

Curriculum Vitae

Personal information **Svetlana Lorenzano**

Work experience

1. Employer: Department of Neurological Sciences, Sapienza University of Rome, Rome

- Start date: 122021
- End date: 122024
- Position: Researcher
- Activities: Research activities and responsibilities (acute stroke; acute recanalization/reperfusion treatments; heart and brain interactions; neuroimaging analysis; molecular biomarkers; translational research; precision medicine; identification of clinical, radiological, molecular predictors of outcome in stroke; neuroprotection and neurogenesis in stroke; stroke and cancer; secondary stroke prevention; stroke in pregnancy and puerperium; vascular aspects in neurodegenerative diseases); responsible and coordinator of research projects and clinical trials; participation to several national and international research projects; neuroimaging analysis, statistical data analysis and data interpretation on large databases including clinical, neuroimaging, and biomarker data); local, national, and international conference presentations (both oral and posters); writing of scientific articles and book chapters; writing of national and international clinical guidelines on strokes; peer-reviewer for international scientific journals; grant applications; mentoring of Medical School students, Neurology residents, PhD students.
- Country: Italy

2. Policlinico Umberto I Hospital, Sapienza University of Rome

- Start date: 022024
- End date: 122024
- Position: Neurologist
- Activities: Clinical activity as Neurologist of the Emergency Department Stroke Unit and Neurologist Consultant at the Emergency Department.
- Country: Italy

3. Employer: AIFA (Italian Medicines Agency)

- Start date: 092014
- End date: 122021(suspension - leave of absence)
- Position: Medical Director, Clinical Expert, Italian and European Clinical Assessor and Product Team Leader (PTL), Scientific

Advisor in the field of Neurology at the European Assessment Unit and Innovation and Pharmaceutical Strategy Unit, Italian Medicine Agency (AIFA, Agenzia Italiana del Farmaco). Position temporary suspended for the abovementioned awarded temporary position of Researcher at the Sapienza University.

- Activities: Clinical expert assessor for centralized procedures for authorizing medicinal products in the field of Neurology and Cardiovascular System (Co-/Rapporteurship and non-Co-/Rapporteurship) also for advanced therapies; Clinical expert assessor for supporting the Technical-Scientific Commission and HTA of the AIFA in evaluating the place in therapy for the national approval, price and reimbursement of medicinal products authorized via centralized procedures; Evaluation of Clinical Trials (phase II-IV) for EMA and AIFA; Participation/contribution to EMA activities: comments on CNS WP guidelines on neurological diseases; Collaboration as clinical assessor with the IT SAWP members on EMA Scientific Advices; participation to EMA Training webinars;
- Country: Italy

4. Employer: Boehringer Ingelheim (Medical Area)

- Start date: 082013
- End date: 072014
- Position: Expert Consultant on invitation
- Activities: Critical revision of literature data on oral anticoagulants
- Country: Italy

5. Employer: Emergency Department Stroke Unit (UTN, Unità di Trattamento Neurovascolare), Department of Neurological Sciences, Policlinico Umberto I Hospital, Sapienza University of Rome, Rome.

- Start date: 062006
- End date: 102009
- Position: Medical Director, Neurologist, Consultant Neurologist
- Activities: Clinical activity as Neurologist of the Emergency Department Stroke Unit and Neurologist Consultant at the Emergency Department.
- Country: Italy

6. Employer: Emergency Department Stroke Unit (UTN, Unità di Trattamento Neurovascolare), Department of Neurological Sciences, Policlinico Tor Vergata Hospital, Tor Vergata University, Rome.

- Start date: 062005
- End date: 062006
- Position: Medical Director, Neurologist, Consultant Neurologist
- Activities: Clinical activity as Neurologist of the Department Stroke Unit and Neurologist Consultant.
- Country: Italy

Education and training

1. Subject:

- Start date: 092015
- End date: 092018

- Qualification: Research position (Research assistant)
- Organisation: Department of Neurology and Psychiatry, Sapienza University of Rome, Rome
- Country: Italy
- Subjects/skills: Research topics: neurovascular diseases; stroke pathophysiology; clinical trials, acute stroke treatment (thrombolytic therapy in acute ischemic stroke; neuroprotection; intracerebral hemorrhage); heart and brain interaction; neuroimaging; molecular biomarkers; translational research; secondary prevention in ischemic stroke; neurovascular aspects (including molecular and neuroimaging markers) of neurodegenerative diseases such as Multiple Sclerosis; Clinical neurological activity within the research activities.

2. Subject:

- Start date: 112009
- End date: 102012
- Qualification: Post-doctoral Research Fellow
- Organisation: Harvard Medical School, Harvard University, and at the Massachusetts General Hospital, Boston, MA, USA. Funded by SPOTRIAS (Specialized Program of Translational Research in Acute Stroke) of the NIH/NINDS (National Institutes of Health and National Institutes of Neurological Disorders and Stroke).
- Country: USA
- Subjects/skills: Research activities and responsibilities (acute stroke; neuroimaging analysis; molecular biomarkers; translational research); mentoring of College/Medical School students, Instructor of Fellows on Imaging Methods for a clinical Trial on IV thrombolysis in acute ischemic stroke; participation to several national (USA) and international research projects; neuroimaging analysis, statistical data analysis on large databases including clinical, neuroimaging, and biomarker data); local (USA), national (USA), and international conference presentations (both oral and posters), writing of scientific articles and book chapters.

3. Subject:

- Start date: 012011
- End date: 102012
- Qualification: Affiliated Post-doctoral Research Fellow
- Organisation: Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Harvard University, Charlestown, MA
- Country: USA

4. Subject:

- Start date: 012011
- End date: 102012
- Qualification: fMRI (functional MRI) Visiting Fellowship
- Organisation: Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA
- Country: USA

5. Subject:

- Start date: 012010
- End date: 012011
- Qualification: Post-lauream (post-graduate) Scholarship for research
- Organisation: Department of Neurological Sciences, Policlinico Umberto I Hospital, University of Rome “La Sapienza”, Rome
- Country: Italy

6. Subject:

- Start date: 092006
- End date: 022009
- Qualification: Master in Science (M.Sc.) - European Master in Stoke Medicine with excellent success.
- Organisation: Danube University, Krems, Austria, organized by the European Stroke Organization (ESO).
- Country: Italy

7. Subject:

- Start date: 092008
- End date: 092008
- Qualification: Clinical and Research Observership
- Organisation: Stroke Unit and Neurointensive Care Unit, Department of Neurological Sciences, University of Heidelberg, Heidelberg.
- Country: Germany

8. Subject:

- Start date: 102008
- End date: 102008
- Qualification: Clinical and Research Observership
- Organisation: Stroke Unit, Division of Medical Sciences, John Radcliffe Hospital, University of Oxford, Oxford.
- Country: United Kingdom

9. Subject:

- Start date: 052005
- End date: 052008
- Qualification: PhD in Experimental and Clinical Neurosciences with honors
- Organisation: Department of Neurological Sciences, University of Rome “La Sapienza”, Rome
- Country: Italy

10. Subject

- Start date: 012000
- End date: 112004
- Qualification: Specialization in Neurology
- Organisation: University of Rome “La Sapienza”, Rome
- Country: Italy

11. Subject

- Start date: 011993
- End date: 111998
- Qualification: Graduation in Medicine and Surgery
- Organisation: University of Rome “La Sapienza”, Rome
- Country: Italy

Supplementary training: Dr. Lorenzano has gained an extensive supplementary training by attending post-graduate national and international courses held in several Academic Institutions on the following topics: Good Clinical Practice for clinical research; Research Methodology; Statistics; Applied Biostatistics for Clinical Trials; Epidemiology and Neuroepidemiology; Molecular Biomarkers; Genetics; Neuroimaging and Brain Connectivity (including acquisition of skills in softwares for volumetric and functional analyses of neuroimaging [in particular analysis of white matter hyperintensity, brain infarcts, perfusion deficits, cerebral microbleeds, spot-signs); Translational Research; Neurosonology; Clinical Neurophysiology; Neuropathophysiology.

Additional information

Publications

- Argentino C, Di Angelantonio E, Falcou A, Fiorelli M, Sacchetti ML, Toni D, Rasura M, Lorenzano S, Fieschi C. Stupor e coma all'esordio di un stroke cerebrale acuto: Risultati dal registro della Stroke Unit del Policlinico Universitario Umberto I di Roma (Stupor and coma at the onset of an acute stroke: results from the stroke unit register at Rome University teaching hospital). *Giornale di Neuropsicofarmacologia* 1999; 6:173-178. (Publisher: CIC Edizioni Internazionali s.r.l.).
- Fiorelli M, Bastianello S, von Kummer R, del Zoppo GJ, Larrue V, Lesaffre E, Ringleb AP, Lorenzano S, Manelfe C, Bozzao L, for the ECASS I Study Group. Hemorrhagic transformation within 36 hours of a cerebral infarct. Relationships with early clinical deterioration and 3-month outcome in the European Cooperative Acute Stroke Study I (ECASS I) cohort. *Stroke* 1999 Nov; 30(11):2280-2284. doi: 10.1161/01.str.30.11.2280. (Publisher: Lippincott Williams & Wilkins on behalf of the American Heart Association (United States)).
- Fiorelli M, Toni D, Bastianello S, Sacchetti ML, Sette G, Falcou A, Argentino C, Lorenzano S, Di Angelantonio E, Bozzao L. Computed tomography findings in the first few hours of a presumed ischemic stroke: implications for the clinician. *Journal of the Neurological Sciences* 2000 Feb 1; 173(1):10-17. doi: 10.1016/s0022-510x(99)00294-4. (Publisher: Elsevier).
- Gallo V, Sacchetti ML, Di Angelantonio E, Lorenzano S, Patella R, Guasticchi G. Development of multimedia case history database dedicated to acute cerebrovascular disease. (Titolo italiano: Elaborazione di una cartella clinica multimediale dedicata alla patologia cerebrovascolare acuta).. *Giornale di Neuropsicofarmacologia* 2000; 22(6):171-178. (Publisher: CIC Edizioni Internazionali s.r.l.).
- Bagnato F, Pietropaolo V, Di Taranto C, Lorenzano S, Toni D. Chronic lymphocytic leukemia complicated by progressive multifocal leukoencephalopathy without apparent immunodepression. *European Journal of Neurology* 2001 Jul; 8(4): 367-368. doi: 10.1046/j.1468-1331.2001.00230.x.. (Publisher: Wiley Online Library).

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- De Michele M, Lorenzano S, Di Angelantonio E, Corte F, Puca E, Biraschi F. Efficienza ed efficacia della gestione del paziente cerebrovascolare in UTN. (Efficiency and efficacy in the management of the cerebrovascular patient in a Neurovascular Treatment Unit). *International Journal of Cardiovascular Diseases* 2004; Vol XXI (Suppl. 1): 27-30.
- Pace F, Toni D, Di Angelantonio E, Lorenzano S, Argentino C. Spontaneous multiple cervical artery dissection: two case reports and a review of the literature. *The Journal of Emergency Medicine* 2004 Aug; 27(2):133-138. doi: 10.1016/j.jemermed.2004.03.010. (Publisher: Elsevier).
- Ricciardi A, Ruberto A, Cavallo A, Dassiè F, Travisi M, Ferrari M, Lorenzano S, Sacchetti ML, Rasura M, Fieschi C, Girardi P, Tatarelli R. Caratteristiche cliniche, criteri diagnostici e fattori di rischio nella depressione post-stroke (PSD). Preliminare di studio in aperto controllato per il trattamento della PSD con sertralina. (Clinical characteristics, diagnostic criteria and risk factors in post-stroke depression. Data collection for an open controlled study for the treatment of PSD with sertraline). *Psichiatria e Psicoterapia* 2004; 23 (1): 64-76. (Publisher: Giovanni Fioriti Editore).
- Di Angelantonio E, Fiorelli M, Toni D, Sacchetti ML, Lorenzano S, Falcou A, Ciarla, MV, Suppa M, Bonanni L, Bertazzoni G, Aguglia F, Argentino C. Prognostic significance of admission levels of troponin I in patients with acute ischaemic stroke. *J Neurology, Neurosurgery and Psychiatry* 2005 Jan; 76: 76-81. doi: 10.1136/jnnp.2004.041491. (Publisher: BMJ Group).
- Toni D, Lorenzano S, Sacchetti ML, Fiorelli M, De Michele M, Prencipe M. Specific therapies for ischemic stroke: rTPA and other. *Neurological Sciences* 2005 May; 26(Suppl. 1):S26-28. doi: 10.1007/s10072-005-0399-4. (Publisher: Springer).
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- Lorenzano S, Anzini A, De Michele M, Falcou A, Fausti S, Gori C, Mancini A, Cavalletti C, Colosimo C, Fiorelli M, Sacchetti ML, Argentino C, Toni D. Which model of stroke unit is better for stroke patient management. *Clinical and Experimental Hypertension* 2006 Apr-May; 28(3-4):377-382. doi: 10.1080/10641960600549728. (Publisher: Taylor & Francis).
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Discovery 2008; 5(3):209-213. (Publisher: Bentham Science).

