

Curriculum vitae Luisa Muratori

Personal details

Born in: Italy

Nationality: Italian

Email: luisa.muratori@unito.it

Website:

ORCID ID: <https://orcid.org/0000-0002-4881-3313>; Scopus ID: 55110326100; Researcher ID: GES-2112-2022

Educations

13/04/2018 - **PhD in Experimental Medicine and Therapy 27th cycle.**

Thesis title: Study of neural plasticity and regeneration in sensory somatic and autonomic nervous system after peripheral nerve injury.

Institution: University of Turin

Supervisors: Prof. Stefano Geuna (Dept. of Clinical and Biological Sciences).

22/04/2010 - **Master's Degree in Neurobiology**

Thesis title: "Caratterizzazione di progenitori neurali responsabili di processi neurogenetici in gangli spinali di ratti adulti"

Institution: University of Turin

Supervisors: Prof. Isabelle Perroteau (Dep. of Clinical and Biological Sciences)

Grade: 108/110

Professional experiences and current position

2022-now Research assistant at the Department of Clinical and Biological Sciences, University of Turin.

2022-2021 Research Fellow at the Department of Clinical and Biological Sciences, University of Turin. Research topics: Clinical trials on chitosan-based nerve prostheses (Reaxon nerve guide) to repair nerve injuries". Tutor: Prof. Stefania RAIMONDO.

2021-2019 Research Fellow at the Department of Clinical and Biological Sciences, University of Turin. Research topics: Allografts of decellularized nerves for the treatment of peripheral nerve lesion. Tutor: Prof. Stefania RAIMONDO.

2019-2018 Research Fellow at the Department of Clinical and Biological Sciences, University of Turin. Research topics: Study of neuronal plasticity and regeneration of the autonomic and somatic nervous system after peripheral nerve injury". Tutor: Prof. Stefano Geuna.

Honors

2018-Research Fellow obtained from Franco and Marilisa Caligara Foundation. Research topic: decellularized nerves for the treatment of peripheral nerve injury"

Teaching activity:

2022-now. Teacher of the course Human Anatomy (6 CFU). Bachelor Degree in Medical Radiology, Imaging and Radiotherapy. University of Turin.

2019-2021. Teacher of the course Human Anatomy (8 CFU) Bachelor Degree in SUISM, University of Turin.

2018-2021 Teacher of the course Doping and Sport (4 CFU). Master's Degree in Advanced Sports Sciences and Techniques (LM-68). University of Turin.

2010-2021- Teacher Assistant in Human Anatomy Bachelor Degree in Nursing University of Turin

Bibliometry (2012-present) (www.scopus.com)

Luisa Muratori has published 23 papers in international journals indexed in ISI and a book chapter. The scientific publications have a total number of 322 citations and H-index equal to 10

10 best publications

Ronchi G, Fregnan F, **Muratori L**, Gambarotta G, Raimondo S. Morphological Methods to Evaluate Peripheral Nerve Fiber Regeneration: A Comprehensive Review. *Int J Mol Sci.* 2023 Jan 17;24(3):1818. doi: 10.3390/ijms24031818. PMID: 36768142; PMCID: PMC9915436.

Muratori L, Fregnan F, Maurina M, Haastert-Talini K, Ronchi G. The Potential Benefits of Dietary Polyphenols for Peripheral Nerve Regeneration. *Int J Mol Sci.* 2022 May 5;23(9):5177. doi: 10.3390/ijms23095177. PMID: 35563568; PMCID: PMC9102183.

Lavorato A, Raimondo S, Boido M, **Muratori L**, Durante G, Cofano F, Vincitorio F, Petrone S, Titolo P, Tartara F, Vercelli A, Garbossa D. Mesenchymal Stem Cell Treatment Perspectives in Peripheral Nerve Regeneration: Systematic Review. *Int J Mol Sci.* 2021 Jan 8;22(2):572. doi: 10.3390/ijms22020572. PMID: 33430035; PMCID: PMC7827385.

Fregnan F, **Muratori L**, Bassani GA, Crosio A, Biagiotti M, Vincoli V, Carta G, Pierimarchi P, Geuna S, Alessandrino A, Freddi G, Ronchi G. Preclinical Validation of SilkBridge™ for Peripheral Nerve Regeneration. *Front Bioeng Biotechnol.* 2020 Aug 7;8:835. doi: 10.3389/fbioe.2020.00835. PMID: 32850714; PMCID: PMC7426473.

Muratori L, Fregnan F, Ronchi G, Haastert-Talini K, Metzen J, Bertolo R, Porpiglia F, Geuna S. New basic insights on the potential of a chitosan-based medical device for improving functional recovery after radical prostatectomy. *BJU Int.* 2019 Dec;124(6):1063-1076. doi: 10.1111/bju.14834. