

VINCENZO DESIDERIO

Nato il 22/03/1980 Nocera Inferiore (Salerno)
Associate Professor
Department of Experimental Medicine
Università degli Studi della Campania "L. Vanvitelli"
Via L. Armanni,5 80138 Napoli
Office: +390815664040
Lab: +390815667715
e-mail: vincenzo.desiderio@unicampania.it

EDUCATION

- **Nov. 2010-Nov 2103** Ph.D. in "Biomedical Technologies applied to Dental and Stomatologic Science" Thesis Project "Increased fucosylation has a pivotal role in invasive and metastatic properties of head and neck cancer stem cells". Concluded with grade "Excellent". University of Campania "Luigi Vanvitelli, Naples, Italy.
- **May 2006-May 2007** Practical course "Expert in Industrial Biotechnology and management of innovation in the biotechnology field" C.I.R.M. Interdepartmental Center for Research and Management, University of Campania "Luigi Vanvitelli, Naples, Italy
- **July 2005-November 2005** English course at "Stanton school of English" Bayswater London UK.
- **December 2004:** five years' degree in Pharmaceutical Biotechnology, Federico II University, Napoli, grade 110/110 (excellent)
- **October 2002-December 2004:** Experimental thesis at CNR-IGB (Institute of Genetic and Biophisic) "Adriano Buzzati Traverso" Naples, Italy about: "Anti-tumoral genetic vaccination against h-TERT (catalytic subunit of human telomerase): use of Salmonella Typhimurium as carrier"
- **December 2003:** Two-week stage at Biotech Company "TecnoGen." Caserta, Italy.
- **March 2003:** Two-week course "Mouse Surgery and Microsurgery" at "Injection core TIGEM" Naples.
- **July 1999** Scientific lyceum. Grade 90/100.

JOB EXPERIENCES

- **Nov 2019 actual position:** Associate Professor of Histology and Embryology- Department of Experimental Medicine, sec-Histology and Embryology, University of Campania "Luigi Vanvitelli, Naples, Italy
- **Nov 2016-Nov 2019:** Tenure track Assistant Professor of Histology and Embryology- Department of Experimental Medicine, sec-Histology and Embryology, University of Campania "Luigi Vanvitelli, Naples, Italy

- **June 2016** Teaching contract, Charles University of Prague, Czech Republic.
- **May 2013- May 2016:** Junior Assistant Professor of Histology and Embryology- Department of Experimental Medicine, sec-Histology and Embryology, University of Campania “Luigi Vanvitelli, Naples, Italy
- **July-Dec 2012** research assistant/ consultant at Michigan University, Ann Arbor, MI, USA
- **Sept-Dec. 2011** research assistant/ consultant at Michigan University, Ann Arbor, MI, USA.
- **Sept-Oct 2010** Advisory contract with CIRM “Interdepartmental Center for research and Management” University of Campania “Luigi Vanvitelli, for the set up of new stem cells laboratory.
- **Nov. 2009-June 2010** Research contract with dep.of Experimental Medicine, Histology and Embryology Section, Second University of Naples. Project on “Cancer stem cells in human sarcomas”
- **Nov. 2008-June 2009** research contract with TESLAB srl Project on “Mesenchymal stem cells and bone regeneration”
- **Oct. 2007-Oct. 2008** research contract with dep.of Experimental Medicine, Histology and Embryology Section, Second University of Naples. Project on “Mesenchymal Stem cells and Biocoral for bone tissue engineering”
- **November 2006-May 2007 Work on the job** on “Stem cells and tissue regeneration” for the course “Expert in biotechnologies and in innovation management in the biotechnology field”. University of Campania “Luigi Vanvitelli”, Naples.
- **June-Oct 2006** research assistant/ consultant at the “Sbarro Institute for Cancer Research and Molecular Medicine”, Temple University, Philadelphia, USA.
- **December 2004-July 2005** Research contract at CNR-IGB (Institute of Genetic and Biophysics) “Adriano Buzzati Traverso” Naples, Italy

AWARD

- **May 2012** New Investigator Award for the 1° Symposium on Head and Neck Cancer Stem Cells. University of Michigan, Ann Arbor, MI, USA
- **April 2013** IADR Colgate/Palmolive Research in Prevention Travel Awards. 42nd Annual Meeting & Exhibition of the AADR Seattle, Wash., USA.
- **September 2016** “Best Researcher under 40” given by the Italian Society of Anatomy and Histology.

