

PERSONAL INFORMATION

Umberto Galderisi



POSITION

- Full Professor of Molecular Biology at the School of Medicine, University of Campania "Luigi Vanvitelli", Naples, Italy.
- Adjunct Professor, Sbarro Inst. for Cancer Research and Mol. Medicine, Temple Univ, Philadelphia, PA, USA.
- Visiting Scientist at Genkok (Genome and Stem Center) of Erciyes University, Kaiseri, Turkey

WORK EXPERIENCE

2008 – 2018

Associate Professor of Molecular Biology

Luigi Vanvitelli Campania University, Naples, Italy

2001 - 2007

Assistant Professor of Molecular Biology

Second University of Naples, Naples, Italy

- Researcher in Molecular Biology

2006, 2008, 2011

Visiting Scientist

"Heinrich Pette" Institute of Hamburg University, Germany.

- Research on cell cycle regulation and anti-oncogenes

2003

Visiting Scientist

Tulane University, New Orleans, LA, USA

- Research on mesenchymal stem cells

2001 to present

Adjunct Associate Professor

College of Science, Temple University, Philadelphia, PA, USA

- Research on cell cycle regulation and anti-oncogenes

1998, 1999

Visiting Scientist

Faculty of Medicine, Thomas Jefferson University, Philadelphia, PA, USA

- Research on cell cycle regulation and anti-oncogenes

1997 - 1999

Senior Scientist

CEINGE, Naples, Italy

- Research in molecular and cellular biology

- 1996 **Post Doc**
 "Museum National d'Histoire Naturelle", Paris, France
 ▪ Research in molecular biology

EDUCATION AND TRAINING

- 1992 **PhD**
 University "Federico II", Naples, Italy
 ▪ PhD in Embryology and Histology
- 1987 **Master of Science**
 University "Federico II", Naples, Italy
 ▪ Degree in Biological Science

ADDITIONAL INFORMATION

- Memberships**
- National Association of Italian Biologist
 - International Society for Cellular Therapy (ISCT)
 - ECSA (European Cellular Senescence Association)
 - Founder and President of Stem Cell Research Italy (www.stemcellitaly.it)

- Editorial Board**
- World Journal of Stem Cells (till Dec 2024)
 - Stem Cell Discovery (2008 to present)
 - Journal of Cardiology and Therapy (2013 to present)
 - Imaging Journal of Clinical and Medical Sciences (2014 to present)
 - Journal of Cancer Metastasis and Treatment (2014 to present)
 - Frontiers in Bioengineering and Biotechnology (2021 to present)
 - Cell Transplantation (2023 to present)

- Scientific Interests**
- Basic and applied researches on normal and cancer stem cells.
 - Analysis of senescence processes that affect stem cell properties.
 - Effect of low dose radiations on the biology of normal and cancer stem cells.
 - Animal models for studies on stem cell aging and senolytic treatments.

- Publications**
- Co-author of more than 180 articles (H-index 46) by Scopus.

Selected publications

1: Alessio N, Aprile D, Peluso G, Mazzone V, Patrone D, Di Bernardo G, Galderisi U. IGFBP5 is released by senescent cells and is internalized by healthy cells, promoting their senescence through interaction with retinoic receptors. *Cell Commun Signal.* 2024 Feb 13;22(1):122. doi: 10.1186/s12964-024-01469-1. PMID: 38351010; PMCID: PMC10863175.

2: Alessio N, Acar MB, Squillaro T, Aprile D, Ayaz-Güner Ş, Di Bernardo G, Peluso G, Özcan S, Galderisi U. Progression of irradiated mesenchymal stromal cells from early to late senescence: Changes in SASP composition and anti-tumour properties. *Cell Prolif.* 2023 Jun;56(6):e13401. doi: 10.1111/cpr.13401. Epub

2023 Mar 22. PMID: 36949664; PMCID: PMC10280137.

3: Aprile D, Alessio N, Squillaro T, Di Bernardo G, Peluso G, Galderisi U. Role of glycosphingolipid SSEA-3 and FGF2 in the stemness and lineage commitment of multilineage differentiating stress enduring (MUSE) cells. *Cell Prolif.* 2023 Jan;56(1):e13345. doi: 10.1111/cpr.13345. Epub 2022 Oct 12. PMID: 36225120; PMCID: PMC9816924.

4: Ayaz-Guner S, Alessio N, Acar MB, Aprile D, Özcan S, Di Bernardo G, Peluso G, Galderisi U. A comparative study on normal and obese mice indicates that the secretome of mesenchymal stromal cells is influenced by tissue environment and physiopathological conditions. *Cell Commun Signal.* 2020 Jul 29;18(1):118. doi: 10.1186/s12964-020-00614-w. PMID: 32727501; PMCID: PMC7388533.

5: Alessio N, Squillaro T, Di Bernardo G, Galano G, De Rosa R, Melone MAB, Peluso G, Galderisi U. Increase of circulating IGFBP-4 following genotoxic stress and its implication for senescence. *Elife.* 2020 Mar 30;9:e54523. doi: 10.7554/eLife.54523. Erratum in: *Elife.* 2022 Jul 01;11: PMID: 32223893; PMCID: PMC7136022.

6: Alessio N, Acar MB, Demirsoy IH, Squillaro T, Siniscalco D, Bernardo GD, Peluso G, Özcan S, Galderisi U. Obesity is associated with senescence of mesenchymal stromal cells derived from bone marrow, subcutaneous and visceral fat of young mice. *Aging (Albany NY).* 2020 Jul 7;12(13):12609-12621. doi: 10.18632/aging.103606. Epub 2020 Jul 7. PMID: 32634118; PMCID: PMC7377882.

7: 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. *J Cell Physiol.* 2018 Nov;233(11):8996-9006. doi: 10.1002/jcp.26845. Epub 2018 Jun 15. PMID: 29904927.

8: Alessio N, Riccitiello F, Squillaro T, Capasso S, Del Gaudio S, Di Bernardo G, Cipollaro M, Melone MAB, Peluso G, Galderisi U. Neural stem cells from a mouse model of Rett syndrome are prone to senescence, show reduced capacity to cope with genotoxic stress, and are impaired in the differentiation process. *Exp Mol Med.* 2018 Mar 22;50(3):1. doi: 10.1038/s12276-017-0005-x. PMID: 29563495; PMCID: PMC6118406.

9: Squillaro T, Severino V, Alessio N, Farina A, Di Bernardo G, Cipollaro M, Peluso G, Chambery A, Galderisi U. De-regulated expression of the BRG1 chromatin remodeling factor in bone marrow mesenchymal stromal cells induces senescence associated with the silencing of NANOG and changes in the levels of chromatin proteins. *Cell Cycle.* 2015;14(8):1315-26. doi: 10.4161/15384101.2014.995053. PMID: 25724006; PMCID: PMC4614278.

10: Acar MB, Ayaz-Güner Ş, Di Bernardo G, Güner H, Murat A, Peluso G, Özcan S, Galderisi U. Obesity induced by high-fat diet is associated with critical changes in biological and molecular functions of mesenchymal stromal cells present in visceral adipose tissue. *Aging (Albany NY).* 2020 Dec 27;12(24):24894-24913. doi: 10.18632/aging.202423. Epub 2020 Dec 27. PMID: 33361524; PMCID: PMC7803587.

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