

# CURRICULUM VITAE



## PERSONAL INFORMATION

First name / Surname **FEDERICA ROSSIN**  
Address **33, via Tommaso Traetta, 00124, Rome, Italy**  
  
Job Phone number **+390672594223**  
E-mail **federicarossin@gmail.com**  
**federica.rossin@uniroma2.it**  
PEC **federicarossin@pec.it**  
Nationality Italian  
Date of birth 29/05/1985

## WORK EXPERIENCE

- Dates **NOVEMBER 2024 – NOWDAYS**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology
- Type of business Tenure Track Researcher (RTT), Experimental Medicine and Pathophysiology (MEDS-02/A)  
Research activity:
  - Interplay between Cancer Associated Fibroblasts and melanoma cells
  - Regulation of MAMs in the Alzheimer disease
  
- Dates **APRIL 2021 – SEPTEMBER 2024 (6 months maternity leave)**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology, laboratory of cellular and development biology
- Type of business 3 years type A Short-Term Researcher (RTD A)  
Research activity:
  - Regulation of survival pathway in the hepatocellular carcinoma development
  - Regulation of MAMs in the Alzheimer disease
  
- Dates **SEPTEMBER 2020 – MARCH 2021**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology, laboratory of cellular and development biology
- Type of business Post Doc fellowship  
Research activity:
  - Regulation of survival pathway in the hepatocellular carcinoma development
  
- Dates **SEPTEMBER 2019 – AUGUST 2020**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology, laboratory of cellular and development biology
- Type of business Post Doc contract (Art. 22 della legge 30 Dicembre 2010 N.240)
- Main activities and responsibilities Research activity:
  - Transglutaminase 2 functions in the Wnt pathway and effects on Pathophysiology

- Dates **APRIL 2017 – AUGUST 2019 (5 months maternity leave)**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology, laboratory of cellular and development biology
- Type of business Senior Post Doc contract (Art. 22 della legge 30 Dicembre 2010 N.240), supported by “AIRC fellowship 2016”
- Main activities and responsibilities Research activity:
  - Innate immune: role of Transglutaminase 2 in the host response to bacterial infections
  - Transglutaminase 2 regulation of Heat Shock Proteins in cancer

- Dates **JANUARY 2017 – MARCH 2017**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology, laboratory of cellular and development biology
- Type of business Umberto Veronesi Post-Doctoral Fellowship-Year 2017
- Main activities and responsibilities Research activity:
  - Transglutaminase 2 regulation of Heat Shock Proteins in cancer

- Dates **FEBRUARY 2014 – DECEMBER 2016**
- Name and address of the employer University of Rome Tor Vergata  
Department of biology, laboratory of cellular and development biology
- Type of business Junior Post Doc contract (Art. 22 della legge 30 Dicembre 2010 N.240)
- Main activities and responsibilities Research activity:
  - Role of Transglutaminase 2 in the autophagic process in celiac disease
  - Role of Transglutaminase 2 in the regulation of cellular proteostasis

## EDUCATION AND TRAINING

- Dates **JUNE 2023**
- Title of qualification awarded Scientific Qualification to function as associate Professor (06/MEDS-02 – EXPERIMENTAL MEDICINE, PATHOPHYSIOLOGY AND CLINICAL PATHOLOGY).

- Dates **JUNE 2023**
- Title of qualification awarded Scientific Qualification to function as associate Professor (05/BIOS-08 – MOLECULAR BIOLOGY).

- Dates **JANUARY 2022**
- Title of qualification awarded Scientific Qualification to function as associate Professor (05/BIOS-04 – COMPARATIVE ANATOMY, CELL BIOLOGY AND DEVELOPMENTAL BIOLOGY).

- Dates **JANUARY 2022**
- Title of qualification awarded Scientific Qualification to function as associate Professor (05/BIOS-10 – CELLULAR AND EXPERIMENTAL BIOLOGY).

