

Dr. Eleonora Galosi

Neurologist, MD, PhD

Current institution: Sapienza University, Department of Human Neuroscience, Viale dell'Università 30, Rome (RM), 00185, Italy

CURRENT POSITION

May 2023 - present. Sapienza University. Post-Doc.

During my research career I have developed skills in the clinical and neurophysiological assessment of peripheral nervous system diseases and neuropathic pain conditions, by evaluating patients with painful polyneuropathies of diverse etiologies, including diabetic, auto immune, and hereditary neuropathies.

I have acquired a deep knowledge and long-standing expertise in the evaluation of intraepidermal and dermal innervation morphometry by skin biopsy in different neuropathic pain conditions. During the last 10 years I have developed robust skills in skin samples immunohistochemical processing and morphometric analysis by traditional and new emerging sensory nerve biomarkers.

I have acquired a considerable experience in the evaluation of somato-sensory and nociceptive system through diverse neurophysiological tools, like nerve conduction study, quantitative sensory testing, and laser evoked potentials.

April 2020 - present. Policlinico Casilino. Neurologist consultant.

Hospitalized neurological consultations for the different hospital departments and the Emergency Room.

Neurological consultations in the hospital's Outpatients Clinic.

Execution and reporting of neurophysiological diagnostic tests, i.e., nerve conduction studies, electromyography, electroencephalography (120 tests/month).

PREVIOUS POSITIONS

2015-2021. Neurology teacher for Italian Academy of Resident Physicians (AIMS) (20 hours/month).

2017-2019. Substitutions of Emergency Medical Service Consultants (3 months/year).

EDUCATION AND TRAINING

2019 – 2023. Sapienza University, Rome. PhD student in “Tecnologie innovative nelle malattie dello scheletro, della cute e del distretto oro-facciale” (Human Neuroscience curriculum).

18th of May 2023. Thesis: “Small fiber damage and neuropathic pain in peripheral neuropathies. New insights from amyloid, lupus, and diabetic polyneuropathy.” Rel: Prof. Andrea Truini

2014-2019. “La Sapienza, University of Rome”. Residency School in Neurology.

10th of December 2019. Final grade: 70 cum laude. Thesis: “Intraepidermal innervation and neuropathic pain. Learnings from comparison between diabetic neuropathy and transthyretin familial amyloid polyneuropathy”. Rel: Prof. Andrea Truini

2017. “Neuropathic Pain Center and Skin biopsy Lab of Aarhus University (Denmark)”. Internship.

2007-2013. “La Sapienza, University of Rome”. Medical School.

27th of July 2013. Final grade: 110 cum laude. Thesis master’s degree: “Breaking dogmas. Paroxysmal pain is mediated by non-nociceptive myelinated fibers”. Rel: Prof. Giorgio Cruccu

2009-2010. “Universitat de Barcelona, Hospital Clinic, Internal Medicine Department.” Erasmus Project.

Participation at courses:

- April 2019: Monographic course on electromyography and evoked potentials. Sorrento, Italy.
- March 2017: Danish Diabetes Academy Winter School.
- November 2015: Monographic course on small-fibre neuropathies. Telese Terme, BN, Italy.

RESEARCH ACTIVITY

Awards:

Efic-Grünenthal-Grant 2018. I’ve been awarded by the European Pain Federation (EFIC) with the Efic-Grünenthal-Grant 2018, with a project entitled “Disclosing pain mechanisms in diabetic neuropathy. A clinical and skin biopsy study with new emerging sensory biomarkers”.

Positions:

2021-present. Member of the Italian Study Group on Diabetic Neuropathy of the Italian Society of Diabetes.

H Index: 9

Citations: 350

Publications:

1: Di Stefano G, Falco P, Galosi E, De Stefano G, Di Pietro G, Leone C, Litewczuk D, Tramontana L, Strano S, Truini A. Pain associated with COVID-19 vaccination is unrelated to skin biopsy abnormalities. Pain Reports. 2023 Sep; 8(5):p e1089. doi: 10.1097/PR9.0000000000001089.

