

PERSONAL INFORMATION



CATERINA PIPINO

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POSITION

RESEARCHER (SSD/AGR15)
Laboratory of VASCULAR and STEM CELL BIOLOGY, Department of Medical, Oral and Biotechnological Sciences, University “G. d’Annunzio” CHIETI – PESCARA,
Center for Advanced Studies and Technology (CAST, ex CeSI-MeT), Italy.

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H-Index 14, Citations 496 (Scopus)

EDUCATION AND QUALIFICATIONS

- 2013 **Ph.D. in “Biomedical Sciences”, Doctor Europaeus**
University “G. d’Annunzio”, Chieti-Pescara (Italy) and University College of London (UCL), London (UK)
- 2008 **Italian Government Pharmacist Licence**
University “G. d’Annunzio”, Chieti-Pescara, Italy
- 2008 **Chemistry and Pharmaceutical Technologies degree**
Single cycle Degree/Combined Bachelor and Master, University “G. d’Annunzio”, Chieti-Pescara
- 2018 National Scientific Habilitation as Associate Professor, 05/F1 – Applied Biology
- 2018 National Scientific Habilitation as Associate Professor, 06/N1 – Science of Health Professions and Applied Medical Technologies

WORK EXPERIENCE

2019 - ongoing **Researcher**
Department of Medical, Oral and Biotechnological Sciences, SSD AGR/15 Area 07, Research Project title: “Innovative technological solutions for the enhancement of agro-food processing products. Focus on nutraceuticals and selected foods”. Laboratory of vascular and stem cell biology, University “G. d’Annunzio” CHIETI – PESCARA, Center for Advanced Studies and Technology (CAST, ex CeSI-MeT), Italy.

2016 - 2019

Post-doctoral Fellow

Department of Genetics & Epidemiology, Joslin Diabetes Center, Harvard Medical School, Boston, USA. Research Project title: "Assessment of the metabolomics profiling of primary endothelial cells in basal conditions and after exposure to high glucose to study the development of diabetic complications associated to type 2 diabetes" (Mentor: Professor Alessandro Doria).

2013 - 2016

Post-doctoral Fellow

Department of Medical, Oral and Biotechnological Sciences, SSD MED/46 Area 06, CeSI (Center for Excellence on Ageing), University "G. d'Annunzio", Chieti-Pescara. Research Project title: "Induced pluripotent stem cells derived from amniotic fluid stem cells. New tool for the treatment of congenital diseases" (Mentor: Prof. Assunta Pandolfi).

2011 - 2012

Visiting PhD student

UCL (University College of London), London (UK) (Mentor: Dr. Paolo De Coppi). "Characterization of human amniotic fluid mesenchymal stem cells; generation, characterization and differentiation of Induced Pluripotent Stem (iPS) cells from disease amniotic fluid cells as an *in vitro* model to study the mechanism of disease and test new drugs".

2009 - 2013

PhD student

Department of Biomedical Sciences, O.U. Blood Vessel Pathophysiology (Mentor: Prof. A. Pandolfi), CeSI (Center for Excellence on Ageing), University "G. d'Annunzio", Chieti-Pescara. "Generation and differentiation of Trisomy 21 Induced Pluripotent Stem Cells as an *in vitro* model to study the mechanism of disease".

2008 - 2009

Fellowship in Cell Biology

Department of Biomedical Sciences, O.U. Blood Vessel Pathophysiology (Mentor: Prof. A. Pandolfi), CeSI (Center for Excellence on Ageing), University "G. d'Annunzio", Chieti-Pescara, Italy.

MAIN TRAINING COURSES

2019-2020

Training Course "Introduction to Omics Research"

Harvard Catalyst Education Program, Harvard Medical School, Boston.

2019-2020

Training Course "Successful Grant Writing Strategies"

Harvard Catalyst Education Program, Harvard Medical School, Boston.

