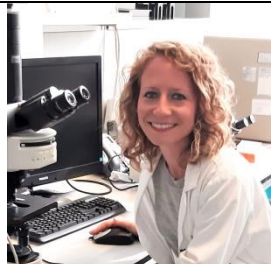


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## BIOGRAPHICAL SKETCH

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NAME  
**Valentina Audrito, PhD**  
**(Feb 24, 1985, Italian)**

POSITION TITLE  
**Assistant Professor in Biochemistry**  
**(RTD-B BIO/10)**  
Dipartimento di Scienze e Innovazione  
Tecnologica (DISIT)  
Università del Piemonte Orientale (UPO)  
viale Teresa Michel 11,  
15121 Alessandria (Italy)  
Valentina.audrito@uniupo.it

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### A. EDUCATION AND TRAINING

2010-2013 PhD in Biomedical Sciences and Human Oncology (specialization Human Genetics), University of Torino, Italy (20 January 2014).

2007-2009 Master Degree in Medical Biotechnologies (110/110 magna cum laude and dignity of print, 29 September 2009), University of Torino, Italy.

2004-2007 Bachelor Degree in Biotechnology (109/110), University of Torino, Italy.

### B. POSITIONS and EMPLOYMENT

**-April 2022-present** Tenure track Assistant Professor (RTD-B) in Biochemistry and Principal Investigator, Dip. Scienze ed Innovazione Tecnologica, Alessandria (Italy), Eastern Piedmont University  
<https://upobook.uniupo.it/valentina.audrito>

**-April 2022-present** Principal Investigator, Molecular Biochemistry of Tumors AIRC-lab funded, <https://disit.uniupo.it/ricerca/gruppi-di-ricerca/biochimica-dei-tumori> DISIT, UPO, and Pre-clinical Laboratory Department of Integrated Activities Research and Innovation (DAIRI) of the Public Hospital Azienda Ospedaliera "SS. Antonio e Biagio e Cesare Arrigo" of Alessandria (AO AL) and DISIT-UPO.

**-March 2021 - March 2022** Senior Post-Doctoral fellow (Assegnista di ricerca), Dept. Molecular Biotechnology and Health Sciences & Molecular Biotechnology Center, University of Turin. Supervisor: Prof. Daniela Taverna

Fellowship 1-3-2021 to 31-5-2021 "Role of miR-214 and miR-148b in tumor/stromal cell interactions and as therapeutic targets in cancer progression".

Assegno di ricerca 1-6-2021 to 31-3-2022 "Ruolo di specifici miRNAs e metaboliti nella progressione del melanoma".

**-March 2017 - Feb 2020** Senior Post-Doctoral fellow (Assegnista di Ricerca). Department of Medical Sciences, University of Torino, Italy. Supervisor: Prof. Silvia Deaglio

Assegno di ricerca 01-03-2017 to 28-02-2018, co-funded Fondazione Caligara "Defining the role of NAD biosynthetic enzymes as prognostic markers and therapeutic targets in metastatic melanoma".

Assegno di ricerca 1-3-2018 to 28-2-2019. "Cross-talk tra metabolismo del NAD e segnali oncogenici mediati da NOTCH1".

Assegno Di Ricerca Cofinanziato – XXI-XXII Tornata 1-3-2019 a 28-2-2021, “Ruolo di NAMPT e NAPRT quali nuovi marcatori di infiammazione acuta e cronica”.

**-Jan 2014- Dec 2016** Post-Doctoral fellow (AIRC/FIRC Fellowship #15047) at Immunogenetics Research Unit of the Italian Institute of Genomic Medicine (IIGM), Torino, Italy. Supervisor: Prof. Silvia Deaglio.

Project: “Role of nicotinamide phosphoribosyltransferase (NAMPT) in the microenvironment of chronic lymphocytic leukemia”

**-December 2014:** Visiting Scientist, Weill Cornell Medical College, NY, USA. Training on xenograft models of lymphoma in mice. Supervisor: Prof. Silvia Deaglio

**-June 2015:** Visiting Scientist, Lab of Immunology, Istituto di Endocrinologia e Oncologia Sperimentale, Consiglio Nazionale delle Ricerche (IEOS-CNR), University of Naples "Federico II", Naples, Italy. Referent: Prof. Giuseppe Matarese. Training on bioenergetics, use of Seahorse metabolic analyzer.

**-Jan 2010- Dec 2013** PhD student (Biomedical Sciences and Human Oncology, specialization Human Genetics, obtained on 01-20-2014), Immunogenetics Research Unit of the IIGM-Torino and Department of Medical Sciences, University of Torino, Italy. Supervisors: Prof. Silvia Deaglio; Dr. Enza Ferrero

Project: “Studio cross-talk metabolico e vie di segnale attivate da nucleotidi extracellulari tra cellule tumorali e microambiente tumorale”

**-Jan 2006- Oct 2009** Internal student, Bachelor and Master’s Degree in Medical Biotechnologies, Laboratory of Immunogenetics, Department of Genetics, Biology and Biochemistry, University of Torino, Italy. Supervisors: Prof. Fabio Malavasi, Dr. Silvia Deaglio

Project: “Valutazione degli effetti di Nicotinamide in leucemia linfatica cronica”

### C. MAIN ACTIVITIES

My research interest is focused on two main aspects of molecular oncology: i) the study of how oncogenic signaling drives cancer metabolic adaptations as drug resistance mechanisms, modifying NAD metabolism homeostasis (biosynthetic/consumption pathways) and ii) the study of metabolic/signaling crosstalk between tumor cells and tumor microenvironment. The final goal is to discover new molecules that can be exploited as therapeutic targets.

