

**PERSONAL
INFORMATION**

Lazzarino Giacomo



✉ giacomo.lazzarino@unicamillus.org

Sex Male | Date of Birth 14/01/1985 | Nationality Italian

PRESENTATION**CURRENT POSITION:** Associate Professor at UniCamillus – Saint Camillus International University of Health and Medical Sciences.ACADEMIC RECRUITMENT FIELD: **05/E1 General Biochemistry**
ACADEMIC DISCIPLINE: **BIO/10 Biochemistry****CURRENT AFFILIATION:** UniCamillus - Saint Camillus International University of Health and Medical Sciences, via di Sant'Alessandro 8, 00131 Roma (Italia).**QUALIFICATION**

Ph.D.

WORK EXPERIENCE

01/10/2022–Present

Associate Professor, SSD BIO/10

UniCamillus - Saint Camillus International University of Health and Medical Sciences, via di Sant'Alessandro 8, 00131 Roma (Italia)

01/10/2019–30/09/2022

Fixed term Researcher L.240/10 type A, SSD BIO/10

UniCamillus - Saint Camillus International University of Health and Medical Sciences, via di Sant'Alessandro 8, 00131 Roma (Italia)

01/04/2018–30/09/2019

Postdoctoral Research Fellow

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)**Main activities and responsibilities:**

Research grant (extended from 01/04/2019 for one year) related to the project funded by "Neuregenix", a spin-off of the "University of Birmingham" (consociated with the pharmaceutical company Tikomed, Sweden).

Project title: "Evaluation of the effect of the ILB® drug (Tikomed AB, Viken, Sweden) - Low Molecular Weight Dextran Sulphate (LMW-DS) on the cerebral metabolic alterations in an experimental model of severe traumatic brain injury."

Research activity was carried out at the Institute of Biochemistry and Clinical Biochemistry, Catholic University of Rome (supervisor Prof. Barbara Tavazzi), on the following research fields:

- Study of the alterations of brain energy metabolism and of oxidative/nitrosative stress using HPLC chromatography
- Study of the alterations of gene expression through Real-Time PCR
- Study of the tissue morphological alterations using histo-morphological analyses

01/07/2017-31/03/2018

Holder of collaboration contract

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)

Main activities and responsibilities:

Holder of: "Coordinated and continuous collaboration contract (Co. Co. Co.)", valid for six months (expiring 31/12/2017) - extended to 31/03/2018.

- Research activity at the Biochemistry and Molecular Biology laboratory, Institute of Biochemistry and Clinical Biochemistry (supervisor Prof.ssa Barbara Tavazzi).
- Study of the alterations of the "Mitochondrial Quality Control" in acute and chronic neurodegenerative diseases (traumatic brain injury and multiple sclerosis), through the analysis of gene and protein expression using molecular biology techniques

10/02/2017–10/05/2017

Research Assistant

"BIOVICI DIAGNOSTICS LIMITED", Edgbaston, Birmingham, B15 2TT (UK)

Main activities and responsibilities:

Research activity at the *"University of Birmingham"*, "Institute of Inflammation and Ageing" (supervisor Dr. Valentina Di Pietro), in collaboration with the academic spin-off "BIOVICI DIAGNOSTICS", for the development of a new diagnostic kit for the quantification of circulating microRNAs as biomarkers in patients affected by traumatic brain injury.

2016-2018

Teaching assistant

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)

Main activities and responsibilities:

Teaching assistant of "Laboratory of Biochemistry and Molecular Biology" Integrated Course of "Elements of Applied Biochemistry" (SSD/BIO10), as part of the bachelor degree course *"Sanitary Biotechnology"*.

- Responsible for organizing theoretical and practical exercises at the Laboratory of Biochemistry and Molecular Biology, at the Institute of Biochemistry and Clinical Biochemistry
- Classroom lectures for the course "Laboratory of Biochemistry and Molecular Biology" (SSD BIO/10)
- Member of the examination committee for the integrated course of "Elements of Applied Biochemistry" (SSD BIO/10)

2016-2018

Teaching assistant

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)**Main activities and responsibilities:**

Teaching assistant of "Chemical laboratory techniques", Integrated course in "Organic chemistry and chemical laboratory exercises" (SSD BIO/10), as part of the bachelor degree course: "Cosmetology sciences and technologies".

- Responsible for organizing theoretical and practical exercises at the Laboratory of Biochemistry and Molecular Biology, at the Institute of Biochemistry and Clinical Biochemistry
- Classroom lectures for the course " Chemical laboratory techniques " (SSD BIO/10)
- Member of the examination committee for the integrated course of "Organic chemistry and chemical laboratory exercises " (SSD BIO/10)

01/2016-07/2016

Visiting researcher (Ph.D. student)

"University of Birmingham", Edgbaston, Birmingham, B15 2TT (UK)**Main activities and responsibilities:**

Research activity within the Ph.D. project at the University of Birmingham "Institute of Inflammation and Aging" (supervisor Dr. Valentina Di Pietro).

The research focused on the study of mitochondrial dysfunctions in an experimental model of mild and severe traumatic brain injury. These studies were carried out by applying molecular biology and Neurobiochemistry techniques.

Furthermore, an *in vitro* model of traumatic brain injury was set up, on organotypic hippocampal rat slices.

01/2015-05/2015

Visiting researcher (Ph.D. student)

"University of Birmingham", Edgbaston, Birmingham, B15 2TT (UK)**Main activities and responsibilities:**

Research activity within the Ph.D. project at the University of Birmingham "Institute of Inflammation and Aging" (supervisor Dr. Valentina Di Pietro).

The research focused on the study of mitochondrial dysfunctions in an experimental model of mild and severe traumatic brain injury. These studies were carried out by applying molecular biology and Neurobiochemistry techniques.

Furthermore, an *in vitro* model of traumatic brain injury was set up, on organotypic hippocampal rat slices.

01/12/2013–31/12/2016

Ph.D. student at the Doctoral School in "Basic Biomedical Sciences and Public Health"; address: "Studies of biological samples by -omics platforms"

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)

Main activities and responsibilities:

- Research activity concerning the PhD thesis project: "Pathobiological mechanisms and biomarkers in acute and chronic neurodegenerations", at the Biochemistry and Molecular Biology laboratory, Institute of Biochemistry and Clinical Biochemistry (supervisor Prof. Barbara Tavazzi). Study of the molecular, biochemical and metabolic mechanisms of traumatic brain injury (mild and severe) in humans and in experimental models. Studies of targeted metabolomics in Multiple Sclerosis. These studies aimed to identify new biomarkers in the two models of acute and chronic neurodegenerations.
- Biochemical diagnosis (analysis of metabolites in biological fluids and determination of enzymatic activities) and post-natal molecular analyses of inherited metabolic diseases (IEM) of purines, pyrimidines, amino acids and N-acetylated amino acids.

01/04/2013-31/05/2013

Visiting researcher (graduate student)

"University of Birmingham", Edgbaston, Birmingham, B15 2TT (UK)

Main activities and responsibilities:

Research activity at the *"University of Birmingham"*, "Institute of Biomedical Research, Neurotrauma and Neurodegeneration section" (supervisors Dr. Valentina Di Pietro and Prof. Ann Logan).

The activity involved the application of molecular biology techniques for the study of molecular mechanisms concerning cerebral energy metabolism in an experimental model of mild and severe diffuse traumatic brain injury.

01/11/2012-31/10/2013

Tutor - Teaching assistant

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)

Main activities and responsibilities:

Postgraduate fellowship as Laboratory Assistant in the bachelor degree course "Sanitary Biotechnology", with the following assignments:

- Responsible for organizing theoretical and practical exercises at the Laboratory of Biochemistry and Molecular Biology, at the Institute of Biochemistry and Clinical Biochemistry
- Member of the examination committee for the integrated course of "Elements of Applied Biochemistry" (SSD BIO/10)

EDUCATION AND TRAINING

-
- 2021 Update Training Course on “Laboratory Animal Protection in Scientific Research”
“Catholic University of Rome”, Largo F. Vito 1, 00168 Rome (Italy)
- 08/07/2020 National Scientific Qualification to function as a university Associate Professor (II Fascia) in the Academic Recruitment Field: **05/E1 General Biochemistry, SSD BIO/10**
- 15/03/2017 Ph.D. “Basic Biomedical Sciences and Public Health”; address: “Studies of biological samples by -omics platforms”
“Catholic University of Rome”, Largo F. Vito 1, 00168 Rome (Italy)
Ph.D. thesis: “Pathobiological mechanisms and biomarkers in acute and chronic neurodegenerations”
Vote: EXCELLENT
- 01/12/2013 Fellowship winner for the Ph.D. “Basic Biomedical Sciences and Public Health”; address: “Studies of biological samples by -omics platforms”
“Catholic University of Rome”, Largo F. Vito 1, 00168 Rome (Italy)
- 11/2012 Graduation to professional biologist
“University of Studies of Tuscia”, Viterbo (Italy)
Vote: 158/200
- 10/2010–10/2012 Master's degree in: “Medical Biotechnologies”
“Catholic University of Rome”, Largo F. Vito 1, 00168 Rome (Italy)
Experimental thesis: “Circulating lactate in multiple sclerosis: a new biomarker for the evaluation of disease progression and pharmacological treatments”; supervisor Prof. Barbara Tavazzi.
Vote 110/11
- 11/2010-09/2012 Undergraduate student
“Catholic University of Rome”, Largo F. Vito 1, 00168 Rome (Italy)
Undergraduate internship at the Biochemistry and Molecular Biology laboratory, Institute of Biochemistry and Clinical Biochemistry (supervisor Prof. Barbara Tavazzi) in the field of research for the achievement of the master's degree.
The activity concerned targeted metabolomics studies on biological fluids and setting up of new methods of high-performance liquid chromatography (HPLC). In particular, the study aimed to identify new circulating biomarkers in multiple sclerosis.

