# PERSONAL INFORMATION Angela Nebbioso



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Sex Female | Date of birth 10/02/1977 | Nationality Italian

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**WORK EXPERIENCE** 

05/01/2011-05/31/2013:

**12/01/2020 – present**: Full Professor of General Pathology

University of Campania "L. Vanvitelli", Naples, IT.

November 2017 – present: Rector's Delegate for National and International Rankings

University of Campania "L. Vanvitelli", Naples, IT.

12/21/2018 to 12/01/2020: Associate Professor of General Pathology

University of Campania "L. Vanvitelli", Naples, IT.

12/21/2015 to 12/21/2018: Fixed-term research assistant, type B

University of Campania "L. Vanvitelli", Naples, IT.

06/07/2013 to 12/20/2015: Fixed-term research assistant, type A

University of Campania "L. Vanvitelli", Naples, IT. Fellowship at the Department of General Pathology

University of Campania "L. Vanvitelli", Naples, IT. **08/01/2010-04/30/2011:** Postdoctoral fellowship – Department of Molecular Biology

Radboud University, Nijmegen, Holland.

**03/01/2008-03/31/2010:** Fellowship at the Department of General Pathology University of Campania "L. Vanvitelli", Naples, IT.

**03/01/2006-02/29/2008:** Postgraduate research contract at the Department of General Pathology

University of Campania "L. Vanvitelli", Naples, IT.

03/06/2003-10/30/2005: Postgraduate research contract at the Department of General Pathology

University of Campania "L. Vanvitelli", Naples, IT.

2002: Postgraduate research contract at the Department of General Pathology

University of Campania "L. Vanvitelli", Naples, IT.

**EDUCATION AND TRAINING** 

**2011**: PhD in Medical Science – Radboud University, Nijmegen, Holland.

**2007**: Specialization in Clinical Pathology, summa cum laude

University of Campania "L. Vanvitelli", Naples, IT.

**2002**: Habilitation to profession of biologist.

2002: Degree in Biological Science, summa cum laude

University of Naples "Federico II".

MAIN SCIENTIFIC INTERESTS

Area: Medicinal Sciences

Focus: Drug discovery, pathogenesis and translational medicine. Identification and

characterization of the mechanisms responsible for human diseases, such as

cancer

• Identification and mining of genomic and epigenomic alterations;

- New pathology markers;
- Meaning and use of epigenome signatures for patient stratification;
- New compounds against cancer;
- New therapeutic combinations based on epigenomic stratification;
- Precision medicine and targeted cancer therapy (mainly Myc-targeted therapies).

GRANTS 2020:

PI of Unit within the PRIN2020. Project entitled "Mechanistic understanding of NADPH oxidases and their role in ROS biology".

2019:

PI of Unit within the Valere 2019 Program of University of Campania "L. Vanvitelli". Project entitled "Targeting ADIPose tissue metabolic dysfunction for preventing Colorectal CAncer progRession and cachExia" (acronym: AdipCARE ID263).

2018:

PI of the project admitted to funding for a Ph.D. fellowship of the 34th cycle of the PhD in Biochemical and Biotechnological Sciences under the "PON Research and Innovation 2014-2020" program - Innovative doctorates with industrial characterization XXXIV Cycle. Project entitled "Alteration of the level of MYC acetylation as an epigenetic marker in the diagnosis, prognosis and cancer therapy" (DOT1349797).

2018:

Identification and characterization of new therapeutic approaches against

cancer (Acronym IDEAL), Collaborator.

2018:

Identification, Characterization and mining of colorectal tumorogenesis: cause, prevention & cure (Acronym iCURE), Collaborator.

#### **REVIEWER ACTIVITY**

Reviewer activity for Journal of Biochemistry and Cell Biology, Clinical Epigenetics, American journal of Cancer Research, PlosOne, Frontiers, Scientific Reports.

### **EDITOR ACTIVITY**

Guest editor of the special issue "Metabolism application in histone deacetylase inhibitors" for the journal "Metabolites", MDPI.

### **TECHNICAL SKILLS**

Flow cytometry, extraction and purification of proteins, RNA and DNA, and their use in accordance with procedures ranging from standard to the most recent, such as RNA interference, chromatin immunoprecipitation (ChIP), microarray analysis and NGS technology.

