

## Curriculum vitae et studiorum

---

### Personal informations

Name: Luigi Mele  
E-mail address: luigi.mele@unibas.it  
Nationality: Italian  
Birth date: July 21, 1986

---

### Education

Date: December, 2017 - April, 2021

#### Post-doctoral fellows

Department of Experimental Medicine, University of Campania “Luigi Vanvitelli”

Principal subjects covered: Histological and Cancer cell processes research

Date: November, 2014 - December, 2017

**Ph.D.** in Biochemical and Biotechnological Sciences, Department of Experimental Medicine, University of Campania “Luigi Vanvitelli”, Naples, Italy. Title of research: “*Polydatin inhibits pentose phosphate pathway and suppresses malignant proliferation and metastases*”

---

### Research and work activities

Date: July 2022 – July 2031

**QUALIFIED AS ASSOCIATE PROFESSOR IN HISTOLOGY (05/H2) IN ITALIAN NATIONAL SCIENTIFIC QUALIFICATION (ASN);**

Date: September, 2021 - July, 2022

#### ADJUNCT PROFESSOR

Adjunct Professor in Human Histology and Embriology -University of Basilicata, Potenza, Italy;

---

### International research experiences

Fewllowship “H2020-MSCA-RISE”, Title of research “New Quaternary Ammonium Salts for use in Drug Manufacture” , University of Neaples Federico II - Royal College of Surgeons in Ireland, Dublin, IRELAND.

### Publications

1. Chipurupalli S, Ganesan R, Martini G, Mele L, Reggio A, Esposito M, Kannan E, Namasivayam V, Grumati P, Desiderio V, Robinson N. Cancer cells adapt FAM134B/BiP mediated ER-phagy to survive hypoxic stress. Cell Death Dis. 2022 Apr 18;13(4):357.

2. D'Onofrio N, Martino E, Balestrieri A, Mele L, Cautela D, Castaldo D, Balestrieri ML. Diet-derived ergothioneine induces necroptosis in colorectal cancer cells by activating the SIRT3/MLKL pathway. *FEBS Lett.* 2022 Feb 4.
3. D'Onofrio N, Martino E, Mele L, Colloca A, Maione M, Cautela D, Castaldo D, Balestrieri ML. Colorectal Cancer Apoptosis Induced by Dietary  $\delta$ -Valerobetaine Involves PINK1/Parkin Dependent-Mitophagy and SIRT3. *Int J Mol Sci.* 2021 Jul 29;22(15):8117.
4. 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, 40(1), 15
5. Pagano M, Mosca L, Vitiello F, Ilisso CP, Coppola A, Borzacchiello L, Mele L, Caruso FP, Ceccarelli M, Caraglia M, Cacciapuoti G, Porcelli M. Mi-RNA-888-5p Is Involved in S-Adenosylmethionine Antitumor Effects in Laryngeal Squamous Cancer Cells. *Cancers (Basel).* 2020 Dec, 12(12), pp. 1–23, 3665
6. Mosca L, Pagano M, Pecoraro A, Borzacchiello L, Mele L, Cacciapuoti G, Porcelli M, Russo G, Russo A. S-Adenosyl-l-Methionine Overcomes uL3-Mediated Drug Resistance in p53 Deleted Colon Cancer Cells. *Int J Mol Sci.* 2020 Dec, 22(1), pp. 1–18, 103 -
7. 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.  $\beta$ 2-AR blockade potentiates MEK1/2 inhibitor effect on HNSCC by regulating the Nrf2-mediated defense mechanism. *Cell Death Dis.* 2020 Oct, 11(10), 850
8. D'Onofrio N, Mele L, Martino E, Salzano A, Restucci B, Cautela D, Tatullo M, Balestrieri ML, Campanile G. Synergistic Effect of Dietary Betaines on SIRT1-Mediated Apoptosis in Human Oral Squamous Cell Carcinoma Cal 27. *Cancers (Basel).* 2020 Aug, 12(9), pp. 1–19, 2468
9. 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 Aug, 88, 102043
10. Martino E, Vuoso DC, D'Angelo S, Mele L, D'Onofrio N, Porcelli M, Cacciapuoti G. Annurca apple polyphenol extract selectively kills MDA-MB-231 cells through ROS generation, sustained JNK activation and cell growth and survival inhibition. *Sci Rep.* 2019 Sep, 9(1), 13045
11. Vigorito C, Anishchenko E, Mele L, Capolongo G, Trepiccione F, Zacchia M, Lombardi P, Capasso R, Ingrosso D, Perna AF. Uremic Toxin Lanthionine Interferes with the Transsulfuration Pathway, Angiogenetic Signaling and Increases Intracellular Calcium. *Int J Mol Sci.* 2019 May, 20(9), 2269
12. Anishchenko E, Vigorito C, Mele L, Lombardi P, Perna AF, Ingrosso D. Novel Applications of Lead Acetate and Flow Cytometry Methods for Detection of Sulfur-Containing Molecules. *Methods Protoc.* 2019 Feb, 2(1), pp. 1–14, 13
13. 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, 38(1), 160
14. 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

15. 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*. 2018 Dec, , 234(8), pp. 13277–13291

16. Ilisso CP, Delle Cave D, Mosca L, Pagano M, Coppola A, Mele L, Caraglia M, Cacciapuoti G, Porcelli M. S-Adenosylmethionine regulates apoptosis and autophagy in MCF-7 breast cancer cells through the modulation of specific microRNAs. *Cancer Cell Int*. 2018 Dec 4; 18:197.

17. 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, 37(1), 296

18. Mele L, Paino F, Regad T, Boocock D, Coveney C, Stiuso P, Lombardi A, Liccardo D, Aquino G, Barbieri A, Arra C, Papaccio F, La Noce M, Papaccio G, Caraglia M, Tirino V, Desiderio V. A new inhibitor of glucose-6-phosphate dehydrogenase block pentose phosphate pathway and suppresses malignant proliferation and metastasis in vivo. *Cell Death and Disease*. 2018 Apr, 9(5), 572

19. Cave DD, Desiderio V, Mosca L, Ilisso CP, 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*. 2018 233(2), pp. 1370–1383

20. Giuliani A, Mazzoni S, Mele L, Liccardo D, Tromba G, Langer M. Synchrotron Phase Tomography: An Emerging Imaging Method for Microvessel Detection in Engineered Bone of Craniofacial Districts. *Front Physiol*. 2017 Sep, 8, 769

21. 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, 7, 62

22. 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, 46(5), pp. 1893–1900

23. 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*. 2015 6(1), pp. 71–84

24. 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 , 28, pp. 348–357

25. Carriero MV, Bifulco K, Minopoli M, Lista L, Maglio O, Mele L, Di Carluccio G, De Rosa M, Pavone V. UPARANT: a urokinase receptor-derived peptide inhibitor of VEGF-driven angiogenesis with enhanced stability and in vitro and in vivo potency. *Mol Cancer Ther*. 2014 13(5), pp. 1092–1104

\* Co-first author Authorization for the treatment of personal information as required by italian D.Lgs 196/2003