10/2007–07/2010

Bachelor's degree in: "Sanitary Biotechnology"

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)

Experimental thesis: "Evaluation of the efficacy of platelet conservation methods through metabolic analyses"; supervisor Prof. Barbara Tavazzi

Vote 103/110

10/2009-09-2012

Undergraduate student

"Catholic University of Rome", Largo F. Vito 1, 00168 Rome (Italy)

Undergraduate internship at the Biochemistry and Molecular Biology laboratory, Institute of Biochemistry and Clinical Biochemistry (supervisor Prof. Barbara Tavazzi). The research activity concerned the quantification of compounds related to oxidative/nitrosative stress in platelet gel in different incubation conditions, with the aim of the optimization of platelet conservation.

09/1999-07/2004

Classical Education

Classical high school **"Giulio Cesare"**, Corso Trieste 48, 00199 Rome (Italy)

TEACHING ACTIVITIES AT THE UNIVERSITY "UNICAMILLUS"

Academic Year
2021/2022

- Module of **"Biochemistry"** of the Integrated Course of **"Biochemistry"** (8 CFU = 80 hours, coordinator of the Integrated Course) – *LM Medicine and Surgery*
- Course of **"Chemistry and Biochemistry"** (5 CFU = 50 hours, coordinator of the Integrated Course) - *LM Dentistry and Dental Prosthetics*
- Module of **"Biochemistry and Metabolism of Nutrients"** of the Integrated Course of **"Biochemistry and Molecular Biology"** (5 CFU = 20 hours) - *LM Human Nutrition Sciences*
- Module of **"Biochemistry"** of the Integrated Course of **"Biochemistry, Physiology and Microbiology"** (2 CFU = 20 hours) - *LT Biomedical Laboratory Techniques*

Total 20 CFU = 170 hours of teaching

Academic Year
2020/2021

- Module of **"Biochemistry"** of the Integrated Course of **"Biochemistry"** (6 CFU = 60 hours, coordinator of the Integrated Course) – *LM Medicine and Surgery*
- Module of **"Biochemistry"** of the Integrated Course of **"Medical Chemistry and Physics"** (2 CFU = 20 hours, coordinator of the Integrated Course) - *LM Dentistry and Dental Prosthetics*
- Module of **"Biochemistry"** of the Integrated Course **"Biochemistry, Physiology and Microbiology"** (2 CFU = 20 hours) - *LT Biomedical*

Laboratory Techniques

- Module of "**Biochemistry**" of the Integrated Course "**Biological and Biochemical Foundations of Living Systems**" (2 CFU = 20 hours) *LT Radiology, Diagnostic Imaging and Radiotherapy Techniques*

Total 12 CFU = 120 hours of teaching

Academic Year
2019/2020

- Module of "**Biochemistry**" of the Integrated Course "**Biochemistry**" (6 CFU = 60 hours, coordinator of the Integrated Course) – *LM Medicine and Surgery*
- Modulo di "**Biochemistry**" of the Integrated Course "**Biology, Applied Physics and Biochemistry**" (2 CFU = 20 hours) *LT Nursing*

Total 80 CFU = 80 hours of teaching**OTHER TEACHING
ACTIVITIES**

Teaching at the II° level
Master at the University
of Catania

- **A.Y. 2021/2022:** Module of "**Biochemistry of reproduction**", SSD BIO/10 (2 CFU = 8 hours) – *II° Level Master of "Clinical Embryology and Seminology"*
- **A.Y. 2020/2021:** Module of "**Biochemistry of reproduction**", SSD BIO/10 (2 CFU = 8 hours) - *II° Level Master of "Biology and Biotechnology of Reproduction"*
- **A.Y. 2019/2020:** Module of "**Biochemistry of reproduction**", SSD BIO/10 (2 CFU = 8 hours) - *II° Level Master of "Biology and Biotechnology of Reproduction"*
- **A.A. 2018/2019:** Module of "**Biochemistry of reproduction**", SSD BIO/10 (2 CFU = 18 hours) - *II° Level Master of "Biology and Biotechnology of Reproduction"*

Teaching at the Catholic
University of Rome

- **A.Y. 2021/2022:** Teaching "**Virtual Labster Using Labster Platform 2**", SSD BIO/10 (3 hours) – *LM Medicine and Surgery*
- **A.A. 2020/2021:** Teaching "**Virtual Labster Using Labster Platform 2**", SSD BIO/10 (3 hours) – *LM Medicine and Surgery*
- **A.A. 2019/2020:** Teaching "**Virtual Labster Using Labster Platform**", SSD BIO/10 (6 hours) – *LM Medicine and Surgery*

**TEACHING ACTIVITIES
INTEGRATIVE AND
SERVICE ACTIVITIES
FOR STUDENTS.**

2019-Present

Tutor for Ph.D. students in the preparation of their Ph.D. thesis

Tutor of 1 Ph.D. student of the Ph.D. "Basic Biomedical Sciences and Public Health" (Dr. Mangione) at the Catholic University of Rome.

2014-Present Supervisor of Bachelor's thesis
Tutor of 4 Bachelor students of the Bachelor Degree in "Sanitary Biotechnology", at the Catholic University of Rome.

2019-Present Professor at the II° Level Master, at the University of Catania

- **Professor** at the II° Level Master "*Clinical Embryology and Seminology*" (A.Y. 2021/2022)
- **Professor** at the II° Level Master "*Biology and Biotechnology of Reproduction*" (A.Y. 2018/2019, 2019/2020, 2020/2021)
- A.Y. 2021/2022: **Member of the Scientific Committee** of the II° Level Master "*Clinical Embryology and Seminology*"
- A.Y. 2020/2021: **Member of the Scientific Committee of the II° Level Master** "*Biology and Biotechnology of Reproduction*"

2014 Member of the Examination Committee
Member of the examination committee of the Integrated Course of "Applied Biochemistry" for the Bachelor Degree of "*Sanitary Biotechnology*" at the Catholic University of Rome.

MANAGEMENT, ORGANIZATIONAL AND SERVICE ACTIVITIES

2020-Present Chairman of the Professors-Students Joint Committee
Chairman of the Professors-Students Joint Committee and representative Professor for the Master Degree in "*Medicine and Surgery*", at UniCamillus - Saint Camillus International University of Health and Medical Sciences, Rome (Italy).

2019-2021 Member of the Quality Assurance Group

- **A.Y. 2020/2021:** Member of the Quality Assurance Group for the Bachelor Degree in "*Radiology, Diagnostic Imaging and Radiotherapy Techniques*", at UniCamillus - Saint Camillus International University of Health and Medical Sciences, Rome (Italy).
- **A.Y. 2019/2020:** Member of the Quality Assurance Group for the Master Degree in "*Medicine and Surgery*", at UniCamillus - Saint Camillus International University of Health and Medical Sciences, Rome (Italy).

2020-Present Member of committees for evaluation of transfer student applications of the Master Degrees in "*Medicine and Surgery*", "*Dentistry and Dental Prosthetics*" and "*Human Nutrition Sciences*", at UniCamillus - Saint Camillus International University of Health and Medical Sciences, Rome (Italy).

2020-Present Member of Student CFU Recognition Committees of the Master Degrees in “*Medicine and Surgery*”, “*Dentistry and Dental Prosthetics*” and “*Human Nutrition Sciences*”, at UniCamillus - Saint Camillus International University of Health and Medical Sciences, Rome (Italy).

PATENTS

Patent Holder Patent’s Title: “*Biomarkers and methods for in vitro diagnosis of multiple sclerosis*” PCT/IT 2017/000238. Submission date: 31 October 2017.

FUNDINGS

Third Party Contract

- **March 2019:** Third-party contract with the pharmaceutical company Tikomed, Sweden for a 40000 euro grant for the continuation of the study on the evaluation of the efficacy of pharmacological treatment of the ILB® drug (Tikomed AB, Viken, Sweden) - Low Molecular Weight Dextran Sulphate (LMW-DS), in an experimental model of diffuse traumatic brain injury.

INVOLVEMENT IN NATIONAL AND INTERNATIONAL RESEARCH GROUPS

10/02/2017–10/05/2017 Research Assistant

“BIOVICI DIAGNOSTICS LIMITED”, Edgbaston, Birmingham, B15 2TT (UK)

Main activities and responsibilities:

Research activity at the “*University of Birmingham*”, “Institute of Inflammation and Ageing” (supervisor Dr. Valentina Di Pietro), in collaboration with the academic spin-off “BIOVICI DIAGNOSTICS”, for the development of a new diagnostic kit for the quantification of circulating microRNAs as biomarkers in patients affected by traumatic brain injury.

01/2016-07/2016 Visiting Researcher (Ph.D. student)

“University of Birmingham”, Edgbaston, Birmingham, B15 2TT (UK)

Main activities and responsibilities:

Research activity within the Ph.D. project at the University of Birmingham “Institute of Inflammation and Aging” (supervisor Dr. Valentina Di Pietro).

The research focused on the study of mitochondrial dysfunctions in an experimental model of mild and severe traumatic brain injury. These studies were carried out by applying molecular biology and Neurobiochemistry techniques.

Furthermore, an *in vitro* model of traumatic brain injury was set up, on organotypic hippocampal rat slices.

01/2015-05/2015

Visiting Researcher (Ph.D. student)

“University of Birmingham”, Edgbaston, Birmingham, B15 2TT (UK)

Main activities and responsibilities:

Research activity within the Ph.D. project at the University of Birmingham "Institute of Inflammation and Aging" (supervisor Dr. Valentina Di Pietro).

The research focused on the study of mitochondrial dysfunctions in an experimental model of mild and severe traumatic brain injury. These studies were carried out by applying molecular biology and Neurobiochemistry techniques.

Furthermore, an *in vitro* model of traumatic brain injury was set up, on organotypic hippocampal rat slices.

01/04/2013-31/05/2013

Visiting Researcher (graduate student)

“University of Birmingham”, Edgbaston, Birmingham, B15 2TT (UK)

Main activities and responsibilities:

Research activity at the *“University of Birmingham”*, "Institute of Biomedical Research, Neurotrauma and Neurodegeneration section" (supervisors Dr. Valentina Di Pietro and Prof. Ann Logan).

The activity involved the application of molecular biology techniques for the study of molecular mechanisms concerning cerebral energy metabolism in an experimental model of mild and severe diffuse traumatic brain injury.