### TEACHING AND EDUCATIONAL ACTIVITIES\_

- 2018 today: Member of Ph.D. Program Biomedical and Biotechnological Science University of Campania "L. Vanvitelli", Naples, IT.
- Teaching of General Pathology for Obstetrics degree course in 2019-2020 and 2020-2021 UniCamillus University, Rome, IT.
- Teaching of General Pathology for Dentistry degree course from 2018-2019 to the present University of Campania "L. Vanvitelli", Naples, IT.
- Teaching of General Pathology for Physioterapy degree course at the Cardarelli Hospital in 2019-2020 and 2020-2021.
- Teaching of General Pathology for Physioterapy degree course from 2020-2021 to the present University of Campania "L. Vanvitelli", Naples, IT.
- Teaching of General Pathology for Medical Radiology Techniques for Imaging and Radiotherapy from 2014-2015 to the present University of Campania "L. Vanvitelli", Naples, IT.
- Teaching of General Pathology for Biomedical Laboratory Techniques from 2017-2018 to the present

   University of Campania "L. Vanvitelli", Naples, IT.

- Teaching of General Pathology for Techniques of prevention in the environment and in the workplace from 2018-2019 to the present – University of Campania "L. Vanvitelli", Naples, IT.
- Teaching of General Pathology for Nurse Science in 2014-2015 to the present University of Campania "L. Vanvitelli", Naples, IT.
- Supporting activities of tutoring, as Expert in General Pathology, for students and undergraduates University of Campania "L. Vanvitelli", Naples, IT.
- Participation to examination committees of General Pathology.
- Training course for final meeting of ATLAS project (contract 221952), Naples 27-29 September 2012.
- Training and research course for the EPITRON final meeting (contract 518417) "Towards an epigenetic treatment of neoplastic disease", Greece March 2011.

### **ASSISTANCE ACTIVITY**

Biologist director – UOC Clinical and Molecular Pathology, University hospital University of Campania "L. Vanvitelli", Naples, IT.

**AWARDS** 

2018:

Winner of the 1st Price from 5\*1000 fund of Bartolo Longo Foundation for C.AR.O. project selected as the best project in the oncology field.

2013:

Winner of the "Mind the Bridge" award as a founding partner of the university, which opened the doors to the Business School in San Francisco, USA.

2010: 2007: 2005: Winner of the 1st Price Start Cup Campania with the business idea Epi-C srl. Winner of the Price from the foundation "Guido Berlucchi" 2007, Brescia, Italy. Winner of the 1st Price ONLUS-AICC 2005 for young investigators in the

Oncology research area.

**SPIN OFF** 

Founding partner of Epi-C srl (Epigenetic compounds), Academic spin-off of University of Campania "L. Vanvitelli", Naples, IT.

**PATENTS** 

- "Sirtuin activators and their uses" (PCT143556).
- "Sirtuin modulators" (WO2020/245468).

### TRACK-RECORD

i) <u>Scopus</u>

H-index: 44; Number of publications: 140; Total citations: 6306.

### SCIENTIFIC PUBLICATIONS

## For the list, see http://orcid.org/0000-0001-5374-3527

- 1. Varghese B, Del Gaudio N, Cobellis G, Altucci L, **Nebbioso A.** KDM4 Involvement in Breast Cancer and Possible Therapeutic Approaches. Front Oncol. 2021 Oct 28;11:750315.
- 2. Scafuro M, Capasso L, Carafa V, Altucci L, **Nebbioso A.** Gene Transactivation and Transrepression in MYC-Driven Cancers. Int J Mol Sci. 2021 Mar 27;22(7):3458.
- Scisciola L, Sarno F, Carafa V, Cosconati S, Di Maro S, Ciuffreda L, De Angelis A, Stiuso P, Feoli A, Sbardella G, Altucci L, Nebbioso A. Two novel SIRT1 activators, SCIC2 and SCIC2.1, enhance SIRT1-mediated effects in stress response and senescence. Epigenetics. 2020 Jun-Jul;15(6-7):664-683
- 4. Sarno F, Pepe G, Termolino P, Carafa V, Massaro C, Merciai F, Campiglia P, **Nebbioso A**, Altucci L. Trifolium Repens Blocks Proliferation in Chronic Myelogenous Leukemia via the BCR-ABL/STAT5 Pathway. Cells. 2020 Feb 6;9(2):379.
- 5. Carafa V, Poziello A, Della Torre L, Giovannelli P, Di Donato M, Safadeh E, Yu Z, Baldi A, Castoria G, Tomaselli D, Mai A, Rotili D, **Nebbioso A**, Altucci L. Enzymatic and Biological Characterization of

