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“Procedura selettiva di chiamata per n. 1 posto di Ricercatore a tempo determinato in tenure track (RTT) presso il Dipartimento di Scienze Biochimiche “A. Rossi Fanelli”, Facoltà di Farmacia e Medicina per il Settore concorsuale/GSD 05/BIOS-07, Settore scientifico-disciplinare BIOS-07/A, di cui al bando emanato con D.R. n. 1529/2024 con avviso pubblicato sulla G.U. – IV serie speciale n. 52 in data 28-6-2024, codice concorso 2024RTTR009”

CHIARA LANZILLOTTA

Curriculum Vitae

Rome,
16st of July 2024

Part I – General Information

ORCID: 0000-0002-6883-7806
Scopus: Author ID: 56983080900

Part II – Education

University graduation	2014	Sapienza University of Rome.	Doctor in Pharmaceutical Chemistry and Technology Tutor: Prof. Raffaella Coccia
Licensure 01	2014	Sapienza University of Rome.	Exam to be legally entitled for practicing the profession of Pharmacist
PhD	2017	Department of Biochemical Sciences, Sapienza University of Rome	Doctorate (Ph.D.) in Biochemistry. Ph.D. Thesis Title: Impairment of proteostasis network in Down syndrome neuropathology: new therapeutic strategies for Alzheimer like dementia Research Mentor: Prof. Fabio Di Domenico
Licensure 02	2024-2035	Ministero dell'Istruzione dell'Università e della Ricerca (MIUR)	ASN, National Scientific Qualification as Full Professor of General Biochemistry (settore concorsuale 05/E1; SSD BIO/10)

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
02/2018	08/2022 (*)	Department of Biochemical Sciences, Sapienza University of Rome	Post-doctoral Researcher
09/2022	08/2023	Department of Biochemical Sciences, Sapienza University of Rome	Post-doctoral Researcher, SAPIEXCELLENCE 2021 - BE FOR ERC
09/2023	present	Department of Biochemical Sciences, Sapienza University of Rome	Post-doctoral Researcher

(*) CAREER BREAK FOR MATERNITY LEAVE from January 28th 2022 to June 25th 2022

IIIB – Other Appointments

Start	End	Institution	Position
01/2013	06/2014	Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome	Bachelor’s degree thesis
05/2016	06/2017	Sanders-Brown Center on Aging and Department of Physiology, University of Kentucky, USA	Ph.D. foreign student in the laboratory of Neurochemistry - Prof. Jose F. Abisambra
11/2014	12/2017	Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome	Ph.D. student

Part IV – Teaching experience

Mentoring activity

2016 - 2017	Dealla Samadi, Undergraduate student, Sanders-Brown Center on Aging- Lexington (KY) - USA
2016 - 2017	Blaine Weiss, Undergraduate Student Sanders-Brown Center on Aging- Lexington (KY) - USA
2018 - 2019	Undergraduate student tutoring at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome

2017 - 2018	Graziella di Undergraduate student tutoring at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome
2019- present	Supervisor of students from Higher Education Institutions within the Project “Alternanza Scuola-Lavoro” . Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome
2017 - 2020	Ilaria Zuliani, Ph.D. student at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome
2018 - 2019	Rossella Scarcello, Undergraduate student tutoring at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome
2020 - 2021	Rachele Orazi, Undergraduate student tutoring at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome
2022-2023	Alessia Venanzoni, Ph.D. Undergraduate student tutoring at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome
2022-2023	Chiara Sette, Undergraduate student tutoring at the Department of Biochemical Sciences “A. Rossi-Fanelli”, Sapienza University of Rome

Part V - Society memberships, Awards and Honors

V.A-Professional Membership

Year Title

2014 - present	Member of the Italian Society of Biochemistry and Molecular Biology (SIB)
2017 - present	Member of the Trisomy 21 Research Society (T21RS)
2018 - present	Member of the Society for Redox Biology and Medicine (SFRBM)
2020 - present	Member of the FENS. The Federation of European Neuroscience Societies
2020 - present	Members of The ISN (International Society for Neurochemistry)

V.B- Awards and Honors

Year Title

2016	SIB Fellowship. Italian Society of Biochemistry Sanders-Brown Center on Aging- Lexington (KY) – USA
2017	Travel Grant Sapienza for study abroad. 5 months. Sapienza University of Rome Sanders-Brown Center on Aging- Lexington (KY) – USA
2019	Travel award 3 rd International Conference Trisomy 21 Research Society Barcelona 2019
2021	Angeletti-Mortari award for scientific research excellence in life science