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- Toni D, Lorenzano S. Intravenous thrombolysis with rt-PA in acute stroke patients aged ≥ 80 years. *International Journal of Stroke* 2009 Feb; 4(1):21-22. doi: 10.1111/j.1747-4949.2009.00242.x.. (Publisher: SAGE Publishing).
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- Diedler J, Ahmed N, Glahn J, Grond M, Lorenzano S, Brozman M, Sykora M, Ringleb P. Is the dose limit of 90 mg alteplase sufficient for patients with ischemic stroke weighing >100 kg? *Stroke* 2011 Jun; 42(6): 1615-1620. doi: 10.1161/STROKEAHA.110.603514. Epub 2011 Apr 14. (Publisher: Lippincott Williams & Wilkins on behalf of the American Heart Association (United States)).
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- Toni D, Ahmed N, Anzini A, Lorenzano S, Brozman M, Kaste M, Mikulik R, Putaala J, Wahlgren N. Intravenous thrombolysis in young stroke patients: Results from the SITS-ISTR. *Neurology* 2012 Mar; 78(12):880-887. doi: 10.1212/WNL.0b013e31824d966b. Epub 2012 Mar 7. (Publisher: Wolters Kluwer's).
- Lorenzano S, Ahmed N, Falcou A, Mikulik R, Tatlisumak T, Roffe C, Wahlgren N, Toni D; SITS Investigators. Does sex influence the response to intravenous thrombolysis in ischemic stroke? Answers from Safe Implementation of Treatments in Stroke - International Stroke Thrombolysis Register. *Stroke* 2013 Dec; 44(12):3401-3406. doi: 10.1161/STROKEAHA.113.002908. Epub 2013 Oct 30. (Publisher: Lippincott Williams & Wilkins on behalf of the American Heart Association (United States)).
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- Lorenzano S, Ahmed N, Tatlisumak T, Gomiz M, Dávalos A, Mikulik R, Sevcik P, Ollikainen J, Wahlgren N, Toni D; SITS Investigators. Within-day and weekly variations of thrombolysis in acute ischemic

stroke. Results from Safe Implementation of Treatments in Stroke – International Stroke Thrombolysis Register. *Stroke* 2014 Jan; 45(1):176-184. doi: 10.1161/STROKEAHA.113.002133. Epub 2013 Nov 21. (Publisher: Lippincott Williams & Wilkins on behalf of the American Heart Association (United States)).