- Dates **NOVEMBER 2010 – DECEMBER 2013**
- Name and type of organization University of Rome Tor Vergata  
Department of biology
- Title of qualification awarded PhD fellowship, PhD course in molecular and cellular biology (XXVI)
- Main activities and responsibilities Research activity:
  - role of Transglutaminase 2 in the autophagic and apoptotic processes and correlation to mitochondrial dysfunctions
  - role of Transglutaminase 2 in Huntington disease

- Dates **NOVEMBER 2010**
- Name and type of organization University of Rome Tor Vergata

- Title of qualification awarded      Biologist qualifying examination
  
- Dates      **OCTOBER 2007 - MARCH 2010**
- Name and type of organization      University of Rome Tor Vergata
- Title of qualification awarded      Master Degree in Cellular and Molecular Biology at University of Rome Tor Vergata (graduated magna cum laude)
- Principal subject/occupational skills covered      Intern during the master degree in the laboratory of cellular and development biology (Prof. Mauro Piacentini). Laboratory activities and direct participation in all the phases of the thesis project: development of cellular models to study the different activities of Transglutaminase 2 in autophagy and apoptosis
  
- Dates      **MARCH 2007 - JULY 2007**
- Name and type of organization      University of Rome Tor Vergata  
Department of biology, laboratory of immunology, Professor Maurizio Fraziano
- Title of qualification awarded      Bachelor Degree in Cellular and Molecular Biology at University of Rome Tor Vergata (graduated magna cum laude)
- Principal subject/occupational skills covered      Intern during the bachelor degree in the laboratory of immunology (Prof. Maurizio Fraziano). Participation to the laboratory activities.
  
- Dates      **SEPTEMBER 1999 – JUNE 2004**
- Name and type of organization      Liceo scientifico statale Democrito
- Title of qualification awarded      Diploma, 94/100

#### **PERSONAL SKILLS**

• Self-Motivated, dependable, flexible, determined  
 Ability to relate to others, to listen, to communicate, to discuss, to collaborate  
 Management of conflict and interpersonal relationships in the personal and professional field

#### **PROFESSIONAL SKILLS**

- Coordination of the scientific projects and management of the group's research activity. Supervision of post doc personnel and PhD students during the laboratory activities, both in the day-to-day running of the project and its overall planning. Tutor of PhD students.  
 - Leadership, sense of organization, working effectively both as team member and independently.  
 - Writing projects; writing manuscripts and presenting reports.

#### **TEACHING**

-- 2023-2024: lessons, General and Clinical Pathology II, Degree course in Pharmacy, Department of Biology, University of Rome, Tor Vergata.  
 -- 2023-2024 Lecturer, Introduction to biology course (3 CFU), Degree course in Pharmacy, Department of Biology, University of Rome, Tor Vergata.  
 -- 2022-2023: lessons, Applied Immunology, Degree course in Biotechnology, Department of Biology, University of Rome, Tor Vergata.  
 -- 2022-2023 Lecturer, Introduction to biology course (3 CFU), Degree course in Pharmacy, Department of Biology, University of Rome, Tor Vergata.  
 - 2017/2018; 2018/2019; 2019/2020: Practical lessons, Cellular and Developmental Biology and Zoology course, Degree course in Pharmacy, Department of Biology, University of Rome, Tor Vergata.  
 - 2012/2013: 32 hours of tutoring in Cytology and Histology, Department of Biology, University of Rome Tor Vergata.  
 - 2016/2017: Biochemistry and Enzymology course (35 hours), "Fondazione ITS, nuove tecnologie della vita".  
 - 2017/2018: Biochemistry and Enzymology course (35 hours), "Fondazione ITS, nuove tecnologie della vita".

#### **MENTORING**

PhD tutor (1 candidate) of the PhD School in Biochemistry and Molecular Biology, University of Rome "Tor Vergata": Dr. Veronica Bellanca (39 Cycle).  
 PhD tutor (1 candidate) of the PhD School in Cellular and Molecular Biology, University of Rome "Tor Vergata" (36 Cycle).

Thesis relator (5 candidates) in Cellular and Molecular Biology and Pharmacy (2016-2024).