Since I was a Master Degree student (2007-2009), and then during the **PhD program in Biomedical Sciences and Human Oncology (2010-2013)** my research project was focused on understanding the role of NAD metabolism in cancer progression, evaluating in particular the role of NAD precursors, NAD-biosynthetic enzymes (NBEs) and NAD-consuming enzymes. My first research project was to analyze the effects of nicotinamide, the main NAD precursor, on chronic lymphocytic leukemia (CLL) lymphocytes (**Audrito V et al, Cancer Research 2011**). I continued the training in oncology obtaining a **3-year fellowship (2014-2016) from the Italian Association for Cancer Research (AIRC)**, with a project aimed at analyzing and dissecting whether the network of signals controlled by extracellular nucleotide/nucleoside metabolism may play functional and molecular roles in creating a growth-favorable microenvironment of CLL. Here, I identified the NBE nicotinamide phosphoribosyltransferase (NAMPT), as a main player in creating immunosuppressive and tumor-promoting conditions in the CLL microenvironment (**Audrito V et al, Blood 2015**). During those years, I was visiting scientist (December 2014) at the laboratories of the Weill Cornell Medical College, NY. Moreover, I spent time (June 2015) to learn Seahorse technology for real-time bioenergetics analysis to study cancer metabolism in the lab Prof. Giuseppe Matarese (Lab of Immunology, Istituto di Endocrinologia e Oncologia Sperimentale, Naples, IT). In parallel, in those years I analyzed critical components of tumor microenvironment and immune evasion mechanisms, including secreted molecules and membrane receptors [i.e., HLA-G (**Rizzo R., Audrito V. et al Haematol 2014**), PD-L1 (**Massi et al Ann Oncol 2014, Massi et al Ann Oncol 2015, Audrito V et al Oncotarget 2017**), and a second NAD-biosynthetic enzyme NAPRT (**Managò A., Audrito V et al Nat. Commun 2019, IT patent**

**I0174545 20/02/2018, PCT/IB2019/051314 19/02/2019, Audrito & Deaglio inventors)],** in chronic and acute inflammatory conditions.

More recently, as a senior postdoctoral fellow (assegnista di ricerca), in the Lab directed by Prof. Silvia Deaglio (Dept. Medical Sciences, University of Turin) from 2017 to 2020 and in the group of Prof. Daniela Taverna (2021-march 2022, Dept. of Molecular Biotechnology and Health Sciences and Molecular Biotechnology Center of the University of Turin), thanks to the collaboration with Prof. Mario Mandalà (University of Perugia), I moved to study the oncogenic pathways that lead to the acquisition of BRAF inhibitor resistance in metastatic melanoma. I identified NAMPT as central player of BRAF inhibitor resistance, driving metabolic reprogramming and phenotype plasticity of melanoma, becoming a therapeutic target (**“Cecilia Cioffrese” award 2016; Audrito V et al JNCI 2018; Audrito V et al Oncotarget 2018; Audrito V et al Cancers 2020, Audrito V et al JTRM 2022**). Moreover, I was involved in the study on the impact of microRNA in metabolic reprogramming and drug resistance in melanoma.

At the end of 2021 I was founded by AIRC [**MFAG 2021 grant ID 26004 “NAMPT as a driver of melanoma progression and immune evasion: therapeutic target for novel combination therapies”**] and thank to this grant I started my independent career and established my lab at the Dept. of Science and Technological Innovation (University of Eastern Piedmont, UPO) where I obtained a position of **tenure track Assistant Professor in Biochemistry**. My research unit (**Molecular Biochemistry of Tumor**) is now composed of 2 PhD students in the PhD of Chemistry & Biology (UPO), 4 Master students in Biology and 2 in Biological Sciences. The focus of the research is to study NAMPT/NAD axis in melanoma and recently also in mesothelioma model and the molecular mechanisms of resistance to targeted therapies and immunotherapy <https://disit.uniupo.it/it/ricerca/gruppi-di-ricerca/biochimica-dei-tumori>.

#### Scientific collaborations:

Prof. Vincenzo Calautti, Prof. Laura Conti, Molecular Biotechnology Center, University of Turin, IT

Prof. Mario Mandalà, Dermatological Unit, University of Perugia, IT

Prof. Daniela Massi, Section of Pathological Anatomy, University of Florence, IT

Prof. Nadia Raffaelli, Biochemistry Unit, Polytechnic University of Marche, Ancona, IT

Prof. Chiara Riganti, Biochemistry Unit, Dept. of Oncology, University of Turin, Italy

Dr. Enrico Moiso, MIT, Cambridge, MA, USA

Prof. Maria Cavaletto DISTE, Vercelli, UPO

Prof. Mauro Patrone DISIT, Alessandria, UPO

Prof. Annalisa Chiocchetti, Dr. Giuseppe Cappellano, CAAD, Novara, UPO.

Prof. Silvia Garavaglia, DSF, Novara, UPO

Prof. Marcello Manfredi, DIMET, Novara, UPO.

Dr.ssa Giulia Pinton, DSF, Novara, UPO.

Dr.ssa Grosso, Dr.ssa Libener, Dr.ssa Roveta, (DAIRI- AOAL)

Prof. Alessandro Provenzani, CIBIO, University of Trento, Povo-Trento, IT

Prof. Santina Bruzzone, University of Genoa, Genoa, IT

Prof. David E. Fisher, Director, Cutaneous Biology Research Center, Massachusetts General Hospital, Harvard Medical School

Dr. Sara Sdelci, The Epigenetic Face of Cancer Metabolism, Center for Genomic Regulation CGR, Barcelona, Spain

#### **D. AWARDS AND HONORS**

2023 “Fondazione DaRosa” 2023 Award in oncology. “Analisi dell’espressione e della funzione dell’enzima/citochina NAMPT nel mesotelioma maligno.

2021 Prize "NICCOLÒ SARTONI" 2021 in Innovative Research in the treatment of melanoma. Sponsored by Associazione MeLa Gioco and Società Italiana Cancerologia SIC

2020-2021 Invited application for the USERN 2020/21 international award

2019 American Association for Cancer Research AACR Scholar in Training Award sponsored by Società Italiana Cancerologia SIC

2018 Pezcoller-Begnudelli Award for the best presentation at the Pezcoller Symposium “Overcoming the innate resistance of cancer to therapy.”