INTERNATIONAL COLLABORATIONS

- **University of Michigan**, Ann Arbor, MI, USA Silvana Papagerakis, Assistant Professor, dep-of Otolaryngology.
- **Marshall University**, One John Marshall Drive Translational Research Genomic Institute, Edwards Cancer Center. Pier Paolo Claudio, Associate Professor Department of Biochemistry and Microbiology & Department of Surgery, Huntington, USA
- **University of Zurich**, Thimios Mitsiadis, Professor of Oral Biology in the Medical Faculty, Switzerland.
- **Institute of Experimental Medicine, Academy of Sciences of the Czech Republic**, Evžen Amler Head of the Department of Tissue Engineering, Institute of Experimental Medicine, Prague, Czech Republic
- **Nottingham Trent University**, Tarik Regad, Senior Research Fellow in Molecular and Cellular Tumour Biology, The John van Geest Cancer Research Centre, Nottingham UK

TEACHING

- **2013-2020** Responsible of the course of “Medical Histology and Embryology”, Medical School, course for international student (Lecture in English), University of Campania “Luigi Vanvitelli”
- **2016-2017** Contract Professor of the course of “Medical Histology and Embryology”, Medical School, University of Salerno, Italy.
- **2016** Guest Lecturer for the “Translational Research Program in Pediatric Orthopedic”, Children’s Hospital of Philadelphia and University of Pennsylvania. Philadelphia, PA, USA
- **2015-2016, 2016-2017** Contract Professor of the course of “Medical Histology and Embryology”, course for international Student (Lecture in English), Medical School, University Federico II, Naples.
- **2013-2015** Lectures of Histology in the course for Nurse, Pediatric Nurse and Obstetrician, Second University of Naples
- **2013-2016** Tutoring and Exams for Medical Students, Second University of Naples.
- **2010-2016** Tutor of the Laboratory of Tissue Engineering, Second University of Naples, Napoli, Italy

- **2010-2016** Responsible for the Histology Laboratory for medical students. Second University of Naples, Napoli, Italy.
- **November 2015** Faculty Member of the Workshop: Theoretical and practical approaches for the use of flow cytometry in cell biology. In collaboration with GIC Italian Society of Flow Cytometry. Second University of Naples, Napoli, Italy.
- **November-December 2015** Visiting Professor at the University of Pennsylvania, Perelman School of Medicine. Philadelphia, US.
- **December 2015** Lectures at the Charles University of Prague. Prague, Czech Republic.
- **May 2016** Supervisor of the course of “Biotechnology and Tissue Engineering and Regenerative Medicine” for Medical Students. Charles University of Prague. Prague, Czech Republic.
- **May 2016** Lectures at the “Moscow Institute of Physics and Technology”, Moscow, Russia.
- **May 2016** Lecture for the Doctoral School in Biotechnology and Biochemistry, Second University of Naples, Italy.
- **June 2016** Lectures to the Charles University of Prague, 2nd Faculty of Medicine. Teaching contract. Prague, Czech Republic.
- **2017-2020** Academic Member of the PhD school in “Biochemistry and Biotechnological Science”

EDITORIAL BOARD AND REFEREE

- Member of the editorial board of the journals: Experimental and Therapeutic Medicine, Translational Medicine Report, Journal of Pharmacological Reports, Archives of Surgical Oncology Journal, SM Journal of Pediatric Surgery and Review Editor in Cellular Biochemistry for the journals Frontiers in Cell and Developmental Biology, Chemistry and Molecular Bioscience.
- Scientific Referee for the journals: Tissue Engineering, Plos One, Frontiers, Journal of Cellular Physiology, Journal of Cellular Biochemistry, ECM Journal, Biomaterials, Cell Death and Disease.
- Editor of the book “Cancer Stem Cells - Methods and Protocols” for the book series “Methods in Molecular Biology” Springer Science Business Media, LLC, 233 Spring Street, New York, NY 10013, U.S.A.

- Editor of the Book: Novel Biomaterials in Regenerative Medicine, Jan Medek, Epika, Miriovskeho 678, Jindrichuv Hradec, Czech Republic. 2016. ISBN 978-80-88113-69-0.

MEMBERSHIP SCIENTIFIC SOCIETY

- Member of the register of Experts in Flow Cytometry held by the Italian Society of Flow Cytometry
- Member of the SIAI "Italian Society of Histology and Anatomy."