2021	Recipient of a Research fellowship funded by “BE FOR ERC” (awarded on a competitive Basis) Department of Biochemical Sciences “A. Rossi Fanelli”. Sapienza University of Rome.
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V.C- Editorial Activities:

Year Title

2019-present	Reviewer per Neurochemical Research.
2020 - present	Invited guest editor for a special issue on “Feature paper in section Molecular Pathology” for “Biomolecules” (ISSN 2218-273X)
2021 - present	Reviewer per Biochemical and biophysical research communications
2020 - present	Reviewer per Neurology and Therapy
2023 - present	Reviewer per International Journal of Molecular Sciences (IJMS)
2024 - present	Reviewer per Heliyon, Brain Sciences, Molecular Neurobiology.

V.D- Member of scientific/organizing committee for the following national and international seminars/conferences

Year Title

2017	Organizing committee member for the 8th BeMM Symposium in Biology and Molecular Medicine - PhD School 2017
2024	Local Organizing Committee member for the 5thT21RS International Conference. Trisomy 21 Research Society

V.E- Professional experience

2017- present	Partnership with GlaxoSmithKline pharmaceutical industry to test the selective PERK inhibitor GSK2606414.
2016-present	Certification from the American Association of Laboratory Animal Science (AALAS) for the Animal Care and Use in Research and Education, University of Kentucky (USA)
2024- present	Certificate of training accredited by the Italian Ministry of Health for Preclinical Testing and Animal Welfare organized by OPBA Sapienza University of Rome

Year	Title
2015	58° National Meeting of the Italian Society of Biochemistry and Molecular Biology. 14-16 September 2015, Urbino, Italy. “Ubiquitin-bound protein profile in human brain from Down Syndrome individuals’ prior and after the development of Alzheimer-like dementia”
2017	13th International Conference on Alzheimer’s and Parkinson’s Diseases ADPD 2017 March 29-April 2, 2017, Vienna, Austria. Title: The Unfolded Protein Response: a major early participant in the development of Alzheimer-like neuropathology in Down syndrome mice.
2019	3th National Scientific Congress “Sindrome di Down dalla diagnosi alla terapia” October 18-19, 2019, Naples, Italy. Title: “Alterazioni dell’omeostasi proteica nella T21”.
2020	4th National Scientific Congress “Sindrome di Down dalla diagnosi alla terapia”. October 16-17, 2020, Virtual edition. Title: “Analisi del profilo proteomico in cellule mononucleate periferiche nella sindrome di Down: una finestra di osservazione verso il danno cerebrale”
2021	15th International Conference on Alzheimer’s and Parkinson’s Diseases ADPD 2021. March 9-14, 2021. Title: Oxidative stress links brain insulin resistance and mitochondrial defects in Down syndrome brain early in life: implication for neurodegeneration
2021	5th National Scientific Congress “Sindrome di Down dalla diagnosi alla terapia”. 15-16 October 2021. Virtual edition. Title: La O- gliconacilazione proteica rappresenta un efficace target farmacologico per il recupero delle alterazioni neuronali associate allo sviluppo della malattia di Alzheimer in soggetti con sindrome di Down
2023	17th International Conference on Alzheimer’s and Parkinson’s Diseases ADPD 2023 March 28-April 1, 2023, Gothenburg, Sweden. Title: The pharmacological increase of protein O-GlcNacylation rescue Alzheimer signatures in Down syndrome mice: A proteomics analysis of molecular target.
2023	7th National Scientific Congress “Sindrome di Down dalla diagnosi alla terapia”. 20-21 October 2023. Virtual edition Title: Alterazioni precoci della proteostasi mitocondriale nella sindrome di Down
2024	5th T21RS International Conference. Promoting Research Excellence in Down Syndrome. Rome, Italy June 5-8, 2024. Title: The pharmacological increase of Protein O-GlcNAcylation rescue Alzheimer signatures in Down syndrome mice: a proteomics analysis of molecular target

V. G – Invited Poster Presenter as First Author

09/2016	Clinical-Translational Research Symposium. Sanders-Brown Center on Aging and Department of Physiology, University of Kentucky, USA.
01/2017	Midwest Stress Response and Molecular and Chaperone Meeting. Northwestern University in Evanstone, IL (USA)
2020	Alzheimer's Association International Conference Amsterdam, Netherlands.
05/2021	1st ESN Virtual Conference Future perspectives for European neurochemistry
09/2021	61° Meeting of the Italian Society of Biochemistry and Molecular Biology (SIB)
03/2024	ADPD 2024 International Conference on Alzheimer's and Parkinson's Diseases. Lisbon, Portugal
06/2024	5thT21RS International Conference. Promoting Research Excellence in Down Syndrome. Rome, Italy June 5-8 2024.

