

CURRICULUM VITAE

Name: **Valeriana Cesarini**
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EDUCATION

- 2015: PhD in Biotechnology and Translational Medicine, highest honors, Department of Cellular Biology, University of Tor Vergata, Rome, Italy.
- 2011: Master's Degree in Medical Biotechnologies (two-years course), highest honors, Catholic University of the Sacred heart, Rome, Italy.
- 2009: 1st level Degree in Sanitary Biotechnologies (three-years course), Catholic University of the Sacred heart, Rome, Italy.

CURRENT POSITION

- July 2020- present: Researcher (permanent position) at the Institute of Translational Pharmacology, National Research Council (CNR), Rome, Italy.

PREVIOUS POSITIONS

- February 2020-June 2020: RTDA, (Ricercatore a tempo determinato di tipo A) at Saint Camillus International University of Health and Medical Sciences (UniCamillus), Rome, Italy.
- January 2016-january 2020: Postdoctoral fellow, Department of Oncohematology, Ospedale Pediatrico Bambino Gesù, Rome Italy.
- November 2012 – December 2015: PhD in Biotechnology and Translational Medicine, Department of Cellular Biology, University of Tor Vergata, Rome Italy.
- December 2011 – November 2012: Research fellowship at the Department of Neurosurgery, Agostino Gemelli University Policlinic, Rome, Italy.
- December 2009 – November 2011: Undergraduate student at the Department of Molecular Pathology, Agostino Gemelli University Policlinic, Rome, Italy.
- December 2007 – November 2009: Undergraduate student (Master's degree) at the Department of Molecular Pathology, Agostino Gemelli University Policlinic, Rome, Italy.

TEACHING

- 2021-present: Professor of Human Anatomy, Degree course in Dentistry, english course, Saint Camillus International University of Health and Medical Sciences (UniCamillus), Rome, Italy
- 2018-2020: Professor of Human Anatomy, Degree course in Medicine and Surgery, english course, Saint Camillus International University of Health and Medical Sciences (UniCamillus), Rome, Italy.

COMMUNICATION in NATIONAL/INTERNATIONAL CONGRESSES

1) Gordon Research Seminar on RNA and DNA Editing and Modification: Mechanism, Function and Tools for Precision Medicine Lucca, Italy March 23 - 24, 2019.

Discussion leader and poster presentation.

Deficiency of RNA-editing enzyme Adar2 in adult mouse brain

Valeriana Cesarini, Domenico Alessandro Silvestris, Valentina Tassinari, Chiara Cingolani, Manuela Marcoli, Viviana Trezza, Rossella Canese, Giulia Carpinelli, Franco Locatelli and Angela Gallo

2) Gordon Research Conference on Next-Generation Epitranscriptomics in Health and Disease, Lucca, Italy, March 25 - 29, 2019.

Deficiency of RNA-editing enzyme Adar2 in adult mouse brain

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3) AACR Annual Meeting 2017. Walter E. Washington Convention Center, Washington, D.C., USA

Deciphering Inosinome in Glioblastoma versus normal cortex and astrocytes

A. D. Silvestris, E. Picardi, **V. Cesarini**, V. Tassinari, N. Mangraviti, G. Pesole, F. Locatelli, and A. Gallo.

4) Society for Melanoma Research 2015 International Congress, San Francisco, California, November 18-21, 2015

Role of Sox2 in the development of BRAFV600E and Pten null driven melanoma

V. Cesarini, S Dolci

5) GBM 2015 Conference, II International Symposium on Clinical and Basic Investigation, Toledo, Spain 9-12 September 2015

Phosphodiesterase type 5 regulates glioblastoma invasiveness.

