# CURRICULUM VITAE of Eleonora <u>CANDI</u>

**PRESENT POSITION:** (*i*) Full Professor in Biochemistry at the Department of Experimental Medicine of the University of Rome "Tor Vergata", Rome. Italy; (*ii*) Head of the Biochemistry laboratory, IDI-IRCCS hospital, Rome, Italy.

**EDUCATION:** PhD (1995, Rome) in Skin Biochemistry; BSc (1991, Rome) in Biology.

**PREVIOUS WORK:** Following fellowships in London (UK, 1992) and Bristol (UK, 1993) moved to the Skin Biology Branch, NIAMS-NIH, Bethesda MD, USA (chief of branch Dr. P.M. Steinert) in 1993-1997. Returned back to Rome, Italy as Telethon Scientists (up to 2001) to become Assistant Professor and Full Professor at the University of Rome "Tor Vergata" in Molecular Biology (BIO/11) (up to 2022).

**EDITORIAL ACTIVITY:** (*i*) Editor-in-chief Discover Oncology (Springer-Nature; <u>https://www.springer.com/journal/12672</u>); (*ii*) Editorial Board member of (1) The FEBS Journal; (2) Encyclopedia of Life Science, Wiley-Blackwell; (3) Cell Cycle, Taylor & Francis; (4) Cell Death Disease, Springer-Nature. (*iii*) Peer-reviewer for international journals (Cell Reports, Nature Comms, Cell Death & Differentiation, Oncogene, Journal Investigative Dermatology).

**AREAS OF EXPERTISE:** (i) Programmed cell death (apoptosis) in epithelial models: (a) role of transgluatminases p63, and their substrates: (b) role of homolog of p53. in epithelia proliferation/differentiation; (ii) role of microRNA/lncRNAs in epithelial proliferation/differentiation and migration/invasion; (iii) p53 family members in squamous cell carcinomas; (iv)generation and characterization of transgenic mice; (v) cell metabolism in normal and pathological conditions.

**PUBLICATIONS**: 167 scientific articles; Corresponding author (\*) 55 papers. Cumulative IF=860,282 Google Scholar: H-index = 60. Cites = 30003. Scopus Research ID: H-index= 50. Cites=15886

#### **SELECTED ARTICLE (10):**

1. Cappello et al. Extracellular serine empowers epidermal proliferation and psoriasis-like symptoms. Science Adv.	
8:eabm7902.	[IF: 14.143]
2. Lena et al. The p63 C-terminus is essential for murine oocytes integrity. NatureComms. 2021; 12:383.	[IF: 12.121]
3. Panatta E et al. Long non-coding RNA uc.291 controls epithelial differentiation by interfering with the A	CTL6A/BAF
complex. EMBO Rep. 2020. 21(3):e46734.	[IF: 7.497]
3. Viticchiè G, et al. p63 supports aerobic respiration through hexokinase II.	
Proc Natl Acad Sci U S A. 2015. 112(37):11577-82.	[IF: 9.771]
4. Amelio I, et al. miR-24 triggers epidermal differentiation by controlling actin adhesion and cell migration.	
J Cell Biology. 2012;199(2):347-63.	[IF: 10.264]
5. Rivetti di Val Cervo P, et al. p63-microRNA feedback in keratinocyte senescence.	
Proc Natl Acad Sci U S A. 2012. 109(4):1133-8.	[IF: 9.771]
6. Agostini M, et al. Neuronal differentiation by TAp73 is mediated by microRNA-34a regulation of synaptic protein targets.	
Proc Natl Acad Sci U S A. 2011. 108(52):21093-8.	[IF: 9.771]
7. Notari M, et al. Inhibitor of apoptosis-stimulating protein of p53 (iASPP) prevents senescence and is required for epithelial	
stratification. Proc Natl Acad Sci U S A. 2011. 108(40):16645-50.	[IF: 9.771]
8. Boase NA, et al. Respiratory distress and perinatal lethality in Nedd4-2-deficient mice.	
Nature Commun. 2011; 2:287.	[IF: 12.764]
9. Gonfloni S, et al. Inhibition of the c-Abl-TAp63 pathway protects mouse oocytes from chemotherapy-inc	luced death. Nature
Medicine. 2009.15(10):1179-85.	[IF: 27.553]
10. Candi E, et al. DeltaNp63 regulates thymic development through enhanced expression of FgfR2 and Jag2.	
Proc Natl Acad Sci U S A. 2007.104(29):11999-2004.	[IF=9.643]

#### **REVIEWS (4):**

1. Amelio I et al. Emerging roles of long non-coding RNAs in breast cancer biology and management. **Semin Cancer Biol.** 2020. \$1044-579X(20)30155-3.