**INVOLVEMENT IN THE
ACTIVITIES OF
RESEARCH GROUPS
CHARACTERIZED BY
NATIONAL OR
INTERNATIONAL
COLLABORATIONS**

Member of the scientific research group dedicated to carry out preclinical and clinical studies on five main research lines: 1) biochemical and biomolecular mechanisms in traumatic brain injury; 2) biochemical mechanisms and biomarkers in male and female infertility; 3) biochemical mechanisms and biomarkers in chronic neurodegenerative diseases; 4) metabolic alterations in cancer cells; 5) study on the involvement of glial cells (astrocytes) in the development of Alzheimer's disease.

The group has mainly carried out its research activities at the Institute of Biochemistry and Clinical Biochemistry of the Catholic University of Rome, and is embedded in a strong network of national and international collaborations.

2013-present

Research line 1) biochemical and biomolecular mechanisms in traumatic brain injury

International collaborations:

- Prof. Antonio Belli and Prof. Valentina Di Pietro, Neurotrauma and Ophthalmology Research Group, Institute of Inflammation and Ageing, College of Medical and Dental Sciences, University of Birmingham,

Edgbaston, Birmingham, UK

- Prof. David A. Hovda, Department of Neurosurgery, Department of Molecular and Medical Pharmacology
- Prof. Christopher C. Giza, Division of Pediatric Neurology, Department of Neurosurgery, David Geffen School of Medicine at UCLA, Mattel Children's Hospital UCLA, UCLA Brain Injury Research Center, Los Angeles, CA, USA
- Prof. Ann Logan, Department of Biomedical Sciences, Warwick Medical School, University of Warwick, Coventry, UK
- Dr Lars Bruce, Tikomed AB, Viken, Sweden.

National collaborations:

- Prof. Roberto Vagnozzi, Department of Neuroscience, University of Rome "Tor Vergata," Rome, Italy
- Prof. Stefano Signoretti, Division of Neurosurgery, Department of Emergency and Urgency, S. Eugenio/CTO Hospital, Rome, Italy
- Prof. Barbara Tavazzi, UniCamillus – Saint Camillus International University of Health Sciences, Rome, Italy
- Prof. Angela Maria Amorini, Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy

PUBLICATIONS:

1. Logan A, Nagy Z, Barnes NM, Belli A, Di Pietro V, Tavazzi B, Lazzarino G, **Lazzarino G**, Bruce L, Persson LI. (2022) A phase II open label clinical study of the safety, tolerability and efficacy of ILB[®] for Amyotrophic Lateral Sclerosis. *PloS One*. 17(5):e0267183. doi: 10.1371/journal.pone.0267183. (I.F. = 3.240; Q2)
2. **Lazzarino G**, Amorini AM, Barnes NM, Bruce L, Mordente A, Lazzarino G, Pietro VD, Tavazzi B, Belli A, Logan A. (2020) Low Molecular Weight Dextran Sulfate (ILB[®]) Administration Restores Brain Energy Metabolism Following Severe Traumatic Brain Injury in the Rat. *Antioxidants (Basel)*. 9(9):850. doi: 10.3390/antiox9090850. **First Author** (I.F. = 6.313; Q1)
3. Di Pietro V, Yakoub KM, Caruso G, **Lazzarino G**, Signoretti S, Barbey AK, Tavazzi B, Lazzarino G, Belli A, Amorini AM. (2020) Antioxidant Therapies in Traumatic Brain Injury. *Antioxidants (Basel)*. 9(3). doi: 10.3390/antiox9030260. (I.F. = 6.313; Q1)
4. **Lazzarino G**, Amorini AM, Signoretti S, Musumeci G, Lazzarino G, Caruso G, Pastore FS, Di Pietro V, Tavazzi B, Belli A. (2019) Pyruvate Dehydrogenase and Tricarboxylic Acid Cycle Enzymes Are Sensitive Targets of Traumatic Brain Injury Induced Metabolic Derangement. *International Journal of Molecular Sciences*. 20(22):5774. doi: 10.3390/ijms20225774. **First Author** (I.F. = 5.924; Q1)
5. Yakoub KM, **Lazzarino G**, Amorini AM, Caruso G, Scazzone C, Ciaccio M, Tavazzi B, Lazzarino G, Belli A, Di Pietro V. (2019) Fructose-1,6-

Bisphosphate Protects Hippocampal Rat Slices from NMDA Excitotoxicity. *International Journal of Molecular Sciences*. 20(9):2239. doi:10.3390/ijms20092239. **Co-first Author** (I.F. = 5.924; Q1)

6. Di Pietro V, **Lazzarino G**, Amorini AM, Signoretti S, Hill LJ, Porto E, Tavazzi B, Lazzarino G, Belli A. (2017) Fusion or Fission: The destiny of mitochondria in traumatic brain injury of different severities. *Scientific Reports*. 7(1):9189. doi: 10.1038/s41598-017-09587-2. **Co-first Author** (I.F. = 4.380; Q1)
7. Di Pietro V, Ragusa M, Davies D, Su Z, Hazeldine J, **Lazzarino G**, Hill LJ, Crombie N, Foster M, Purrello M, Logan A, Belli A. (2017) MicroRNAs as novel biomarkers for the diagnosis and prognosis of mild and severe traumatic brain injury. *Journal of Neurotrauma*. 34(11):1948-1956. doi: 10.1089/neu.2016.4857. (I.F. = 5.269; Q1)
8. Amorini AM, **Lazzarino G**, Di Pietro V, Signoretti S, Lazzarino G, Belli A, Tavazzi B. (2016) Severity of experimental traumatic brain injury modulates changes in concentration of cerebral free amino acids. *Journal of Cellular and Molecular Medicine*. 21(3):530-542. doi: 10.11/jcmm.12998. **Co-first Author** (I.F. = 5.310; Q2)
9. Amorini AM, **Lazzarino G**, Di Pietro V, Signoretti S, Lazzarino G, Belli A, Tavazzi B. (2016) Metabolic, enzymatic and gene involvement in cerebral glucose dysmetabolism after traumatic brain injury. *Biochimica et Biophysica Acta-Molecular Basis of Disease*. 1862(4):679-687. doi: 10.1016/j.bbadis.2016.01.023. (I.F. = 5.187; Q1)
10. Di Pietro V, Amorini AM, **Lazzarino G**, Yakoub KM, D'Urso S, Lazzarino G, Belli A. (2015) S100B and Glial Fibrillary Acidic Protein as Indexes to Monitor Damage Severity in an In Vitro Model of Traumatic Brain Injury. *Neurochemical Research*. 40(5):991-999. doi: 10.1007/s11064-015-1554-1559. (I.F. = 3.996; Q2)
11. Di Pietro V, Amorini AM, Tavazzi B, Vagnozzi R, Logan A, **Lazzarino G**, Signoretti S, Lazzarino G, Belli A. (2014) The molecular mechanisms affecting N-acetylaspartate homeostasis following experimental graded traumatic brain injury. *Molecular Medicine*. 20(1):147-57. doi: 10.2119/molmed.2013.00153. (I.F. = 6.354; Q1)
12. Di Pietro V, **Lazzarino G**, Amorini AM, Tavazzi B, D'Urso S, Longo S, Vagnozzi R, Signoretti S, Clementi E, Giardina B, Lazzarino G, Belli A. (2014) Neuroglobin expression and oxidant/antioxidant balance after graded traumatic brain injury in the rat. *Free Radical Biology and Medicine*. 69:258-64. doi: 10.1016/j.freeradbiomed.2014.01.032. (I.F. = 7.376; Q1)
13. Di Pietro V, Amorini AM, Tavazzi B, Hovda DA, Signoretti S, Giza CC, **Lazzarino G**, Vagnozzi R, Lazzarino G, Belli A. (2013) Potentially neuroprotective gene modulation in an in vitro model of mild traumatic brain injury. *Molecular and Cellular Biochemistry*. 375(1-2):185-98. doi: 10.1007/s11010-012-1541-2. Epub 2012 Dec 15. (I.F. = 3.396; Q3)

2017-present

Research line 2) biochemical mechanisms and biomarkers in male and female infertility

National collaborations:

- Prof. Pasquale Bilotta, Alma Res Fertility Center, Obstetrics and Gynecology, Rome, Italy
- Drs. Ilaria Listorti, Romina Pallisco and Gabriele Bilotta, Alma Res Fertility Center, Laboratory of Andrology and Embriology, Rome, Italy
- Prof. Giuseppe Pisani, Department of Obstetrics and Gynecology, Azienda Ospedaliera S. Camillo-Forlanini, Rome, Italy
- Prof. Barbara Tavazzi, UniCamillus – Saint Camillus International University of Health Sciences, Rome, Italy
- Prof. Angela Maria Amorini, Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy
- Prof. Maria Violetta Brundo, Department of Biology, Geology and Environmental Sciences, University of Catania, Italy

PUBLICATIONS:

1. **Lazzarino G**, Pallisco R, Bilotta G, Listorti I, Mangione R, Saab MW, Caruso G, Amorini AM, Brundo MV, Lazzarino G, Tavazzi B, Bilotta P. (2021) Altered Follicular Fluid Metabolic Pattern Correlates with Female Infertility and Outcome Measures of In Vitro Fertilization. *International Journal of Molecular Sciences*. 22(16):8735. doi: 10.3390/ijms22168735. **First Author** (I.F. = 5.924; Q1)
2. Amorini AM, Listorti I, Bilotta G, Pallisco R, Saab MW, Mangione R, Manca B, Lazzarino G, Tavazzi B, **Lazzarino G**, Bilotta P. (2021) Antioxidant-Based Therapies in Male Infertility: Do We Have Sufficient Evidence Supporting Their Effectiveness? *Antioxidants (Basel)*. 10(2):220. doi: 10.3390/antiox10020220. **Co-corresponding Author** (I.F. = 6.313; Q1)
3. **Lazzarino G**, Listorti I, Bilotta G, Capozzolo T, Amorini AM, Longo S, Caruso G, Lazzarino G, Tavazzi B, Bilotta P. (2019) Water- and Fat-Soluble Antioxidants in Human Seminal Plasma and Serum of Fertile Males. *Antioxidants (Basel)*. 8(4):96. doi: 10.3390/antiox8040096. **First Author** (I.F. = 6.313; Q1)
4. **Lazzarino G**, Listorti I, Muzii L, Amorini AM, Longo S, Di Stasio E, Caruso G, D'Urso S, Puglia I, Pisani G, Lazzarino G, Tavazzi B, Bilotta P. (2018) Low-molecular weight compounds in human seminal plasma as potential biomarkers of male infertility. *Human Reproduction*. 33(10):1817-1828. doi: 10.1093/humrep/dey279. **First Author** (I.F. = 6.918; Q1)
5. **Lazzarino G**, Longo S, Amorini AM, Di Pietro V, D'Urso S, Lazzarino G, Belli A, Tavazzi B. (2017) Single-step preparation of selected biological fluids for the High Performance Liquid Chromatographic analysis of fat-soluble vitamins and antioxidant. *Journal of Chromatography A*. 1527: 43-52. doi: 10.1016/j.chroma.2017.10.053. **First Author** (I.F. = 4.759; Q1)