2019 (Sept - July)

Course in Applied Biostatistics

Certificate in applied biostatistics, Harvard Medical School, Boston.

2016 (29-31 October)

Training Course "Induced Pluripotent Stem Cell culture"

iPS core facility, Joslin Diabetes Center, Boston.

2011

Training Course for Animal Users

University College of London (UCL). Certificate number: UCL/11/055. UCL, London (UK)

PERSONAL SKILLS

Language

Italian (native), English (fluent)

Digital competence

Microsoft Office (Word, Excel, Power Point), graphic processing programs (Image J, Photoshop), statistical software (GraphPad, basic knowledge of R)

ADDITIONAL INFORMATION

Member of Scientific Society

2020- COST (European Cooperation in Science and Technology)
 2019- SISA (Italian Society for the Study of Atherosclerosis)
 2017- American Diabetes Association (ADA)
 2016- EASD (European Association for the Study of Diabetes)
 2016- SID (Italian Society of Diabetes)
 2010- Siset (Italian Society for the Study of Haemostasis and Thrombosis)
 2010- iNOS (Italian Nitric Oxide Society)
 2009- SCR Italy (Stem Cell Research Italy)
 2009- StemTech Group (group for the study of Stem Cells, Chieti-Teramo)

Ad hoc Reviewer

Stem Cells and Development, Acta Histochemica, Current Stem Cell Research & Therapy, Innate Immunity, AASCIT journals, Oxidative Medicine and Cellular Longevity, Molecular Reproduction and Development, Materials, Applied Sciences, Bioengineering, Biomedicines, Stem Cells, Microvascular Research, BioMed Research International, Tissue and Cell, International Journal of Molecular Sciences.

Editorial Board member

Stem Cell and Translational Investigation
 Stem Cell Research and Therapeutics
 International Journal of Stem Cell & Research
 AASCIT Journal (The American Association for Science and Technology)
 Global Journal of Food Science and Clinical Nutrition

Topic Editor of Clinical Cytology, Journal of Clinical Medicine (MDPI)

Section Editor of Current Stem Cell Research & Therapy

Lead Editor "Stem Cell International", Special Issue "Fetal Stem Cells in Prenatal Therapy and Beyond"

Guest Editor "International Journal of Molecular Sciences", Special Issue "Natural Bioactive Compounds to Promote Cardiovascular Health"

Guest Editor IJERPH journal, Special Issue "Oncological Rehabilitation: Strengths and Weaknesses for a Global Interdisciplinary Management of the Cancer Patient and Novel Future Perspectives during COVID Emergency"

Participation in Founded Projects

2020-ongoing Finalizzata Sanità Giovani Ricercatori (Responsible Unit Chieti)

2018-2022 COST (European Cooperation in Science and Technology CA 17116)

International Network for Translating Research on Perinatal Derivatives into Therapeutic Approaches
 EU Framework Programme Horizon

2016-2019 SANOFI-USA

2017 POR FESR Abruzzo 2014-2020: EU (2015) 5818 del 13/08/2015; Action 1.1.4: N°39

2014-2015 IBERSAN-SANTIVERI Spain

2012-2014 ROCHE-DIAGNOSTICS

2011-2013 GLOMERIA, Switzerland

2010-2012 Carichieti Foundation

2008-2012 ERA-AMGEN, USA

Research Supervisory and Training Responsibilities

Post-graduated fellow

2021- ongoing Tutor of Ilaria Cappellacci

PhD students

2022- ongoing Tutor of Javier Stelling Ferez (Visiting PhD student from UCAM University, Murcia, Spain)

Bachelor and master's degree students

2020 Supervisor of Ilaria Cappellacci, University of Medical Biotechnologies, Padova, Italy. Thesis title: "Association of human amniotic membrane and endothelial cells: a novel in vitro system to study wound healing mechanisms in diabetic foot ulcer".