2. Dötsch V, et al. p63 and p73, the ancestors of p53. Cold Spring Harb Perspect Biol. 2010 Sep;2(9):a004887.

3. Aberdam D, et al. miRNAs, 'stemness' and skin. Trends Biochem Sci. 2008. 33(12):583-91.

4. Candi E, et al. The cornified envelope: a model of cell death. Nature Reviews Molec. Cell. Biol. 2005. 6:328-40.

# CURRICULUM VITAE



NAME: *Eleonora <u>CANDI</u>* e-mail: candi@uniroma2.it ORCID: 0000-0001-8332-4825

#### **PRESENT POSITION**

**Since 2017:** (*i*) Full Professor in Biochemistry (SSD BIO/10) at the Department of Experimental Medicine of the University of Rome "Tor Vergata", Rome, Italy. (*ii*) Head of the Biochemistry laboratory, IDI-IRCCS hospital, Rome, Italy.

#### **EDUCATION**

**1995** Ph.D. degree in "Biology and physiophatology of the epidermis" at the University of Rome "Tor Vergata". Title of the experimental thesis: "Loricrin in the assembly of the cornified envelope: structural studies, and transglutaminase substrate properties".

**1991** Doctoral degree (Biology). Final score 110/110 cum laude; experimental thesis at the Dept. of Biology University of Rome "Tor Vergata" on "Bradykinin effect on the transduction mechanisms on a rat fibroblast cell line (F208)".

#### **PREVIOUS POSITIONS**

**Since 2017 up to now:** (*i*) Full Professor in Molecular Biology at the Department of Experimental Medicine of the University of Rome "Tor Vergata", Rome, Italy. (*ii*) Head of the Biochemistry laboratory, IDI.IRCCS hospital, Rome, Italy.

**2012 up to 2017:** Associate Professor in Molecular Biology at the Department of Experimental Medicine and Surgery of the University of Rome "Tor Vergata".

**2001 up to 2012:** Assistant Professor in Biochemistry at the Department of Experimental Medicine and Surgery of the University of Rome "Tor Vergata".

**5/1999 up to 5/2001**: Telethon Research fellow at the Department of Experimental Medicine and Biochemical Sciences of "Tor Vergata" University. The position was supported by Telethon Grant.

**10/1997 up to 4/1999:** Postdoctoral research fellow in Biochemistry at the Department of Experimental Medicine and Biochemical Sciences of "Tor Vergata" University.

**3/1993 up to 9/1997:** Visiting research fellow at the Skin Biology Branch, NIAMS-NIH, Bethesda MD (chief of branch Dr. P.M. Steinert).

**1-3/1993:** Three months of sabbatical practical experience with a COMETT-FORUM grant in Neuroendocrinology laboratory of University of Bristol, UK.

**9-11/1992:** Three months of sabbatical practical experience with a COMETT-FORUM grant in Immunology laboratory of Charing Cross & Westminster Med. Sch., London.

**12/1991:** Postdoctoral research fellow in cellular biology at the Department of Experimental Medicine and Biochemical Sciences of "Tor Vergata" University.

1988-1991: Graduate research student at the Dept. of Biology of the University of Rome "Tor Vergata".

# ACADEMIC EXPERIENCE

- **1997-2008:** Practicals, main lectures and exams in Biochemistry for Medical Students at the University of Rome "Tor Vergata".
- 2008 to date: Teaching Molecular Biology in Medical Biotechnology course.
- 2009 to date: Teaching Molecular Biology for student in Pharmacy.
- **2010 to date:** Member of the bord of the PhD program in "Biochemistry and Molecular Biology" of the University of Rome "Tor Vergata".
- 2013 to date: Coordinator of the Master course: "Nutrition and Cosmetics", University of Rome "Tor Vergata".
- **2018 to 2020:** Coordinator of the PhD Program: "Biochemistry and Molecular Biology", University of Rome "Tor Vergata".

# EDITORIAL EXPERIENCE

- **2009 to 2020** Section Editor of *The Encyclopedia of Life Science* (eLS), Molecular Biology section, Wiley-Blackwell.
- 2014 to date Editorial Board member of FEBS Journal, Wiley Online Library.
- 2014 to date Editorial Board member of Cell Death Disease, Springer-Nature.
- 2020 to date Editorial Assistant of *Cell Cycle*, Taylor & Francis.
- 2020 to date Editor-in-Chief of Discover Oncology, Springer-Nature.

Acting as referee for: Cell Reports, Nature Comms, Cell Death & Differentiation, Oncogene, Journal Investigative Dermatology.

# SCIENTIFIC INTERESTS

Programmed cell death (apoptosis) in epithelial models: (1) role of transgluatminases and their substrates; (2) role of p63, homolog of p53, in epithelia proliferation/differentiation; (2) role of microRNA/lncRNAs in epithelial proliferation/differentiation and migration/invasion; (3) p53 family members in squamous cell carcinomas; (4) generation and characterization of transgenic mice; (5) cell metabolism in normal tissue and pathologies.

