

CURRICULUM VITAE AND STUDIORUM PROF. MAURIZIO BALESTRINO

Prof. Maurizio Balestrino was born in Genoa on 9/2/1956. He graduated with honors in Medicine and Surgery in 1980 at the University of Genoa, and specialized in Neurology with honors in 1984 at the same University. In 1989 he obtained the qualification to practice cognitive-behavioral psychotherapy by passing the final exam of the relevant course at the Miller Institute in Genoa. In 2015 he obtained the 2nd Level University Master in Criminology and Forensic Psychosciences at the University of Genoa, passing the final exam with honors. He has held the following work positions:

1980-1983: specialist at the Neurological Clinic of the University of Genoa.

1983-1986: Research Associate, Department of Physiology, Duke University Medical Center, Durham NC, USA.

1987 (November-December): consultant at the Department of Physiology, Duke University Medical Center, Durham NC, USA.

1988 (July-September): Fellow of the Medical Research Council at the Department of Pharmacology, University of Ottawa, Canada.

1991 (July 15- August 31): Visitor, Department of Neurosurgery, University of Washington, Seattle WA, USA.

1987-1993:

Collaborator with research functions at the Center for Cerebral Neurophysiology of the CNR, Genoa

Consultant neuropsychiatrist at the Military District of Genoa

neurologist specialist at various UU.SS.LL. in the province of Genoa.

from 1993 to 2019 (November 30): Researcher, then Confirmed Researcher, at the University of Genoa (Institute of Clinical Neurology, now Department of Neuroscience, rehabilitation, ophthalmology, genetics and maternal-child sciences - DINOEMI)

from 2019 (1 December) to today: Associate Professor at the University of Genoa (Institute of Clinical Neurology, now Department of Neuroscience, rehabilitation, ophthalmology, genetics and maternal-child sciences - DINOEMI)

Prof. Balestrino was invited to hold relations officials ("invited speakers") at the following conferences **international** : "Mechanisms of Cerebral Hypoxia and Stroke" (Budapest, 16-21 August 1987), "Central Nervous System Slice Preparation" (Louisville, USA, 6-10 June 1994), "Stroke in the Young" (Genoa, Italy, 11-12 December 1998), IVTIP (In Vitro Testing Industrial Platform) Annual Meeting (Amboise, 2004), Creatine in Health, Sport And Medicine (Lauf, Germany, 2015), Cerebral Creatine Deficiency Syndromes Symposium (Austin, Texas, USA, 2018), Cerebral Creatine Deficiency Syndromes Symposium (Rotterdam, 2019), Creatine in Health and Disease Throughout the Lifetime (online, 2022), CCDS scientific and patient symposium (Park City, UT, USA, 2022), Creatine for Health (Munich, Germany, 2025).

He was Associated Partner in the international project "In vitro neurotoxicology tests based on the coupling of brain slices to silicon microelectrode arrays" funded by the European Commission in the three-year period 1998-2000.

Was Research Project Coordinator international "Development of new creatine-derived drugs with potent capability of increasing cerebral high-energy stores: A novel approach for prevention and treatment of brain ischemia and stroke" funded by INTAS (International Association for the promotion of co-operation with scientists from the New Independent States of the former Soviet Union) for the three-year period 2001-2004.

He was the Coordinator of the Telethon Project "Creatine administration in creatine deficiency syndromes " for the three-year period 2004-2007.

He was the coordinator of an Operating Unit in a national multicenter project (PRIN), funded by MIUR for the two-year period 2011-2013, in which he carried out the research entitled "Effects of a physical exercise program on circulating endothelial progenitor cells and on cerebral vasoreactivity in patients affected by CADASIL or idiopathic leukoaraiosis "

He was the scientific director of an industrial research project in the biochemical field (new methods of synthesis of phosphocreatine) on behalf of the company Alpha-Wassermann (2014-2015).

He was responsible for an industrial research project in the biochemical field (new creatine-derived drugs for the treatment of hereditary creatine transporter deficiency) on behalf of Lumos Pharma, Dallas, USA (2015-2016).

He has worked as an expert evaluator:

1990-present: Reviewer of scientific articles for several scientific journals, including Brain Research , Neuroscience , Neuroscience Letters , International Journal of Neuroscience , Molecular Genetics and Metabolism, Neurobiology of Disease, Neurological Sciences, Pharmacology Biochemistry and Behavior, PlosOne .

scientific research funding for the European Commission FP7 project (area "Health").

2012-2015: Consultant to the Italian Ministry of University to monitor the multicenter project "Cyber Brain" using EU funds for underdeveloped areas.