## FUNDING

- Unit coordinator, Ministero della Ricerca e dell'Istruzione (113624€), PRIN 2022 (project code: CUP E53D23007150006).
- Principal Investigator, AIRC, MFAG 2022 (468600€), Cancer Associated Fibroblasts in melanoma: cysteamine as a novel approach to target TG2-HSF1-Wnt axis". (Project code: ID 27116).
- PNRR-MAC2-II.3, 2022, project PE6 "Heal Italia" (CUP E83C22004670001), membro work package.
- Principal-investigator grant (3816€) from University of Rome Tor Vergata (Fondi di Ricerca Scientifica d'Ateneo 2021) with the project "TG2-HSF1-Wnt axis in Cancer Associated Fibroblasts as a novel target for melanoma" (Project code: E83C22000220005).
- Principal-investigator grant from "Airalzh-Grants-for-Young-Researchers" AGYR 2020 (40000€), with the project "ER- Mitochondria contact sites in Alzheimer disease: Transglutaminase 2 a novel therapeutic target".
- Co- Principal investigator (Co-Pi unit: 40000€) grant from Fondazione Fibrosi Cistica (FFC) with the project "Oxidative stress and autophagy in Cystic Fibrosis: Novel biochemical characterizations and drug discovery approaches" (FFC2021, Project code: FFC#4).

## AWARDS

- 2018 Poster presentation award for "Cell death in disease: from small molecules to translational medicine", 26th Conference of the European Cell Death Organization (ECDO), Saint Petersburg (Russia). <https://www.ecdo.eu/content/poster-prizes>
- 2018 Travel Grant Award for "Cell death in disease: from small molecules to translational medicine", 26th Conference of the European Cell Death Organization (ECDO), Saint Petersburg (Russia).
- "Post-Doctoral Fellowship-Year 2017", Fondazione Umberto Veronesi, Project Title "Type 2 Transglutaminase regulation of Heat Shock Proteins in cancer"
- "AIRC fellowship 2016", Project Title "TG2 regulation of autophagy in malignant melanoma"
- 2014 Travel Grant Award for "Transglutaminases in Human Disease"

## PEER REVIEW ACTIVITY

- FASEB Journal
- Frontiers Cellular Neuroscience
- Journal of Innate Immunity
- Cell Death and Differentiation
- Cell Death and Disease

## CONFERENCE PARTICIPATION

Joint National PhD meeting, Gubbio (Italy) 20-22 October 2011. Poster presentation.

"From death to eternity", 20th Conference of the European Cell Death Organization (ECDO), Rome (Italy) 2012.

"Cell death, a Biomedical Paradigm", 21th Conference of the European Cell Death Organization (ECDO), Paris (France) 25-28 September 2013. Poster Presentation.

Mitochondria, apoptosis and cancer 2013 (MAC-2013), Stockholm (Sweden) 10-12 October 2013. Poster presentation.

"Transglutaminases in Human Disease Processes", Gordon Research Conference (GRC), Lucca (Italy) 29-04 July 2014. Poster Presentation.

"Autophagy signalling and progression in health and disease", EMBO conference, Chia (Italy) 9-12 September 2015. Poster Presentation.

"XIII Convention d'Autunno della Rete di Ricerca FFC", Fondazione per la ricerca sulla fibrosi cistica, Garda (Italy) 26-28 November 2015. Poster presentation.

"XIV Convention d'Autunno della Rete di Ricerca FFC", Fondazione per la ricerca sulla fibrosi cistica, Garda (Italy) 24-26 November 2016. Poster presentation.

"Cell death in disease: from small molecules to translational medicine", 26th Conference of the

European Cell Death Organization (ECDO), Saint Petersburg (Russia) 10-12 October 2018. Poster presentation award.

"The Regulation of Proteostasis in Cancer", Saint Petersburg (Russia) 11-12 October 2019.

Convegno unificato GEI-SII, Ancona (Italy) 24-27 June 2019. Poster presentation.