MEETING AND CONGRESS

- May 2012 "1st Symposium on Head and Neck Cancer Stem Cells" University of Michigan, Ann Arbor, MI, USA. Poster
- April 2013 42nd Annual Meeting & Exhibition of the IADR Seattle, Wash., USA. Oral Communication
- September 2013 46th Meeting of the Continental European Division of the International Association for Dental Research with the Scandinavian Division. Firenze, Italy. Oral communication, Invited.
- October 2013 XXXI National Conference of Cytometry. Lucca, Italy. Oral Communication
- October 2014 International Symposium "The Many Faces of Stem Cells", Salerno, Italy. Oral Communication, Invited.
- November 2014 Focused Meeting "The Malignant Tumor of Head and Neck". Oral communication, Invited.
- September 2015 69th National Congress of the Italian Society of Anatomy and Histology. Ferrara, Italy. Oral Communication.
- October 2015 20th World Congress on Advances in Oncology and 18th International Symposium on Molecular Medicine, Athens, Greece. Oral Communication.
- October 2015 37th National Meeting of Italian Society of Pharmacology. Napoli, Italy. Oral Communication.
- November 2015 28th Annual Conference of the Italian Association of Cell Culture. Member of the Scientific Committee and Oral Communication.
- November 2015 Invited presentation to the Nottingham Trent University, College of Arts and Science, School of Science & Technology, Nottingham, UK.
- December 2015 Invited presentation and lectures to the "Institute of Experimental Medicine, Academy of Sciences of the Czech Republic"
- December 2015 University of Pennsylvania, Ovarian Cancer Center, Medical School. Visiting Professor
- December 2015 1st Annual World Congress of Digestive Diseases-2015, Nanjing, China. Invited presentation.
- March 2016 invited presentation for the "Collegio dei Docenti di Istologia ed Embriologia" (Board of Histology and Embryology Faculties), Rome, Italy.

- May 2016 “Interdisciplinary Congress of Disease of Head and Neck” Moscow, Russia. Oral Communication Invited.
- May 2017 “Vth Interdisciplinary Congress on Head and Neck Diseases” Moscow, Russia. Oral Communication Invited.
- September 2016 70th National Congress of the Italian Society of Anatomy and Histology. Rome, Italy. Invited Presentation.
- Maggio 2017 “Vth Interdisciplinary Congress on Head and Neck Diseases” Moscow, Russia. Invited presentation.
- September 2017 71th National Congress of the Italian Society of Anatomy and Histology. Taormina, Italy. Invited Presentation.

FUNDS

2005. FIRB 2005 “Impiego di cellule staminali, biomateriali e biotecnologie innovative TAUT” Collaborator.

2011. PON 01_02834 Prometeo: Progettazione e Sviluppo di Piattaforme tecnologiche innovative ed ottimizzazione di PROcessi per applicazioni in Medicina rigenerativa in ambito oromaxillofaciale, emaTologico, nEurologico e cardiOlogico. Collaborator

2013. Fondi ricerca di Ateneo 2013-14 (Second University of Naples) PI

Avvio alla Ricerca Scientifica 2015 (Second University of Naples) PI

2017. AIRC 2017 “miR423-5p/MALAT1 loop as a new tool for therapeutic intervention in hepatocarcinoma”. Collaborator

PUBBLICATIONS

1. Mele L, Del Vecchio V, Marampon F, Regad T, Wagner S, Mosca L, Bimonte S, Giudice A, Liccardo D, Prisco C, Schwerdtfeger M, La Noce M, Tirino V, Caraglia M, Papaccio G, Desiderio V*, Barbieri A. β 2-AR blockade potentiates MEK1/2 inhibitor effect on HNSCC by regulating the Nrf2-mediated defense mechanism. *Cell Death Dis.* 2020 Oct 13;11(10):850.
2. Barbieri A, Robinson N, Palma G, Maurea N, Desiderio V*, Botti G. Can Beta-2-Adrenergic Pathway Be a New Target to Combat SARS-CoV-2 Hyperinflammatory Syndrome?-Lessons Learned From Cancer. *Front Immunol.* 2020 Sep 30;11:588724. doi: 10.3389/fimmu.2020.588724. eCollection 2020. PMID: 33117402
3. Vitiello PP, Martini G, Mele L, Giunta EF, De Falco V, Ciardiello D, Belli V, Cardone C, Matrone N, Poliero L, Tirino V, Napolitano S, Della Corte C, Selvaggi F, Papaccio G, Troiani T, Morgillo F, Desiderio V, Ciardiello F, Martinelli E. Vulnerability to low-dose

combination of irinotecan and niraparib in ATM-mutated colorectal cancer. *J Exp Clin Cancer Res.* 2021 Jan 6;40(1):15. doi: 10.1186/s13046-020-01811-8. PMID: 33407715

