Massimo M. Santoro**, Tracy S Mitchell, Julie Frantsve, Benno Jungblut, Dimitris Beis, Ian C Scott, Leonard A D'Amico, Elke A Ober, Hether Verkade, Holly A Field, Neil C Chi, Anne Wehman, Hervig Baier, Didier Y. Stainier. A TRANSGENE-ASSISTED GENETIC SCREEN IDENTIFIES ESSENTIAL REGULATORS OF VASCULAR DEVELOPMENT IN VERTEBRATE EMBRYOS. *Developmental Biology,* 307:29 – 42, 2007.

39. Serena Germano, Danilo Barberis, **Massimo M. Santoro**, Lorenza Penengo, Ami Citri, Yosef Yarden and Giovanni Gaudino**.** GELDANAMYCIN TRIGGERS A NOVEL RON DEGRADATIVE PATHWAY HAMPERING ONCOGENIC SIGNALLING. *Journal of Biological Chemistry*, 281 (31) 21710-9, 2006.

40. **Massimo M. Santoro** and Giovanni Gaudino. CELLULAR AND MOLECULAR FACETS OF KERATINOCYTE REEPITHELIZATION DURING WOUND HEALING. *Experimental Cell Research* 304: 274-86, 2005.

41. **Massimo M. Santoro**, Giovanni Gaudino and Emma Villa. PROTEIN PHOSPHATASE-1 BINDS TO PHOSPHOSERINE 1394 OF THE MSP RECEPTOR. *Biochemical Journal*, 376: 587-94, 2003

42. **Massimo M. Santoro**, Giovanni Gaudino and Pier Carlo Marchisio. THE MSP RECEPTOR REGULATES α6β4 AND α3β1 INTEGRINS VIA 14-3-3 PROTEINS IN KERATINOCYTE RE-EPITHELIZATION. *Developmental Cell,* 5: 257-271, 2003.

43. Claudia Camerino, **Massimo M. Santoro**, G. Mori, Pier Carlo Marchisio, Giovanni Gaudino, Antonia Zallone. C MACROPHAGE STIMULATING PROTEIN (MSP) REGULATE OSTEOBLAST DIFFERENTIATION AND ACTIVITY. *Bone* 30(3):34S-34S, 2002.

44. Sandra Brunelleschi, Lorenza Penengo, **Massimo M. Santoro** and Giovanni Gaudino. RECEPTOR TYROSINE KINASES AS TARGET FOR ANTI-CANCER THERAPY. *Current Pharmacological Design* 8: 1959-72, 2002.

45. **Massimo M. Santoro**, Lorenza Penengo, Sara Orecchia, Michele Cilli and Giovanni Gaudino. THE RON ONCOGENIC ACTIVITY INDUCED BY THE MEN2B-LIKE SUBSTITUTION OVERCOMES THE REQUIREMENT FOR THE MULTIFUNCTIONAL DOCKING SITE. *Oncogene,* 19: 5208-5211, 2000.

46. **Massimo M. Santoro**, Lorenza Penengo, Marta Minetto, Sara Orecchia, Michele Cilli and Giovanni Gaudino. POINT MUTATIONS IN THE TYROSINE KINASE DOMAIN RELEASE THE ONCOGENIC AND METASTATIC POTENTIAL OF THE RON RECEPTOR. *Oncogene,* 17: 741-749, 1998.

47. **Massimo M. Santoro** and Giovanni Gaudino. MOTOGENIC GROWTH FACTORS: HGF/SF AND MSP. *Minerva Biotecnologica* 9: 85-92, 1997.

48. **Massimo M. Santoro**, Chiara Collesi, Silvia Grisendi, Giovanni Gaudino and Paolo Maria Comoglio. CONSTITUTIVE ACTIVATION OF THE RON GENE INDUCES INVASIVE GROWTH BUT NOT TRANSFORMATION. *Molecular Cellular Biology* 16: 7072-7083, 1996.

49. Chiara Collesi, **Massimo M. Santoro**, Giovanni Gaudino and Paolo Maria Comoglio. A SPLICING VARIANT OF THE RON TRANSCRIPT INDUCES CONSTITUTIVE TYROSINE KINASE ACTIVITY AND INVASIVE PHENOTYPE. *Molecular Cellular Biology* 16: 5518-5526, 1996.

50. Giovanni Gaudino, Antonia Follenzi, Luigi Naldini, Chiara Collesi, **Massimo Santoro**, Kathy A. Gallo, Paul J. Godowski and Paolo Maria Comoglio. RON IS A HETERODIMERIC TYROSINE KINASE RECEPTOR ACTIVATED BY THE HGFHOMOLOG MSP. *EMBO Journal* 13: 3524-3532, 1994.

Book Chapters

1. Dafne Gays, Vera Mugoni and **Massimo M. Santoro**. TUMOR ANGIOGENESIS: “FISHING” FOR DRUG SCREENING MODELS. Book title: “Angiogenesis and vascularisation - cellular and molecular mechanisms in health and diseases” Edited by Dr. Joseph Dulak. Springer series, 2014.

2. Vera Mugoni and **Massimo M. Santoro.** MANIPULATING REDOX SIGNALING TO BLOCK TUMOR ANGIOGENESIS. Book title: **Research Directions in Tumor Angiogenesis** Dr. Jianyuan Chai (Ed.) ISBN 978-953-51-0963-1. InTech Open, 2013.

3. **Massimo M. Santoro.** MODELING TUMOR ANGIOGENESIS IN ZEBRAFISH. Book Title: **Tumor Angiogenesis**, Sophia Ran (Ed.), pp167-180. ISBN: 978-953-51-0009-6, InTech Open. 2012.

4. **Massimo M. Santoro**. NEW FINDINGS IN GROWTH FACTOR RECEPTORS AND INTEGRINS CROSS-TALK. “Recent Research Developments in Molecular and Cellular Biology”, ISBN 81-308-0131-0, Vol.3, Part-II, Page 661-675, 2003.

5. **Massimo M. Santoro** and Giovanni Gaudino. THE CONSTITUTIVE ACTIVATION OF MET, RON, SEA GENES INDUCES DIFFERENT BIOLOGICAL RESPONSES. In "Interacting protein domains" NATO-ASI Series, Subseries H "Cell Biology", ISBN 3-540-63124-0, vol. 102 Ed. by L. Heilmeyer, pp 207-212, Springer-Verlag Heidelberg, 1997.