Curriculum Luigi Leanza

Personal Informations

Family name, First Name	**LEANZA, Luigi**
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Current Position

Associate Professor in Biochemistry
Department of Biology – University of Padova - Italy

Education

29.09.2023: Professional Qualification as Full Professor in Cell Biology.
08.02.2022: Professional Qualification as Full Professor in Biochemistry.
21.04.2009: PhD in Biosciences, University of Padova, Italy
31.01.2007: Professional Qualification as a Biologist, University of Padova, Italy.
20.07.2005: Master Degree in Molecular Biology *cum laude*, University of Padova, Italy.

Previous Positions

2016-2019 Assistant Professor, Department of Biology, University of Padova, Italy

2013-2016 Senior PostDoc, Department of Biology, University of Padova, Italy

2009-2013 PostDoc University of Padova, Italy

2006-2008 PhD Program in Bioscienze – XXI cycle, University of Padova, Italy

Reserach Abroad

2014 EMBO Short Term Fellowship, University of Duisburg-Essen, Department of Molecular Biology, Essen, Germany

2013 Visiting Scientist, University of Kiel, Department of Molecular Oncology, Kiel, Germany

2004 Stage, Karolinska Institutet, Department of Environmental Medicine, Division of Toxicology, Stockholm, Sweden

Publications

Luigi Leanza is co-author of ***58 papers*** published in international peer reviewed journals, such as *Cancer Cell, Leukemia, EMBO Molecular Medicine, Journal of Experimental & Clinical Cancer Research, Cell Reports, Cell Death and Disease, Oncogene, Nature*

Communication, Redox Biology, PNAS, Cell Death and Differentiation, Journal of Biological Chemistry. ***First, Last or Corresponding authors in 32***. He is also co-author of a book chapter in *Handbook of Experimental Pharmacology* and of 6 published abstracts. ***Total citations (Scopus): 2155. H-index (Scopus): 27***.

Selected publications

1. Muccioli S, … **Leanza L*.** (2023) Transglutaminase Type 2-MITF axis regulates phenotype switching in skin cutaneous melanoma. ***Cell Death Dis.***, 14(10):704.
2. Angi B., Muccioli S, … **Leanza L.** (2023) A Meta-Analysis Study to Infer Voltage-Gated K+ Channels Prognostic Value in Different Cancer Types. *Antioxidants,* 12, 573.
3. Muccioli S, … **Leanza L.** (2022) Promising prognostic value of Transglutaminase type 2 and its correlation with tumor-infiltrating immune cells in skin cutaneous melanoma. *Cell Death Discov.,* 8:294.
4. Severin F, … **Leanza L**, et al. (2022) Pharmacological modulation of Kv1.3 potassium channel selectively triggers pathological B lymphocyte apoptosis in vivo in a genetic CLL model. *J Exp Clin Cancer Res.,* 41:64.
5. Rossin F, … **Leanza L.** (2021) Transglutaminase Type 2 regulates the Wnt/β-catenin pathway in vertebrates. *Cell Death Dis.,* 12:249.
6. Costa R, … **Leanza L.** (2021) Mitochondrial dysfunction interferes with neural crest specification through the FoxD3 transcription factor. *Pharmacol Res.,* 164:105385.
7. Peruzzo R, Costa R, Bachmann M, **Leanza L***, Szabò I. (2020) Mitochondrial Metabolism, Contact Sites and Cellular Calcium Signaling: Implications for Tumorigenesis. *Cancers,* 12(9):2574. *corresponding author.
8. Costa R, …., **Leanza L**. (2019) Impaired Mitochondrial ATP Production Downregulates Wnt Signaling via ER Stress Induction. *Cell Rep.*, 28:1949-1960.e6.
9. **Leanza L**, et al. (2019) Pharmacological modulation of mitochondrial ion channels. *Br J Pharmacol.*, 176(22):4258-4283.
10. **Leanza L**, et al. (2017) Direct pharmacological targeting of a mitochondrial ion channel selectively kills tumor cells *in vivo*. *Cancer Cell*, 31(4): 516-531.e10.
11. **Leanza L**, et al. (2014) Mitochondrial ion channels as oncological targets. *Oncogene*, 33: 5569-5581.
12. **Leanza L**, et al. (2013) Clofazimine, Psora-4 and PAP-1, inhibitors of the potassium channel Kv1.3, as a new and selective therapeutic strategy in chronic lymphocytic leukemia. *Leukemia*, 27: 1782-1785.
13. **Leanza L**, et al. (2012) Inhibitors of mitochondrial Kv1.3 channels induce Bax/Bak-independent death of cancer cells. *EMBO Molecular Medicine*, 4: 577-593.
14. **Leanza L**, et al. (2008) Metabolic interrelations within guanine deoxyribonucleotide pools for mitochondrial and nuclear DNA maintenance. *J. Biol. Chem.*, 283: 16437-16445.

Grants

Luigi Leanza was awarded research grant from University of Padua (STARS, Progetto Giovani Studiosi, PRID), as well as other national and international funding agencies (AIRC, EMBO, PRIN).