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2016	Intranasal rapamycin administration to prevent Alzheimer-like dementia in Down Syndrome	Component of Jerome Lejeune foundation grant #1484	
2017	Aberrant insulin signaling contributes to development of Alzheimer disease in Down Syndrome: identifying novel drug candidates	Component Progetti di Ateneo from Sapienza University of Rome # RG11715C773A333E	
2019	The link between aberrant brain metabolism and cognitive decline in Down syndrome neuropathology: A novel role for altered protein O-GlcNAcylation	PI of “Avvio alla ricerca” Grant from Sapienza University of Rome # AR21916B89434AE5	
2019	The sweet link between brain dys-metabolism and cognitive decline: A novel role for protein O-GlcNAcylation	Component of “Two year-research project reserved to under 45 years-old junior scientists” by Pasteur Institute–Cenci Bolognetti Foundation	
2020	Role of PERK in the regulation of Nrf2 related antioxidant response in Down syndrome neuropathology	PI of “Avvio alla ricerca” Grant from Sapienza University of Rome # AR220172B7BE9204	
2020	Unravelling a novel mechanism favoring brain insulin resistance development	Component , Alzheimer's Association, Project ID 2019-AARG-643091 (the most	

		important international institution funding studies on Alzheimer disease; ONLY two projects awarded in Italy)	
2020	Aberrant insulin signaling contributes to development of Alzheimer disease in Down syndrome: search for novel therapeutic strategies	Component , Jerome Lejeune Foundation, Project ID Cycle 2019b –#1887 (France's number one funder for research in genetic intelligence disorders, develops and funds programmes in France and abroad)	
2021	The pharmacological increase of protein O-GlcNAcylation rescue Down syndrome neuropathology: a proteomics analysis of molecular targets	PI of “Avvio alla ricerca” Grant from Sapienza University of Rome AR22117A66BB18E5	
2022	The noxious crosstalk between protein O- GlcNAcylation and S-palmitoylation under metabolic stress: from their biochemical interaction to the development of neuropathological hallmarks	Component: Progetti di Ateneo from Sapienza University of Rome # RG11715C773A333E	
2022	The interplay between the Unfolded Protein Response and brain insulin resistance: A dangerous partnership in Down syndrome neuropathology	PI: BE FOR ERC, SAPIEXCELLENCE 2021	
2023	Characterization of brain alterations in Ts66Yah and Ts68Yah murine models of Down Syndrome: Investigating the effects of genotype, aging and humanized A β sequence in the neurodegenerative process.	Component: Jerome Lejeune Foundation, Project ID Cycle	
2022	The noxious crosstalk between protein O-GlcNAcylation and S-palmitoylation under metabolic stress: from their biochemical interaction to the development of neuropathological hallmarks	Component: PRIN 2022 program of the Ministry of University and Research 2022KP5LKS	
2023	The interplay between the Unfolded Protein Response and brain insulin resistance: A dangerous partnership in Down syndrome neuropathology	PI of “Avvio alla ricerca” Grant from Sapienza University of Rome AR223188B4218A64	

Part VII – Research Activities

Keywords	Brief Description
Alzheimer disease	My research is currently focused on understanding the role of defective proteostasis in the in the development of Alzheimer's-like dementia in order to propose novel effective therapeutic approaches that might ameliorate cognitive decline. Starting in 2015, I dedicated my research on the studies of oxidative stress role in the development of neurodegenerative disease. Thanks to my experience at University of Kentucky in the laboratory of prof. Jose F Abisambra I have been involved in the study of the Unfolded Protein Response and its involvement in the neuropathological process in Down syndrome neuropathology. Recent studies revealed that chronic induction of the unfolded protein response has a prominent role in the development of AD-like dementia in DS brain. Indeed, the pharmacological rescue of UPR function leads to the reduction in neuropathological hallmarks and to decrease in protein oxidation in a mechanism involving the Nrf2 antioxidant response. The results obtained led to the publication of several articles on peer-reviewed journals and based on these we started to test a number of compounds for the treatment and prevention of cognitive decline in Down syndrome mice.
Down Syndrome	
Type 2 Diabetes	
Metabolic disorders	
Oxidative stress	
Protein Homeostasis	
Insulin signaling	
Neurodegeneration	