1995-present: Evaluator of scientific research grant proposals for several agencies, including the Alzheimer's Association, the Italian Ministry of University and Research, INTAS (International Association for the Promotion of Cooperation with Scientists from the New Independent States of the Former Soviet Union), the Serbian Government, Swiss National Science Foundation, Wellcome Trust (UK), and more.

As regards teaching activity, Prof. Balestrino began teaching in the years 1980-1983, carrying out practical exercises in neurological semiotics for the students of the Degree Course in Medicine.

During his stay at Duke University (1983-1986) he contributed to the teaching activity for the students of the School of Medicine of that University by conducting seminars within the mandatory course "Basic Neurophysiology " during the academic years 1984-85 and 1985-86.

Since his appointment as Researcher (1993) and then as Associate Professor (2019), Prof. Balestrino has carried out integrative teaching activities for the students of the Integrated Course of Diseases of the Nervous System of the Faculty of Medicine with practical exercises in Neurological Semiotics and with participation in exam sessions. In the academic year 1994-95, he held two lessons entitled "Pathophysiology of cerebral ischemic damage" for the students of the School of Specialization in Neurophysiology. Since his confirmation in tenure (1996), Prof. Balestrino has held various teaching positions at the University of Genoa, where he currently holds the following courses:

- NEUROLOGY (code 67493)
NEUROLOGY MASTER'S DEGREE COURSE (SINGLE CYCLE) - MEDICINE AND SURGERY
- NEUROLOGY (code 67597)
EMERGENCIES AND TRAUMATOLOGY MASTER'S DEGREE COURSE (SINGLE CYCLE) - MEDICINE AND SURGERY
- NEUROLOGY (PROPEDEUTIC) (code 68103)
APPLIED NEUROSCIENCES I DEGREE COURSE - PHYSIOTHERAPY
- NEUROLOGY (SYSTEMICAL) (code 68191)
APPLIED NEUROSCIENCES II DEGREE COURSE - PHYSIOTHERAPY
- ADULT CLINICAL NEUROPSYCHOLOGY (code 68126)
NEUROPSYCHOLOGY AND NEUROPSYCHOLOGICAL REHABILITATION DEGREE COURSE - PHYSIOTHERAPY
- NEUROPSYCHOLOGY I (code 65516)
APPLIED NEUROSCIENCES I DEGREE COURSE - SPEECH THERAPY

Since 2003, Prof. Balestrino has taught the following topics at the Cognitive-Behavioral Psychotherapy Course organized by the Miller Institute: "Neuropsychology", "Differential Psychodiagnosis", "Psychopharmacology". He has also participated in Examination Commissions for the aforementioned course.

He has been the supervisor of several experimental degree theses, carried out under his supervision, in the Degree Courses in Biological Sciences, Pharmacy, Chemistry and Pharmaceutical Techniques and Medicine and Surgery at the University of Genoa.

From the point of view of clinical activity, since he entered service as a Researcher at the Neurological Clinic of the University of Genoa (1993), Prof. Balestrino has regularly provided his care, first in the hospital wards, then (since 1996) at the Stroke Center. He has also provided his services at the Clinic's Outpatient Clinic, as a neurologist consultant at other Institutes, during regular shifts as a Neurologist Consultant at the Emergency Department of the S. Martino Hospital in Genoa, with which the University has an agreement. From 1989 to 2007, he provided his services as a Neurologist Consultant at INAIL in Savona. Since about 1990, he has regularly provided his services as a

neuropsychiatric consultant at the Courts of Genoa and Chiavari, and occasionally at other Courts.

He has participated as co-investigator in the following international clinical trials, concerning experimental therapies for the treatment and prevention of stroke:

- **ESTAT (European Stroke Treatment with Ancrod Trial)** Experimental therapy with Ancrod in acute stroke within 6 hours of onset, compared to placebo
- **MATCH (Management of ATherothrombosis with Clopidogrel in High-risk patients with recent TIA or ischemic stroke)** Antiplatelet therapy with acetylsalicylic acid alone or in addition to clopidogrel in the secondary prevention of ischemic stroke
- **PERFORM (Prevention of cerebrovascular and cardiovascular Events of ischemic origin with teRutroban in patients with a history of ischaemic strOke or tRansient ischaeMic attack)** Therapy with terutroban or acid acetylsalicylic acid in the prevention secondary of the stroke ischemic
- **SAINT II (Stroke Acute Ischemic NXY-059 Treatment)** Experimental therapy with NXY-059 (Cerovive) in acute stroke within 6 hours of onset, compared to placebo
- **SITS - MOST (Safe Implementation of Thrombolysis in Stroke-Monitoring Study)** Observational study on the efficacy and safety of thrombolytic therapy with Alteplase in ischemic stroke within 3 hours of onset
- **IST-3 (third International Stroke Trial)** Thrombolytic therapy with Alteplase or conventional therapy in ischemic stroke within 6 hours of onset
- **Synthesis -Expansion**, Intravenous or intra-arterial thrombolysis therapy in acute stroke within 3 hours of onset
- **FARM65KNKY** Intravenous thrombolysis therapy or conventional therapy in acute ischemic stroke within 3 hours in patients over 80 years of age
- **SITS-ISTR Safe Implementation of Thrombolysis in Stroke International Stroke Thrombolysis Register** Observational study on the efficacy and safety of thrombolytic therapy with Alteplase in ischemic stroke within 4.5 hours of onset