2014-present

Research line 3) biochemical mechanisms and biomarkers in chronic neurodegenerative diseases

International collaborations:

- Prof. Axel Petzold and Prof. Chris H. Polman, VU Medical Center, Department of Neurology, Amsterdam, The Netherlands
- Prof. Ann Logan, Department of Biomedical Sciences, Warwick Medical School, University of Warwick, Coventry, UK
- Prof. Zsuzsanna Nagy, Nicholas M. Barnes, Antonio Belli and Valentina Di Pietro; College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK
- Dr Lars Bruce, Tikomed AB, Viken, Sweden
- Prof. Lennart I. Persson, Department of Clinical Neuroscience, Institute of Neuroscience and Physiology, The Sahlgrenska Academy, University of Gothenburg, Sweden

National collaborations:

- Prof. Claudio Gasperini, Department of Neurosciences, S Camillo-Forlanini Hospital, Rome, Italy
- Prof. Serena Ruggeri, Department of Neurology and Psychiatry, University of Rome “La Sapienza”, Italy
- Prof. Barbara Tavazzi, UniCamillus – Saint Camillus International University of Health Sciences, Rome, Italy
- Prof. Giovanni Li Volti, Daniele Tibullo, Rosalba Parenti, Nunzio Vicario and Angela Maria Amorini, Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy.

PUBLICATIONS:

1. Logan A, Nagy Z, Barnes NM, Belli A, Di Pietro V, Tavazzi B, Lazzarino G, **Lazzarino G**, Bruce L, Persson LI. (2022) A phase II open label clinical study of the safety, tolerability and efficacy of ILB[®] for Amyotrophic Lateral Sclerosis. *PloS One*. 17(5):e0267183. doi: 10.1371/journal.pone.0267183. (I.F. = 3.240; Q2)
2. **Lazzarino G**, Mangione R, Belli A, Di Pietro V, Nagy Z, Barnes NM, Bruce L, Roperio BM, Persson LI, Manca B, Saab MW, Amorini AM, Tavazzi B, Lazzarino G, Logan A. (2021) ILB[®] Attenuates Clinical Symptoms and Serum Biomarkers of Oxidative/Nitrosative Stress and Mitochondrial Dysfunction in Patients with Amyotrophic Lateral Sclerosis. *Journal of Personalized Medicine*. 11(8):794. doi: 10.3390/jpm11080794. **First Author** (I.F. = 4.945; Q1)
3. Sanfilippo C, Castrogiovanni P, Imbesi R, Lazzarino G, Di Pietro V, Li Volti G, Tibullo D, Barbagallo I, **Lazzarino G**, Avola R, Musumeci G, Fazio F, Vinciguerra M, Di Rosa M. (2021) Sex-dependent monoamine oxidase isoforms expression patterns during human brain ageing. *Mechanisms of Ageing and Development*. 197:111516. doi: 10.1016/j.mad.2021.111516.

- Epub 2021 Jun 5. (I.F. = 5.432; Q1)
4. **Lazzarino G**, Amorini AM, Petzold A, Gasperini C, Ruggieri S, Quartuccio E, Lazzarino G, Di Stasio E, Tavazzi B. (2016) Serum compounds of energy metabolism impairment are related to disability, disease course and neuroimaging in multiple sclerosis. *Molecular Neurobiology*. 54(9):7520-7533. doi: 10.1007/s12035-016-0257-9. **First Author** (I.F. = 5.590; Q1)
 5. Petzold A, Nijland PG, Balk LJ, Amorini AM, Lazzarino G, Wattjes MP, Gasperini C, van der Valk P, Tavazzi B, **Lazzarino G**, van Horssen J. (2015) Visual pathway neurodegeneration winged by mitochondrial dysfunction. *Annals of clinical and translational neurology*. 2(2):140-150. doi: 10.1002/acn3.157. (I.F. = 4.511; Q2)
 6. Amorini AM, Nociti V, Petzold A, Gasperini C, Quartuccio E, **Lazzarino G**, Di Pietro V, Belli A, Signoretti S, Vagnozzi R, Lazzarino G, Tavazzi B. (2014) Serum lactate as a novel potential biomarker in multiple sclerosis. *Biochimica et Biophysica Acta-Molecular Basis of Disease*. 1842(7):1137-43. doi: 10.1016/j.bbadis.2014.04.005. Epub 2014 Apr 13. (I.F. = 5.187; Q1)

2019-present

Research line 4) metabolic alterations in cancer cells

National collaborations:

- Prof. Giovanni Li Volti, Daniele Tibullo, Rosalba Parenti, Nunzio Vicario and Angela Maria Amorini, Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy.
- Dr. Giuseppe Caruso, Istituto di Ricerca Oasi, Troina, Italia.
- Prof. Cesarina Giallongo, Department of Medical, Surgical Sciences and Advanced Technologies G.F. Ingrassia, University of Catania, Catania, Italy
- Prof. Cristian Ripoli, Fondazione Policlinico Universitario A. Gemelli IRCCS, Catholic University of Rome, Italy.
- Prof. Fabio Ciccarone, IRCCS San Raffaele Roma, Department of Human Sciences and Promotion of the Quality of Life, San Raffaele Roma Open University, Rome, Italy.
- Prof. Maria Rosa Ciriolo, Department of Biology, University of Rome "Tor Vergata", Rome Italy;

PUBLICATIONS:

1. Longhitano L, Forte S, Orlando L, Grasso S, Barbato A, Vicario N, Parenti R, Fontana P, Amorini AM, Lazzarino G, Li Volti G, Di Rosa M, Liso A, Tavazzi B, **Lazzarino G**, Tibullo D. (2022) The Crosstalk between GPR81/IGFBP6 Promotes Breast Cancer Progression by Modulating Lactate Metabolism and Oxidative Stress. *Antioxidants (Basel)*. 11(2):275. doi: 10.3390/antiox11020275. **Co-last Author** (I.F. = 6.313; Q1)
2. Giallongo C, Dulcamare I, Tibullo D, Del Fabro V, Vicario N, Parrinello N, Romano A, Scandura G, **Lazzarino G**, Conticello C, Li Volti G, Amorini AM, Musumeci G, Di Rosa M, Polito F, Oteri R, Aguenouz M, Parenti R, Di Raimondo F, Palumbo GA. (2022) CXCL12/CXCR4 axis supports mitochondrial trafficking in tumor myeloma microenvironment. *Oncogenesis*. 11(1):6. doi: 10.1038/s41389-022-00380-z. (I.F. = 7.485; Q1)

3. Barbato A, Scandura G, Puglisi F, Cambria D, La Spina E, Palumbo GA, **Lazzarino G**, Tibullo D, Di Raimondo F, Giallongo C, Romano A. (2020) Mitochondrial Bioenergetics at the Onset of Drug Resistance in Hematological Malignancies: An Overview. *Frontiers in Oncology*. 10:604143. doi: 10.3389/fonc.2020.604143. eCollection 2020. (I.F. = 6.244; Q2)
4. Nanni S, Aiello A, Salis C, Re A, Cencioni C, Bacci L, Pierconti F, Pinto F, Ripoli C, Ostano P, Baroni S, **Lazzarino G**, Tavazzi B, Pugliese D, Bassi P, Grassi C, Panunzi S, Chiorino G, Pontecorvi A, Gaetano C, Farsetti A. (2020) Metabolic Reprogramming by Malat1 Depletion in Prostate Cancer. *Cancers (Basel)*. 13(1):15. doi: 10.3390/cancers13010015. (I.F. = 6.639; Q1)
5. Camiolo G, Barbato A, Giallongo C, Vicario N, Romano A, Parrinello NL, Parenti R, Sandoval JC, García-Moreno D, **Lazzarino G**, Avola R, Palumbo GA, Mulero V, Li Volti G, Tibullo D, Di Raimondo F. (2020) Iron regulates myeloma cell/macrophage interaction and drives resistance to bortezomib. *Redox Biology*. 36:101611. doi: 10.1016/j.redox.2020.101611. Epub 2020 Jun 24 (I.F. = 11.799; Q1)
6. Giallongo S, Di Rosa M, Caltabiano R, Longhitano L, Reibaldi M, Distefano A, Lo Re O, Amorini AM, Puzzo L, Salvatorelli L, Palmucci S, Tibullo D, Russo A, Longo A, **Lazzarino G**, Li Volti G, Vinciguerra M. (2020) Loss of macroH2A1 decreases mitochondrial metabolism and reduces the aggressiveness of uveal melanoma cells. *Aging (Albany NY)*. 12(10):9745-9760. doi: 10.18632/aging.103241. Epub 2020 May 12. (I.F. = 5.682; Q1)
7. Tibullo D, Giallongo C, Romano A, Vicario N, Barbato A, Puglisi F, Parenti R, Amorini AM, Wissam Saab M, Tavazzi B, Mangione R, Brundo MV, **Lazzarino G**, Palumbo GA, Volti GL, Raimondo FD, Lazzarino G. (2020) Mitochondrial Functions, Energy Metabolism and Protein Glycosylation are Interconnected Processes Mediating Resistance to Bortezomib in Multiple Myeloma Cells. *Biomolecules*. 10(5):696. doi: 10.3390/biom10050696. (I.F. = 4.879; Q2)
8. Ciccarone F, Di Leo L, **Lazzarino G**, Maulucci G, Di Giacinto F, Tavazzi B, Ciriolo MR. (2019) Aconitase 2 inhibits the proliferation of MCF-7 cells promoting mitochondrial oxidative metabolism and ROS/FoxO1-mediated autophagic response. *British Journal of Cancer*. 122(2):182-193. doi: 10.1038/s41416-019-0641-0. Epub 2019 Dec 10. (I.F. = 7.640; Q1)
9. Giallongo C, Tibullo D, Camiolo G, Parrinello NL, Romano A, Puglisi F, Barbato A, Conticello C, Lupo G, Anfuso CD, **Lazzarino G**, Li Volti G, Palumbo GA, Di Raimondo F. (2019) TLR4 signaling drives mesenchymal stromal cells commitment to promote tumor microenvironment transformation in multiple myeloma. *Cell Death & Disease*. 10(10):704. doi: 10.1038/s41419-019-1959-5. (I.F. = 8.469; Q1)

2017-present

Research line 5) study on the involvement of glial cells (astrocytes) in the development of Alzheimer's disease

National collaborations:

- Prof. Claudio Grassi and Roberto Piacentini, Department of Neuroscience, Catholic University of Rome, Italy.