2020 Supervisor of Silvia Pappadà, Course of Study in Biomedical Laboratory Techniques, University G. d'Annunzio, Chieti. Thesis title: "Membrana amniotica e colture di cellule endoteliali umane: un modello innovativo per lo studio dei meccanismi di guarigione delle ulcere del piede diabetico".

2015-2016 Supervisor of Alessandra Prezioso. Course of Study in Biomedical Laboratory Techniques, University G. d'Annunzio Chieti, Italy. Thesis title: "Isolation and characterization of stem cells potentially present in bovine milk. Possible development in regenerative medicine in the zootechnical field".

Medical students research exchange program

2021 Supervisor of Grazia Senatore (University of Salerno) e Myriam Traulo (University Tor Vergata, Roma), SISM (Medical Student Italian Secretary) research exchange program, University G. d'Annunzio Chieti-Italy.

2021 Supervisor of Adrián Alejandro Moreno Mares (University of Mexico), SISM (Medical Student Italian Secretary) research exchange program, University G. d'Annunzio Chieti-Italy.

2019 Supervisor of Sama Ramos (University of Caxias do Sul, RS, Brazil), SISM (Medical Student Italian Secretary) research exchange program, University G. d'Annunzio Chieti-Italy.

2013 Supervisor of Reza Sorbi (University of Teheran, Iran), SISM (Medical Student Italian Secretary) research exchange program, University G. d'Annunzio Chieti-Italy.

Undergraduate students

2007-2008 Tutor in Analytical Chemistry, Faculty of Pharmacy, University "G. D'Annunzio", Chieti-Italy.

Teaching

2019-2020; 2020-2021; 2021-2022: Teaching assignment for the discipline of Nutrition Sciences and Technologies, Dietistic course (SSD/AGR15), School of Medicine, University G. d'Annunzio, Chieti.

2015-2018: Teaching assistant for the discipline "Methodology of Scientific Research" (SSD/MED46, 06/N1), Course of Study in Biomedical Laboratory Techniques, University G. d'Annunzio, Chieti.

Academic Commitment

Member of the "Third Mission" committee, Department of Medical, Oral and Biotechnological Sciences, University G. d'Annunzio, Chieti.

Conferences at National and International Meetings

Participation with ORAL COMMUNICATIONS or POSTER PRESENTATION to 60 National Conferences (2009-2019) and 30 International Conferences (2009-2019), with Peer Reviewed Published Abstracts.

Invited Speaker

23-24-25.09.2020 Pipino C. "Mediterranean model of nutrition and health. Focus on bioactive compounds and cell models". Master's Degree Course in Food and Health Sciences, University G. D'Annunzio, Chieti.

10-12 June 2015 Pipino C. "Osteogenic differentiation of amniotic fluid mesenchymal stromal cells and their bone regeneration potential". Journal of Regenerative Medicine. VI Meeting Stem Cell Research Italy, Bari, Italy.

23 November 2015 Pipino C. "Induced pluripotent stem cells: definition and applications". Continuing Medical Education (ECM) course for biologists, Institute C.C.S. Mendel "Casa sollievo della sofferenza" Rome, Italy.

28 March 2015 Pipino C. "Stem cells and prevention: a possible combination?" Continuing Medical Education course, Italian hygiene society (SITI Abruzzo e Molise), University "G. d'Annunzio" Chieti-Pescara, Italy.

9 October 2014 Pipino C. "Stem cells from amniotic fluid: biomolecular characterization of osteogenic differentiation". Meeting "Stem cells in regenerative medicine: new perspectives for the treatment of aging pathologies", University G. d'Annunzio, Chieti-Pescara, Italy.

Awards, fellowship and appointments received for research activities

August 2020-ongoing Researcher position, Programma Operativo Nazionale (PON) Ricerca e Innovazione 2014-2020 - Fondo Sociale Europeo, Azione I.2 "AIM: Attraction and International Mobility" – Avviso D.D. n 407 del 27/02/2018.