2: Leonardi L, Costanzo R, Forcina F, Morino S, Antonini G, Salvetti M, Luigetti M, Romano A, Primiano G, Guglielmino V, Fionda L, Garibaldi M, Lauletta A, Rossini E, Tufano L, Ceccanti M, Esposito N, Falco P, di Pietro G, Truini A, Galosi E. Quantitative sensory testing and skin biopsy findings in late-onset ATTRv presymptomatic carriers: Relationships with predicted time of disease onset (PADO). J Peripher Nerv Syst. 2023 Aug 3. doi: 10.1111/jns.12586. Epub ahead of print. PMID: 37535421.

- 3: Falco P, Galosi E, Di Stefano G, Leone C, Di Pietro G, Tramontana L, De Stefano G, Litewczuk D, Esposito N, Truini A. Autonomic small-fiber pathology in patients with fibromyalgia. *J Pain*. 2023 Jul 29;S1526-5900(23)00486-8. doi:10.1016/j.jpain.2023.07.020. Epub ahead of print. PMID: 37524221.
- 4: De Stefano G, Litewczuk D, Mollica C, Di Pietro G, Galosi E, Leone C, Falco P, Tullo MG, Caramia F, Truini A, Di Stefano G. Sex differences in trigeminal neuralgia: a focus on radiological and clinical characteristics. *Neurol Sci*. 2023 Jul 12. doi: 10.1007/s10072-023-06923-5. Epub ahead of print. PMID: 37436558.
- 5: Galosi E, Truini A. The diagnostic accuracy of the small fiber neuropathy symptoms inventory questionnaire (SFN-SIQ): Reply to letter to the Editor. *J Peripher Nerv Syst*. 2023 Jun;28(2):286. doi: 10.1111/jns.12535. Epub 2023 Feb 14. PMID: 36786220.
- 6: Di Stefano G, Falco P, Galosi E, Di Pietro G, Leone C, Truini A. A systematic review and meta-analysis of neuropathic pain associated with coronavirus disease 2019. *Eur J Pain*. 2023 Jan;27(1):44-53. doi: 10.1002/ejp.2055. Epub 2022 Nov 23. PMID: 36367322; PMCID: PMC9877974.
- 7: Leone C, Galosi E, Esposito N, Falco P, Fasolino A, Di Pietro G, Di Stefano G, Camerota F, Vollert J, Truini A. Small-fibre damage is associated with distinct sensory phenotypes in patients with fibromyalgia and small-fibre neuropathy. *Eur J Pain*. 2023 Jan;27(1):163-173. doi: 10.1002/ejp.2049. Epub 2022 Nov 12. PMID: 36314856.
- 8: Galosi E, Falco P, Di Pietro G, Leone C, Esposito N, De Stefano G, Di Stefano G, Truini A. The diagnostic accuracy of the small fiber neuropathy symptoms inventory questionnaire (SFN-SIQ) for identifying pure small fiber neuropathy. *J Peripher Nerv Syst*. 2022 Dec;27(4):283-290. doi: 10.1111/jns.12513. Epub 2022 Oct 5. PMID: 36175394; PMCID: PMC10092576.
- 9: Galosi E, Leonardi L, Falco P, Di Pietro G, Fasolino A, Esposito N, Leone C, Di Stefano G, Inghilleri M, Luigetti M, Giovanni A, Truini A. Functional and morphometric assessment of small-fibre damage in late-onset hereditary transthyretin amyloidosis with polyneuropathy: the controversial relation between small-fibre-related symptoms and diagnostic test findings. *Amyloid*. 2023 Mar;30(1):59-66. doi: 10.1080/13506129.2022.2120799. Epub 2022 Sep 12. PMID: 36094793.
- 10: De Stefano G, Leone C, Di Pietro G, Esposito N, Falco P, Galosi E, Litewczuk D, Mollica C, Truini A, Di Stefano G. Unravelling the role of unmyelinated nerve fibres in trigeminal neuralgia with concomitant continuous pain. *Clin Neurophysiol*. 2022 Oct;142:52-58. doi: 10.1016/j.clinph.2022.07.502. Epub 2022 Aug 5. PMID: 35970059.
- 11: Galosi E, Truini A, Di Stefano G. A Systematic Review and Meta-Analysis of the Prevalence of Small Fibre Impairment in Patients with Fibromyalgia. *Diagnostics (Basel)*. 2022 May 3;12(5):1135. doi: 10.3390/diagnostics12051135. PMID: 35626288; PMCID: PMC9139885.
- 12: Leonardi L, Di Pietro G, Di Pasquale A, Vanoli F, Fionda L, Garibaldi M, Galosi E, Alfieri G, Lauletta A, Morino S, Salvetti M, Truini A, Antonini G. High-resolution ultrasound of peripheral nerves in late-onset hereditary transthyretin amyloidosis with polyneuropathy: similarities and differences with CIDP. *Neurol Sci*. 2022 May;43(5):3387-3394. doi: 10.1007/s10072-021-05749-3. Epub 2021 Nov 21. PMID: 34802089.
- 13: Galosi E, Hu X, Michael N, Nyengaard JR, Truini A, Karlsson P. Redefining distal symmetrical polyneuropathy features in type 1 diabetes: a systematic review. *Acta Diabetol*. 2022 Jan;59(1):1-19. doi: 10.1007/s00592-021-01767-x. Epub 2021 Jul 2. PMID: 34213655; PMCID: PMC8758619.
- 14: Leonardi L, Galosi E, Vanoli F, Fasolino A, Di Pietro G, Luigetti M, Sabatelli M, Fionda L, Garibaldi M, Alfieri G, Lauletta A, Morino S, Salvetti M, Truini A, Antonini G. Skin biopsy and quantitative sensory assessment in an Italian cohort of ATTRv patients with polyneuropathy and asymptomatic carriers: possible