Research Interests:

1. Unraveling the role of the Unfolded Protein Response (UPR) in Down syndrome neuropathology.
2. Rescue mTOR signaling in Down Syndrome mice by a novel rapamycin intranasal administration protocol (InRapa) that maximizes brain delivery and reduce systemic side effects.
3. Role of oxidative stress and protein oxidation in Alzheimer disease, Parkinson disease and Down syndrome.
4. Role of protein Glycosylation (N-Gly and O-Gly) in the development and progression of Alzheimer Disease
5. Unraveling the molecular mechanism(s) promoting insulin resistance along the progression of Alzheimer disease pathology. Role of biliverdin reductase-A (BVR-A) as putative player in the onset of insulin resistance in Alzheimer disease.

Personal Statement:

VII.B - Direction or participation to a research group characterized by national or international collaborations

Since 2016: Prof. D. Allan Butterfield, Department of Chemistry, University of Kentucky, Lexington, KY, USA 12 papers are published in collaboration with Prof D.A. 2 papers published in rage of this collaboration.(link

here:<https://pubmed.ncbi.nlm.nih.gov/?term=lanzillotta+c+and+Butterfield&sort=date>).

Since 2016: Collaboration with the research group headed by Prof. Elizabeth Head, Professor, Vice Chair for Research Department of Pathology and Laboratory Medicine Director, Experimental

Pathology Program University of California, Irvine 1111 Gillespie Neuroscience Research Facility Irvine, CA 92697. 2 papers published in range of this collaboration (link here <https://pubmed.ncbi.nlm.nih.gov/?term=lanzillotta+c+and+Head+E&sort=date>).

Since 2016: Collaboration with the research group headed by Prof. Jose F. Abisambra, College of Medicine Department of Neuroscience, Center for Translational Research in Neurodegenerative Diseases Gainesville, FLORIDA (USA). Role of Unfolded protein response and ER Stress in Down syndrome. 2 papers published in range of this collaboration. 4 papers in range of this collaboration. (link here: <https://pubmed.ncbi.nlm.nih.gov/?term=lanzillotta+c+and+Abisambra+JF&sort=date>). The collaboration and the project are still on going.

Since 2019: Collaboration with the research group headed by Dr. Diletta Valentini MD Medical Doctor at Ospedale Pediatrico Bambino Gesù, Rome, Italy and with Valentina Folgiero from the research group of Franco Locatelli at Ospedale Pediatrico Bambino Gesù, Rome, Italy. Collections and Evaluation of blood samples from healthy children and children with Down Syndrome: protocol approved by Bambino Gesù ethical committee (Protocollo: 1771_OPBG_2019). 2 papers published in range of this collaboration: (link here: <https://pubmed.ncbi.nlm.nih.gov/?term=lanzillotta+c+and+Valentini+&sort=date>). The collaboration and the project are still ongoing.

Since 2020: Bindu Diana Paul, Ph.D., M.S. Associate Professor of Pharmacology and Molecular Sciences Johns Hopkins University School of Medicine, Baltimore, MD, USA 2 papers published in range of this collaboration: (link here: <https://pubmed.ncbi.nlm.nih.gov/?term=lanzillotta+c+and+Bindu+D+Paul&sort=date>).

Since 2021: Collaboration with the research group headed by Bianca De Filippis, Istituto Superiore di Sanità | ISS · Center for Behavioral Sciences and Mental Health. 1 paper published in range of this collaboration. (link here: <https://pubmed.ncbi.nlm.nih.gov/36442649/>). The collaboration and the project are still ongoing.

Since 2021: Yann Hérault, Ph.D, Group Leader at the Institut de Génétique et Biologie Moléculaire et Cellulaire" ("IGBMC"), 67404 ILLKIRCH (France). Collaboration for the evaluation of the novel murine models of Down syndrome, the Ts66Yah and the Ts68Yah. MTA 2021-E_02. 1 paper published in range of this collaboration. (link here: <https://pubmed.ncbi.nlm.nih.gov/38705491/>). The collaboration and the project are still ongoing.