4. Mele L, Del Vecchio V, Liccardo D, Prisco C, Schwerdtfeger M, Robinson N, Desiderio V, Tirino V, Papaccio G, La Noce M. The role of autophagy in resistance to targeted therapies. *Cancer Treat Rev.* 2020 May 30;88:102043. doi: 10.1016/j.ctrv.2020.102043. Epub ahead of print. PMID: 32505806.
5. Abu-El-Rub E, Sareen N, Yan W, Alagarsamy KN, Rafieerad A, Srivastava A, Desiderio V, Dhingra S. Hypoxia-induced shift in the phenotype of proteasome from 26S toward immunoproteasome triggers loss of immunoprivilege of mesenchymal stem cells. *Cell Death Dis.* 2020 Jun 4;11(6):419. doi: 10.1038/s41419-020-2634-6. PMID: 32499535; PMCID: PMC7272449.
6. Lombardi A, Russo M, Luce A, Morgillo F, Tirino V, Misso G, Martinelli E, Troiani T, Desiderio V, Papaccio G, Iovino F, Argenziano G, Moscarella E, Sperlongano P, Galizia G, Addeo R, Necas A, Necasova A, Ciardiello F, Ronchi A, Caraglia M, Grimaldi A. Comparative Study of NGS Platform Ion Torrent Personal Genome Machine and Therascreen Rotor-Gene Q for the Detection of Somatic Variants in Cancer. *High Throughput.* 2020 Feb 11;9(1):4. doi: 10.3390/ht9010004. PMID: 32054005; PMCID: PMC7151067.
7. Alagarsamy KN, Yan W, Srivastava A, Desiderio V, Dhingra S. Application of injectable hydrogels for cardiac stem cell therapy and tissue engineering. *Rev Cardiovasc Med.* 2019 Dec 30;20(4):221-230. doi: 10.31083/j.rcm.2019.04.534. PMID: 31912713.
8. Mosca L, Pagano M, Ilisso CP, Cave DD, Desiderio V, Mele L, Caraglia M, Cacciapuoti G, Porcelli M. **AdoMet triggers apoptosis in head and neck squamous cancer by inducing ER stress and potentiates cell sensitivity to cisplatin.** *J Cell Physiol.* 2019 Aug;234(8):13277-13291. doi: 10.1002/jcp.28000. Epub 2018 Dec 21. PubMed PMID: 30575033.
9. Martini G, Cardone C, Vitiello PP, Belli V, Napolitano S, Troiani T, Ciardiello D, Della Corte CM, Morgillo F, Matrone N, Sforza V, Papaccio G, Desiderio V, Paul MC, Moreno-Viedma V, Normanno N, Rachiglio AM, Tirino V, Maiello E, Latiano TP, Rizzi D, Signoriello G, Sibilia M, Ciardiello F, Martinelli E. **EPHA2 Is a Predictive Biomarker of Resistance and a Potential Therapeutic Target for Improving Antiepidermal Growth Factor Receptor Therapy in Colorectal Cancer.** *Mol Cancer Ther.* 2019 Apr;18(4):845-855. doi: 10.1158/1535-7163.MCT-18-0539. Epub 2019 Mar 1. PubMed PMID: 30824612.
10. La Noce M, Mele L, Laino L, Iolascon G, Pieretti G, Papaccio G, Desiderio V, Tirino V, Paino F. **Cytoplasmic Interactions between the Glucocorticoid Receptor and HDAC2 Regulate Osteocalcin Expression in VPA-Treated MSCs.** *Cells.* 2019 Mar 5;8(3). pii: E217. doi: 10.3390/cells8030217. PubMed PMID: 30841579; PubMed Central PMCID: PMC6468918.