PUBLICATIONS:

1. Li Puma DD, Ripoli C, Puliatti G, Pastore F, **Lazzarino G**, Tavazzi B, Arancio O, Piacentini R, Grassi C. (2022) Extracellular tau oligomers affect extracellular glutamate handling by astrocytes through downregulation of GLT-1 expression and impairment of NKA1A2 function. *Neuropathology and Applied Neurobiology*. doi: 10.1111/nan.12811. Online ahead of print. (I.F. = 8.090; Q1)
2. Li Puma DD, Marcocci ME, **Lazzarino G**, De Chiara G, Tavazzi B, Palamara AT, Piacentini R, Grassi C. (2020) Ca²⁺ -dependent release of ATP from astrocytes affects herpes simplex virus type 1 infection of neurons. *Glia*. 69(1):201-215. doi: 10.1002/glia.23895. (I.F. = 7.452; Q1)
3. Piacentini R, Li Puma DD, Mainardi M, **Lazzarino G**, Tavazzi B, Arancio O, Grassi C. (2017) Reduced Gliotransmitter Release from Astrocytes Mediates Tau-Induced Synaptic Dysfunction in Cultured Hippocampal Neurons. *Glia*. 65(8):1302-1316. doi: 10.1002/glia.23163. (I.F. = 7.452; Q1)

PARTICIPATION ON EDITORIAL BOARDS OF SCIENTIFIC JOURNALS

2022-present	<p>Editorial Board Member of the journal <i>Frontiers in Oncology</i></p> <p>Review Editor for the journal <i>Frontiers in Oncology - Section Molecular and Cellular Oncology and Section Hematologic Malignancies</i></p>
2022-present	<p>Editorial Board Member of the journal <i>Frontiers in Physiology</i></p> <p>Review Editor for the journal <i>Frontiers in Physiology - Section Integrative Physiology</i></p>
2021-present	<p>Editorial Board Member of the journal <i>Frontiers in Neuroscience</i></p> <p>Review Editor for the journal <i>Frontiers in Neuroscience, Frontiers in Neurology and Frontiers in Psychiatry - Section Neurodegeneration</i></p>
2022	<p>Guest Editor of the Special Issue “Mitochondrial Dysfunction in acute and chronic neurodegenerations” for the journal <i>Frontiers In Biosciences Landmark</i></p>
2022	<p>Guest Editor of the Special Issue “Oxidative Stress in neurodegenerations” for the journal <i>Antioxidants</i></p>
2020	<p>Guest Editor of the Special Issue “Oxidative and Nitrosative Stress related to mitochondrial dysfunction in Traumatic Brain Injury” for the journal <i>Antioxidants</i></p>
2021-present	<p>Reviewer for the following international journals :</p> <ul style="list-style-type: none"> • Antioxidants • Frontiers in Neurology • Frontiers in Neuroscience • Experimental Neurology

**PARTICIPATION IN
ACADEMIES AND
SCIENTIFIC
SOCIETIES HAVING
PRESTIGE IN THE
FIELD**

2019-present

Member of the Italian Society of Biochemistry and Molecular Biology (SIB)

**NATIONAL AND
INTERNATIONAL
AWARDS AND
RECOGNITION**

2016-2018

Teaching assistant at the Catholic University of Rome, Italy

Teaching assistant of "Laboratory of Biochemistry and Molecular Biology" Integrated Course of "Elements of Applied Biochemistry" (SSD/BIO10), as part of the bachelor degree course "*Sanitary Biotechnology*".

- Responsible for organizing theoretical and practical exercises at the Laboratory of Biochemistry and Molecular Biology, at the Institute of Biochemistry and Clinical Biochemistry
- Classroom lectures for the course "Laboratory of Biochemistry and Molecular Biology" (SSD BIO/10)
- Member of the examination committee for the integrated course of "Elements of Applied Biochemistry" (SSD BIO/10)

Teaching assistant of "Chemical laboratory techniques", Integrated course in "Organic chemistry and chemical laboratory exercises" (SSD BIO/10), as part of the bachelor degree course: "Cosmetology sciences and technologies".

- Responsible for organizing theoretical and practical exercises at the Laboratory of Biochemistry and Molecular Biology, at the Institute of Biochemistry and Clinical Biochemistry
- Classroom lectures for the course "Chemical laboratory techniques" (SSD BIO/10)
- Member of the examination committee for the integrated course of "Organic chemistry and chemical laboratory exercises" (SSD BIO/10)

**PARTICIPATION AS A
SPEAKER AT
CONGRESSES AND
CONFERENCES OF
INTERNATIONAL
INTEREST**

05/11/2021-06/11/2021

NOVEL TRANSLATIONAL APPROACHES IN HEMATOLOGICAL MALIGNANCIES: FROM BENCH TO BEDSIDE

Chairman at the Congress: "NOVEL TRANSLATIONAL APPROACHES IN HEMATOLOGICAL MALIGNANCIES: FROM BENCH TO BEDSIDE", 5-6

November 2021, University of Catania, Catania, Italy.

23/09/2021-24/09/2021

61° SIB 2021 CONGRESS

Speaker: Lazzarino G, Listorti I, Pallisco R, Mangione R, Tavazzi B, Bilotta P. "The Follicular Fluid Metabolic Pattern: Correlation With Female Infertility And Outcome Measures Of In Vitro Fertilization". 61° SIB 2021 CONGRESS - VIRTUAL EDITION, 23-24 September 2021.

19/11/2017

GIORNATA DI STUDIO DEI BIOCHIMICI DELL'AREA ROMANA 2017

Speaker: Meccanismi patobiologici e biomarkers nelle neurodegenerazioni acute e croniche. GIORNATA DI STUDIO DEI BIOCHIMICI DELL'AREA ROMANA 2017, 19 November 2017, Catholic University of Rome, Italy.

14/06/2017-16/06/2017

GIBB INTERNATIONAL MEETING CATANIA 2017

Speaker: Lazzarino G, Amorini AM, Di Pietro V, Belli A, Tavazzi B. "The response of the mitochondrial quality control system to graded traumatic brain injury". GIBB INTERNATIONAL MEETING CATANIA 2017, 14-16 June 2017, Catania, Italy.

BIBLIOMETRIC INDEXES

The total scientific production consists of **57 total publications**, in **16** of them in a **position of prominence** (first name, last name or corresponding author), plus **one book chapter**.

The bibliometric parameters related to the overall scientific production are as follows (updated on SCOPUS on 16/10/2022

<https://www.scopus.com/authid/detail.uri?authorId=55574111900>).

Publications = 57

Citations = 1140

Average Citations: 20

Normalized Citations by Academic Age: 126,667

h-index = 21

Total Impact Factor: 313,152

Average Impact Factor Medio: 5,494

Total Impact Factor Normalized by Academic Age: 34,795

VALUTAZIONE VQR 2015-2019

Valutazione VQR 2015-2019

1. Fresta CG, Chakraborty A, Wijesinghe MB, Amorini AM, Lazzarino G, Lazzarino G, Tavazzi B, Lunte SM, et al. (2018). Non-toxic engineered carbon nanodiamond concentrations induce oxidative/nitrosative stress, imbalance of energy metabolism, and mitochondrial dysfunction in microglial and alveolar basal epithelial cells. *CELL DEATH & DISEASE*, vol. 9, p. 245-257, ISSN: 2041-4889, doi: 10.1038/s41419-018-0280-z.