"Inflammation links Cancer & Neurodegeneration", 28th Conference of the European Cell Death Organization (ECDO), Bonn (Germany) 26-29 September 2022.

"XX CONVENTION OF FFC INVESTIGATORS IN CYSTIC FIBROSIS", Fondazione per la ricerca sulla fibrosi cistica, Verona (Italy) 24-26 November 2022.

"Cell death in oncopharmacology and oncoimmunology", Conference of the European Cell Death Organization (ECDO) and European Academy of Tumor Immunology (EATI), Paris (France) 28-30 June 2023.

## CONFERENCE PRESENTATION

Invited speaker in the tumor session of Gordon Research Conference (GRC) on "Transglutaminases Human Disease Processes", Girona (Spain) 10-15 July 2016 ("How does TG2 participate in bioenergetics metabolism?")

Invited speaker in 15th CONVENTION OF FFC INVESTIGATORS IN CYSTIC FIBROSIS, Verona (Italy) 26-28 October 2017.

Invited speaker in the tumor session of Gordon Research Conference (GRC) on "Transglutaminases in Human Disease Processes", Les Diablerets (Switzerland) 17-22 June 2018 ("TG2 controls mutated CFTR trafficking by modulating HSP70 expression through post-translational modification of HSF1")

Invited speaker in 17th CONVENTION OF FFC INVESTIGATORS IN CYSTIC FIBROSIS, Verona 2019.

Invited speaker in the National Meeting Nazionale "IBD e Manifestazioni extraintestinali – Cirrosi ed epatocarcinoma", Avellino 2019 ("Regulation of proteostasis in cancer").

Invited speaker in the FEBS congress "Transglutaminases in human disease processes", Bertinoro (Italy) 19-23 May 2024 ("Transglutaminase 2 controls metabolic reprogramming in hepatocellular carcinoma").

Invited speaker in "Forum Nazionale sulla medicina di precisione", Palermo (Italy) 13-15 June 2024 ("Role of Transglutaminase 2 in hepatocarcinogenesis").

## SCIENTIFIC PUBLICATIONS

Zaltron E, Vianello F, Ruzza A, Palazzo A, Brillo V, Celotti I, Scavezzon M, **Rossin F**, Leanza L, Severin F. 2024. The Role of Transglutaminase 2 in Cancer: An Update. *Int J Mol Sci.* 25:2797.

Gagliardi M, Saverio V, **Rossin F**, D'Eletto M, Corazzari M. 2023. Transglutaminase 2 and Ferroptosis: a new liaison? *Cell Death Discov.* 9:88.

Muccioli S, Brillo V, Varanita T, **Rossin F**, Zaltron E, Velle A, Alessio G, Angi B, Severin F, Tosi A, D'Eletto M, Occhigrossi L, Falasca L, Checchetto V, Ciaccio R, Fasci A, Chieregato L, Rebelo AP, Giacomello M, Rosato A, Szabò I, Romualdi C, Piacentini M, Leanza L. 2023. Transglutaminase Type 2-MITF axis regulates phenotype switching in skin cutaneous melanoma. *Cell Death Dis.* 14:704.

**Rossin F**, Ciccocanti F, D'Eletto M, Occhigrossi L, Fimia GM, Piacentini M. 2023. Type 2 transglutaminase in the nucleus: the new epigenetic face of a cytoplasmic enzyme. *Cell Mol Life Sci.* 80, 52.

Occhigrossi L, **Rossin F**, Villella VR, Esposito S, Abbate C, D'Eletto M, Farrace MG, Tosco A, Nardacci R, Fimia GM, Raia V, Piacentini M. 2023. The STING/TBK1/IRF3/IFN type I pathway is defective in cystic fibrosis. *Front Immunol.* 2023 Feb 27;14:1093212.

Palucci I, Salustri A, De Maio F, Pereyra Boza MDC, Paglione F, Sali M, Occhigrossi L, D'Eletto M, **Rossin F**, Goletti D, Sanguinetti M, Piacentini M, Delogu G. 2022. Cysteamine/Cystamine Exert Anti-Mycobacterium abscessus Activity Alone or in Combination with Amikacin. *Int J Mol Sci.* 24, 1203.