11. Mele L, la Noce M, Paino F, Regad T, Wagner S, Liccardo D, Papaccio G, Lombardi A, Caraglia M, Tirino V, Desiderio V*, Papaccio F*. **Glucose-6-phosphate dehydrogenase blockade potentiates tyrosine kinase inhibitor effect on breast cancer cells through autophagy perturbation.** J Exp Clin Cancer Res. 2019 Apr 12;38(1):160. doi: 10.1186/s13046-019-1164-5. PubMed PMID: 30987650; PubMed Central PMCID: PMC6466760.
12. Al-Juboori SI, Vadakekolathu J, Idri S, Wagner S, Zafeiris D, Pearson JR, Almshayakhchi R, Caraglia M, Desiderio V, Miles AK, Boocock DJ, Ball GR, Regad T. **PYK2 promotes HER2-positive breast cancer invasion.** J Exp Clin Cancer Res. 2019 May 22;38(1):210. doi: 10.1186/s13046-019-1221-0. PubMed PMID: 31118051; PubMed Central PMCID: PMC653226
13. La Noce M, Paino F, Mele L, Papaccio G, Regad T, Lombardi A, Papaccio F, Desiderio V*, Tirino V*. **HDAC2 depletion promotes osteosarcoma's stemness both in vitro and in vivo: a study on a putative new target for CSCs directed therapy.** J Exp Clin Cancer Res. 2018 Dec 3;37(1):296. doi: 10.1186/s13046-018-0978-x. PubMed PMID: 30509303; PubMed Central PMCID: PMC6276256.
14. Mele L, Paino F, Papaccio F, Regad T, Boocock D, Stiuso P, Lombardi A, Liccardo D, Aquino G, Barbieri A, Arra C, Coveney C, La Noce M, Papaccio G, Caraglia M, Tirino V, Desiderio V. **A new inhibitor of glucose-6-phosphate dehydrogenase blocks pentose phosphate pathway and suppresses malignant proliferation and metastasis in vivo.** Cell Death Dis. 2018 May 1;9(5):572. doi: 10.1038/s41419-018-0635-5. PubMed PMID: 29760380; PubMed Central PMCID: PMC5951921.
15. Papaccio F, Paino F, Regad T, Papaccio G, Desiderio V*, Tirino V*. **Concise Review: Cancer Cells, Cancer Stem Cells, and Mesenchymal Stem Cells: Influence in Cancer Development.** Stem Cells Transl Med. 2017 Oct 26. doi: 10.1002/sctm.17-0138. [Epub ahead of print] Review. PubMed PMID: 29072369.
16. Megiorni F, Gravina GL, Camero S, Ceccarelli S, Del Fattore A, Desiderio V, Papaccio F, McDowell HP, Shukla R, Pizzuti A, Beirinckx F, Pujuguet P, Saniere L, der Aar EV, Maggio R, De Felice F, Marchese C, Dominici C, Tombolini V, Festuccia C, Marampon F. **Pharmacological targeting of the ephrin receptor kinase signaling by GLPG1790 in vitro and in vivo reverts oncophenotype, induces myogenic differentiation and radiosensitizes embryonal rhabdomyosarcoma cells.** J Hematol Oncol. 2017 Oct 6;10(1):161. doi: 10.1186/s13045-017-0530-z. PubMed PMID:28985758.
17. Cave DD*, Desiderio V*, Mosca L, Paola Ilisso C, Mele L, Caraglia M, Cacciapuoti G, Porcelli M. **S-ADENOSYLMETHIONINE-MEDIATED APOPTOSIS IS POTENTIATED BY AUTOPHAGY INHIBITION INDUCED BY CHLOROQUINE IN HUMAN BREAST CANCER CELLS.** J Cell Physiol. 2017 May 18. doi: 10.1002/jcp.26015. PubMed PMID: 28518408.

18. Paino F, La Noce M, Di Nucci D, Nicoletti GF, Salzillo R, De Rosa A, Ferraro GA, Papaccio G, Desiderio V*, Tirino V*. **Human adipose stem cell differentiation is highly affected by cancer cells both in vitro and in vivo: implication for autologous fat grafting.** Cell Death Dis. 2017 Jan 19;8(1):e2568. doi: 10.1038/cddis.2016.308. PubMed PMID: 28102844; PubMed Central PMCID: PMC5386348.

19. Paino F, La Noce M, Giuliani A, De Rosa A, Mazzoni S, Laino L, Amler E, Papaccio G, Desiderio V*, Tirino V*. **Human DPSCs fabricate vascularized woven bone tissue: a new tool in bone tissue engineering.** Clin Sci (Lond). 2017 Apr 25;131(8):699-713. doi: 10.1042/CS20170047. Epub 2017 Feb 16. PubMed PMID: 28209631; PubMed Central PMCID: PMC5383003.

20. Mele L, Vitiello PP, Tirino V, Paino F, De Rosa A, Liccardo D, Papaccio G, Desiderio V. **Changing Paradigms in Cranio-Facial Regeneration: Current and New Strategies for the Activation of Endogenous Stem Cells.** Front Physiol. 2016 Feb 24;7:62. doi: 10.3389/fphys.2016.00062. eCollection 2016. Review. PubMed PMID: 26941656; PubMed Central PMCID: PMC4764712.

21. Kopecka J, Porto S, Lusa S, Gazzano E, Salzano G, Pinzòn-Daza ML, Giordano A, **Desiderio V**, Ghigo D, De Rosa G, Caraglia M, Riganti C. **Zoledronic acid-encapsulating self-assembling nanoparticles and doxorubicin: a combinatorial approach to overcome simultaneously chemoresistance and immunoresistance in breast tumors.** Oncotarget. 2016 Mar 9. doi: 10.18632/oncotarget.8012. [Epub ahead of print] PubMed PMID: 26980746.

22. Emiliana Perillo, Stefania Porto, Annarita Falanga, Silvia Zappavigna, Paola Stiuso, Virginia Tirino, **Vincenzo Desiderio**, Gianpaolo Papaccio, Massimiliano Galdiero, Antonio Giordano, Stefania Galdiero, Michele Caraglia. **Liposome armed with herpes virus-derived gH625 peptide to overcome doxorubicin resistance in lung adenocarcinoma cell lines.** Oncotarget 2015 Oct 06.