2017 ISCaM2017 Travel awards, ISCaM2017 - 4th Annual Meeting - Cancer Metabolism

2016 “Cecilia Cioffrese” Prize 2016 (Carlo Erba Foundation) for the research in oncologic diseases

2015 Fondazione Franco e Marilisa Caligara: co-funding of research project grant 2016 “Defining the role of NAD-biosynthetic enzymes as prognostic markers and therapeutic targets in metastatic melanoma.”

2013 American Association for Cancer Research AACR Scholar in Training Award sponsored by Pezcoller Foundation.

2013 Pezcoller-Begnudelli Award for the best presentation at the Pezcoller Symposium “METABOLISM AND TUMORIGENESIS”

2012 Travel grant for the attendance at the XII SIES NATIONAL CONGRESS, Roma, Italy

2010 “CARLO GENETTA” Prize for the best poster presented at the 7° S.I.Ci.C.S. National Congress (Società Italiana di Citometria Clinica e Sperimentale)

2010 Travel Bursary to attend the 9th International Conference on Human Leukocyte Differentiation Antigens (HLDA9), Barcelona, Spain

2009 Degree Prize 2009 “Lorenzetti Lando” for the best degree thesis, FONDAZIONE PER LA RICERCA SUL CANCRO “F. e G. Renzi”, Ancona, Italy

#### **E. ACHIEVEMENTS OF QUALIFICATION**

“Abilitazione scientifica nazionale alle funzioni di professore universitario di II fascia” in the disciplinary sections:

- 1) SSD 06/N1 SCIENZE DELLE PROFESSIONI SANITARIE E DELLE TECNOLOGIE MEDICHE APPLICATE, from 13/11/2020 to 13/11/2029
- 2) SSD 05/E2 BIOLOGIA MOLECOLARE, from 13/11/2020 to 13/11/2029
- 3) SSD 05/E1 BIOCHIMICA GENERALE, from 1/06/2021 to 1/06/2030

#### **F. FELLOWSHIPS AND GRANTS**

1. FIRC/AIRC triennial fellowship #15047 “Role of nicotinamide phosphoribosyltransferase (NAMPT) in the microenvironment of chronic lymphocytic leukemia” (2014-2016 completed, role: PI, 25.000€/year, three-years project)

2. “Carlo Chianello” Foundation fellowship/award 2014 (Università degli Studi di Palermo), “Intracellular/Extracellular NAMPT/visfatin in metastatic melanoma: predictive role in response to treatment and prognosis” (2015 completed, role: PI, 6.000€)

3. Co-funding assegno di ricerca 2015/2016 “Franco e Marilisa Caligara” Foundation fellowships (Turin) “Defining the role of NAD biosynthetic enzymes as prognostic markers and therapeutic targets in metastatic melanoma” (completed at the end of February 2017, role: PI, 12.500€).

4. Gilead Fellowship 2018 “Circulating NAD biosynthetic enzymes (NBEs) as novel prognostic markers in chronic lymphocytic leukemia and Richter's syndrome” (2019 completed, role: Co-PI with Prof. Silvia Deaglio, 25.000€)

5. Assegno Di Ricerca Cofinanziato – XXI Tornata (01-03-2019 to 29-02-2020), Dept. of Medical Sciences, University of Turin. Title: Ruolo di NAMPT ed NAPRT quali nuovi marcatori in condizioni di infiammazione cronica e acuta.

6. Ex-60% 2019, University of Turin, “Growth hormone-releasing hormone (GHRH) antagonists enhance radiosensitivity in lung cancer cells” PI Prof. Riccarca Granata. (Funded, role: PI of operative Unit)

7. Assegno Di Ricerca Cofinanziato – XXII Tornata renewal (01-03-2020 to 28-02-2021), Dept. of Medical Sciences, University of Turin. Title: Ruolo di NAMPT ed NAPRT quali nuovi marcatori in condizioni di infiammazione cronica e acuta.
8. Recipient of post-doctoral fellowship 2022 Fondazione Umberto Veronesi “Investigating the impact of miR-214/miR-148b axis in BRAF/MEK targeted therapy-resistance mechanisms in metastatic melanoma” (Funded, role: PI, 30,000€/year 1-year project. NOT USED TO START MFAG grant).
9. My First AIRC Grant (MFAG)-AIRC 2021 grant ID 26004 “NAMPT as a driver of melanoma progression and immune evasion: therapeutic target for novel combination therapies” (Funded, role: PI, 100,000€/year, five-years project).
10. Scientist involved in several projects in the lab of Prof. Deaglio: AIRC 2009. IG8590; Italian Institute for Genomic Medicine-IIGM institutional funds 2010-2019; Ministero Salute-Progetto Giovani Ricercatori 2008 GR-2008-1138053; PRIN2009LMEEEH\_002; AIRC 2012. IG12754; FIRB-Futuro in Ricerca 2012 RBFR12D1CB\_002; AIRC 2019. IG23095.

### Clinical Studies

- In collaboration with Università di Perugia, centro coordinatore (Prof. Mandalà) e dell’Intergruppo Melanoma Italiano (IMI), Studio multicentrico osservazionale “Nicotinamide fosforibosiltransferasi (NAMPT) potenziale driver di progressione di malattia e immuno-evasione nei pazienti con melanoma: un target terapeutico per nuove terapie di combinazione”. Approvazione CE maggio 2023.
- In collaboration with DAIRI e SSD Mesotelioma (AOAL, Dr.ssa Federica Grosso) Studio osservazionale “NAMPT-MESO: Il ruolo prognostico e predittivo dell’enzima nicotinamide fosforibosiltransferasi (NAMPT) nei pazienti con mesotelioma avanzato”. Approvazione CE giugno 2023.
- In collaboration with Prof. Laura Conti (Molecular Biotechnology Center, University of Turin, IT) protocollo per sperimentazione animale in vivo Autorizzazione Ministero salute n° 426/2023-PR (Risp. a prot. CC652.199) “Valutazione del ruolo dell’enzima-citochina NAMPT sulla crescita tumorale, sulla polarizzazione del sistema immunitario e la risposta a immunoterapia nel modello del melanoma metastatico”.