Occhigrossi L, D'Eletto M, Vecchio A, Piacentini M, **Rossin F**. 2022. Transglutaminase type 2-dependent crosslinking of IRF3 in dying melanoma cells. *Cell Death Discov.* 8, 498.

Alonzi T, Aiello A, Petrone L, Najafi Fard S, D'Eletto M, Falasca L, Nardacci R, **Rossin F**, Delogu G, Castilletti C, Capobianchi MR, Ippolito G, Piacentini M, Goletti D. 2021. Cysteamine with In Vitro Antiviral Activity and Immunomodulatory Effects Has the Potential to Be a Repurposing Drug Candidate for COVID-19 Therapy. *Cells* 11, 52.

**Rossin F**, Avitabile E, Catarinella G, Fornetti E, Testa S, Oliverio S, Gargioli C, Cannata S, Latella L, Di Sano F. 2021. Reticulon-1C Involvement in Muscle Regeneration. *Metabolites* 11, 855.

Occhigrossi L, D'Eletto M, Barlev N, **Rossin F**. 2021. The Multifaceted Role of HSF1 in Pathophysiology: Focus on Its Interplay with TG2. *Int J Mol Sci.* 22, 6366.

Occhigrossi L\*, **Rossin F\***, D'Eletto M, Farrace MG, Ciccocanti F, Petrone L, Sacchi A, Nardacci R, Falasca L, Del Nonno F, Palucci I, Smirnov E, Barlev N, Agrati C, Goletti D, Delogu G, Fimia GM and Piacentini M. 2021. Transglutaminase 2 regulates innate immunity by modulating the STING/TBK1/IRF3 axis. *Journal of Immunology* 206, 2420-2429. \*Co-first author.

**Rossin F**, Costa R, Bordi M, D'Eletto M, Occhigrossi L, Farrace MG, Barlev N, Ciccocanti F, Muccioli S, Chiericato L, Szabo I, Fimia GM, Piacentini M and Leanza L. 2021. Transglutaminase Type 2 regulates the Wnt/ $\beta$ -catenin pathway in vertebrates. *Cell Death and Dis.* 12, 249.

Oliverio S, Beltran JSO, Occhigrossi L, Bordoni V, Agrati C, D'Eletto M, **Rossin F**, Borelli P, Amarante-Mendes GP, Demidov O, Barlev NA, Piacentini M. 2020. Transglutaminase Type 2 is Involved in the Hematopoietic Stem Cells Homeostasis. *Biochemistry (Mosc).* 85, 1159-1168.

**Rossin F**, Piacentini M. 2020. Celiac disease TG2 autoantibodies development: it takes two to tango. *Cell Death and Dis.* 11, 229.

Esposito S, Vilella VR, **Rossin F**, Tosco A, Raia V, Luciani A. 2019. Succinate links mitochondria to deadly bacteria in cystic fibrosis. *Ann Transl Med.* 7, S263.

Esposito S, Vilella VR, Ferrari E, Monzani R, Tosco A, **Rossin F**, D'Eletto M, Castaldo A, Luciani A, Silano M, Bona G, Marseglia GL, Romani L, Piacentini M, Raia V, Kroemer G, Maiuri L. 2019. Genistein antagonizes gliadin-induced CFTR malfunction in models of celiac disease. *Aging* 11, 2003-2019.

Vilella VR, Esposito S, Ferrari E, Monzani R, Tosco A, **Rossin F**, Castaldo A, Silano M, Marseglia GL, Romani L, Barlev NA, Piacentini M, Raia V, Kroemer G, Maiuri L. 2019. Autophagy suppresses the pathogenic immune response to dietary antigens in cystic fibrosis. *Cell Death Dis.* 10, 258.