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	31	PubMed/Google Scholar	2015	2024
Number of papers published as first, last/corresponding author: (69.5%)				

Total Impact factors (IF)	175.68 (31 papers)
Average Impact factor	5.667
Total Citations	Scopus: 899 Google Scholar: 1177
Average Citations per Product	Scopus: 29 Google Scholar: 37.96
Hirsch (H) index	Scopus: 18 Google Scholar: 20
Normalized H index*	Scopus: 2 (9y; 2015-2024) Google Scholar: 2,2 (9y; 2015-2024)
First author	10
Second Author	9
Last author (not corresponding)	1

*H index divided by the academic seniority (years from 1st publication)

Part IX– Selected Publications (12 out of 31)

Impact factors totale= 84.945

Impact factors average = 7.07

Citations total = 298

Citations average = 24.8

% first, last/corresponding author = 67%

[1] **Lanzillotta C**, Tramutola A, Lanzillotta S, Greco V, Pagnotta S, Sanchini C, Di Angelantonio S, Forte E, Rinaldo S, Paone A, Cutruzzola F, Cimini FA, Barchetta I, Cavallo MG, Urbani A, Butterfield DA, Di Domenico F, Paul BD, Perluigi M, Duarte JMN, Barone E. Biliverdin Reductase-A integrates insulin signaling with mitochondrial metabolism through phosphorylation of GSK3 β . Redox Biol. 2024 Jul;73:103221. doi: 10.1016/j.redox.2024.103221. Epub 2024 Jun 1. PMID: 38843768; PMCID: PMC11190564.

Citations= 0; Impact factor (2024) = 10.7

[2] **Lanzillotta C**, Baniowska MR, Prestia F, Sette C, Nalesso V, Perluigi M, Barone E, Duchon A, Tramutola A, Herault Y, Di Domenico F. Shaping down syndrome brain cognitive and molecular changes due to aging using adult animals from the Ts66Yah murine model. *Neurobiol Dis.* 2024 Jun 15;196:106523. doi: 10.1016/j.nbd.2024.106523. Epub 2024 May 4. PMID: 38705491.

Citations= 0; Impact factor (2024) = 5.1

[3] Zuliani I, **Lanzillotta C**, Tramutola A, Barone E, Perluigi M, Rinaldo S, Paone A, Cutruzzola F, Bellanti F, Spinelli M, Natale F, Fusco S, Grassi C, Di Domenico F. High-Fat Diet Leads to Reduced Protein O-GlcNAcylation and Mitochondrial Defects Promoting the Development of Alzheimer's Disease Signatures. *Int J Mol Sci.* 2021 Apr 3;22(7):3746. doi: 10.3390/ijms22073746. PMID: 33916835; PMCID: PMC8038495.

Citations= 19 Impact factor (2021) = 6.208

[4] **Lanzillotta C**, Tramutola A, Di Giacomo G, Marini F, Butterfield DA, Di Domenico F, Perluigi M, Barone E. Insulin resistance, oxidative stress and mitochondrial defects in Ts65dn mice brain: A harmful synergistic path in down syndrome. *Free Radic Biol Med.* 2021 Mar;165:152-170. doi: 10.1016/j.freeradbiomed.2021.01.042. Epub 2021 Jan 29. PMID: 33516914.

Citations= 29 Impact factor (2021) = 8.101

[5] Zuliani I, **Lanzillotta C**, Tramutola A, Francioso A, Pagnotta S, Barone E, Perluigi M, Di Domenico F. The Dysregulation of OGT/OGA Cycle Mediates Tau and APP Neuropathology in Down Syndrome. *Neurotherapeutics.* 2021 Jan;18(1):340-363. doi: 10.1007/s13311-020-00978-4. Epub 2020 Nov 30. PMID: 33258073; PMCID: PMC8116370.

Citations= 11 Impact factor (2020) = 6.088

[6] **Lanzillotta C**, Zuliani I, Tramutola A, Barone E, Blarzino C, Folgiero V, Caforio M, Valentini D, Villani A, Locatelli F, Butterfield DA, Head E, Perluigi M, Abisambra JF, Di Domenico F. Chronic PERK induction promotes Alzheimer-like neuropathology in Down syndrome: Insights for therapeutic intervention. *Prog Neurobiol.* 2021 Jan;196:101892. doi: 10.1016/j.pneurobio.2020.101892. Epub 2020 Aug 11. PMID: 32795489.