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- Lorenzano S. Timing of thrombolysis for acute ischemic stroke: the earlier the treatment the better the outcome, irrespective of age or stroke severity. *Evidence-Based Medicine* 2015 Jun; 20(3):108. doi: 10.1136/ebmed-2014-110155. Epub 2015 Apr 8. (Publisher: BMJ Publishing Group).
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- Du R, Zhou J, Lorenzano S, Liu W, Charoenvimolphon N, Qian B, Wang J, Zhang X, Wang X, Berndt A, Devan WJ, Valant VJ, Wang J, Furie KL, Rosand J, Rost NS, Friedlander R, Paigen B, Weiss ST. Integrative mouse and human studies implicate ANGPT1 and ZBTB7C as susceptibility genes to ischemic injury. *Stroke* 2015 Dec; 46(12):3514-3522. doi: 10.1161/STROKEAHA.115.010767. Epub 2015 Nov 5. (Publisher: Lippincott Williams & Wilkins on behalf of the American Heart Association (United States)).
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- Toni D, Lorenzano S, Strano S.; SAFFO Trial Investigators Detection of Silent Atrial Fibrillation aFter ischemic StrOke (SAFFO) guided by implantable loop recorder. Multicentre Italian trial based on Stroke Unit network with paired Cardio-Arrhythmology Units (Italian Neurocardiology Unit Network). *International Journal of Stroke* 2016

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RE, Thankachan TK, Thornell B, Muzikansky A, Arai K, Som AT, Pham LD, Wu O, Harris GJ, Lo EH, Blumberg JB, Milbury PE, Feske SK, Furie KL. Early molecular oxidative stress biomarkers of ischemic penumbra in acute stroke. *Neurology*. 2019 Sep 24; 93(13):e1288-e1298. doi: 10.1212/WNL.00000000000008158. Epub 2019. (Publisher: Wolters Kluwer's).

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- Lorenzano S: Collaborazione nella scrittura di tre capitoli per il libro "VAS European Book on Angiology/Vascular Medicine – An Inte

national Expert Guide”: i) “Stroke, Transient Ischaemic Attack, and Minor Stroke”, per la sezione “Stroke Unit”; ii) “Secondary prevention after Ischaemic Stroke and Transient Ischaemic Attack” per la sezione “Arterial hypertension”; iii) “Secondary prevention after Ischaemic Stroke and Transient Ischaemic Attack” per la sezione “Sex and gender perspective”.

Oral and Poster presentations at international and national conferences
Dr. Lorenzano has authored 178 oral presentations and poster presentations at international and national conferences.

Projects Dr. Lorenzano has an extensive experience in clinical trials both as co-promoter, giving her contribution to obtain important funds for no-profit studies from National Governmental Agencies or from Pharmaceutical Industries, and as co-investigator/coordinator. She has been involved in several international clinical trials (on acute ischemic stroke; IV thrombolysis; primary intracerebral hemorrhage; molecular biomarkers; secondary stroke prevention; cerebrovascular diseases in pregnancy and puerperium; and projects funded by national or local funds on neurogenesis in stroke; cancer-related ischemic stroke.

Memberships Member and Fellow of professional scientific societies and groups
Dr. Lorenzano is member of several national/international scientific professional societies including ESO (European Stroke Organization), WSO (World Stroke rganization) where she has been also nominated Fellow; AAN (American Academy of Neurology), AHA/ASA (American Heart Association/American Stroke Assoociation), Italian neurological Society (SIN), Italian Stroke Association (ISA); Invitation to become a Member of the Royal Society of Medicine, UK.

Member of Editorial Boards, Guest Editors, Associate Editors of International peer-reviewed scientific journals

Member of the Editorial Board of Neurology (the Official Journal of the American Academy of Neurology) on invitation by the Editor-in-Chief for the high scientific quality of the thoughtful and critical reviews;
Member of the Editorial Board of ISRN (International Scholarly Research Network - Stroke) on Editor’s invitation; Invitation to become Member of Editorial Board for several international peer-reviewed scientific journals and books; Guest Associate Editor (on invitation) of Research Topics of Frontiers in Neurology; Associate Editor for Frontiers in Stroke on invitation.

Awards and Honors

Dr. Lorenzano has received international and national awards and honors for her scientific research activity.