Valutato dal GEV: 5

Al prodotto è stato attribuito punteggio complessivo pari a **26.5** ed è stato quindi classificato in **classe B (Eccellente)** in quanto presenta:

- un livello di originalità qualificabile come Eccellente - punteggio

9

- un livello di rigore metodologico qualificabile come Eccellente - punteggio 9
- un livello di impatto qualificabile come Molto buono - punteggio 8.5

2. Di Pietro V, **Lazzarino G**, Amorini AM, Signoretti S, Hill LJ, Porto E, Tavazzi B, Lazzarino G, et al. (2017). Fusion or fission: The destiny of mitochondria in traumatic brain injury of different severities. *SCIENTIFIC REPORTS*, vol. 7, p. 9189-9198, ISSN: 2045-2322, doi: 10.1038/s41598-017-09587-2

Valutato dal GEV: 5

Al prodotto è stato attribuito punteggio complessivo pari a **27** ed è stato quindi classificato in **classe B (Eccellente)** in quanto presenta:

- un livello di originalità qualificabile come Eccellente - punteggio 9
- un livello di rigore metodologico qualificabile come Eccellente - punteggio 9
- un livello di impatto qualificabile come Eccellente - punteggio 9

3. Di Pietro V, Ragusa M, Davies D, Su Z, Hazeldine J, **Lazzarino G**, Hill LJ, Crombie N, et al. (2017). MicroRNAs as Novel Biomarkers for the Diagnosis and Prognosis of Mild and Severe Traumatic Brain Injury.. *JOURNAL OF NEUROTRAUMA*, vol. 34, p. 1948-1955, ISSN: 0897-7151, doi: 10.1089/neu.2016.4857

Valutato dal GEV: 5

Al prodotto è stato attribuito punteggio complessivo pari a **29** ed è stato quindi classificato in **classe A (Eccellente ed estremamente rilevante)** in quanto presenta:

- un livello di originalità qualificabile come Eccellente - punteggio 9
- un livello di rigore metodologico qualificabile come Eccellente ed estremamente rilevante - punteggio 10
- un livello di impatto qualificabile come Eccellente ed estremamente rilevante - punteggio 10

4. Piacentini R, Li Puma DD, Mainardi M, **Lazzarino G**, Tavazzi B, Arancio O, Grassi C. (2017). Reduced gliotransmitter release from astrocytes mediates tau-induced synaptic dysfunction in cultured hippocampal neurons. *GLIA*, vol. 65, p. 1302-1316, ISSN: 0894-1491, doi: 10.1002/glia.23163

Valutato dal GEV: 5

Al prodotto è stato attribuito punteggio complessivo pari a **29.5** ed è stato quindi classificato in **classe A (Eccellente ed estremamente rilevante)** in quanto presenta:

- un livello di originalità qualificabile come Eccellente - punteggio 9.5
- un livello di rigore metodologico qualificabile come Eccellente ed estremamente rilevante - punteggio 10
- un livello di impatto qualificabile come Eccellente ed estremamente rilevante - punteggio 10

PUBLICATIONS IN
EXTENSO

1. Logan A, Belli A, Di Pietro V, Tavazzi B, **Lazzarino G**, Mangione R, Lazzarino G, Morano I, Qureshi O, Bruce L, Barnes NM, Nagy Z. (2022) The mechanism of action of a novel neuroprotective low molecular weight dextran sulphate: New platform therapy for neurodegenerative diseases like Amyotrophic Lateral Sclerosis. *Frontiers in Pharmacology*. 13:983853. doi: 10.3389/fphar.2022.983853. (I.F. = 5.810; Q1)
2. **Lazzarino G**, Di Pietro V, Rinaudo M, Nagy Z, Barnes NM, Bruce L, Signoretti S, Mangione R, Saab MW, Tavazzi B, Belli A, Lazzarino G, Amorini AM, Logan A. (2022) ILB[®], a Low Molecular Weight Dextran Sulphate, Restores Glutamate Homeostasis, Amino Acid Metabolism and Neurocognitive Functions in a Rat Model of Severe Traumatic Brain Injury. *International Journal of Molecular Sciences*. 23(15):8460. doi: 10.3390/ijms23158460. **First Author** (I.F. = 5.924; Q1)
3. **Lazzarino G**, Amorini AM, Mangione R, Saab MW, Di Stasio E, Di Rosa M, Tavazzi B, Lazzarino G, Onder G, Carfi A. (2022) Biochemical discrimination of the Down syndrome-related metabolic and oxidative/nitrosative stress alterations from the physiologic age-related changes through the targeted metabolomic analysis of serum. *Antioxidants (Basel)*. 11(6):1208. doi: 10.3390/antiox11061208. **First Author** (I.F. = 6.313; Q1)
4. Ciccarone F, Castelli S, **Lazzarino G**, Scaricamazza S, Mangione R, Bernardini S, Apolloni S, D'Ambrosi N, Ferri A, Ciriolo MR. (2022) Lipid catabolism and mitochondrial uncoupling are stimulated in brown adipose tissue of amyotrophic lateral sclerosis mouse models. *Genes & Diseases*. doi: 10.1016/j.gendis.2022.04.006 (I.F. = 7.103; Q1)
5. Villacís-Chiriboga J, Jacobs G, Van Camp J, Elst K, Ruales J, Marcillo-Parra V, Böhm V, Bunea A, Cirlini M, Craft N, De Meulenaer B, Graça Dias M, **Lazzarino G**, Meléndez-Martínez AJ, Versloot P, Mercadante AZ, Olmedilla-Alonso B, Ortiz-Ulloa J, Stinco CM, Voorspoels S. (2022) Interlaboratory exercise for the analysis of carotenoids and related compounds in dried mango fruit (*Mangifera indica* L.). *Journal of Food Composition and Analysis*. doi: 10.1016/j.jfca.2022.104616 (I.F. = 4.556; Q1)
6. Logan A, Nagy Z, Barnes NM, Belli A, Di Pietro V, Tavazzi B, Lazzarino G, **Lazzarino G**, Bruce L, Persson LI. (2022) A phase II open label clinical study of the safety, tolerability and efficacy of ILB[®] for Amyotrophic Lateral Sclerosis. *PLoS One*. 17(5):e0267183. doi: 10.1371/journal.pone.0267183. (I.F. = 3.240; Q2)
7. Li Puma DD, Ripoli C, Puliatti G, Pastore F, **Lazzarino G**, Tavazzi B, Arancio O, Piacentini R, Grassi C. (2022) Extracellular tau oligomers affect extracellular glutamate handling by astrocytes through downregulation of GLT-1 expression and impairment of NKA1A2 function. *Neuropathology and Applied Neurobiology*. doi: 10.1111/nan.12811. Online ahead of print. (I.F. = 8.090; Q1)
8. Longhitano L, Forte S, Orlando L, Grasso S, Barbato A, Vicario N, Parenti R, Fontana P, Amorini AM, Lazzarino G, Li Volti G, Di Rosa M, Liso A, Tavazzi B, **Lazzarino G**, Tibullo D. (2022) The Crosstalk between GPR81/IGFBP6 Promotes Breast Cancer Progression by Modulating

- Lactate Metabolism and Oxidative Stress. *Antioxidants (Basel)*. 11(2):275. doi: 10.3390/antiox11020275. **Co-last Author** (I.F. = 6.313; Q1)
9. Giallongo C, Dulcamare I, Tibullo D, Del Fabro V, Vicario N, Parrinello N, Romano A, Scandura G, **Lazzarino G**, Conticello C, Li Volti G, Amorini AM, Musumeci G, Di Rosa M, Polito F, Oteri R, Aguenouz M, Parenti R, Di Raimondo F, Palumbo GA. (2022) CXCL12/CXCR4 axis supports mitochondrial trafficking in tumor myeloma microenvironment. *Oncogenesis*. 11(1):6. doi: 10.1038/s41389-022-00380-z. (I.F. = 7.485; Q1)
 10. **Lazzarino G**, Pallisco R, Bilotta G, Listorti I, Mangione R, Saab MW, Caruso G, Amorini AM, Brundo MV, Lazzarino G, Tavazzi B, Bilotta P. (2021) Altered Follicular Fluid Metabolic Pattern Correlates with Female Infertility and Outcome Measures of In Vitro Fertilization. *International Journal of Molecular Sciences*. 22(16):8735. doi: 10.3390/ijms22168735. **First Author** (I.F. = 5.924; Q1)
 11. **Lazzarino G**, Mangione R, Belli A, Di Pietro V, Nagy Z, Barnes NM, Bruce L, Ropero BM, Persson LI, Manca B, Saab MW, Amorini AM, Tavazzi B, Lazzarino G, Logan A. (2021) ILB[®] Attenuates Clinical Symptoms and Serum Biomarkers of Oxidative/Nitrosative Stress and Mitochondrial Dysfunction in Patients with Amyotrophic Lateral Sclerosis. *Journal of Personalized Medicine*. 11(8):794. doi: 10.3390/jpm11080794. **First Author** (I.F. = 4.945; Q1)
 12. Sanfilippo C, Castrogiovanni P, Imbesi R, Lazzarino G, Di Pietro V, Li Volti G, Tibullo D, Barbagallo I, **Lazzarino G**, Avola R, Musumeci G, Fazio F, Vinciguerra M, Di Rosa M. (2021) Sex-dependent monoamine oxidase isoforms expression patterns during human brain ageing. *Mechanisms of Ageing and Development*. 197:111516. doi: 10.1016/j.mad.2021.111516. Epub 2021 Jun 5. (I.F. = 5.432; Q1)
 13. Caruso G, Fresta CG, Costantino A, **Lazzarino G**, Amorini AM, Lazzarino G, Tavazzi B, Lunte SM, Dhar P, Gulisano M, Caraci F. (2021) Lung Surfactant Decreases Biochemical Alterations and Oxidative Stress Induced by a Sub-Toxic Concentration of Carbon Nanoparticles in Alveolar Epithelial and Microglial Cells. *International Journal of Molecular Sciences*. 22(5):2694. doi: 10.3390/ijms22052694. (I.F. = 5.924; Q1)
 14. Amorini AM, Listorti I, Bilotta G, Pallisco R, Saab MW, Mangione R, Manca B, Lazzarino G, Tavazzi B, **Lazzarino G**, Bilotta P. (2021) Antioxidant-Based Therapies in Male Infertility: Do We Have Sufficient Evidence Supporting Their Effectiveness? *Antioxidants (Basel)*. 10(2):220. doi: 10.3390/antiox10020220. **Co-corresponding Author** (I.F. = 6.313; Q1)
 15. Barbato A, Scandura G, Puglisi F, Cambria D, La Spina E, Palumbo GA, **Lazzarino G**, Tibullo D, Di Raimondo F, Giallongo C, Romano A. (2020) Mitochondrial Bioenergetics at the Onset of Drug Resistance in Hematological Malignancies: An Overview. *Frontiers in Oncology*. 10:604143. doi: 10.3389/fonc.2020.604143. eCollection 2020. (I.F. = 6.244; Q2)
 16. Nanni S, Aiello A, Salis C, Re A, Cencioni C, Bacci L, Pierconti F, Pinto F, Ripoli C, Ostano P, Baroni S, **Lazzarino G**, Tavazzi B, Pugliese D, Bassi P, Grassi C, Panunzi S, Chiorino G, Pontecorvi A, Gaetano C, Farsetti A. (2020) Metabolic Reprogramming by Malat1 Depletion in Prostate Cancer. *Cancers (Basel)*. 13(1):15. doi: 10.3390/cancers13010015. (I.F. = 6.639; Q1)