Citations= 24 Impact factor (2021) = 10.885

[7] **Lanzillotta C**, Greco V, Valentini D, Villani A, Folgiero V, Caforio M, Locatelli F, Pagnotta S, Barone E, Urbani A, Di Domenico F, Perluigi M. Proteomics Study of Peripheral Blood Mononuclear Cells in Down Syndrome Children. *Antioxidants (Basel).* 2020 Nov 11;9(11):1112. doi: 10.3390/antiox9111112. PMID: 33187268; PMCID: PMC7696178.

Citations= 5 Impact factor (2020) = 6.310

[8] **Lanzillotta C**, Zuliani I, Vasavda C, Snyder SH, Paul BD, Perluigi M, Di Domenico F, Barone E. BVR-A Deficiency Leads to Autophagy Impairment through the Dysregulation of AMPK/mTOR Axis in the Brain-Implications for Neurodegeneration. *Antioxidants (Basel).* 2020 Jul 27;9(8):671. doi: 10.3390/antiox9080671. PMID: 32727065; PMCID: PMC7466043.

Citations= 18 Impact factor (2020) = 6.310

[9] Tramutola A, **Lanzillotta C**, Di Domenico F, Head E, Butterfield DA, Perluigi M, Barone E. Brain insulin resistance triggers early onset Alzheimer disease in Down syndrome. *Neurobiol Dis.* 2020 Apr;137:104772. doi:10.1016/j.nbd.2020.104772. Epub 2020 Jan 24. PMID: 31987911.

Citations= 50 Impact factor (2020) = 5.996

[10] Di Domenico F, Tramutola A, Barone E, **Lanzillotta C**, Defever O, Arena A, Zuliani I, Foppoli C, Iavarone F, Vincenzoni F, Castagnola M, Butterfield DA, Perluigi M. Restoration of aberrant mTOR signaling by intranasal rapamycin reduces oxidative damage: Focus on HNE-modified proteins in a mouse model of down syndrome. *Redox Biol.* 2019 May;23:101162. doi:

10.1016/j.redox.2019.101162. Epub 2019 Mar 9. PMID: 30876754; PMCID: PMC6859577.
Citations= 50; Impact factor (2019) = 10.20

[11] Tramutola A*, **Lanzillotta C***, Barone E, Arena A, Zuliani I, Mosca L, Blarzino C, Butterfield DA, Perluigi M, Di Domenico F. Intranasal rapamycin ameliorates Alzheimer-like cognitive decline in a mouse model of Down syndrome. *Transl Neurodegener.* 2018 Nov 6;7:28. doi: 10.1186/s40035-018-0133-9. PMID: 30410750; PMCID: PMC6218962. * shared 1st authorship

Citations= 74; Impact factor (2018) = 5.530

[12] **Lanzillotta C**, Tramutola A, Meier S, Schmitt F, Barone E, Perluigi M, Di Domenico F, Abisambra JF. Early and Selective Activation and Subsequent Alterations to the Unfolded Protein Response in Down Syndrome Mouse Models. *J Alzheimers Dis.* 2018;62(1):347-359. doi: 10.3233/JAD-170617. PMID: 29439332; PMCID: PMC5988365.

Citations= 18 Impact factor (2018) = 3.517

Total Publications

[1] **Lanzillotta C**, Tramutola A, Lanzillotta S, Greco V, Pagnotta S, Sanchini C, Di Angelantonio S, Forte E, Rinaldo S, Paone A, Cutruzzola F, Cimini FA, Barchetta I, Cavallo MG, Urbani A, Butterfield DA, Di Domenico F, Paul BD, Perluigi M, Duarte JMN, Barone E. Biliverdin Reductase-A integrates insulin signaling with mitochondrial metabolism through phosphorylation of GSK3 β . *Redox Biol.* 2024 Jul;73:103221. doi: 10.1016/j.redox.2024.103221. Epub 2024 Jun 1. PMID: 38843768; PMCID: PMC11190564.

Citations= 0; Impact factor (2024) = 10.7

[2] **Lanzillotta C**, Baniowska MR, Prestia F, Sette C, Nalesso V, Perluigi M, Barone E, Duchon A, Tramutola A, Herault Y, Di Domenico F. Shaping down syndrome brain cognitive and molecular changes due to aging using adult animals from the Ts66Yah murine model. *Neurobiol Dis.* 2024 Jun 15;196:106523. doi: 10.1016/j.nbd.2024.106523. Epub 2024 May 4. PMID: 38705491.

