

CURRICULUM VITAE

Valentina Tassinari

PERSONAL DATA

Citizenship: Italian

Place of Birth: Aprilia (LT)



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EDUCATION

-February-2015: PhD in Medical biotechnology and translational medicine. University of Rome "Tor Vergata".

-March-2011: Master degree in Biology applied to biomedical research. University of Rome "Sapienza". Final score 110/110 cum laude.

CAREER HISTORY

-March 2023- present: Researcher. Department of Experimental Medicine, University of Rome "Tor Vergata".

-June 2022- February 2023: Post-Doctoral Researcher, **SAPIEXCELLENCE 2021 - BE-FOR-ERC**. Department of Molecular Medicine, University of Rome "Sapienza".

-October 2021- May 2022: Post-Doctoral Researcher. Pasteur Institute, Italy.

- February 2020- March 2022: Post-Doctoral Researcher. Department of Molecular Medicine, University of Rome "Sapienza".

RESEARCH ACTIVITY 2020-2023:

Understanding the role of ADAR1-driven "A-to-I" RNA editing in immuno-evasion mechanisms adopted by cervical cancer cells, focusing on strategies to evade innate immune cells killing (Natural Killer).

-March 2016- Genuary 2020: Post-Doctoral Researcher. Department of Oncohaematology, Bambino Gesù children hospital, Rome.

RESEARCH ACTIVITY:

1-Understanding the molecular mechanisms triggering the increased expression of ADAR1 RNA editing enzyme, and its oncogenic role in glioblastoma. Specifically, I studied the role of m6A RNA methylation in enhancing ADAR1 protein expression, and the A-to-I RNA editing dependent and independent molecular mechanisms by which this enzyme promotes glioblastoma progression.

2-Study A-to-I RNA editing dependent microRNAs "re-targeting" in glioblastoma. In this project, I studied how reduced A-to-I editing on miR589-3p affects its ability to target an anti-tumoral gene, rather than a pro-tumoral one.

-Mach 2015- March 2016: Post-Doctoral Researcher. University of Molise.

RESEARCH ACTIVITY:

Study of Ataxia-Telangectasia-Mutated knockout mice (*Atm*^{-/-}) skeletal muscle phenotype.

-November 2011- February 2015: PhD student. Department of Biomedicine and prevention, University of Rome "Tor Vergata".

RESEARCH ACTIVITY:

1-Study of signal transduction pathways controlling male germ cells meiotic entry;

2-Generation of mouse models harboring mutations in signal transduction pathway controlling meiosis (MAPK, PI3K), and study of the oncogenic potential of these mutations.

-June 2008– March 2011: Master degree student. Department of food safety, Nutrition and Veterinary public health, Istituto Superiore di Sanità, Rome.

RESEARCH ACTIVITY:

Analysis of the effects of the plasticizer di-(2-ethylhexyl)phthalate (DEHP) on fetal liver development, after intra-uterine exposure.

EDITORIAL ACTIVITY

-May 2023-present: Editorial Board of Biology Direct (Springer Nature).

Reviewer for international journals: Cell Death & Disease; Biology Direct; Cellular and Molecular Life Sciences; International Journal of Molecular Sciences; Bioengineered; Tumor Biology.

TEACHING ACTIVITIES

1-Supervision of master degree students:

-March 2020- October 2021: Title of the experimental thesis “Tuning the ADAR1 RNA editing enzyme to boost type I IFN and NK cell innate immune responses in the model of HPV-transformed cells”. University of Rome, “Sapienza”.

-March 2015- September 2016: Title of the experimental thesis “Modulazione dell’espressione e dell’attività dell’enzima ADAR2 in glioblastoma, calpaina 1 - dipendente”. University of Rome, “Sapienza”.

2-Supervision of PhD student:

-November 2021- February 2023: PhD in “INNOVATION IN IMMUNO-MEDIATED AND HEMATOLOGICAL DISORDERS”, XXXVII ciclo. University of Rome, “Sapienza”.

GRANTS

1- **Avvio alla Ricerca 2022**, University of Rome, “Sapienza”.

Project title “Exploring the role of ADAR1 RNA editing enzyme in the regulation of innate immune responses in HPV-transformed cervical cancer cells”.

2-SAPIEXCELLENCE 2021- BE-FOR-ERC, University of Rome, “Sapienza”.

Project title: “Tuning the ADAR1 RNA editing enzyme to boost type I IFN and NK cell innate immune responses in the model of HPV-transformed cells”.