17. **Lazzarino G**, Amorini AM, Barnes NM, Bruce L, Mordente A, Lazzarino G, Pietro VD, Tavazzi B, Belli A, Logan A. (2020) Low Molecular Weight Dextran Sulfate (ILB[®]) Administration Restores Brain Energy Metabolism Following Severe Traumatic Brain Injury in the Rat. *Antioxidants (Basel)*. 9(9):850. doi: 10.3390/antiox9090850. **First Author** (I.F. = 6.313; Q1)
18. Camiolo G, Barbato A, Giallongo C, Vicario N, Romano A, Parrinello NL, Parenti R, Sandoval JC, García-Moreno D, **Lazzarino G**, Avola R, Palumbo GA, Mulero V, Li Volti G, Tibullo D, Di Raimondo F. (2020) Iron regulates myeloma cell/macrophage interaction and drives resistance to bortezomib. *Redox Biology*. 36:101611. doi: 10.1016/j.redox.2020.101611. Epub 2020 Jun 24 (I.F. = 11.799; Q1)
19. Li Puma DD, Marcocci ME, **Lazzarino G**, De Chiara G, Tavazzi B, Palamara AT, Piacentini R, Grassi C. (2020) Ca²⁺ -dependent release of ATP from astrocytes affects herpes simplex virus type 1 infection of neurons. *Glia*. 69(1):201-215. doi: 10.1002/glia.23895. (I.F. = 7.452; Q1)
20. Longhitano L, Tibullo D, Giallongo C, **Lazzarino G**, Tartaglia N, Galimberti S, Li Volti G, Palumbo GA, Liso A. (2020) Proteasome Inhibitors as a Possible Therapy for SARS-CoV-2. *International Journal of Molecular Sciences*. 21(10):3622. doi: 10.3390/ijms21103622. (I.F. = 5.924; Q1)
21. Giallongo S, Di Rosa M, Caltabiano R, Longhitano L, Reibaldi M, Distefano A, Lo Re O, Amorini AM, Puzzo L, Salvatorelli L, Palmucci S, Tibullo D, Russo A, Longo A, **Lazzarino G**, Li Volti G, Vinciguerra M. (2020) Loss of macroH2A1 decreases mitochondrial metabolism and reduces the aggressiveness of uveal melanoma cells. *Aging (Albany NY)*. 12(10):9745-9760. doi: 10.18632/aging.103241. Epub 2020 May 12. (I.F. = 5.682; Q1)
22. Tibullo D, Giallongo C, Romano A, Vicario N, Barbato A, Puglisi F, Parenti R, Amorini AM, Wissam Saab M, Tavazzi B, Mangione R, Brundo MV, **Lazzarino G**, Palumbo GA, Volti GL, Raimondo FD, Lazzarino G. (2020) Mitochondrial Functions, Energy Metabolism and Protein Glycosylation are Interconnected Processes Mediating Resistance to Bortezomib in Multiple Myeloma Cells. *Biomolecules*. 10(5):696. doi: 10.3390/biom10050696. (I.F. = 4.879; Q2)
23. Di Pietro V, Yakoub KM, Caruso G, **Lazzarino G**, Signoretti S, Barbey AK, Tavazzi B, Lazzarino G, Belli A, Amorini AM. (2020) Antioxidant Therapies in Traumatic Brain Injury. *Antioxidants (Basel)*. 9(3):260. doi: 10.3390/antiox9030260. (I.F. = 6.313; Q1)
24. Fresta CG, Fidilio A, **Lazzarino G**, Musso N, Grasso M, Merlo S, Amorini AM, Bucolo C, Tavazzi B, Lazzarino G, Lunte SM, Caraci F, Caruso G. (2020) Modulation of Pro-Oxidant and Pro-Inflammatory Activities of M1 Macrophages by the Natural Dipeptide Carnosine. *International Journal of Molecular Sciences*. 21(3). doi: 10.3390/ijms21030776. (I.F. = 5.924; Q1)
25. Ciccarone F, Di Leo L, **Lazzarino G**, Maulucci G, Di Giacinto F, Tavazzi B, Ciriolo MR. (2019) Aconitase 2 inhibits the proliferation of MCF-7 cells

promoting mitochondrial oxidative metabolism and ROS/FoxO1-mediated autophagic response. *British Journal of Cancer*. 122(2):182-193. doi: 10.1038/s41416-019-0641-0. Epub 2019 Dec 10. (I.F. = 7.640; Q1)

26. **Lazzarino G**, Amorini AM, Signoretti S, Musumeci G, Lazzarino G, Caruso G, Pastore FS, Di Pietro V, Tavazzi B, Belli A. (2019) Pyruvate Dehydrogenase and Tricarboxylic Acid Cycle Enzymes Are Sensitive Targets of Traumatic Brain Injury Induced Metabolic Derangement. *International Journal of Molecular Sciences*. 20(22):5774. doi: 10.3390/ijms20225774. **First Author** (I.F. = 5.924; Q1)
27. Tamburrano A, Tavazzi B, Callà CAM, Amorini AM, **Lazzarino G**, Vincenti S, Zottola T, Campagna MC, Moscato U, Laurenti P. (2019) Biochemical and nutritional characteristics of buffalo meat and potential implications on human health for a personalized nutrition. *Italian Journal of Food Safety*. 8(3):8317. doi: 10.4081/ijfs.2019.8317. (Q4)
28. Giallongo C, Tibullo D, Camiolo G, Parrinello NL, Romano A, Puglisi F, Barbato A, Conticello C, Lupo G, Anfuso CD, **Lazzarino G**, Li Volti G, Palumbo GA, Di Raimondo F. (2019) TLR4 signaling drives mesenchymal stromal cells commitment to promote tumor microenvironment transformation in multiple myeloma. *Cell Death & Disease*. 10(10):704. doi: 10.1038/s41419-019-1959-5. (I.F. = 8.469; Q1)
29. Caruso G, Fresta CG, Fidilio A, O'Donnell F, Musso N, **Lazzarino G**, Grasso M, Amorini AM, Tascetta F, Bucolo C, Drago F, Tavazzi B, Lazzarino G, Lunte SM, Caraci F. (2019) Carnosine Decreases PMA-Induced Oxidative Stress and Inflammation in Murine Macrophages. *Antioxidants (Basel)*. 8(8):281. doi: 10.3390/antiox8080281. (I.F. = 6.313; Q1)
30. Yakoub KM, **Lazzarino G**, Amorini AM, Caruso G, Scazzone C, Ciaccio M, Tavazzi B, Lazzarino G, Belli A, Di Pietro V. (2019) Fructose-1,6-Bisphosphate Protects Hippocampal Rat Slices from NMDA Excitotoxicity. *International Journal of Molecular Sciences*. 20(9):2239; doi:10.3390/ijms20092239. **Co-first Author** (I.F. = 5.924; Q1)
31. Clementi ME, **Lazzarino G**, Sampaolese B, Brancato A, Tringali G. (2019) DHA protects PC12 cells against oxidative stress and apoptotic signals through the activation of the NFE2L2/HO-1 axis. *International Journal of Molecular Medicine*. 43(6):2523-2531. doi: 10.3892/ijmm.2019.4170. **Co-first Author** (I.F. = 4.101; Q2)
32. **Lazzarino G**, Listorti I, Bilotta G, Capozzolo T, Amorini AM, Longo S, Caruso G, Lazzarino G, Tavazzi B, Bilotta P. (2019) Water- and Fat-Soluble Antioxidants in Human Seminal Plasma and Serum of Fertile Males. *Antioxidants (Basel)*. 8(4):96. doi: 10.3390/antiox8040096. **First Author** (I.F. = 6.313; Q1)
33. Di Mauro R, Cantarella G, Bernardini R, Di Rosa M, Barbagallo I, Distefano A, Longhitano L, Vicario N, Nicolosi D, **Lazzarino G**, Tibullo D, Gulino ME,

- Spampinato M, Avola R, Li Volti G. (2019) The Biochemical and Pharmacological Properties of Ozone: The Smell of Protection in Acute and Chronic Diseases. *International Journal of Molecular Sciences*. 20(3):634. doi: 10.3390/ijms20030634. (I.F. = 5.924; Q1)
34. D'Alessandro M, Pascon R, Tavazzi B, Sargentini V, **Lazzarino G**, Poli L, Garofalo M, Bachetoni A, Angeloni A, Pretagostini R. (2019) Tubular Dysfunction In A Patient With A Recent Kidney Transplant. *Biochimica Clinica*. 43:3. doi: 10.19186/BC_2019.038
35. Spampinato M, Murabito P, Raffaele M, Vanella L, Licari M, Distefano A, Tomasello B, Sferrazzo G, Carota G, Rosa M.D, Tibullo D, Bonaventura G, **Lazzarino G**, Li Volti G, Barbagallo I. (2019) N-Acetylcysteine Restores Endogenous Antioxidant System In Human Bronchial Epithelial Cells Exposed To Cigarette Smoke Extract. *EuroMediterranean Biomedical Journal*. 14:24-29
36. Caruso G, Fresta CG, **Lazzarino G**, Distefano DA, Parlascino P, Lunte SM, Lazzarino G, Caraci F. (2018) Sub-Toxic Human Amylin Fragment Concentrations Promote the Survival and Proliferation of SH-SY5Y Cells via the Release of VEGF and HspB5 from Endothelial RBE4 Cells. *International Journal of Molecular Sciences*. 19(11):3659. doi: 10.3390/ijms19113659. (I.F. = 5.924; Q1)
37. **Lazzarino G**, Listorti I, Muzii L, Amorini AM, Longo S, Di Stasio E, Caruso G, D'Urso S, Puglia I, Pisani G, Lazzarino G, Tavazzi B, Bilotta P. (2018) Low-molecular weight compounds in human seminal plasma as potential biomarkers of male infertility. *Human Reproduction*. 33(10):1817-1828. doi: 10.1093/humrep/dey279. **First Author** (I.F. = 6.918; Q1)
38. Fresta C, Chakraborty A, Wijesinghe M, Amorini AM, **Lazzarino G**, Lazzarino G, Tavazzi B, Lunte S, Caraci F, Dhar P, Caruso G. (2018) Non-toxic engineered carbon nanodiamond concentrations induce oxidative/nitrosative stress, imbalance of energy metabolism and mitochondrial dysfunction in microglial and alveolar basal epithelial cells. *Cell Death and Disease*. 9(2):245. doi: 10.1038/s41419-018-0280-z. (I.F. = 8.469; Q1)
39. Clementi ME, Sampaolese B, **Lazzarino G**, Tringali G. (2018) Ultraviolet A radiation induces cortistatin overexpression and activation of somatostatin receptors in ARPE-19 cells. *Molecular Medicine Reports*. 17(4):5538-5543. doi: 10.3892/mmr.2018.8547. Epub 2018 Feb 2. (I.F. = 2.952; Q3)
40. **Lazzarino G**, Longo S, Amorini AM, Di Pietro V, D'Urso S, Lazzarino G, Belli A, Tavazzi B. (2017) Single-step preparation of selected biological fluids for the High Performance Liquid Chromatographic analysis of fat-soluble vitamins and antioxidant. *Journal of Chromatography A*. 1527:43-52. doi: 10.1016/j.chroma.2017.10.053. **First Author** (I.F. = 4.759; Q1)
41. Di Pietro V, **Lazzarino G**, Amorini AM, Signoretti S, Hill LJ, Porto E, Tavazzi B, Lazzarino G, Belli A. (2017) Fusion or Fission: The destiny of