2024 Italian Association for Cancer Research (AIRC) - Investigator Grant 2024: "Impact of diet on mitochondrial contactome and its relevance in cancer". (Project n°: 30789; 920,000.00 euro; 60 months; Role: PI).

2022 Ministry of Education (PRIN2022) – "Cancer Associated Fibroblasts impact on Wnt signaling on melanoma progression" – (project number n° 2022ACN7LZ; 199.898,00 euro; 30 months; Role: PI).

2022 Component of the research group of the CN3 – Spoke 2 Cancer PNRR 2022 (around 3.2 M euro)

2021 STARS UniPD 2021: "Organelles CONtact sites in cancer – CONCERt" (project number: 494876; 140.000,00 euro; 24 months; Role: PI).

2019 Italian Association for Cancer Research (AIRC) - My First AIRC Grant 2019: "Starving cancer: modulation of Wnt signaling by diet through mitochondria-endoplasmic reticulum cross-talk". (Project number: 23271; 494.285,00 euro; 60 months; Role: PI).

2017 Italian Ministry of Research: Call "Finanziamento attività base di Ricerca" (FFABR2017): 3000,00 € - Role: PI.

2016 University of Padua (PRID 2016 n°BIRD162511 - 59356,00 €). Title: "Wnt signaling and mitochondrial fitness: making the link". Role: PI.

2014 Senior PostDoc, University of Padua, Italy, project n°: GRIC14OFQC.

2014 European Molecular Biology Organization (EMBO) Short Term Fellowship, project n°: ASTF 233-2014. (3 months, 8263,10 €).

2012 Project Young Researcher, University of Padua, Italia, project number: GRIC12NN5G (72.982,00 €, Role PI).

Awards

2024 **Best Oral Presentation.** 4th Workshop of the SIB group Tumor Biochemistry: "Biochemical Dynamics in Tumor Microenvironment: new insights and implications" – Catania, Italy.

2023 **Best Poster Prize.** Mitochondria, Apoptosis and Cancer (MAC23) Conference 2023 – Coimbra (Portugal).

2020 **Maria Paola Belloni award 2019** – for research in oncology.

2018 **Best Poster Prize.** European Cell Death Organization (ECDO) Conference 2018 – Saint Petersburg (Russia).

2013 **Best Oral Presentation.** Italian Group of Bioenergetic and Biomembranes (GIBB) Annula meeting – Padua, Italy.

Patent

15.01.2015 Co-author of the patent number PD2015A000006, title: *"Psoralen derivatives as selective tumor-killing agents".*

National and International Meetings

Luigi Leanza joined **54 among seminars, national and international conferences: in 4 of them has been invited as speaker** and in **22 has been selected for an oral presentation**, like in the European Cell Death Organization (ECDO) annual meeting, in the European Bioenergetic Group (EBEC), Gordon Conference, and a Cold Spring Harbor Asia meeting. In addition, he was part of the Organizing Commitee of the international meeting "Padua MitInnsbruck - Mitochondrial Conference" (2017) and 1st and 2nd Italian Pancreatic Cancer Community (IPCC) Symposium (2024-2025).

Teaching activity

During the Academic Year 2017-18 he follow the course Teaching4Learning for innovative teaching organized by the University of Padua (see the badge in the first page).

Since the 2005/2006, Luigi Leanza acted as support for the teaching in the bachelor and master courses of the University of Padua. Since the 2019-20, Luigi Leanza teaches Biochemistry 1 and Biochemical Methods for the bachelor program in Molecular Biology.

Since the 2010/2011, Luigi Leanza supervised 24 bachelor students and 25 master students as well as 3 PhD students of the PhD program in Bioscience.

Editorial Activity

Luigi Leanza is Associated Editor at Cell Death and Discovery (2022-25). In addition, he acted as "Guest editor" of two "*special issue*": (2019) Genes and (2020) Frontiers in Bioscience. In addition, he is ad hoc *reviewer* for several international peer reviewed journals, such as:

BBA Bioenergetics
Scientific Reports
Expert Opinion on Therapeutic Targets
Journal of Cellular Biochemistry
Journal for ImmunoTherapy of Cancer
Asian Biomedicine
BBA Biomembranes
Plos One
Biology Open
Journal on Neurology and Neuromedicine
Advanced in Medical Sciences
Bioscience reports
Oncotarget
Cellular Physiology and Biochemistry
Biological Research
International Journal In Molecular Sciences
Frontiers in Oncology
Gene
Cell Death and Differentiation
Cell Death and Disease
Cell Death and Discovery
Cancers
Cell Reports
Life

Luigi Leanza acted as *Referee* for the projects of the National Science Center (Poland), the Czech Heath Research Council (Czech Republic) and the Institut National Du Cancer (France).

Institutional roles

2019-today: Vice President/Secretary of the Program in Molecular Biology, University of Padua.
2021-today: *President* of the Guidance Committee of the Faculty of Sciences, University of Padua.
2021-Today: Member of the Committee of the University of Padua for Guidance.

I thereby authorize the treatment of my personal data as in DL n° 196/03.

Padua, 01 September 2025