4-25 November 2019: Short Term Scientific Mission supported by COST action in the laboratory of Regeneración, Oncología Molecular y TGF β of the Institute of Biomedical Research of Murcia (IMIB_Arrixaca), Murcia, Spain.

July 2016-July 2019: Fellowship at Harvard Medical school, Joslin Diabetes center, Boston, USA.

2013-2016: Research Fellow position (SSD 06/N1) Department of Medical, Oral and Biotechnological Sciences, University G. d'Annunzio Chieti-Pescara.

2011: Regional Fellowship Grant for Research and High Education abroad. PROGETTO SPECIALE MULTIASSE "RETI PER L'ALTA FORMAZIONE" – P.O. F.S.E. 2007-2013 PIANO OPERATIVO 2009-2010-2011. Project: "Induced pluripotent stem cells can be derived successfully from amniotic fluid stem cells". University G. d'Annunzio Chieti and UCL London, UK.

2011: Research Fellowship Grant Amgen (American multinational biopharmaceutical company) "Evaluation of the role of calcium R568 in the osteogenic differentiation of human stem cells". Department of Biomedical Sciences, O.U. Blood Vessel Pathophysiology, University "G. d'Annunzio", Chieti-Pescara, Italy.

April-Sept 2009: Research Fellowship Grant MIPAAF (Italian Ministry of Agricultural, Food and Forestry Policies). "Carotenoid activities of nutritional interest in human health". Department of Biomedical Sciences, O.U. Blood Vessel Pathophysiology, University "G. d'Annunzio", Chieti-Pescara, Italy.

2012: Young Investigator Award SCR (Stem Cell Research) Italy. Ferrara, 20-22 June 2012. Oral communication: "Reprogramming disease amniotic fluid stem cells into induced pluripotent stem cells. A new source for iPS banking of disease specific cells?".

2010: Young Investigator Award Siset (Italian Society for the Study of Haemostasis and Thrombosis). Bologna, 28-31 October 2010. Oral communication: "Inducible Nitric Oxide Synthase (iNOS) regulation by Ca²⁺/Calmodulin-dependent Protein Kinase II in vascular smooth muscle cells (vSMC) from diabetic rats".

Capitoli di libro

1. **Caterina Pipino**, Beatriz Martín-García, Ana M^a Gómez-Caravaca and Vito Verardo. OLIVE OIL: COMPOSITION AND BIOACTIVITY. Food Science and Technology, Super and Nutraceutical Foods Composition and Technology book. Published by Nova Science Publishers, Inc. † New York, 2021.
2. Domitilla Mandatori, Letizia Pelusi, Valeria Schiavone, **Caterina Pipino**, Natalia Di Pietro and Assunta Pandolfi. The Dual Role of Vitamin K2 in “Bone Vascular Crosstalk”: Opposite Effects on Bone Loss and Vascular Calcification. In: Eloy A Zepeda-Carrillo, editor. Prime Archives in Nutrition. Hyderabad, India: Vide Leaf. 2021.

Produzione scientifica

35

Pubblicazioni scientifiche
(Ultimi 10 anni)