23. Kopecka J, Porto S, Lusa S, Gazzano E, Salzano G, Giordano A, **Desiderio V**, Ghigo D, Caraglia M, De Rosa G, Riganti C. **Self-assembling nanoparticles encapsulating zoledronic acid revert multidrug resistance in cancer cells.** Oncotarget. 2015 Sep 9. [Epub ahead of print] PubMed PMID: 26372812.

24. Pepe P, Castellano M, Alfano S, Della Pepa ME, Tirino V, Piemonte M, **Desiderio V**, Zappavigna S, Galdiero M, Caraglia M, Cringoli G, Rinaldi L, Galdiero M. **Dicrocoelium dendriticum induces autophagic vacuoles accumulation in human hepatocarcinoma cells.** Vet Parasitol. 2015 Aug 6. pii: S0304-4017(15)00381-7. doi:10.1016/j.vetpar.2015.07.039. [Epub ahead of print] PubMed PMID: 26283464.

25. D'Angelo V, Iannotta A, Ramaglia M, Lombardi A, Zarone MR, **Desiderio V**, Affinita MC, Pecoraro G, Di Martino M, Indolfi P, Casale F, Caraglia M. **EZH2 is increased in paediatric T-cell acute lymphoblastic leukemia and is a suitable molecular target in combination treatment approaches.** J Exp Clin Cancer Res. 2015 Aug 14;34:83. doi:

10.1186/s13046-015-0191-0. PubMed PMID: 26268310; PubMed Central PMCID: PMC4535295.

26. Grimaldi A, Santini D, Zappavigna S, Lombardi A, Misso G, Boccellino M, **Desiderio V**, Vitiello PP, Di Lorenzo G, Zoccoli A, Pantano F, Caraglia M. **Antagonistic effects of chloroquine on autophagy occurrence potentiate the anticancer effects of everolimus on renal cancer cells.** *Cancer Biol Ther.* 2015;16(4):567-79. doi: 10.1080/15384047.2015.1018494. Epub 2015 Apr 11. PubMed PMID: 25866016.
27. Lamberti M, Porto S, Zappavigna S, Stiuso P, Tirino V, **Desiderio V**, Mele L, Caraglia M. **Levofolene modulates apoptosis induced by 5-fluorouracil through autophagy inhibition: Clinical and occupational implications.** *Int J Oncol.* 2015 Feb 24. doi: 10.3892/ijo.2015.2904. [Epub ahead of print] PubMed PMID: 25709090.
28. **Desiderio V**, Papagerakis P, Tirino V, Zheng L, Matossian M, Prince ME, Paino F, Mele L, Papaccio F, Montella R, Papaccio G, Papagerakis S. **Increased fucosylation has a pivotal role in invasive and metastatic properties of head and neck cancer stem cells.** *Oncotarget.* 2014 Nov 6. [Epub ahead of print] PubMed PMID: 25428916.
29. La Noce M, Mele L, Tirino V, Paino F, De Rosa A, Naddeo P, Papagerakis P, Papaccio G, **Desiderio V.** **Neural crest stem cell population in craniomaxillofacial development and tissue repair.** *Eur Cell Mater.* 2014 Oct 28;28:348-57. Review. PubMed PMID: 25350250.
30. **Desiderio V**, Tirino V, Papaccio G, Paino F. **Bone defects: Molecular and cellular therapeutic targets.** *Int J Biochem Cell Biol.* 2014 Jun;51:75-8. doi: 10.1016/j.biocel.2014.03.025. Epub 2014 Apr 2. PubMed PMID: 24704416. IF 4.240
31. La Noce M, Paino F, Spina A, Naddeo P, Montella R, **Desiderio V**, De Rosa A, Papaccio G, Tirino V, Laino L. **Dental pulp stem cells: State of the art and suggestions for a true translation of research into therapy.** *J Dent.* 2014 Jul;42(7):761-768. doi: 10.1016/j.jdent.2014.02.018. Epub 2014 Feb 28. Review. PubMed PMID: 24589847. IF 2.840
32. Paino F, La Noce M, Tirino V, Naddeo P, **Desiderio V**, Pirozzi G, De Rosa A, Laino L, Altucci L, Papaccio G. **Histone Deacetylase Inhibition with Valproic Acid Downregulates Osteocalcin Gene Expression in Human Dental Pulp Stem Cells and Osteoblasts: Evidence for HDAC2 Involvement.** *Stem Cells.* 2014 Jan;32(1):279-89. doi: 10.1002/stem.1544. PubMed PMID: 24105979. IF 7.133
33. **Desiderio V**, Paino F, Nebbioso A, Altucci L, Pirozzi G, et al. (2013) **Molecular Profiling of Human Primary Chondrosarcoma-Derived Spheres Reveals Specific and Target Genes Involved in Multidrug Resistance and Metastasis.** *J Carcinogene Mutagene* 4:152. doi: 10.4172/2157-2518.1000152