Vilella VR, Venerando A, Cozza G, Esposito S, Ferrari E, Monzani R, Spinella MC, Oikonomou V, Renga G, Tosco A, **Rossin F**, Guido S, Silano M, Garaci E, Chao YK, Grimm C, Luciani A, Romani L, Piacentini M, Raia V, Kroemer G, Maiuri L. 2019. A pathogenic role for cystic fibrosis transmembrane conductance regulator in celiac disease. *EMBO J.* 38, e100101.

D'Eletto M\*, **Rossin F\***, Fedorova O, Farrace MG, Piacentini M. 2019. Transglutaminase type 2 in the regulation of proteostasis. *Biol Chem.* 400, 125-140. \*Co-first author

D'Eletto M, **Rossin F**, Occhigrossi L, Farrace MG, Faccenda D, Desai R, Marchi S, Refolo G, Falasca L, Antonioli M, Ciccocanti F, Fimia GM, Pinton P, Campanella M, Piacentini M. 2018. Transglutaminase Type 2 Regulates ER-Mitochondria Contact Sites by Interacting with GRP75. *Cell Rep.* 25, 3573-3581.

**Rossin F**, Vilella VR, D'Eletto M, Farrace MG, Esposito S, Ferrari E, Monzani R, Occhigrossi L, Pagliarini V, Sette C, Cozza G, Barlev NA, Falasca L, Fimia GM, Kroemer G, Raia V, Maiuri L, Piacentini M. 2018. TG2 regulates the heat-shock response by the post-translational modification

of HSF1. *EMBO Rep.* 19, e45067.

Piacentini M, Baiocchini A, Del Nonno F, Melino G, Barlev NA, **Rossin F**, D'Eletto M, Falasca L. 2018. Non-alcoholic fatty liver disease severity is modulated by transglutaminase type 2. *Cell Death Dis.* 9, 257.

Palucci I, Matic I, Falasca L, Minerva M, Maulucci G, De Spirito M, Petruccioli E, Goletti D, **Rossin F**, Piacentini M, Delogu G. 2018. Transglutaminase type 2 plays a key role in the pathogenesis of *Mycobacterium tuberculosis* infection. *J Intern Med.* 283, 303-313.

D'Eletto M, Farrace MG, Piacentini M, **Rossin F**. 2017. Assessing the Catalytic Activity of Transglutaminases in the Context of Autophagic Responses. *Methods Enzymol.* 587, 511-520.

Ferrari E, Monzani R, Villella VR, Esposito S, Saluzzo F, **Rossin F**, D'Eletto M, Tosco A, De Gregorio F, Izzo V, Maiuri MC, Kroemer G, Raia V, Maiuri L. 2017. Cysteamine re-establishes the clearance of *Pseudomonas aeruginosa* by macrophages bearing the cystic fibrosis-relevant F508del-CFTR mutation. *Cell Death Dis.* 8, e2544.

Diaz-Hidalgo H, Altuntas S, **Rossin F**, D'Eletto M, Marsella C, Farrace MG, Falasca L, Antonioli M, Fimia GM, Piacentini M. 2016. Transglutaminase type 2-dependent selective recruitment of proteins into exosomes under stressful cellular conditions. *Biochim Biophys Acta.* 1863, 2084-92.

Altuntas S, **Rossin F**, Marsella C, D'Eletto M, Diaz Hidalgo L, Farrace MG, Campanella M, Antonioli M, Fimia GM, Piacentini M. 2015. The transglutaminase type 2 and pyruvate kinase isoenzyme M2 interplay in autophagy regulation. *Oncotarget.* 6, 44941-54.

Reali V, Mehdawy B, Nardacci R, Filomeni G, Risuglia A, **Rossin F**, Antonioli M, Marsella C, Fimia GM, Piacentini M, Di Sano F. 2015. Reticulon protein-1C is a key component of MAMs. *Biochim Biophys Acta.* 1853, 733-45.

**Rossin F**, D'Eletto M, Falasca L, Sepe S, Cocco S, Fimia GM, Campanella M, Mastroberardino PG, Farrace MG, Piacentini M. 2015. Transglutaminase 2 ablation leads to mitophagy impairment associated with a metabolic shift towards aerobic glycolysis. *Cell Death Differ.* 22, 408-18.