1. Baldassarre MPA, **Pipino C**, Pandolfi A, Consoli A, Di Pietro N, Formoso G. Old and New Biomarkers Associated with Endothelial Dysfunction in Chronic Hyperglycemia. *Oxid Med Cell Longev*. 2021 Dec 27; 2021:7887426. doi: 10.1155/2021/7887426.
2. De Angelis F, Mandatori D, Schiavone V, Melito FP, Valentinuzzi S, Vadini M, Di Tomo P, Vanini L, Pelusi L, **Pipino C**, Del Boccio P, D’Arcangelo C, Pandolfi A. Cytotoxic and Genotoxic Effects of Composite Resins on Cultured Human Gingival Fibroblasts. *Materials (Basel)*. 2021 Sep 11;14(18):5225. doi: 10.3390/ma14185225.
3. Mandatori D, Penolazzi L, Pelusi L, Lambertini E, Michelucci F, Porreca A, Cerritelli P, **Pipino C**, Di Iorio A, Bruni D, Di Nicola M, Buda R, Piva R, Pandolfi A. Three-Dimensional Co-Culture System of Human Osteoblasts and Osteoclast Precursors from Osteoporotic Patients as an Innovative Model to Study the Role of Nutrients: Focus on Vitamin K2. *Nutrients* 2021 Aug 17;13(8):2823.
4. Lambertini E, Penolazzi L, Pelliello G, **Pipino C**, Pandolfi A, Fiorito S, Epifano F, Genovese S, Piva R. Pro-Osteogenic Properties of Violina pumpkin (*Cucurbita moschata*) Leaf Extracts: Data from In Vitro Human Primary Cell Cultures. *Nutrients* 2021 Jul 30;13(8):2633.
5. Md Dom SZI, **Pipino C**, Krolewski B, O’Neil K, Satake E and Krolewski AS. “Effect of TNF α Stimulation on Expression of Kidney Risk Inflammatory Proteins in Human Umbilical Vein Endothelial Cells Cultured in Hyperglycemia Conditions”. *Scientific Reports* 2021 May.
6. Satake E, Saulnier P-J, Kobayashi H, Gupta MK, Looker HC, Wilson JM, Md Dom SZI, Ihara K O’Neil K, Krolewski B, **Pipino C**... Krolewski AS. “Comprehensive search for novel circulating miRNAs and axon guidance pathway proteins associated with risk of end stage kidney disease in diabetes”. *JASN* 2021 May.
7. Palmerini C, Piscitani L, Bologna G, Riganti C, Lanuti P, Mandatori D, Di Liberato L, Di Fulvio G, Sirolli V, Renda G, **Pipino C**, Marchisio M, Bonomini M, Pandolfi A, Di Pietro N. Predialysis and Dialysis Therapies Differently Affect Nitric Oxide Synthetic Pathway in Red Blood Cells from Uremic Patients: Focus on Peritoneal Dialysis”. *Int J Mol Sci*. 2021 Mar 17;22(6):3049. doi: 10.3390/ijms22063049.
8. Mandatori D, Pelusi L, Schiavone V, **Pipino C**, Di Pietro N, Pandolfi A. “The dual role of vitamin K2 in “bone-vascular crosstalk”: Opposite effects on bone loss and vascular calcification. *Nutrients* 2021, 13, 4.
9. Di Pietrantonio N, Palmerini C, **Pipino C**, Baldassarre MPA, Bologna G, Mohn A, Giannini C, Lanuti P, Chiarelli F, Pandolfi A, Di Pietro N. “Plasma from obese children increases monocyte-endothelial adhesion and affects intracellular insulin signaling in cultured endothelial cells: Potential role of mTORC1-S6K1”. *Biochim Biophys Acta Mol Basis Dis*. 2021 Apr 1;1867(4):166076.
10. Di Pietro N, Baldassarre MPA, Cichelli A, Pandolfi A, Formoso G, **Pipino C**. “Role of Polyphenols and Carotenoids in Endothelial Dysfunction: An Overview from Classic to Innovative Biomarkers”. *Oxid Med Cell Longev*. 2020 Oct 19;2020:6381380. doi: 10.1155/2020/6381380. eCollection 2020.
11. **Pipino C**, Shah H, Prudente S, Di Pietro N, Zeng L, Park K, Trischitta V, Pennathur S, Pandolfi A, Doria A. “Association of the 1q25 Diabetes-Specific Coronary Heart Disease Locus with Alterations of the γ -Glutamyl Cycle and Increased Methylglyoxal Levels in Endothelial Cells”. *Diabetes*. 2020 Oct;69(10):2206-2216. doi: 10.2337/db20-0475. Epub 2020 Jul 10.
12. Formoso G*, **Pipino C***, Baldassarre MPA, Del Boccio P, Zucchelli M, D’Alessandro N, Tonucci L, Cichelli A, Pandolfi A, Di Pietro N. “An Italian innovative small-scale approach to promote the conscious consumption of healthy food”. *These two authors equally contributed to the work. *Applied Sciences*, 2020, 10(16), 5678.