### **G. OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS**

- 2011-: American Association for Cancer Research AACR (associated member)
- 2012-: Italian Society for Experimental Hematology SIES (associated member)
- 2014-: Società Italiana di Cancerologia SIC (associated member)
- 2015-: International Society of Cancer Metabolism (associated member)
- 2015-: European Association for Cancer Research EACR (associated member)
- 2021-: Italian Society of Biophysics and Molecular Biology SIBBM (associated member)
- 2022-: Italian Society of Biochemistry SIB (associated member)

2018-:

- Reviewer for Cancer Research, Journal of Translational Medicine, Cell Communication and Signaling, Cancers, Cells, International Journal of Molecular Sciences, Frontiers in Oncology, Frontiers in Pharmacology, Frontiers in Immunology, Molecules, OncoTargets and Therapy, Antioxidants.
- 2021-: Review Editor on the Editorial Board of Pharmacology of Anti-Cancer Drugs (specialty section of Frontiers in Pharmacology and Frontiers in Oncology)
- 2023-: Associate Editor of Frontiers in Molecular Biosciences, Cellular Biochemistry section.

Sept 2021 Guest Editor with Dr. Alice Indini. Journal: International Journal of Molecular Sciences [https://www.mdpi.com/journal/ijms/special\\_issues/biomarker\\_target\\_melanoma](https://www.mdpi.com/journal/ijms/special_issues/biomarker_target_melanoma)  
Special Issue: Novel Biomarkers and Therapeutic Targets for Melanoma

November 2021 Guest Editor with Dr. Denisa Baci, Dr. Manol Jovani and Dr. Antonino Bruno. Journal: Frontiers in Immunology

<https://www.frontiersin.org/research-topics/29522/fibrosis-inflammation-and-cancers-dangerous-liaisons-to-be-depicted-and-targeted>

Research Topic: Fibrosis, inflammation, and cancers: dangerous liaisons to be depicted and targeted.

Jan 2023 Guest Editor with Prof. Laura Conti. Journal: International Journal of Molecular Sciences

[https://www.mdpi.com/journal/ijms/special\\_issues/FXKOE7XZC4](https://www.mdpi.com/journal/ijms/special_issues/FXKOE7XZC4)

Special issue: "Advances in Immunotherapy for Cancer: From Molecular Basis to Novel Biomarkers and Therapeutic Targets"

Aug 2023 Guest Editor with Dr. Elisa Giovannetti. Journal: Frontiers in Pharmacology

Research Topic: "Metabolic reprogramming in cancer". <https://www.frontiersin.org/research-topics/58878/metabolic-reprogramming-in-cancer>

Sept 2023 Guest Editor with Dr. Joanna Kopecka and Dr. Camila Rosat Consiglio. Journal: Frontiers in Molecular Biosciences.

Research Topic: "Tumor-host interactions: metabolic and signaling pathways altered in cancer, immune and stromal cells". <https://www.frontiersin.org/research-topics/58931/tumor-host-interactions-metabolic-and-signaling-pathways-altered-in-cancer-immune-and-stromal-cells>

## H. MENTORING/TEACHING ACTIVITIES AND ACADEMIC APPOINTMENTS

### Teaching activity and academic appointments

- a.y. 2022-2023 Instructor: Course of Molecular Biology I (Biological Sciences), University of Eastern Piedmont UPO

- Since a.y. 2022-2023-present Biochemistry Instructor: Course of Principles of Biochemistry (Biological Sciences); Course of Applied Biochemistry (Biology), University of Eastern Piedmont UPO.

- Since 2022-present Teacher of the PhD/Doctoral Course in Chemistry & Biology (XXXVIII cycle), DISIT, UPO. Biochemistry of Tumor course 22-23.

- Graduation session commissioner UPO (june, july 2022, October, December 2023)

- 2022-present Member of the Council of the Dept. of Science and Technological Innovation DISIT, Alessandria, University of Eastern Piedmont UPO, IT; Member of the Board of PhD/Doctoral Course in Chemistry & Biology (XXXVIII cycle) DISIT, AL, UPO, IT; Member of the CCS of Biological Sciences and Biology of the DISIT, AL, UPO, IT

- Feb 2023-present Member of the CTS of CAAD "Centro di Ricerca Traslazionale sulle Malattie Autoimmuni e Allergiche", UPO, Novara

-20 May 2022 Lesson "Transfection methods". Course of Applied Biochemistry (Biology, UPO).

-6 May 2021 Seminar "The oncogenic role of NAMPT in driving melanoma progression: a therapeutic target to overcome BRAF inhibitors resistance"; Course: Anatomia Patologica, UniTO.

-2015-2020 didactic collaborator of Prof S. Deaglio, course of genetics for nurses/pediatric nurses, UniTO

### PhD supervision and student tutoring

- Since 2022 2 PhD student in Chemistry & Biology and 4 Master students in Biology and 4 Biological Sciences, UPO

-2015-2020 2 PhD students in Biomedical Sciences and Human Oncology, 5 Master students in Molecular Biotechnologies, UniTO, 2 visiting students from UK and Iran.

## I. TECHNICAL SKILLS AND COMPETENCES

Research methodology and technical skills:

Cell cultures, blood separation and purification of peripheral blood mononuclear cell (PBMC) population, PBMC differentiation and isolation protocols, proliferation/apoptosis assays, migration assays, invasion assays, colony-forming 2D-3D assays, ELISA assays, immunofluorescence assays (FACS analysis and confocal microscopy) and immunocytochemistry assays.

Protein expression analysis (western blotting), mRNA analysis (RNA extraction, qualitative RT-PCR and quantitative real time RT-PCR) and microRNA analysis.

Molecular biology techniques (DNA extraction, bacterial transformation, transient and stable transfections, viral production and infection).

RNAseq transcriptome analysis (design, sample preparation, sequencing, bioinformatics analysis and validation)

Cell metabolism analysis: ROS detection, mitochondrial membrane potential, mitotracker and confocal staining to visualize mitochondria, lactate secretion assay, glucose up-take assay, NAD / NADH assay, metabolic flux analysis using Seahorse instrument (bioenergetics)

Animal care: xenograft model and in vivo treatments.