Prof. Balestrino works as a neurologist at the Policlinico San Martino in Genoa. In this context, Prof. Balestrino carries out specialist diagnostic and therapeutic work.

He is the author or co-author of over 100 scientific works published in print (source: Pubmed). His H-index is 27 (source: Scopus).

He also published:

BOOKS:

1. Balestrino M. (ed.) *Advances in the Preclinical Study of Ischemic Stroke* , Fiume:InTech , 2012.
2. Balestrino M. (ed.) *Advances in the treatment of ischemic stroke* , Fiume:InTech , 2012.

BOOK CHAPTERS WRITTEN BY INVITATION:

- 1 Somjen GG, Aitken PG., Balestrino M, Schiff S.: Uses and abuses of in vitro systems in the study of the pathophysiology of the central nervous system; in Schurr TT, (ed): Basel, Karger, 1987, pp 79-104.
- 2 Balestrino M., Somjen GG: Effects of CO₂ and interstitial pH changes on synaptic transmission in CA1 region of rat hippocampus in vitro.; in Schurr TT, (ed): Basel, Karger, 1987, pp 147-151.
- 3 Somjen GG, Schiff S., Aitken PG., Balestrino M: Forms of suppression of neuronal function: Leao's depression, hypoxia and hyperthermia.; in Chalazonitis N. GM, (ed): New York, Alan Liss, 1987, pp 137-145.
- 4 Balestrino M, Aitken PG., Jones LS, Somjen GG.: The role of spreading depression-like hypoxic depolarization in irreversible neuron damage, and its prevention.; in Somjen , (ed): New York, Plenum, 1988, pp 291-301.
- 5 Balestrino M.: Studies on anoxic depolarization.; in A. Schurr , B. M. Rigor , (eds): Brain Slices in Basic and Clinical Research. Boca Raton, Florida, CRC Press, 1995, pp 273-293.
- 6 Gandolfo C., Del Sette M, Balestrino M: Cerebrovascular diseases; in Loeb C., Favale E, (eds): Neurology by Fazio Loeb. Rome, Società Editrice Universo, 2003, pp 913-987.
- 7 Balestrino M, E. Adriano, and P. Garbati. Could Mannitol-Induced Delay of Anoxic Depolarization be Relevant in Stroke Patients? In: *Advances in the Preclinical Study of Ischemic Stroke* ., edited by Balestrino M, Fiume:InTech , 2012, p. 399-408.
- 8 Balestrino M, Dinia L, Del Sette M, Albano B, and Gandolfo C. Thrombolysis for Ischemic Stroke in Patients Aged 90 Years or Older. In: *Advances in the treatment of ischemic stroke* , edited by Balestrino M, Fiume:InTech , 2012, p. 163-168.
- 9 Balestrino M. The analysis of writing in the will. In: Bolognini N, Zago S (editors), *"The capacity to dispose by will. Legal framework and clinical evaluation "*, Hogrefe Editore, Florence, 2021.

INDUSTRIAL PATENTS:

1. Balestrino M, Burov SV, Lensman M, Polenov S., Yakutseni PP: Phosphocreatine complexes , Italian Patent Application TO2005A000847 of November 30, 2005.
2. Balestrino M, Burov SV, Lensman M, Polenov S., and Yakutseni PP. (WO2007063509) Phosphocreatine complexes . (WO/2007/063509), 2007. <http://www.wipo.int/patentscope/search/en/WO2007063509>
3. method to synthesize creatine derivatives . Anonymous . Anonymous. Italy:TO2012A001098, 2012. Patent application .

A handwritten signature in blue ink, appearing to read 'M. Balestrino', with a long horizontal flourish extending to the right.

Prof. M. Balestrino

Genoa, 16/06/2025