13. Mandatori D*, **Pipino C***, Di Tomo P, Schiavone V, Ranieri A, Pantalone S, Di Silvestre S, Di Pietrantonio N, Ucci M, Palmerini C, Failli P, Di Pietro N*, Pandolfi A*. "Osteogenic transdifferentiation of vascular smooth muscle cells isolated from spontaneously hypertensive rats and potential menaquinone-4 inhibiting effect". *These two authors equally contributed to the work. *J Cell Physiol.* **2019** Nov;234(11):19761-19773. doi: 10.1002/jcp.28576. Epub 2019 Apr 1. PMID: 30937905
14. Ucci M, Di Tomo P, Tritschler F, Cordone VGP, Lanuti P, Bologna G, Di Silvestre S, Di Pietro N, **Pipino C**, Mandatori D, Formoso G and Pandolfi A. "Anti-inflammatory role of carotenoids in endothelial cells derived from umbilical cord of women affected by gestational diabetes mellitus". *Oxid Med Cell Longev.* **2019** Jan 30; 2019:8184656. doi: 10.1155/2019/8184656. eCollection 2019. PMID: 30918580
15. Mandatori D, Penolazzi L, **Pipino C**, Di Tomo P, Di Silvestre S, Di Pietro N, Trevisani S, Angelozzi M, Ucci M, Piva R, Pandolfi A. "Menaquinone-4 enhances osteogenic potential of human Amniotic Fluid Mesenchymal Stem Cells cultured in 2D and 3D dynamic culture system". *J Tissue Eng Regen Med.* **2018** Feb;12(2):447-459. doi: 10.1002/term.2471. Epub 2017 Aug 31. PMID: 28508565
16. **Pipino C**, Mandatori D, Buccella F, Lanuti P, Preziuso A, Castellani F, Grotta L, Di Tomo P, Marchetti S, Di Pietro N, Cichelli A, Pandolfi A, Martino G. "Identification and characterization of a stem cell-like population in bovine milk: a potential new source for regenerative medicine in veterinary". *Stem Cells Dev.* **2018** Nov 15;27(22):1587-1597. doi: 10.1089/scd.2018.0114. Epub 2018 Sep 29. PMID: 30142991
17. Di Pietro N, Potenza MA, Di Silvestre S, Addabbo F, Di Pietrantonio N, Di Tomo P, **Pipino C**, Mandatori D, Failli P, Bonomini M, Montagnani M, Pandolfi A. "Calcimimetic R-568 vasodilatory effect on mesenteric vascular beds from normotensive (WKY) and spontaneously hypertensive (SHR) rats. Potential involvement of vascular Smooth Muscle Cells (vSMCs)". *PLoS One.* **2018** Aug 9;13(8): e0202354. doi: 10.1371/journal.pone.0202354. eCollection 2018. PMID: 30092054
18. Alessio N*, **Pipino C***, Mandatori D, Di Tomo P, Ferone A, Marchiso M, Melone MAB, Peluso G, Pandolfi A, Galderisi U. Mesenchymal stromal cells from amniotic fluid are less prone to senescence compared to those obtained from bone marrow: An in vitro study. *These two authors equally contributed to the study. *J Cell Physiol.* **2018** Nov;233(11):8996-9006. doi: 10.1002/jcp.26845. Epub 2018 Jun 15.