Citations= 0; Impact factor (2024) = 5.1

[3] Di Domenico F, **Lanzillotta C**, Perluigi M. Redox imbalance and metabolic defects in the context of Alzheimer disease. *FEBS Lett.* 2024 Mar 12. doi: 10.1002/1873-3468.14840. Epub ahead of print. PMID: 38472147.

Citations= 0; Impact factor (2024) = 3.0

[4] Cimini FA, Tramutola A, Barchetta I, Ceccarelli V, Gangitano E, Lanzillotta S, **Lanzillotta C**, Cavallo MG, Barone E. Dynamic Changes of BVRA Protein Levels Occur in Response to Insulin: A Pilot Study in Humans. *Int J Mol Sci.* 2023 Apr 14;24(8):7282. doi: 10.3390/ijms24087282. PMID: 37108445; PMCID: PMC10138944.

Citations= 2; Impact factor (2023) = 4.9

[5] Urbinati C, **Lanzillotta C**, Cosentino L, Valenti D, Quattrini MC, Di Crescenzo L, Prestia F, Pietraforte D, Perluigi M, Di Domenico F, Vacca RA, De Filippis B. Chronic treatment with the anti-diabetic drug metformin rescues impaired brain mitochondrial activity and selectively ameliorates defective cognitive flexibility in a female mouse model of Rett syndrome. *Neuropharmacology.* 2023 Feb 15;224:109350. doi: 10.1016/j.neuropharm.2022.109350. Epub 2022 Nov 25. PMID: 36442649.

Citations= 3; Impact factor (2022) = 5.273

[6] Di Domenico F, **Lanzillotta C**. The disturbance of protein synthesis/degradation homeostasis is a common trait of age-related neurodegenerative disorders. *Adv Protein Chem Struct Biol*. 2022;132:49-87. doi: 10.1016/bs.apcsb.2022.05.008. Epub 2022 Jun 9. PMID: 36088079.

Citations= 9; Impact factor (2022) = 5.447

[7] Zuliani I, **Lanzillotta C**, Tramutola A, Barone E, Perluigi M, Rinaldo S, Paone A, Cutruzzolà F, Bellanti F, Spinelli M, Natale F, Fusco S, Grassi C, Di Domenico F. High-Fat Diet Leads to Reduced Protein O-GlcNAcylation and Mitochondrial Defects Promoting the Development of Alzheimer's Disease Signatures. *Int J Mol Sci*. 2021 Apr 3;22(7):3746. doi: 10.3390/ijms22073746. PMID: 33916835; PMCID: PMC8038495.

Citations= 19 Impact factor (2021) = 6.208

[8] **Lanzillotta C**, Di Domenico F. Stress Responses in Down Syndrome Neurodegeneration: State of the Art and Therapeutic Molecules. *Biomolecules*. 2021 Feb 11;11(2):266. doi: 10.3390/biom11020266. PMID: 33670211; PMCID: PMC7916967.

Citations= 18; Impact factor (2021) = 4.231

[9] Koren SA, Hamm MJ, Cloyd R, Fontaine SN, Chishti E, **Lanzillotta C**, Rodriguez- Rivera J, Ingram A, Bell M, Galvis-Escobar SM, Zulia N, Di Domenico F, Duong D, Seyfried NT, Powell D, Vandsburger M, Frolinger T, Hartz AMS, Koren J 3rd, Axten JM, Laping NJ, Abisambra JF. Broad Kinase Inhibition Mitigates Early Neuronal Dysfunction in Tauopathy. *Int J Mol Sci*. 2021 Jan 26;22(3):1186. doi: 10.3390/ijms22031186. PMID: 33530349; PMCID: PMC7865413.

Citations= 5; Impact factor (2022) = 6.208

[10] **Lanzillotta C**, Tramutola A, Di Giacomo G, Marini F, Butterfield DA, Di Domenico F, Perluigi M, Barone E. Insulin resistance, oxidative stress and mitochondrial defects in Ts65dn mice brain: A harmful synergistic path in down syndrome. *Free Radic Biol Med*. 2021 Mar;165:152-170. doi: 10.1016/j.freeradbiomed.2021.01.042. Epub 2021 Jan 29. PMID: 33516914.

Citations= 29 Impact factor (2021) = 8.101

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Firma

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