34. Czerwinski MJ, **Desiderio V**, Shkeir O, Papagerakis P, Lapadatescu MC, Owen JH, Athanassiou-Papaefthymiou M, Zheng L, Papaccio G, Prince ME, Papagerakis S. **In vitro evaluation of sialyl Lewis X relationship with head and neck cancer stem cells.** *Otolaryngol Head Neck Surg.* 2013 Jul;149(1):97-104. doi: 10.1177/0194599813482879. Epub 2013 Apr 4. PubMed PMID: 23558285. IF 1.721
35. **Desiderio V**, De Francesco F, Schiraldi C, De Rosa A, La Gatta A, Paino F, d'Aquino R, Ferraro GA, Tirino V, Papaccio G. **Human Ng2+ adipose stem cells loaded in vivo on a new crosslinked hyaluronic acid-Lys scaffold fabricate a skeletal muscle tissue.** *J Cell Physiol.* 2013 Aug;228(8):1762-73. doi: 10.1002/jcp.24336. PubMed PMID: 23359523. IF 3.874
36. Giuliani A, Manescu A, Langer M, Rustichelli F, **Desiderio V**, Paino F, De Rosa A, Laino L, d'Aquino R, Tirino V, Papaccio G. **Three years after transplants in human mandibles, histological and in-line holotomography revealed that stem cells regenerated a compact rather than a spongy bone: biological and clinical implications.** *Stem Cells Transl Med.* 2013;2:316-24. IF 3.696
37. Ferraro GA, De Francesco F, Nicoletti G, Paino F, **Desiderio V**, Tirino V, D'Andrea F. **Human adipose CD34(+) CD90(+) stem cells and collagen scaffold Constructs grafted in vivo fabricate loose connective and adipose tissues.** *J Cell Biochem.* 2012 Nov 5. doi: 10.1002/jcb.24443. [Epub ahead of print] PubMed PMID: 23129214 IF 3.368
38. Tirino V, **Desiderio V**, Paino F, De Rosa A, Papaccio F, La Noce M, Laino L, De Francesco F, Papaccio G. **Cancer stem cells in solid tumors: an overview and new approaches for their isolation and characterization.** *FASEB J.* 2012 Sep 28. [Epub ahead of print] PubMed PMID: 23024375. IF 5.480
39. Piepoli A, Mazzoccoli G, Panza A, Tirino V, Biscaglia G, Gentile A, Valvano MR, Clemente C, **Desiderio V**, Papaccio G, Bisceglia M, Andriulli A. **A unifying Working hypothesis for juvenile polyposis syndrome and Menetrier's disease: Specific localization or concomitant occurrence of a separate entity?** *Dig Liver Dis.* 2012 Nov;44(11):952-6. doi: 10.1016/j.dld.2012.05.019. Epub 2012 Jun 27. PubMed PMID: 22748914. IF 2.889
40. Mangano C, Paino F, d'Aquino R, De Rosa A, Iezzi G, Piattelli A, Laino L, Mitsiadis T, **Desiderio V**, Mangano F, Papaccio G, Tirino V. **Human dental pulp stem cells hook into biocoral scaffold forming an engineered biocomplex.** *PLoSOne.* 2011 Apr 11;6(4):e18721. PubMed PMID: 21494568; PubMed Central PMCID: PMC3073992.4.0927 IF 3.534
41. d'Aquino R, Tirino V, **Desiderio V**, Studer M, De Angelis GC, Laino L, De Rosa **crest-derived postnatal cells exhibit remarkable embryonic attributes either in vitro or in vivo.** *Eur Cell Mater.* 2011 Mar 22;21:304-16. PubMed PMID: 21432784. IP 3.028PP 7 IF 4.887