19. Castellano I, Di Tomo P, Di Pietro N, Mandatori D, **Pipino C**, Formoso G, Napolitano A, Palumbo A, Pandolfi A. "Anti-Inflammatory Activity of Marine Ovotriol A in an In Vitro Model of Endothelial Dysfunction Induced by Hyperglycemia". *Oxid Med Cell Longev.* **2018** Apr 19; 2018:2087373. doi: 10.1155/2018/2087373. eCollection 2018. PMID: 29849868
20. **Pipino C** and Pandolfi A. Osteogenic differentiation of amniotic fluid mesenchymal stromal cells and their bone regeneration potential. *World J Stem Cells.* **2015** May 26;7(4):681-90. doi: 10.4252/wjsc.v7.i4.681.
21. **Pipino C**, Mukherjee S. "Exploring the Reprogramming Potential of Fetal Sources of Induced Pluripotent Stem Cells and their Application in Regenerative Medicine". *International Journal of Stem Cells & Research.* **2016**;1(1): 001-006.
22. Di Tomo P, Di Silvestre S, Cordone VG, Giardinelli A, Faricelli B, **Pipino C**, Lanuti P, Peng T, Formoso G, Yang D, Arduini A, Chiarelli F, Pandolfi A, Di Pietro N. "Centella Asiatica and Lipoic Acid, or a combination thereof, inhibit monocyte adhesion to endothelial cells from umbilical cords of gestational diabetic women." *Nutr Metab Cardiovasc Dis.* **2015** Jul;25(7):659-66. doi: 10.1016/j.numecd.2015.04.002. Epub 2015 Apr 22. PMID: 26026207
23. Morabito C, D'Alimonte I, Pierdomenico L, **Pipino C**, Guarnieri S, Caprara GA, Antonucci I, Ciccarelli R, Marchisio M, Pandolfi A, Mariggiò MA. Calcitonin-Induced Effects on Amniotic Fluid-Derived Mesenchymal Stem Cells. *Cell Physiol Biochem.* **2015**; 36(1):259-73. doi: 10.1159/000374069.
24. **Pipino C**, Pierdomenico L, Di Tomo P, Di Giuseppe F, Cianci E, D'Alimonte I, Morabito C, Centurione L, Antonucci I, Mariggiò MA, Di Pietro R, Ciccarelli R, Marchisio M, Romano M, Angelucci S and Pandolfi A. Molecular and phenotypic characterization of human amniotic fluid-derived cells. A morphological and proteomic approach. *Stem Cells Dev.* **2015** Jun 15; 24(12):1415-28. doi: 10.1089/scd.2014.0453. Epub 2015 Mar 11.
25. Shaw SW, Blundell MP, **Pipino C**, Shangaris P, Maghsoudlou P, Ramachandra DL, Georgiades F, Boyd M, Thrasher AJ, Porada CD, Almeida-Porada G, Cheng PJ, David AL, de Coppi P. Sheep CD34+ amniotic fluid cells have hematopoietic potential and engraft after autologous in utero transplantation. *Stem Cells* **2015** Jan;33(1):122-32. doi: 10.1002/stem.1839.
26. **Pipino C**, Mukherjee S, David AL, Blundell MP, Shaw SW, Sung P, Shangaris P, Waters JJ, Ellershaw D, Cavazzana M, Mostoslavsky G, Pandolfi A, Pierro A, Guillot PV, Thrasher AJ, and De Coppi P. Trisomy 21 mid-trimester amniotic fluid iPS cells maintain genetic signatures during reprogramming: implications for disease modeling and cryo-banking. *Cell Reprogram.* **2014** Oct; 16(5):331-44. doi: 10.1089/cell.2013.0091. Epub 2014 Aug 27.