V. Cesarini, S. Dolci and E.A. Jannini

6) 38° Congresso Nazionale Societa' Italiana di Endocrinologia, Taormina, ME, 27-30 maggio 2015

Phosphodiesterase type 5 transcriptional regulation in myometrial cells

V. Cesarini, Martini M, Pallini R Ricci Vitiani, L. M. Larocca , E.A. Jannini and S. Dolci

PUBLICATIONS

1) *The RNA editor ADAR2 promotes immune cell trafficking by enhancing endothelial responses to interleukin-6 during sterile inflammation.*

Gatsiou A, Tual-Chalot S, Napoli M, Ortega-Gomez A, Regen T, Badolia R, **Cesarini V**, Garcia-Gonzalez C, Chevre R, Ciliberti G, Silvestre-Roig C, Martini M, Hoffmann J, Hamouche R, Visker JR, Diakos N, Wietelmann A, Silvestris DA, Georgiopoulos G, Moshfegh A, Schneider A, Chen W, Guenther S, Backs J, Kwak S, Selzman CH, Stamatelopoulos K, Rose-John S, Trautwein C, Spyridopoulos I, Braun T, Waisman A, Gallo A, Drakos SG, Dimmeler S, Sperandio M, Soehnlein O, Stellos K.

Immunity. 2023 May 9;56(5):979-997.e11. doi: 10.1016/j.immuni.2023.03.021.

2) *Contribution of A-to-I RNA editing, M6A RNA Methylation, and Alternative Splicing to physiological brain aging and neurodegenerative diseases.*

Tassinari V, La Rosa P, Guida E, Colopi A, Caratelli S, De Paolis F, Gallo A, Cenciarelli C, Sconocchia G, Dolci S, **Cesarini V**.

Mech Ageing Dev. 2023 Apr 5;212:111807. doi: 10.1016/j.mad.2023.111807.

3) *Impact of age and gender on glioblastoma onset, progression, and management.*

Colopi A, Fuda S, Santi S, Onorato A, **Cesarini V**, Salvati M, Balistreri CR, Dolci S, Guida E.

Mech Ageing Dev. 2023 Apr;211:111801. doi: 10.1016/j.mad.2023.111801.

4) *Sex differences in antioxidant defence and the regulation of redox homeostasis in physiology and pathology.*

Tiberi J, **Cesarini V**, Stefanelli R, Canterini S, Fiorenza MT, La Rosa P.

Mech Ageing Dev. 2023 Apr;211:111802. doi: 10.1016/j.mad.2023.111802.