# CONFERENCES ORGANIZATION/SPEAKERS

# **ORGANIZATION:**

- 1997-International Investigative Dermatology Satellite workshop on "Inherited Skin Diseases", Rome, Italy.
- 2003-International workshop on "Programmed Cell Death", Villa Vigoni, Como, Italy.
- 2004-International workshop on "New insights into apoptosis: from basic mechanism to therapeutic application", Villa Vigoni, Como, Italy.
- 2012-International conference, ECDO, 20th Euroconference on Apoptosis, Rome, Italy.
- 2013-Workshop on Cell Death, "Cell Death and Disease" Como, Italy.

SELECTED ORAL PRESENTATIONS:

- 2009-International EMBO workshop on "Model organisms in cell death research", Obergurgl, Austria.
- 2010-The 1<sup>st</sup> International p53 Isoforms Meeting, Lione, France.
- 2012-The 42<sup>nd</sup> ESDR meeting, Venezia Lido, Venice, Italy.
- 2005-The 2<sup>nd</sup> International p53 Isoform Conference, Aix-en-Provence, France.
- 2016-The 7<sup>th</sup> p63/p73 International Workshop, Boston, USA.
- 2015-The 23<sup>rd</sup> Conference of the European Cell Death Organization "Death pathways and beyond" Genevra, Swiss.

• 2017-The 17<sup>th</sup> International p53 Workshop, Singapore.

# **INVITED SPEAKER:**

- 1993-Advances in Neuroblastoma Research, No 6, Philadelphia, USA.
- 1995-Biochemistry of Neuroectodermal Tumours, 3<sup>rd</sup> Workshop, IDI-IRCCS, Rome, Italy.
- 1996-The 5<sup>th</sup> International Conference on "Transglutaminase and Protein Cross-linking reactions", Cheju-Korea, Korea.
- 2000-The 6<sup>th</sup> International Conference on "Transglutaminase and Protein Cross-linking", Lyon-France.
- 2000- The 2<sup>nd</sup> European Workshop on "Cell Death", Gibilmanna, Italy.
- 2001-The 9<sup>th</sup> Euroconference on "Apoptosis", European Cell Death Organization (ECDO). Vienna, AU.
- 2002-Workshop on "Cell Death and Differentiation in Cancer and Onfections Diseases", Capri, Italy.
- 2003- The 8<sup>th</sup> International Congress on "Amino Acids and Proteins", Rome, Italy.
- 2003-Gordon Reasearch Conference "Barrier Function of Mammalian Skin", Bristol, USA.
- 2008-International workshop on "Epistem Conference", Ghent-Belgium.
- 2009-The 4<sup>th</sup> p63/p73 Workshop, Toronto, Canada.
- 2013. The 6<sup>th</sup> p63/p73 International workshop, Chiba, Japan.
- 2016-Symposium in "Epigenetic Regulation of Skin Regeneration, Ageing and Disease", Bradford, UK.
- 2017-Workshop "TGases in health and dieseases" Debrecen, HU.
- 2017-ESDR Satellite Symposium "Skin epigenetics", Salisbury, AU.
- 2018-CDD Conference 2018 "Genes vs Environment in Cancer", Cambridge, UK.
- 2019-CDD Conference "Cancer, Immunity & Inflammation", Cambridge, UK
- 2019-The Wuxi International Bioforum and 9<sup>th</sup> Cell Death & Disease Symposium New Drug Discovery, Wuxi, China.
- 2022 European Cell Death Organization, DZNE Bonn, Germany.

#### GRANTS

PAST:

1999 Telethon Grant 417/bi
2002 Telethon Grant GP002251
2006 Telethon Grant (2006-2009) GGP06048
2006 PRIN (2006-2007)
2006 Ministry of Health IDI-IRCCS (2007-2009)
2012 AIRC, Italian Cancer Association (2013-2016)
2016 Fondazione Roma (2016-2017)
ON GOING:
2018 Mistry of Health IDI-IRCCS, resp. UO (2018-2020)
2018-2020 MISE, Cooperation Italy-China, PI (2018-2021)
2019 AIRC, Italian Cancer Association, PI (2019-2023)
2020 Minister of Health, Ricerca Finalizzata, PI (2020-2023)
2021 Regione L azio, PI (2021-2023)

2021 Regione Lazio, PI (2021-2023)

2022 Ministry of University, PNRR-PE6 (2022-2026)

2023 Ministry of Health, PNRR-MAD (2022-2024)

#### SCIENTIFIC PUBLICATIONS

Published <u>168 papers</u>, including: : 11 <u>PNAS-USA</u>, 1 <u>Nature Rev Mol Cell Biol</u>, 1 <u>Nature Medicine</u>, 2 <u>EMBO J</u>, 1 <u>Mol Cell Biol</u>, 6 J <u>Biol Chem</u>, 8 <u>Cell Death Differ</u>, 1 <u>Blood</u>, 2 <u>Nature Communications</u>, 1 J <u>Cell</u> <u>Biology</u>, 6 Oncogene, <u>1 Embo Reports</u>, 1 <u>Science Advances</u>. Corresponding author (\*) 56 papers. Cumulative IF=874,418 Google Scholar: H-index = 60. Cites = 30003. Scopus Research ID: H-index= 50. Cites=15866.