Invitation to attend international conferences as speaker / lecturer

Dr. Lorenzano has received several invitations to attend international conferences as speaker / lecturer. Dr. Lorenzano has received several Invitations by Editors to write articles, editorials, commentaries, or reviews for international peer-reviewed journals or book chapters for international books.

Other Relevant Information International and National Research Collaborations

Harvard Medical School, Harvard University, Massachusetts General Hospital, Boston, MA, USA; Tufts University, Boston, MA, USA; Brown University, Providence, RI, USA; George Washington University, Washington DC, USA; Karolinska Institutet, Karolinska University, Stockholm, Sweden; Lund University, Sweden; Research collaborations with many other research insitution around the world for the SiPP (Stroke in Pregnancy/Postpartum) study and some of the most important stroke centers in Europe and in Italy and with the National Italian Institute of Health.

International and National Guidelines

Member (on invitation) of the Committee designated for the European Guidelines for Stroke in Women, as member of the European Stroke Organization (ESO) and the ESO WISE (Women Initiative for Stroke in Europe) working group; Italian Stroke Guidelines, ISO-SPREAD, Italian Stroke Organization - Stroke Prevention and Educational awareness Diffusion.

Reviewer for International peer-reviewed scientific journals

Since her Neurology Residency, Dr. Lorenzano serves as Reviewer (on invitation) for a number of international peer-reviewed scientific journals including New England Journal of Medicine; The Lancet; JAMA; JAMA Network Open; Neurology; Neurology Clinical Practice; Scientific Reports; Stroke; International Journal of Stroke; Cerebrovascular Diseases; Stroke: Vascular and Interventional Neurology; ISRN Stroke; European Journal of Neurology; European Neurology; European Journal of Neurology; European Journal; Neurological Sciences; Drugs & Aging; BMC Neurology; CNS Drugs; Frontiers in Neurology; Frontiers in Stroke; Journal of Neurology, Neuropsychiatry and Neurosurgery; Neurolog; Jurnal of the Neurological Sciences; Research International; Journal of Critical Care; Disability and Rehabilitation; Therapeutics and Clinical Risk Management; BMC Open; BMC Case Reports; BMJ Evidence Based Medicine; British Journal of Clinical Pharmacology; BMC Open; BMC Case Reports; BMJ Evidence Based Medicine; and many others.

Other activities as Reviewer

Reviewer of grant applications for the Stroke Association of the United Kingdom. Reviewer of abstracts submitted to international and natinal conferences: European Stroke Organization Conference (ESOC); American Academy of Neurology (AAN); American Heart Association (AHA) Scientific Sessions; European Academy of Neurology; World Stroke Organization; Italian Society of Neurology (SIN, Società Italiana di Neurologia).

Organization of national and international conferences and workshops European Stroke Organization Conferences (ESOCs), as member of the Conference Support Group and Scientific Advisory Committee, and workshops within the ESOC as member of the ESO-Young Stroke Physician Committee; 5° Italian Stroke Conference 2018.

Chair of Scientific Sessions of national and international conferences
European Stroke Organization Conferences (ESOCs); American
Academy of Neurology (AAN); Italian Stroke Conferences.

Teaching activity

Dr. Lorenzano has teaching experience including teaching on neurovascular diseases for Medical School students, Neurology residents, Master of Science students (Master of Science in Emergency Medicine, Sapienza University of Rome, Rome, Italy) physiotherapists (Physiotherapy Training School, Sapienza University of Rome); several lectures on invitation in international, national, and local conferences and courses. She taught imaging methods of MR WITNESS trial on IV thrombolysis in unwitness stroke (PI: Prof. L. Schwamm) to Massachusetts General Hospital/Harvard Medical School Research Fellows, and neurologists/radiologists involved in the trial.

Mentor / Tutor activity

Dr. Lorenzano has extensive experience as Mentor/Tutor by supervising Medical School students and interns, Neurology residents, Master School students, and Massachusetts General Hospital/Harvard Medical Schools Research Fellows. She has been the supervisor for the preparation of several theses for Medical School degree, Specialization in Neurology degree, and Master School degree.