27. Mukherjee S, **Pipino C**, David A.L., De Coppi P. and Thrasher A. Emerging neuronal precursors from amniotic fluid-derived down syndrome induced pluripotent stem cells. *Hum Gene Ther*. **2014** Aug;25(8):682-3. doi: 10.1089/hum.2014.074.
28. **Pipino C**, Di Tomo P, Mandatori D, Cianci E, Lanuti P, Cutrona MB, Penolazzi L, Pierdomenico L, Lambertini E, Antonucci I, Sirolli V, Bonomini M, Romano M, Piva R, Marchisio M, Pandolfi A. Calcium Sensing Receptor Activation by Calcimimetic R-568 in Human Amniotic Fluid Mesenchymal Stem Cells: Correlation with Osteogenic Differentiation. *Stem Cells Dev*. **2014** Dec 15;23(24):2959-71. doi: 10.1089/scd.2013.0627.
29. Di Tomo P*, **Pipino C***, Lanuti P, Morabito C, Pierdomenico L, Sirolli V, Bonomini M, Miscia S, Marigiò MA, Marchisio M, Barboni B and Pandolfi A. Calcium Sensing Receptor Expression in Ovine Amniotic Fluid Mesenchymal Stem Cells and the Potential Role of R-568 during Osteogenic Differentiation. *These two authors equally contributed to the study. *PlosOne*, **2013** Sep 9;8(9):e73816. eISSN-1932-6203.
30. D'Alimonte I*, Lannutti A*, **Pipino C**, Di Tomo P, Pierdomenico L, Cianci E, Antonucci I, Marchisio M, Romano M, Stuppia L, Caciagli F, Pandolfi A, Ciccarelli R. Wnt Signaling Behaves as a "Master Regulator" in the Osteogenic and Adipogenic Commitment of Human Amniotic Fluid Mesenchymal Stem Cells. *These two authors equally contributed to the study. *Stem Cell Rev and Rep*, **2013** Oct;9(5):642-54. doi: 10.1007/s12015-013-9436-5.
31. Di Castelnuovo A, Di Pietro N, Di Tomo P, Di Silvestre S, **Pipino C**, Nenna G, Bonomini M, Iacoviello L, Pandolfi A. "Metabolic Syndrome in Survivors from the 2009 Earthquake in Italy". *Nutr Metab Cardiovasc Dis*. **2013** Jan;23(1): e5-8. doi: 10.1016/j.numecd.2012.09.005. No abstract available. PMID: 23347883
32. Di Pietro N, Di Tomo P, Di Silvestre S, Giardinelli A, **Pipino C**, Morabito C, Formoso G, Marigiò MA, Pandolfi A. "Increased iNOS activity in Vascular Smooth Muscle Cells from diabetic rats: potential role of Ca²⁺/Calmodulin-dependent Protein Kinase II." *Atherosclerosis*. **2013** Jan;226(1):88-94. doi: 10.1016/j.atherosclerosis.2012.10.062. Epub 2012 Nov 8. PMID: 23177014
33. Masciopinto F*, Di Pietro N*, Corona C, Bomba M, **Pipino C**, Curcio M, Di Castelnuovo A, Ciavardelli D, Silvestri E, Canzoniero LM, Sekler I, Pandolfi A, Sensi SL. "Effects of long-term treatment with pioglitazone on cognition and glucose metabolism of PS1-K1, 3xTg-AD and wild-type mice". *First two authors equally contributed to the work. *Cell Death Dis*. **2012** Dec 20;3:e448. doi: 10.1038/cddis.2012.189. PMID: 23254291
34. **Pipino C**, Shangaris P, Resca E, Zia S, Deprest J, Sebire NJ, David AL, Guillot PV, De Coppi P. Placenta as a reservoir of stem cells: an underutilised resource? *British Medical Bulletin*. **2013**;105:43-68. doi: 10.1093/bmb/lds033. Epub 2012 Nov 25.
35. Di Tomo P, Canali R, Ciavardelli D, Di Silvestre S, Azzini E, Giardinelli A, **Pipino C**, Di Pietro N, Virgili F, Pandolfi A. "β-carotene and Lycopene affect endothelial response to TNF-α reducing nitro-oxidative stress and interaction with monocytes". *Mol Nutr Food Res*. **2012** Feb;56(2):217-27. doi: 10.1002/mnfr.201100500. Epub 2011 Dec 9. PMID: 22162208