evidence of early non-length dependent denervation. *Neurol Sci.* 2022 Feb;43(2):1359-1364. doi: 10.1007/s10072-021-05434-5. Epub 2021 Jun 29. PMID: 34189665.

15: Galosi E, Di Pietro G, La Cesa S, Di Stefano G, Leone C, Fasolino A, Di Lionardo A, Leonetti F, Buzzetti R, Mollica C, Cruccu G, Truini A. Differential involvement of myelinated and unmyelinated nerve fibers in painful diabetic polyneuropathy. *Muscle Nerve.* 2021 Jan;63(1):68-74. doi: 10.1002/mus.27080. Epub 2020 Oct 31. PMID: 32996600.

16: Fasolino A, Di Stefano G, Leone C, Galosi E, Gioia C, Lucchino B, Terracciano A, Di Franco M, Cruccu G, Truini A. Small-fibre pathology has no impact on somatosensory system function in patients with fibromyalgia. *Pain.* 2020 Oct;161(10):2385-2393. doi: 10.1097/j.pain.0000000000001920. PMID: 32897040.

17: Di Stefano G, Di Lionardo A, La Cesa S, Di Pietro G, Fasolino A, Galosi E, Leone C, Cruccu G, Marinelli L, Leandri M, Truini A. The new micropatterned interdigitated electrode for selective assessment of the nociceptive system. *Eur J Pain.* 2020 May;24(5):956-966. doi: 10.1002/ejp.1545. Epub 2020 Feb 27. PMID: 32064700.

18: Di Stefano G, Di Lionardo A, Galosi E, Truini A, Cruccu G. Acetyl-L- carnitine in painful peripheral neuropathy: a systematic review. *J Pain Res.* 2019 Apr 26;12:1341-1351. doi: 10.2147/JPR.S190231. PMID: 31118753; PMCID: PMC6498091.

19: Leone C, Dufour A, Di Stefano G, Fasolino A, Di Lionardo A, La Cesa S, Galosi E, Valeriani M, Nolano M, Cruccu G, Truini A. Cooling the skin for assessing small-fibre function. *Pain.* 2019 Sep;160(9):1967-1975. doi: 10.1097/j.pain.0000000000001584. PMID: 30985621.

20: Galosi E, La Cesa S, Di Stefano G, Karlsson P, Fasolino A, Leone C, Biasiotta A, Cruccu G, Truini A. A pain in the skin. Regenerating nerve sprouts are distinctly associated with ongoing burning pain in patients with diabetes. *Eur J Pain.* 2018 Nov;22(10):1727-1734. doi: 10.1002/ejp.1259. Epub 2018 Jul 9. PMID: 29885017.