- 5) *Direct CD32 T-cell cytotoxicity: implications for breast cancer prognosis and treatment.*
Sconocchia G, Lanzilli G, **Cesarini V**, Silvestris DA, Rezvani K, Arriga R, Caratelli S, Chen K, Dou J, Cenciarelli C, Toietta G, Baldari S, Sconocchia T, De Paolis F, Aureli A, Iezzi G, Irno Consalvo M, Buccisano F, Del Principe MI, Maurillo L, Venditti A, Ottaviani A, Spagnoli GC.
Life Sci Alliance. 2022 Oct 14;5(12):e202201590. doi: 10.26508/lisa.202201590.
- 6) *miRNome and Proteome Profiling of Small Extracellular Vesicles Secreted by Human Glioblastoma Cell Lines and Primary Cancer Stem Cells.*
Cifola I, Fratini F, Cardinali B, Palmieri V, Gatti G, Selmi T, Donzelli S, Sacconi A, **Cesarini V**, Marei HE, Papi M, Blandino G, Cenciarelli C, Falcone G, D'Agnano I.
Biomedicines. 2022 Aug 4;10(8):1886. doi: 10.3390/biomedicines10081886.
- 7) *ADAR2 Protein Is Associated with Overall Survival in GBM Patients and Its Decrease Triggers the Anchorage-Independent Cell Growth Signature.*
Cesarini V, Silvestris DA, Galeano F, Tassinari V, Martini M, Locatelli F, Gallo A.
Biomolecules. 2022 Aug 19;12(8):1142. doi: 10.3390/biom12081142.
- 8) *MAPK activation drives male and female mouse teratocarcinomas from late primordial germ cells.*
Guida E, Tassinari V, Colopi A, Todaro F, **Cesarini V**, Jannini B, Pellegrini M, Botti F, Rossi G, Rossi P, Jannini EA, Dolci S.
J Cell Sci. 2022 Apr 15;135(8):jcs259375. doi: 10.1242/jcs.259375.
- 9) *ADAR-mediated RNA editing of DNA:RNA hybrids is required for DNA double strand break repair.*
Jimeno S, Prados-Carvajal R, Fernández-Ávila MJ, Silva S, Silvestris DA, Endara-Coll M, Rodríguez-Real G, Domingo-Prim J, Mejías-Navarro F, Romero-Franco A, Jimeno-González S, Barroso S, **Cesarini V**, Aguilera A, Gallo A, Visa N, Huertas P.
Nat Commun. 2021 Sep 17;12(1):5512. doi: 10.1038/s41467-021-25790-2.
- 10) *AMBRA1 regulates cyclin D to guard S-phase entry and genomic integrity.*
Maiani E, Milletti G, Nazio F, Holdgaard SG, Bartkova J, Rizza S, Cianfanelli V, Lorente M, Simoneschi D, Di Marco M, D'Acunzo P, Di Leo L, Rasmussen R, Montagna C, Raciti M, De Stefanis C, Gabicagogeascoa E, Rona G, Salvador N, Pupo E, Merchut-Maya JM, Daniel CJ, Carinci M, **Cesarini V**, O'sullivan A, Jeong YT, Bordi M, Russo F, Campello S, Gallo A, Filomeni G, Lanzetti L, Sears RC, Hamerlik P, Bartolazzi A, Hynds RE, Pearce DR, Swanton C, Pagano M, Velasco G, Papaleo E, De Zio D, Maya-Mendoza A, Locatelli F, Bartek J, Cecconi F.
Nature. 2021 Apr;592(7856):799-803. doi: 10.1038/s41586-021-03422-5.
- 11) *ADAR1 is a new target of METTL3 and plays a pro-oncogenic role in glioblastoma by an editing-independent mechanism.*
Tassinari V, **Cesarini V**, Tomaselli S, Ianniello Z, Silvestris DA, Ginistrelli LC, Martini M, De Angelis B, De Luca G, Vitiani LR, Fatica A, Locatelli F, Gallo A.
Genome Biol. 2021 Jan 28;22(1):51. doi: 10.1186/s13059-021-02271-9.
- 12) *Aptamer-Based In Vivo Therapeutic Targeting of Glioblastoma.*
Cesarini V, Scopa C, Silvestris DA, Scafidi A, Petrera V, Del Baldo G, Gallo A.
Molecules. 2020 Sep 17;25(18):4267. doi: 10.3390/molecules25184267.
- 13) *MicroRNA Editing Detection and Function: A Combined In Silico and Experimental Approach for the Identification and Validation of Putative Oncogenic Targets.*
Tassinari V, **Cesarini V**, Silvestris DA, Scafidi A, Cucina L, Gallo A.
Methods Mol Biol. 2021;2181:253-267. doi: 10.1007/978-1-0716-0787-9_15.
- 14) *Type 5 phosphodiesterase (PDE5) and the vascular tree: From embryogenesis to aging and disease.*

Cesarini V, Guida E, Campolo F, Crescioli C, Di Baldassarre A, Pisano C, Balistreri CR, Ruvolo G, Jannini EA, Dolci S.
Mech Ageing Dev. 2020 Sep;190:111311. doi: 10.1016/j.mad.2020.111311.

15) Deregulation of TLR4 signaling pathway characterizes Bicuspid Aortic valve syndrome.
C R. Balistreri, A G M Marullo, M Madonna, E Cavarretta, A Allegra, **V Cesarini**, A Iaccarino, S Schiavon, M Peruzzi, E Greco, S Sciarretta, C Pisano, G Ruvolo, M Torella & G Frati. *Sci Rep.* 2019 Jul 30;9(1):11028.