Data analysis (using statistical software) and graphical analysis (using Adobe Suite software and Windows Office).

## J. COURSES

-November 2009: Immunogenetics course "Come la genetica indirizza la risposta immunitaria", XII National Congress SIGU, 11 November 2009, Turin

-EpigeneticSeq Workshop 2014, 28-30 May 2014 (Hugef), Torino, Italy

-Illumina Cancer, Genetic Disease and Microbiology course: Next Generation Sequencing, 26 November 2014, MBC-Hugef, Torino, Italy

- Seahorse technology Training (June 2015) to study real-time bioenergetics/metabolic fluxes in the lab Prof. Giuseppe Matarese (Lab of Immunology, Istituto di Endocrinologia e Oncologia Sperimentale, Naples, IT).

- Seahorse training program with Dr. Alex Liversage (Seahorse Bioscience) October 2015 and Dr. Alfredo Caro (Agilent) January 2019.

-2023 Corsi FAD IZSLER Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia-Romagna "Bruno Ubertini". Certificati ottenuti per i seguenti corsi:

-ETICA E CONCESSIONE DEI PROGETTI, MODULI 9, 10, 11, DM 5 AGOSTO 2021.

-ZEBRAFISH COME ORGANISMO MODELLO: APPROCCI SPERIMENTALI IN VITRO E IN VIVO NELLA RICERCA SCIENTIFICA.

-BIOLOGIA E GESTIONE DEGLI ANIMALI DA LABORATORIO, MODULI 3.1, 4, 5, 6.1, 7. DM 5 AGOSTO 2021 RODITORI E LAGOMORFI.

-LEGISLAZIONE NAZIONALE ED ETICA LIVELLO 1, MODULI 1 E 2, DM 5 AGOSTO 2021.

- OPBA: FORMAZIONE PER I COMPITI, MODULI 25, 50, 51.

-2023 Corso Media Training, UPO

## K. CONFERENCES

- Invited Speaker at Giovedì Scienza 26th edition "Le due eredità" 1 December 2011, Torino, Italy

- Invited Speaker at FASEB Summer School "NAD metabolism & signaling", 4-9 September 2011, Lucca, Italy

- Invited Speaker FASEB Summer School "NAD metabolism & signaling", 14-19 July 2013, Itasca (Chicago, IL)

- Invited speaker a VIII Brainstorming on CLL, February 5-6, 2015, Aviano (PN), Italy.

- Invited speaker at "Giornata di Studio Guido Tarone 2018" May, 16 2018 MBC, Torino, Italy

- Organizer and speaker at NAD-Day, 21-06-2018 MBC, Torino, Italy. Title: Role of NAMPT in cancer.

- Invited speaker at NAD-Day 6-05-2019 Novara, Italy. Title: Role of NADome in inflammation
- Invited speaker at "Metabolism Meets Function 2019" workshop, 19th July 2019, at MBC, Torino, Italy
- Local organizer and speaker at International Society of Cancer Metabolism ISCaM 2022 "Targeting metabolic dynamics in cancer" Torino 29 June- 2 July 2022 and chair of the session 3 "Metabolic Flexibility".
- Invited Speaker seminari "Dal Laboratorio al Paziente" 3-03-23 DAIRI-AOAL. Title: "NAMPT enzima, citochina, e bersaglio terapeutico nel melanoma metastatico".
- Invited Speaker al CAAD "Centro di Ricerca Traslazionale sulle Malattie Autoimmuni e Allergiche" il 5-04-23. Title: "NAMPT as a therapeutic target in melanoma: linking NAMPT-dependent metabolic reprogramming and immune regulation".
- Invited Speaker al CIBIO, University of Trento, Povo-Trento (IT) il 19-04-23. Title: "NAMPT as a therapeutic target in melanoma: linking NAMPT-dependent metabolic reprogramming and immune regulation".

Speaker selected for ORAL presentation at several national and international meetings:

- Human Leukocyte Differentiation Antigen (HLDA) 9, 11-13 Marzo 2010, Barcelona, Spain. Title: Nicotinamide promotes apoptosis in chronic lymphocytic leukemia cells through the activation of the p53/miR-34a/SIRT1 network.
- 7° S.I.Ci.C.S. (Società Italiana di Citometria Clinica e Sperimentale) National Congress, 23-24 September 2010, Rimini, Italy. Title: Nicotinamide promotes apoptosis in chronic lymphocytic leukemia cells through the activation of the p53/miR-34a/SIRT1 tumor suppressor network.
- XI SIES (Società Italiana di Ematologia Sperimentale) NATIONAL CONGRESS, 6-8 Ottobre 2010, Torino, Italy. Title: La vitamina nicotinamide promuove l'attivazione del network proapoptotico p53/mir-34a/sirt1 nella leucemia linfatica cronica.
- 36st Federation of European Biochemical Societies (FEBS) Meeting, 25-30 June 2011, Torino, Italy. Title: Nicotinamide blocks proliferation and induces apoptosis of chronic lymphocytic leukemia cells through activation of the p53/miR-34a/SIRT1 tumor suppressor network.
- American Association for Cancer Research AACR 104nd Annual Meeting, 6-10 April, 2013, Washington, DC. Title: The extracellular form of NAMPT contributes to creating a proinflammatory environment in chronic lymphocytic leukemia.
- 25th Pezcoller Symposium "METABOLISM AND TUMORIGENESIS", 20-22 June 2013, Trento, Italy. Title: The extracellular form of NAMPT contributes to creating a proinflammatory environment in chronic lymphocytic leukemia.
- "METABOLISM and MICROENVIRONMENT in CANCER PLASTICITY" ISCaM annual meeting, September 16-19, 2015, Venice, Italy. Title: Defining the role of Nicotinamide phosphoribosyltransferase (NAMPT) as prognostic markers and therapeutic targets in metastatic melanoma.
- "ISCaM2017 - 4th Annual Meeting - Cancer Metabolism 19-21 October 2017, Bertinoro, Italy. Title: Nicotinamide phosphoribosyltransferase (NAMPT) is up-regulated by BRAF-inhibitor-resistant melanoma cells, becoming an actionable therapeutic target.
- 30th Pezcoller Symposium "Overcoming the innate resistance of cancer to therapy" June, 25-26, 2018, Trento, Italy. Title: Nicotinamide phosphoribosyltransferase (NAMPT) as prognostic marker and therapeutic target in metastatic melanoma.