- mitochondria in traumatic brain injury of different severities. *Scientific Reports*. 7(1):9189. doi: 10.1038/s41598-017-09587-2. **Co-first Author** (I.F. = 4.380; Q1)
42. Macchiaiolo M, Barresi S, Cecconi F, Zanni G, Niceta M, Bellacchio E, **Lazzarino G**, Amorini AM, Bertini ES, Rizza S, Contardi B, Tartaglia M, Bartuli A. (2017) A mild form of adenylosuccinate lyase deficiency in absence of typical brain MRI features diagnosed by whole exome sequencing. *Italian Journal of Pediatrics*. 43(1):65. doi: 10.1186/s13052-017-0383-7. (I.F. = 2.638; Q2)
 43. Piacentini R, Li Puma DD, Mainardi M, **Lazzarino G**, Tavazzi B, Arancio O, Grassi C. (2017) Reduced Gliotransmitter Release from Astrocytes Mediates Tau-Induced Synaptic Dysfunction in Cultured Hippocampal Neurons. *Glia*. 65(8):1302-1316. doi: 10.1002/glia.23163. (I.F. = 7.452; Q1)
 44. Di Pietro V, Ragusa M, Davies D, Su Z, Hazeldine J, **Lazzarino G**, Hill LJ, Crombie N, Foster M, Purrello M, Logan A, Belli A. (2017) MicroRNAs as novel biomarkers for the diagnosis and prognosis of mild and severe traumatic brain injury. *Journal of Neurotrauma*. 34(11):1948-1956. doi: 10.1089/neu.2016.4857. (I.F. = 5.269; Q1)
 45. **Lazzarino G**, Amorini AM, Petzold A, Gasperini C, Ruggieri S, Quartuccio E, Lazzarino G, Di Stasio E, Tavazzi B. (2016) Serum compounds of energy metabolism impairment are related to disability, disease course and neuroimaging in multiple sclerosis. *Molecular Neurobiology*. 54(9):7520-7533. doi: 10.1007/s12035-016-0257-9. **First Author** (I.F. = 5.590; Q1)
 46. Amorini AM, **Lazzarino G**, Di Pietro V, Signoretti S, Lazzarino G, Belli A, Tavazzi B. (2016) Severity of experimental traumatic brain injury modulates changes in concentration of cerebral free amino acids. *Journal of Cellular and Molecular Medicine*. 21(3):530-542. doi: 10.111/jcmm.12998. **Co-first Author** (I.F. = 5.310; Q2)
 47. Amorini AM, **Lazzarino G**, Di Pietro V, Signoretti S, Lazzarino G, Belli A, Tavazzi B. (2016) Metabolic, enzymatic and gene involvement in cerebral glucose dysmetabolism after traumatic brain injury. *Biochimica et Biophysica Acta-Molecular Basis of Disease*. 1862(4):679-687. doi: 10.1016/j.bbadis.2016.01.023. (I.F. = 5.187; Q1)
 48. Alberghina D, Piccione G, Amorini AM, **Lazzarino G**, Congiu F, Lazzarino G, Tavazzi B. (2015) Body Temperature and Plasma Nitric Oxide Metabolites in Response to Standardized Exercise Test in the Athletic Horse. *Journal of Equine Veterinary Science*. 35(9):709-713. doi: 10.1016/j.jevs.2015.06.021. (I.F. = 1.583; Q2)
 49. Di Pietro V, Amorini AM, **Lazzarino G**, Yakoub KM, D'Urso S, Lazzarino G, Belli A. (2015) S100B and Glial Fibrillary Acidic Protein as Indexes to Monitor Damage Severity in an In Vitro Model of Traumatic Brain Injury. *Neurochemical Research*. 40(5):991-999. doi: 10.1007/s11064-015-1554-1559. (I.F. = 3.996; Q2)

50. Petzold A, Nijland PG, Balk LJ, Amorini AM, Lazzarino G, Wattjes MP, Gasperini C, van der Valk P, Tavazzi B, **Lazzarino G**, van Horssen J. (2015) Visual pathway neurodegeneration winged by mitochondrial dysfunction. *Annals of clinical and translational neurology*. 2(2):140-150. doi: 10.1002/acn3.157. (I.F. = 4.511; Q2)
51. Clementi ME, Sampaolese B, **Lazzarino G**, Giardina B. (2015) Effect of Puncalagin and Resveratrol on Methionine Sulfoxide Reductase: a possible protective contribution against Alzheimer Disease. *The Journal of Prevention of Alzheimer's Disease*. 2(1): 33-37. doi: 10.14283/jpad.2015.40. (I.F. = 4.671; Q2)
52. Bracko O, Di Pietro V, **Lazzarino G**, Amorini AM, Tavazzi B, Artmann J, Wong EC, Buxton RB, Weller M, Luft AR, Wegener S. (2014) 3-Nitropropionic acid-induced ischemia tolerance in the rat brain is mediated by reduced metabolic activity and cerebral blood flow. *Journal of Cerebral Blood Flow and Metabolism*. 34(9):1522-30. doi: 10.1038/jcbfm.2014.112. Epub 2014 Jun 18. (I.F. = 6.200; Q1)
53. Amorini AM, Nociti V, Petzold A, Gasperini C, Quartuccio E, **Lazzarino G**, Di Pietro V, Belli A, Signoretti S, Vagnozzi R, Lazzarino G, Tavazzi B. (2014) Serum lactate as a novel potential biomarker in multiple sclerosis. *Biochimica et Biophysica Acta-Molecular Basis of Disease*. 1842(7):1137-43. doi: 10.1016/j.bbadis.2014.04.005. Epub 2014 Apr 13. (I.F. = 5.187; Q1)
54. Di Pietro V, Amorini AM, Tavazzi B, Vagnozzi R, Logan A, **Lazzarino G**, Signoretti S, Lazzarino G, Belli A. (2014) The molecular mechanisms affecting N-acetylaspartate homeostasis following experimental graded traumatic brain injury. *Molecular Medicine*. 20(1):147-57. doi: 10.2119/molmed.2013.00153. (I.F. = 6.354; Q1)
55. Di Pietro V, **Lazzarino G**, Amorini AM, Tavazzi B, D'Urso S, Longo S, Vagnozzi R, Signoretti S, Clementi E, Giardina B, Lazzarino G, Belli A. (2014) Neuroglobin expression and oxidant/antioxidant balance after graded traumatic brain injury in the rat. *Free Radical Biology and Medicine*. 69:258-64. doi: 10.1016/j.freeradbiomed.2014.01.032. Epub 2014 Jan 31. (I.F. = 7.376; Q1)
56. Di Pietro V, Cavallari U, Amorini AM, **Lazzarino G**, Longo S, Poggiani C, Cavalli P, Tavazzi B. (2013) New T530C mutation in the aspartoacylase gene caused Canavan disease with no correlation between severity and N-acetylaspartate excretion. *Clinical Biochemistry*. 46(18):1902-4. doi: 10.1016/j.clinbiochem.2013.09.004. Epub 2013 Sep 12. (I.F. = 3.281; Q2)
57. Di Pietro V, Amorini AM, Tavazzi B, Hovda DA, Signoretti S, Giza CC, **Lazzarino G**, Vagnozzi R, Lazzarino G, Belli A. (2013) Potentially neuroprotective gene modulation in an in vitro model of mild traumatic brain injury. *Molecular and Cellular Biochemistry*. 375(1-2):185-98. doi: 10.1007/s11010-012-1541-2. Epub 2012 Dec 15. (I.F. = 3.396; Q3)

BOOK CHAPTERS

1. **Lazzarino G**, O'Halloran P, Di Pietro V, Mangione R, Tavazzi B, Amorini AM, Lazzarino G, Signoretti S. (2022) Pyruvate Dehydrogenase and Tricarboxylic Acid Cycle Enzymes Are Sensitive Targets of Traumatic Brain Injury Induced Metabolic Derangement in "Cellular, Molecular, Physiological and Behavioural Aspects of Traumatic Brain Injury", Rajendram R, Preedy VR and Martin CR eds, *Academic Press*, San Diego, CA, USA, pp. 208-216.

Authorization to process personal data in accordance with the law 675/96.

The undersigned Giacomo Lazzarino, born in Rome on January 14 1985, residing in Rome at Via Camillo Iacobini 185, authorizes the processing of the personal data contained in his curriculum vitae in accordance with art. 13 of Legislative Decree 196/2003 and art. 13 GDPR 679/16.