16) Regulation of PDE5 expression in human aorta and thoracic aortic aneurysms.
V Cesarini, C Pisano, G Rossi, C R Balistreri, F Botti, G Antonelli, G Ruvolo, E A Jannini & S Dolci. *Sci Rep.* 2019 Aug 21;9(1):12206.

17) AKT-dependent phosphorylation of the adenosine deaminases ADAR-1 and -2 inhibits deaminase activity.
Bavelloni A, Focaccia E, Piazzini M, Raffini M, **Cesarini V**, Tomaselli S, Orsini A, Ratti S, Faenza I, Cocco L, Gallo A, Blalock WL. *FASEB J.* 2019 Aug;33(8):9044-9061.

18) Dynamic inosinome profiles reveal novel patient stratification and gender-specific differences in glioblastoma.
Silvestris DA, Picardi E, **Cesarini V**, Fosso B, Mangraviti N, Massimi L, Martini M, Pesole G, Locatelli F, Gallo A. *Genome Biol.* 2019 Feb 13;20(1):33.

19) The adaptive potential of RNA editing-mediated miRNA-retargeting in cancer.
Tassinari V, **Cesarini V**, Silvestris DA, Gallo A. *Biochim Biophys Acta Gene Regul Mech.* 2019 Mar;1862(3):291-300.

20) ADAR2/miR-589-3p axis controls glioblastoma cell migration/invasion.
V Cesarini, D A Silvestris, V Tassinari, S Tomaselli, S Alon, E Eisenberg, F Locatelli and Angela Gallo. *Nucleic Acids Res.* 2018 Feb 28;46(4):2045-2059.

21) Sox2 is not required for melanomagenesis, melanoma growth and melanoma metastasis in vivo.
Cesarini V, Guida E, Todaro F, Di Agostino S, Tassinari V, Nicolis S, Favaro R, Caporali S, Lacal PM, Botti E, Costanzo A, Rossi P, Jannini EA, Dolci S. *Oncogene.* 2017 Aug;36(31):4508-4515.

22) Type 5 phosphodiesterase regulates glioblastoma multiforme aggressiveness and clinical outcome.
Cesarini V, Martini M, Vitiani LR, Gravina GL, Di Agostino S, Graziani G, D'Alessandris QG, Pallini R, Larocca LM, Rossi P, Jannini EA, Dolci S. *Oncotarget.* 2017 Feb 21;8(8):13223-13239.

23) Fgf9 inhibition of meiotic differentiation in spermatogonia is mediated by Erk-dependent activation of Nodal-Smad2/3 signaling and is antagonized by Kit Ligand.
Tassinari V, Campolo F, **Cesarini V**, Todaro F, Dolci S, Rossi P. *Cell Death Dis.* 2015 Mar 12;6:e1688.

24) Platelet-derived growth factor regulation of type-5 phosphodiesterase in human and rat penile smooth muscle cells.
Carosa E, Castri A, Forcella C, Sebastiani G, Di Sante S, Gravina GL, Ronchi P, **Cesarini V**, Dolci S, Di Stasi S, Lenzi A, Jannini EA. *J Sex Med.* 2014 Jul;11(7):1675-84.

25) Epigenetic silencing of Id4 identifies a glioblastoma subgroup with a better prognosis as a consequence of an inhibition of angiogenesis.
M. Martini, T. Cenci, G. Q. D'Alessandris, **V. Cesarini**, A. Cocomazzi, L. Ricci-Vitiani, R. De Maria, Roberto Pallini, L. M. Larocca. *Cancer.* 2013 Mar 1;119(5):1004-12.

26) *The viral load of Epstein-Barr virus (EBV)-DNA in Peripheral Blood Predicts for Biological and Clinical Characteristics in Hodgkin Lymphoma.*

S. Hohaus, R. Santangelo, M. Giachelia, B. Vannata, G. Massini, A. Cuccaro, M. Martini, **V. Cesarini**, T. Cenci, F. D'Alò, M.T. Voso, G. Fadda, G. Leone, L. M. Larocca. *Clin Cancer Res.* 2011; 17:2885-92