Meeting (last name in the abstract)

- European Association for Cancer Research annual meeting EACR, 12-15 giugno 2023. POSTER: "NAMPT in drug-resistant melanoma: linking NAMPT-dependent metabolic reprogramming and immune regulation" I. Fiorilla\*, A.M.Todesco\*, E.Moiso, L. Ponzzone, A.Ponzano, R.Piraino, S.Sdelci, M.Manfredi, V.Calautti, V.Audrito.



- 62° Società Italiana Biochimica annual meeting; 7-9 Settembre 2023. POSTER: "NAMPT in drug-resistant melanoma: linking NAMPT-dependent metabolic reprogramming and immune regulation" I.Fiorilla\*, A.M.Todesco\*, E.Moiso, L. Ponzone, A.Ponzano, R.Piraino, S.Sdelci, M.Manfredi, V.Calautti, V.Audrito. SIB award to Fiorilla I. Best poster.

#### L. LAY DISSEMINATION ACTIVITIES (NOT DIRECTED TO SCIENTISTS)

Lay dissemination activities, seminars or didactic laboratory for students: Giovedì Scienza 26th edition "Le due eredità" 1-1-2011, Turin, IT; "Settimane della Scienza 2015-18; Notte Europea della Ricerca 2012-17, 2020, 2021 Turin; Photo contest "La scienza attraverso il mio obiettivo" ProgettoTuit4STEM Nov 2020; "C'è scienza per te 2021" (<http://www.7web.tv>). 11-05-2021 UniTo; Webinar BIOTECXFUTURE – 11 Giugno 2021 UniTo. Seminar "AIRC nelle scuole": Istituto Superiore Giovanni Giolitti, TO. 18-11-2021; Liceo Valsalice, TO, 26-01-2022, 23-01-2023.

-Attività di orientamento DISIT-UPO: 19-01-23 Seminar "Il metabolismo tumorale: cosa mangiano i tumori"

-Attività PNRR, 29-31 Maggio 2023 "Dalle cellule alle biomolecole".

-UPO Junior per la settimana della ricerca 2023. Attività per le scuole il 27-09-23 ad Alessandria "La cellula e il suo codice segreto".

-Attività di orientamento DISIT-UPO: 6-12-23 Seminar "La parola ai ricercatori come contrastiamo il melanoma?"

#### M. PATENT

Italian Patent with International extension: "Procedimento immunologico e kit per la diagnosi in vitro di patologie tumorali e/o infiammatorie" (Italian patent I0174545, N. 102018000002866, deposited 20/02/2018), inventors Deaglio Silvia & Valentina Audrito, owners Università di Torino & IIGM. International patent PCT (PCT/IB2019/051314, filed on 19/02/2019)

#### N. SCIENTIFIC PUBLICATIONS

Scopus Author Identifier: 36550032100

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Total number: 45; 2 without IF; Total IF (2022-23): 434.9 mean: 10.1

N° paper first name: 15; 2 without IF; IF paper first name: 121.9

N° paper last/corresponding name: 10; IF paper last/corresponding name: 59.4

H-index=24 (Scopus, Last update dec 2023); H-index=28 (Google Scholar, Last update dec 2023)

Citations: 1,616 (Scopus, Last update dec 2023); Citations: 2,129 (Google Scholar, Last update dec 2023).

<https://pubmed.ncbi.nlm.nih.gov/?term=audrito+v&sort=date>

<https://www.scopus.com/authid/detail.uri?authorId=36550032100>

<https://scholar.google.com/citations?user=teJ-lc4AAAAJ&hl=it&oi=ao>

#### Publications in chronological order (from 2010)

1. Malavasi F, Deaglio S, Zaccarello G, Horenstein AL, Chillemi A, **Audrito V**, *et al.* The hidden life of NAD<sup>+</sup>-consuming ectoenzymes in the endocrine system. *J Mol Endocrinol* **2010**;45:183-91 **IF: 3.5 Q1**
2. **Audrito V**, Vaisitti T, Rossi D, Gottardi D, D'Arena G, Laurenti L, *et al.* Nicotinamide blocks proliferation and induces apoptosis of chronic lymphocytic leukemia cells through activation of the p53/miR-34a/SIRT1 tumor suppressor network. *Cancer Res* **2011**;71:4473-83 **IF: 11.2 Q1**