SCIENTIFIC PUBLICATIONS

Published 16
H-index 8
Citations 279

Links <https://www.scopus.com/authid/detail.uri?authorId=35786484400>
<https://pubmed.ncbi.nlm.nih.gov/?term=Tassinari%2C+Valentina&sort=date&size=50>

- 1- **Tassinari V**, Smeriglio A, Stillitano V, Trombetta D, Zilli R, Tassinari R, Marangh F, Frank G, Marcoccia D, Di Renzo L.
Endometriosis Treatment: Role of Natural Polyphenols as Anti-Inflammatory Agents.
Nutrients. 2023 Jun 30;15(13):2967. doi: 10.3390/nu15132967. (IF 5.9).
- 2- Girone C, Calati F, Lo Cigno I, Salvi V, **Tassinari V**, Schioppa T, Borgogna C, Lospinoso Severini L, Hiscott J, Cerboni C, Soriani A, Bosisio D, Gariglio M.
The RIG-I agonist M8 triggers cell death and natural killer cell activation in human papillomavirus-associated cancer and potentiates cisplatin cytotoxicity.
Cancer Immunol Immunother. 2023 Jun 25. doi: 10.1007/s00262-023-03483-7. (IF 6.630).

- 3- **Tassinari V***, La Rosa P, Guida E, Colopi A, Caratelli S, De Paolis F, Gallo A, Cenciarelli C, Sconocchia G, Dolci S, Cesarini V*. ***corresponding authors**
Contribution of A-to-I RNA editing, M6A RNA Methylation, and Alternative Splicing to physiological brain aging and neurodegenerative diseases.
[Mech Ageing Dev.](#) 2023 Apr 4;111807. (IF 5.498).
- 4- Cesarini V, Silvestris DA, Galeano F, **Tassinari V**, Martini M, Locatelli F, Gallo A.
ADAR2 Protein Is Associated with Overall Survival in GBM Patients and Its Decrease Triggers the Anchorage-Independent Cell Growth Signature.
[Biomolecules.](#) 2022 Aug 19;12(8):1142. (IF 6.064).
- 5- **Tassinari V**, Cerboni C and Soriani A.
“Self or non-self? It is also a matter of RNA recognition and editing by ADAR1”.
[Biology](#) 2022, 11(4), 568. (IF 5.079).
- 6- Guida E*, **Tassinari V***, Colopi A, Todaro F, Cesarini V, Jannini B, Pellegrini M, Botti F, G Rossi G, Rossi P, Jannini EA and Dolci S. ***equally contributed as first authors.**
Mapk activation drives male and female mouse teratocarcinomas from late PGCs.
[J Cell Science.](#) 2022 Mar 17;jcs.259375. (IF 5.285).
- 7- Quagliarini E, Renzi S, Digiacomo L, Giulimondi F, Sartori B, Amenitsch H, **Tassinari V**, Cui L, Wang J, Amici A, Marchini C, Pozzi D and Caracciolo G.
Microfluidic formulation of DNA-loaded multicomponent lipid nanoparticles for gene delivery.
[Pharmaceutics.](#) 2021 Aug 19;13(8):1292. (IF 6.072).
- 8- **Tassinari V**, Cesarini V, Tomaselli S, Ianniello Z, Silvestris DA, Ceci Ginistrelli L, Martini M, De Angelis B, De Luca G, Ricci Vitiani L, Fatica A, Locatelli F and Gallo A.
ADAR1 is a new target of METTL3 and plays a pro-oncogenic role in glioblastoma by an editing-independent mechanism.
[Genome Biology.](#) 2021 Jan 28;22(1):51. (IF 17.906).
- 9- De Meo S, Dell’Oste V, Molfetta R, **Tassinari V**, Lotti LV, Vespa S, Pignoloni B; Covino DA, Fantuzzi L, Bona R, Zingoni A, Nardone I, Biolatti M, Coscia A, Paolini R, Benkirane M, Edfors F, Sandalova T, Achour A, Hiscott J, Landolfo S, Santoni A, Cerboni C.
SAMHD1 phosphorylation and cytoplasmic relocalization after human cytomegalovirus infection limits its antiviral activity.
[PLos Pathog.](#) 2020 Sep 28;16(9). (IF 6.823).
- 10- **Tassinari V**, Cesarini V, Silvestris DA, Scafidi A, Cucina L, Gallo A.
MicroRNA Editing Detection and Function: A Combined In Silico and Experimental Approach for the Identification and Validation of Putative Oncogenic Targets.
[Methods Mol Biol.](#) 2021;2181:253-267. (IF 1.17).
- 11- **Tassinari V**, De Gennaro V, La Sala G, Marazziti D, Bolasco G, Aguanno S, De Angelis L, Naro F, Pellegrini M.
Atrophy, oxidative switching and ultrastructural defects in skeletal muscle of Ataxia Telangiectasia mouse model.
[J Cell Science.](#) 2019 Mar 4;132(5). (IF 5.285).
- 12- **Tassinari V**, Cesarini V, Silvestris DA, Gallo A.
The adaptive potential of RNA editing-mediated miRNA-retargeting in cancer.
[Biochim Biophys Acta Gene Regul Mech.](#) 2019 Mar;1862(3):291-300. (IF 4.49).
- 13- Cesarini V*, Silvestris DA*, **Tassinari V***, Tomaselli S, Alon S, Eisenberg E, Locatelli F, Gallo A.
ADAR2/miR-589-3p axis controls glioblastoma cell migration/invasion.
[Nucleic Acid Res.](#) 2018 Feb 28;46(4):2045-2059. ***equally contributed as first authors.** (IF 16.971).
- 14- Cesarini V, Guida E, Todaro F, Di Agostino S, **Tassinari V**, Nicolis S, Favaro R, Caporali S, Lecal PM, Botti E, Costanzo A, Rossi P, Jannini EA, Dolci S.
Sox2 is not required for melanomagenesis, melanoma growth and melanoma metastasis in vivo.
[Oncogene](#) (2017) 1 – 8. (IF 9.867).