21: La Cesa S, Di Stefano G, Leone C, Pepe A, Galosi E, Alu F, Fasolino A, Cruccu G, Valeriani M, Truini A. Skin denervation does not alter cortical potentials to surface concentric electrode stimulation: A comparison with laser evoked potentials and contact heat evoked potentials. *Eur J Pain.* 2018 Jan;22(1):161-169. doi: 10.1002/ejp.1112. Epub 2017 Sep 12. PMID: 28898491.

22: Di Stefano G, La Cesa S, Leone C, Pepe A, Galosi E, Fiorelli M, Valeriani M, Lacerenza M, Pergolini M, Biasiotta A, Cruccu G, Truini A. Diagnostic accuracy of laser-evoked potentials in diabetic neuropathy. *Pain.* 2017 Jun;158(6):1100-1107. doi: 10.1097/j.pain.0000000000000889. PMID: 28267059.

23: Truini A, Biasiotta A, Di Stefano G, Leone C, La Cesa S, Galosi E, Piroso S, Pepe A, Giordano C, Cruccu G. Does the epidermal nerve fibre density measured by skin biopsy in patients with peripheral neuropathies correlate with neuropathic pain? *Pain.* 2014 Apr;155(4):828-832. doi: 10.1016/j.pain.2014.01.022. Epub 2014 Jan 31. PMID: 24486884.

Conference presentations as an invited speaker:

- *September 2023: Italian Association for Pain Study (AISD) Annual Symposium, Bari.* Workshop presentation: "Pathophysiology of peripheral nerve damage".
- *September 2023: European Pain federation (EFIC) international Congress, Budapest.* Plenary session presentation: "Disclosing pain mechanisms in painful diabetic neuropathy. A clinical, neurophysiological, and skin biopsy study with new emerging sensory biomarkers".
- *September 2023: NeuPsig Conference, Lisbon.* Hands-on Workshop presentation: "How to stain and analyze skin biopsies".
- *July 2023: European Academy of Neurology (EAN) Congress, Budapest.* Workshop presentation: "Electrodiagnostic and psychophysical techniques for the assessment of small fiber neuropathies".

- *May 2023: 3rd National SIMEGEN Conference, Rome.* Oral presentation: “Gender differences in neuropathic pain”.
- *September 2022: IASP (international Association for the Study of Pain) international Congress, Toronto.* Workshop presentation: “How to stain and analyze skin biopsy with traditional and unconventional biomarkers”.
- *May 2022: Neurocardiology Network National Congress, Rome.* Oral presentation: “POTS, fatigue, and small-fibre neuropathy”.
- *April 2022: European Pain federation (EFIC) international Congress, Dublin.* Workshop presentation: “Quantitative sensory testing and skin biopsy findings in patients with painful diabetic neuropathy”.
- *March 2022: Podcast Presentation for the Italian Society of Neurology (SIN), available on Spotify and Youtube.* Podcast presentation: “Neuropod: Beyond pain in diabetic neuropathy”.
- *November 2020: Advanced training course on “Redefining mechanical compressive neuropathies”, University of Torino, Online event.* Oral presentation: “Small-fibre damage in compressive neuropathies”.
- *September 2019: EFIC international Congress, Valencia.* Workshop presentation: “Light microscopy investigation of skin biopsies of healthy humans and patients suffering from painful neuropathies”.

Conference presentations:

- *October 2019: SIN 2019 Annual Symposium, Bologna.* Oral presentation: “Intraepidermal innervation and neuropathic pain. Learnings from comparison between diabetic neuropathy and transthyretin familial amyloid polyneuropathy”.
- *October 2017: SIN 2017 Annual Symposium, Naples.* Oral presentation: “A pain in the skin. Mechanisms of burning pain in diabetic neuropathy”.
- *October 2016: SIN 2016 Annual Symposium, Venice.* Oral presentation: “Diagnostic accuracy of laser evoked potentials in diabetic neuropathy.”
- *May 2016: Italian Association for Pain Study (AISD) Annual Symposium, Rome.* Oral presentation: “A practical guide to skin biopsy.”

LANGUAGES

English: fluent, excellent working knowledge

Spanish: fluent, excellent working knowledge

Italian: native speaker

Rome, 05/10/2023