- Novel Sirtuin Modulators Against Cancer. Int J Mol Sci. 2019 Nov 12;20(22):5654. (Corresponding author)
- 6. Del Gaudio N, Di Costanzo A, Liu NQ, Conte L, Migliaccio A, Vermeulen M, Martens JHA, Stunnenberg HG, **Nebbioso A**, Altucci L. BRD9 Binds Cell Type-Specific Chromatin Regions Regulating Leukemic Cell Survival via STAT5 Inhibition. Cell Death Dis. 2019 Apr 18;10(5):338.
- 7. Carafa V, Altucci L, **Nebbioso A.** Dual Tumor Suppressor and Tumor Promoter Action of Sirtuins in Determining Malignant Phenotype. Front Pharmacol. 2019 Jan 30;10:38.
- 8. Kaur J, Singh M, Dell'Aversana C, Benedetti R, Giardina P, Rossi M, Valadan M A, Vergara, Cutarelli A, Montone AMI, Altucci L, Corrado F, **Nebbioso A\***, Altucci C\*. Biological interactions of biocompatible and water-dispersed MoS<sub>2</sub> nanosheets with bacteria and human cells. Sci Rep. 2018 Nov 6;8(1):16386.
- 9. Sarno F, Papulino C, Franci G, Andersen JH, Cautain B, Melardo C, Altucci L, **Nebbioso A**. 3-Chloro-N'-(2-hydroxybenzylidene) benzohydrazide: An LSD1-selective inhibitor and iron-chelating agent for anticancer therapy. Front Pharmacol. 2018 Sep 7;9:1006.
- Carafa V, Nebbioso A, Cuomo F, Rotili D, Cobellis G, Bontempo P, Baldi A, Spugnini EP, Citro G, Chambery A, Russo R, Ruvo M, Ciana P, Maravigna L, Shaik J, Radaelli E, De Antonellis P, Tarantino D, Pirolli A, Ragno R, Zollo M, Stunnenberg HG, Mai A, Altucci L. RIP1-HAT1-SIRT Complex Identification and Targeting in Treatment and Prevention of Cancer. Clin Cancer Res. 2018 Jun 15:24(12):2886-2900.
- 11. **Nebbioso A**, Tambaro FP, Dell'Aversana C, Altucci L. Cancer epigenetics: Moving forward. PLoS Genet. 2018 Jun 7;14(6):e1007362.
- 12. Di Costanzo A, Del Gaudio N, Conte L, Dell'Aversana C, Vermeulen M, de Thé H, Migliaccio A, **Nebbioso A**, Altucci L. The HDAC inhibitor SAHA regulates CBX2 stability via a SUMO-triggered ubiquitin-mediated pathway in leukemia. Oncogene. 2018 May;37(19):2559-2572.
- 13. **Nebbioso A**, Benedetti R, Conte M, Carafa V, De Bellis F, Shaik J, Matarese F, Della Ventura B, Gesuele F, Velotta R, Martens JHA, Stunnenberg HG, Altucci C, Altucci L. Time-resolved analysis of DNA-protein interactions in living cells by UV laser pulses. Sci Rep 2017 Sep 15;7(1):11725. (**First and Corresponding author**)
- 14. **Nebbioso A**, Carafa V, Conte M, Tambaro FP, Abbondanza C, Martens J, Nees M, Benedetti R, Pallavicini I, Minucci S, Garcia-Manero G, Iovino F, Lania G, Ingenito C, Belsito Petrizzi V, Stunnenberg HG, Altucci L. c-Myc Modulation and Acetylation Is a Key HDAC Inhibitor Target in Cancer. Clin Cancer Res. 2017 May 15;23(10):2542-2555. (**First and Corresponding author**)