- 15- **Tassinari V**, Campolo F, Cesarini V, Todaro F, Dolci S and Rossi P.
Fgf9 inhibition of meiotic differentiation in spermatogonia is mediated by Erk-dependent activation of Nodal-Smad2/3 signalling and is antagonized by Kit Ligand.
Cell Death Dis. 2015 Mar 12;6:e1688. (IF 8.469).
- 16- Maranghi F, Lorenzetti S, Tassinari R, Moracci G, **Tassinari V**, Marcoccia D, Di Virgilio A, Eusepi A, Romeo A, Magrelli A, Salvatore M, Tosto F, Viganotti M, Antoccia A, Di Masi A, Azzalin G, Tanzarella C, Macino G, Taruscio D, Mantovani A.
In utero exposure to di-(2-ethylhexyl) phthalate affects liver morphology and metabolism in post-natal CD-1 mice.
Reprod Toxicol. 2010 29(4):427-32. (IF 3.143).

INVITED SPEAKER

- 1- CDD Press by Springer Nature , King's College Londra, 1 July 2023 .

CONFERENCES

- 1- **Tassinari V**, Cesarini V, Tomaselli S, Ianniello Z, Silvestris DA, Ceci Ginistrelli L, Martini M, De Angelis B, De Luca G, Ricci Vitiani L, Fatica A, Locatelli F and Gallo A.
ADAR1 is a new target of METTL3 and plays a pro-oncogenic role in glioblastoma by an editing independent mechanism.
SIBBM 2022, Rome 20-22 Giugno 2022 (Italia).
- 2- Cuollo L, Sandomenico A, Raimondo D, Fionda C, Iaccarino E, Kosta A, **Tassinari V**, Di Cristofano S, Zingoni A, Cippitelli M, Petrucci MT, Menotti R, Santoni A, Soriani A.
Release of cGAMP by doxorubicin-treated multiple myeloma cells and its regulation through ectoenzymatic degradation.
SIICA 2022, XIII National Congress, Napoli 23-26 Maggio 2022 (Italia).
- 3- Gallo A, **Tassinari V**, Silvestris DA, Cesarini V, Picardi E, Martini M, Locatelli F.
Inosinome signature reveals ADAR1 as a key deaminase promoting the oncogenic signaling in glioblastoma.
American Association for Cancer Research Annual Meeting 2020, San Diego (USA).
- 4- Cesarini V, Silvestris DA, **Tassinari V**, Cingolani C, Marcoli M, Trezza V, Canese R, Carpinelli G, Locatelli F and Gallo A.
Deficiency of RNA-editing enzyme Adar2 in adult mouse brain.
Gordon Research Seminar on RNA and DNA Editing and Modification: Mechanism, Function and Tools for Precision Medicine Lucca, Italy March 23 - 24, 2019.
- 5- Cesarini V, Silvestris DA, **Tassinari V**, Cingolani C, Marcoli M, Trezza V, Canese R, Carpinelli G, Locatelli F and Gallo A.
Deficiency of RNA-editing enzyme Adar2 in adult mouse.
Gordon Research Conference on Next-Generation Epitranscriptomics in Health and Disease, Lucca, Italy, March 24 - 29, 2019.
- 6- Silvestris DA, Picardi E, Cesarini V, **Tassinari V**, Mangraviti N, Pesole G, Locatelli F, and Gallo A.
Deciphering Inosinome in Glioblastoma versus normal cortex and astrocytes.
AACR Annual Meeting 2017, Washington D.C., USA.
- 7- **Tassinari V**, Campolo F, Cesarini V, Todaro F, Jannini EA, Rossi P and Dolci S.
Role of Pten deletion and BRAFV600E mutation in the generation of germ cell tumors.
38° Congresso Nazionale SIE. May 27-30, 2015. Taormina, Italy.
- 8- **Tassinari V**, Campolo F, Cesarini V, Todaro F, Jannini EA, Rossi P and Dolci S.
Role of Pten deletion and BRAFV600E mutation in the generation of germ cell tumors.
68° Congresso Nazionale SIAI. September 18-20, 2014. Ancona, Italy.

9- **Tassinari V**, Campolo F, Dolci S and Rossi P.

"FGF9-Nodal signaling negatively control meiotic entry of postnatal male germ cells".

67° Congresso Nazionale SIAI. September 20-22, 2013. Brescia, Italy.

COURSES

Corso di Accesso alle Strutture di Servizio alla Sperimentazione Animale", University of Rome "Tor Vergata".
January 2015.