3. Deaglio S, Vaisitti T, Serra S, **Audrito V**, Bologna C, D'Arena G, *et al.* CD38 in chronic lymphocytic leukemia: from bench to bedside? *Mini Rev Med Chem* **2011**;11:503-7 **IF: 3.8 Q2**
4. Ferretti E, Bertolotto M, Deaglio S, Tripodo C, Ribatti D, **Audrito V**, *et al.* A novel role of the CX3CR1/CX3CL1 system in the cross-talk between chronic lymphocytic leukemia cells and tumor microenvironment. *Leukemia* **2011**;25:1268-77 **IF: 11.4 Q1**
5. Vaisitti T, **Audrito V**, Serra S, Bologna C, Brusa D, Malavasi F, *et al.* NAD<sup>+</sup>-metabolizing ecto-enzymes shape tumor-host interactions: the chronic lymphocytic leukemia model. *FEBS Lett* **2011**;585:1514-20 **IF: 3.5 Q1**
6. Isoardo G, Morra I, Chiarle G, **Audrito V**, Deaglio S, Melcarne A, *et al.* Different aquaporin-4 expression in glioblastoma multiforme patients with and without seizures. *Mol Med* **2012**;18:1147-51 **IF: 5.7 Q1**
7. **Audrito V**, Vaisitti T, Serra S, Bologna C, Brusa D, Malavasi F, *et al.* Targeting the microenvironment in chronic lymphocytic leukemia offers novel therapeutic options. *Cancer Lett* **2013**;328:27-35 **IF: 9.7 Q1**
8. Vaisitti T, **Audrito V**, Serra S, Bologna C, Arruga F, Brusa D, *et al.* Multiple metamorphoses of CD38 from prognostic marker to disease modifier to therapeutic target in chronic lymphocytic leukemia. *Curr Top Med Chem* **2013**;13:2955-64 **IF: 3.4 Q1**
9. Massi D, Brusa D, Merelli B, Ciano M, **Audrito V**, Serra S, *et al.* PD-L1 marks a subset of melanomas with a shorter overall survival and distinct genetic and morphological characteristics. *Ann Oncol* **2014**;25:2433-42 **IF: 50.5 Q1**
10. Rizzo R, **Audrito V**, Vacca P, Rossi D, Brusa D, Stignani M, *et al.* HLA-G is a component of the chronic lymphocytic leukemia escape repertoire to generate immune suppression: impact of the HLA-G 14 base pair (rs66554220) polymorphism. *Haematologica* **2014**;99:888-96 **IF: 10.1 Q1**
11. **Audrito V**, Serra S, Brusa D, Mazzola F, Arruga F, Vaisitti T, *et al.* Extracellular nicotinamide phosphoribosyltransferase (NAMPT) promotes M2 macrophage polarization in chronic lymphocytic leukemia. *Blood* **2015**;125:111-23 **IF: 20.3 Q1**
12. Fiorcari S, Martinelli S, Bulgarelli J, **Audrito V**, Zucchini P, Colaci E, *et al.* Lenalidomide interferes with tumor-promoting properties of nurse-like cells in chronic lymphocytic leukemia. *Haematologica* **2015**;100:253-62 **IF: 10.1 Q1**
13. Massi D, Brusa D, Merelli B, Falcone C, Xue G, Carobbio A, *et al.* The status of PD-L1 and tumor-infiltrating immune cells predict resistance and poor prognosis in BRAFi-treated melanoma patients harboring mutant BRAFV600. *Ann Oncol* **2015**;26:1980-7 **IF: 50.5 Q1**
14. Vaisitti T, **Audrito V**, Serra S, Buonincontri R, Sociali G, Mannino E, *et al.* The enzymatic activities of CD38 enhance CLL growth and trafficking: implications for therapeutic targeting. *Leukemia* **2015**;29:356-68 **IF: 11.4 Q1**
15. Bologna C, Buonincontri R, Serra S, Vaisitti T, **Audrito V**, Brusa D, *et al.* SLAMF1 regulation of chemotaxis and autophagy determines CLL patient response. *J Clin Invest* **2016**;126:181-94 **IF: 15.9 Q1**
16. Buondonno I, Gazzano E, Jean SR, **Audrito V**, Kopecka J, Fanelli M, *et al.* Mitochondria-Targeted Doxorubicin: A New Therapeutic Strategy against Doxorubicin-Resistant Osteosarcoma. *Mol Cancer Ther* **2016**;15:2640-52 **IF: 5.7 Q1**