- 15. De Bellis F, Carafa V, Conte M, Rotili D, Petraglia F, Matarese F, Francoijs KJ, Ablain J, Valente S, Castellano R, Goubard A, Collette Y, Mandoli A, Martens JH, de The H, **Nebbioso A\***, Mai A\*, Stunnenberg HG\*, Altucci L\*. Context-selective death of acute myeloid leukemia cells triggered by the novel hybrid retinoid-HDAC inhibitor MC2392. Cancer Res. 2014 Feb 24.
- 16. **Nebbioso A**, Carafa V, Benedetti R, Altucci L. Trials with 'epigenetic' drugs: An update. Mol Oncol. 2012 Dec;6(6):657-82.
- 17. Santarlasci V, Maggi L, Capone M, Querci V, Beltrame L, Cavalieri D, D'Aiuto E, Cimaz R, **Nebbioso A**, Liotta F, De Palma R, Maggi E, Cosmi L, Romagnani S, Annunziato F. Rarity of human T helper 17 cells is due to retinoic acid orphan receptor-dependent mechanisms that limit their expansion. Immunity. 2012 Feb 24;36(2):201-14.
- 18. **Nebbioso A**, Pereira R, Khanwalkar H, Matarese F, García-Rodríguez J, Miceli M, Logie C, Kedinger V, Ferrara F, Stunnenberg HG, de Lera AR, Gronemeyer H, Altucci L. Death Receptor Pathway Activation and Increase of ROS Production by the Triple Epigenetic Inhibitor UVI5008. Mol Cancer Ther. 2011 Dec;10(12):2394-404.
- 19. Chaib H. **Nebbioso A**, Prebet T, Castellano R, Garbit S, Restouin A, Vey N, Altucci L, Collette Y. Antileukemia activity of chaetocin via death receptor-dependent apoptosis and dual modulation of the histone methyl-transferase SUV39H1. Leukemia. 2012 Apr;26(4):662-74.
- 20. **Nebbioso A**, Dell'Aversana C, Bugge A, Sarno R, Valente S, Rotili D, Manzo F, Teti D, Mandrup S, Ciana P, Maggi A, Mai A, Gronemeyer H, Altucci L. HDACs class II-selective inhibition alters nuclear receptor-dependent differentiation. J Mol Endocrinol. 2010 Oct;45(4):219-28.
- 21. Martens JH, Brinkman AB, Simmer F, Francoijs KJ, **Nebbioso A**, Ferrara F, Altucci L, Stunnenberg HG. PML-RARalpha/RXR Alters the Epigenetic Landscape in Acute Promyelocytic Leukemia. Cancer Cell. 2010 Feb 17;17(2):173-85.
- 22. **Nebbioso A**, Manzo F, Miceli M, Conte M, Manente L, Baldi A, De Luca A, Rotili D, Valente S, Mai A, Usiello A, Gronemeyer H, Altucci L. Selective class II HDAC inhibitors impair myogenesis by modulating the stability and activity of HDAC-MEF2 complexes. EMBO Rep. 2009 Jul;10(7):776-82.
- 23. Scognamiglio A, **Nebbioso A**, Manzo F, Valente S, Mai A, Altucci L. HDAC-class II specific inhibition involves HDAC proteasome-dependent degradation mediated by RANBP2. Biochim Biophys Acta. 2008 Oct;1783(10):2030-8. (**First author**)

24.	Nebbioso A, Clarke N, Voltz E, Germain E, Ambrosino C, Bontempo P, Alvarez R, Schiavone EM	И,
	Ferrara F, Bresciani F, Weisz A, de Lera AR, Gronemeyer H, Altucci L. Tumor-selective action	of
	HDAC inhibitors involves TRAIL induction in acute myeloid leukemia cells. Nat Med. 200	)5
	Jan;11(1):77-84.	

According to law 679/2016 of the Regulation of the European Parliament of 27<sup>th</sup> April 2016, I hereby express my consent to process and use my data provided in this CV.

angela Mebhioso