42. Tirino V*, **Desiderio V***, Paino F, De Rosa A, Papaccio F, Fazioli F, Pirozzi G, Papaccio G. **Human primary bone sarcomas contain CD133+ cancer stem cells displaying high tumorigenicity in vivo.** FASEB J. 2011 Jun;25(6):2022-30. Epub 2011 Mar 8. PubMed PMID: 21385990. IF 5.480
43. Tirino V, Paino F, d'Aquino R, **Desiderio V**, De Rosa A, Papaccio G. **Methods for The identification, characterization and banking of human DPSCs: current strategies and perspectives.** Stem Cell Rev. 2011 Sep;7(3):608-15. PubMed PMID: 21318597. IF 3.214
44. Aimola P, **Desiderio V**, Graziano A, Claudio PP. **Stem cells in cancer therapy: From their role in pathogenesis to their use as therapeutic agents.** Drug News Perspect. 2010 Apr;23(3):175-83. PubMed PMID: 20440419.
45. Mangano C, De Rosa A, **Desiderio V**, d'Aquino R, Piattelli A, De Francesco F, Tirino V, Mangano F, Papaccio G. **The osteoblastic differentiation of dental pulp Stem cells and bone formation on different titanium surface textures.** Biomaterials. 2010 May;31(13):3543-51. Epub 2010 Feb 1. PubMed PMID: 20122719.7.40423 IF 8.312
46. d'Aquino R, De Rosa A, Lanza V, Tirino V, Laino L, Graziano A, **Desiderio V**, Laino G, Papaccio G. **Human mandible bone defect repair by the grafting of dental Pulp stem/progenitor cells and collagen sponge biocomplexes.** Eur Cell Mater. 2009 Nov 12;18:75-83. PubMed PMID: 19908196. IF 4.887
47. De Francesco F, Tirino V, **Desiderio V**, Ferraro G, D'Andrea F, Giuliano M, Libondi G, Pirozzi G, De Rosa A, Papaccio G. **Human CD34/CD90 ASCs are capable of Growing as sphere clusters, producing high levels of VEGF and forming capillaries.** PLoSOne. 2009 Aug 6;4(8):e6537. PubMed PMID: 19657392; PubMed Central PMCID: PMC2717331. IF 3.534
48. De Rosa A, De Francesco F, Tirino V, Ferraro GA, **Desiderio V**, Paino F, Pirozzi G, D'Andrea F, Papaccio G. **A new method for cryopreserving adipose-derived stem cells: an attractive and suitable large-scale and long-term cell banking technology.** TissueEng Part C Methods. 2009 Dec;15(4):659-67. PubMed PMID: 19254116. IF 4.254
49. Tirino V*, **Desiderio V***, d'Aquino R, De Francesco F, Pirozzi G, Graziano A, Galderisi U, Cavaliere C, De Rosa A, Papaccio G, Giordano A. **Detection and characterization of CD133+ cancer stem cells in human solid tumours.** PLoSOne. 2008;3(10):e3469. Epub 2008 Oct 21. IF 3.534
50. D'Andrea F, De Francesco F, Ferraro GA, **Desiderio V**, Tirino V, De Rosa A, Papaccio G. **Large-scale production of human adipose tissue from stem cells: a new tool for regenerative medicine and tissue banking.** TissueEng Part C Methods. 2008 Sep;14(3):233-42. PubMed PMID: 18781836. IF 4.254

51. Graziano A, d'Aquino R, Tirino V, **Desiderio V**, Rossi A, Pirozzi G. **The stem Cell hypothesis in head and neck cancer**. J Cell Biochem. 2008 Feb 1;103(2):408-12. Review. PubMed PMID: 17546610. IF 3.368
52. Pedullà M, d'Aquino R, **Desiderio V**, de Francesco F, Puca A, Papaccio G. **MnSOD Mimic compounds can counteract mechanical stress and islet beta cell apoptosis, Although at appropriate concentration ranges**. J Cell Physiol. 2007 Aug;212(2):432-8. PubMed PMID: 17311287. IF 3.874
53. Pedullà M, **Desiderio V**, Graziano A, d'Aquino R, Puca A, Papaccio G. **Effects of a vitamin D3 analog on diabetes in the bio breeding (BB) rat**. J Cell Biochem. 2007 Feb 15;100(3):808-14. PubMed PMID: 16960873. IF 3.368

Contributes in international books

Editor “**Cancer Stem Cells - Methods and Protocols**” for the book series “Methods in Molecular Biology” Springer Science Business Media, LLC, 233 Spring Street, New York, NY 10013, U.S.A.

Editor: **Novel Biomaterials in Regenerative Medicine**, Jan Medek, Epika, Miriovskeho 678, Jindrichuv Hradec, Czech Republic. 2016. ISBN 978-80-88113-69-0.

Tirino V, *Desiderio V*, Paino F, Papaccio G. **Cytometry and Pathology**, Advanced Imaging Techniques in Clinical Pathology for the series “Current Clinical Pathology”, pp 65-84. Edited by F.M. Sacerdoti and A. Giordano. Springer New York, 2016. Doi 10.1007/978-1-4939-3469-0_5. ISBN 978-1-4939-3467-6.

Tirino V, *Desiderio V*, Paino F, Papaccio G, De Rosa M. **Methods for cancer stem Cell detection and isolation**. MethodsMolBiol. 2012; 879:513-29. PubMed PMID:22610581.

Tirino V, Paino F, Papaccio F, La Noce M, Papaccio G, *Desiderio V*. **Stemness markers of osteosarcoma, Chapter 18, Bone Cancer, Primary Bone Cancer and Bone Metastases**, Second Edition. Edited by Dominique Heymann. Academic Press, 29 Aug 2014, Print Book ISBN: 9780124167216.

Napoli li 06/04/2021