17. Fiorcari S, Maffei R, **Audrito V**, Martinelli S, Ten Hacken E, Zucchini P, *et al.* Ibrutinib modifies the function of monocyte/macrophage population in chronic lymphocytic leukemia. *Oncotarget* **2016**;7:65968-81 **IF: 5.2 Q1**
18. Salaro E, Rambaldi A, Falzoni S, Amoroso FS, Franceschini A, Sarti AC, *et al.* Involvement of the P2X7-NLRP3 axis in leukemic cell proliferation and death. *Sci Rep* **2016**;6:26280 **IF: 4.6 Q1**
19. Serra S, Vaisitti T, **Audrito V**, Bologna C, Buonincontri R, Chen SS, *et al.* Adenosine signaling mediates hypoxic responses in the chronic lymphocytic leukemia microenvironment. *Blood Adv* **2016**;1:47-61 **IF: 7.5 Q1**
20. **Audrito V\***, Serra S\*, Stingi A, Orso F, Gaudino F, Bologna C, *et al.* PD-L1 up-regulation in melanoma increases disease aggressiveness and is mediated through miR-17-5p. *Oncotarget* **2017**;8:15894-911 **Q1**
21. **Audrito V**, Manago A, La Vecchia S, Zamporlini F, Vitale N, Baroni G, *et al.* Nicotinamide Phosphoribosyltransferase (NAMPT) as a Therapeutic Target in BRAF-Mutated Metastatic Melanoma. *J Natl Cancer Inst* **2018**;110 **IF: 10.3 Q1**
22. **Audrito V**, Manago A, Zamporlini F, Rulli E, Gaudino F, Madonna G, *et al.* Extracellular nicotinamide phosphoribosyltransferase (eNAMPT) is a novel marker for patients with BRAF-mutated metastatic melanoma. *Oncotarget* **2018**;9:18997-9005 **Q1**
23. **Audrito V#**, Manago A, Gaudino F, Sorci L, Messina VG, Raffaelli N, *et al.* NAD-Biosynthetic and Consuming Enzymes as Central Players of Metabolic Regulation of Innate and Adaptive Immune Responses in Cancer. *Front Immunol* **2019**;10:1720 **IF: 7.3 Q1**
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25. Gaudino F, Manfredonia I, Manago A, **Audrito V**, Raffaelli N, Vaisitti T, *et al.* Subcellular Characterization of Nicotinamide Adenine Dinucleotide Biosynthesis in Metastatic Melanoma by Using Organelle-Specific Biosensors. *Antioxid Redox Signal* **2019**;31:1150-65 **IF: 6.6 Q1**
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27. Villanova T, Gesmundo I, **Audrito V**, Vitale N, Silvagno F, Musuraca C, *et al.* Antagonists of growth hormone-releasing hormone (GHRH) inhibit the growth of human malignant pleural mesothelioma. *Proc Natl Acad Sci U S A* **2019**;116:2226-31 **IF: 11.1 Q1**
28. **Audrito V#**. The dual face of NAMPT: Intracellular/extracellular protein and diagnostic/therapeutic target in cancer. *EBioMedicine* **2020**;62:103109 **IF: 11.1 Q1**
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30. **Audrito V#**, Messina VG, Deaglio S. NAMPT and NAPRT: Two Metabolic Enzymes With Key Roles in Inflammation. *Front Oncol* **2020**;10:358 **IF: 4.7 Q1**
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32. Lorenzato A, Magri A, Matafora V, **Audrito V**, Arcella P, Lazzari L, *et al.* Vitamin C Restricts the Emergence of Acquired Resistance to EGFR-Targeted Therapies in Colorectal Cancer. *Cancers (Basel)* **2020**;12 **IF: 5.2 Q1**
33. Barutta F, Kimura S, Hase K; Bellini S, Corbetta B, Corbelli A, *et al.* Protective role of the m-sectunneling nanotube system in podocytes. *JASN* **2021** **IF: 13.6 Q1**
34. Ballarò R, Lopalco P, **Audrito V**, Beltrà M, Pin F, Angelini M, *et al.* Targeting Mitochondria by SS-31 Ameliorates the Whole-Body Energy Status in Cancer- and Chemotherapy-Induced Cachexia. *Cancers* **2021**, 13(4), 850 **IF: 5.2 Q1**
35. **Audrito V#**. Pancreatic cancer immune evasion mechanisms: the immunosuppressive role of P2RX1-negative neutrophils. *Purinergic Signal*. **2021** Mar 30. doi: 10.1007/s11302-021-09782-x **IF: 3.5**
36. Fiorito V, Allocco AL, Petrillo S, Gazzano E, Torretta S, Marchi S, *et al.* The heme synthesis-export system: a regulator of the tricarboxylic acid cycle flux and oxidative phosphorylation. *Cell Reports* **2021** **IF: 8.8 Q1**
37. Indini A, Grossi F, Mandalà M, Taverna D, **Audrito V#**. Metabolic Interplay between the Immune System and Melanoma Cells: Therapeutic Implications. *Biomedicines*. **2021** May 26;9(6):607. **IF: 4.7 Q1**
38. **Audrito V**, Messina VG, Brandimarte L, Deaglio S. The Extracellular NADome Modulates Immune Responses. *Front Immunol* **2021** Aug 4; 12:704-779. **IF: 7.3 Q1**
39. **Audrito V**, Moiso E, Ugolini F, Messina V, Brandimarte L, Manfredonia I, *et al.* Tumors carrying BRAF-mutations over-express NAMPT that is genetically amplified and possesses oncogenic properties. *J Transl Med*. **2022**;20(1):118. **IF: 7.4 Q1**
40. Gasparrini M. and **Audrito V#**. NAMPT: A critical driver and therapeutic target for cancer. *Int J Biochem Cell Biol*. **2022**;145:106189. **IF: 4 Q1**
41. Gasparrini M., Mazzola F., Cuccioloni M., Sorci L., **Audrito V.**, *et al.* Molecular insights into the interaction between human nicotinamide phosphoribosyltransferase and Toll-like receptor 4. *J Biol Chem*. **2022**; 298(3):101669. **IF: 4.8 Q1**
42. L Quirico, F Orso, S Cucinelli, M Paradžik, D Natalini, G Centonze, A Dalmasso, S La Vecchia, M Coco, **V Audrito**, C Riganti, P Defilippi and D Taverna. miRNA-guided metabolic reprogramming and its impact on cell adhesion/migration during solid tumor progression” *Cell Mol Life Sci*. 2022 Mar 29;79(4):216 **IF: 8.7 Q1**
43. Indini A, Fiorilla I, Ponzzone L, Calautti E, **Audrito V#**. NAD/NAMPT and mTOR Pathways in Melanoma: Drivers of Drug Resistance and Prospective Therapeutic Targets. *Int J Mol Sci* 2022 Sep 1;23(17):9985 **IF: 5.6 Q1**
44. Boumya S, Fallarini S, Siragusa S, Petrarolo G, Aprile S, **Audrito V**, *et al.* A Selective ALDH1A3 Inhibitor Impairs Mesothelioma 3-D Multicellular Spheroid Growth and Neutrophil Recruitment. *Int J Mol Sci*. 2023 Apr 3;24(7):6689. **IF: 5.6 Q1**

45. Fiorilla I, Martinotti S, Todesco AM, Bonsignore G, Cavaletto M, Patrone M, Ranzato E, **Audrito V#**. Chronic Inflammation, Oxidative Stress and Metabolic Plasticity: Three Players Driving the Pro-Tumorigenic Microenvironment in Malignant Mesothelioma. *Cells*. 2023 Aug 11;12(16):2048. **IF: 6 Q1**


#### Submitted

1. Agata Carreira, Elena Cerri, Daniele Peroni, Romina Belli, Irene Fiorilla, **Valentina Audrito** and Alessandro Provenzani. "YAP modulates mitochondrial function and sensitivity to NAMPT inhibition in triple-negative breast cancer cells". *In revision*
2. Luca Ponzone, **Valentina Audrito**, Claudia Landi, Chiara Levra Levron, Aurora Savino, Nicoletta Vitale.....Vincenzo Calautti. "RICTOR/mTORC2 downregulation in BRAFV600E 1 melanoma cells promotes resistance to BRAF/MEK inhibition". *In revision*

#### O. CAREER BREAKS

- Chiara (Oct 27, 2016)

Alessandria, December 28, 2023



Autorizzo il trattamento dei dati personali presenti nel CV in conformità con l'art. 13 del Decreto Legislativo 30giugno 2003, n. 196 (Codice in materia di protezione dei dati personali) e dell'articolo 13 del GDPR (RegolamentoUE 2016/679).

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE (art. 46 e 47 D.P.R. 445/2000)

La sottoscritta Valentina Audrito, ai sensi e per gli effetti degli articoli 46 e 47 e consapevole delle sanzioni penali previste dall'articolo 76 del D.P.R. 28 dicembre 2000, n. 445 nelle ipotesi di falsità in atti e dichiarazioni mendaci, dichiara che le informazioni riportate nel presente curriculum vitae corrispondono a verità.