**Rossin F**, D'Eletto M, Farrace MG, Piacentini M. 2014. Transglutaminase type 2: a Multifunctional Protein Chaperone? *Molecular & Cellular Oncology.* 1, e968506.

Altuntas S, D'Eletto M, **Rossin F**, Diaz-Hidalgo L, Farrace MG, Falasca L, Piredda L, Cocco S, Mastroberardino PG, Piacentini M, Campanella M. 2014. Transglutaminase Type 2, Mitochondria and Huntington's Disease: Menage a trois. *Mitochondrion* 19 Pt A, 97-104.

D'Eletto M, Farrace MG, **Rossin F**, Strappazon F, Di Giacomo G, Cecconi F, Melino G, Sepe S, Moreno S, Fimia GM, Falasca L, Nardacci R, Piacentini M. 2012. Type 2 transglutaminase is involved in the autophagy-dependent clearance of ubiquitinated proteins. *Cell Death Differ.* 7, 1228-38.

**Rossin F**, D'Eletto M, Macdonald D, Farrace MG, Piacentini M. 2012. TG2 transamidating activity acts as a reostat controlling the interplay between apoptosis and autophagy. *Amino Acids.* 42, 1793-1802.

## RESEARCH ACTIVITY

The research activity performed in the last 15 years has been mainly focused on the role of Transglutaminase 2 protein (TG2) in the autophagic and apoptotic processes in relation to human disorders such as cystic fibrosis and cancer. During my PhD, I studied the mitochondrial dynamics, in particular the mitophagy process. The obtained results highlighted an essential role, played by TG2, in the regulation of mitochondria functionality and energetic metabolism (Rossin et al., 2014). During my postdoc I continued to investigate the mitochondria homeostasis focusing the attention on the ER-mitochondria contact sites (MAMs) and the cellular function of this compartment (Reali et al., 2015; D'Eletto et al., 2018). I have also coordinated different projects mainly regarding the study of the chaperones activity and the regulation of cellular proteostasis (Diaz-Hidalgo et al., 2015). Throughout these years, I worked at the involvement of TG2 in the regulation of cellular response to proteotoxic stresses. I investigated the TG2 dependent modulation of chaperones and I highlighted the nuclear function of TG2 and specifically its protein disulphide isomerase activity showing that it is necessary to activate HSF1, the master transcriptional regulator of the stress-responsive genes (Rossin et al., 2018). In the last years, I addressed my studies on

understanding TG2 implication in different human diseases and design novel therapeutic approaches. In this regard, I moved my attention on Cystic fibrosis pathogenesis (Vilella et al., 2019; Rossin et al., 2020) and cancer biology (Altuntas et al., 2016) with my projects supported by “Umberto Veronesi Foundation” and the “Italian Foundation for Cancer Research”. Recently my research interests have been also extended to the role played by TG2 on the overall gene expression and particularly the effect on the Wnt/ $\beta$ -catenin axis, focusing the attention on cellular processes, such as embryonal development and cancer progression (Rossin et al., 2021). Finally, in the last years I obtained financial support as PI for research projects regarding the characterization of TG2 involvement in human disease, such as Alzheimer, Cystic fibrosis and cancer.

Source Scopus:  
Documents 33  
h-index 16  
Citations 725 by 511 documents

MOTHER TONGUE	<b>ITALIAN</b>
OTHER LANGUAGES	<b>ENGLISH</b>
• Understanding	GOOD
• Writing	GOOD
• Speaking	GOOD
	<b>FRENCH</b>
• Understanding	GOOD
• Writing	GOOD
• Speaking	GOOD
COMPUTER SKILLS	Text processor: frequent use Windows: user level knowledge Macintosh: user level knowledge Office package: frequent use Photoshop: frequent use

La sottoscritta Federica Rossin,

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, redatto in formato europeo, corrispondono a verità.

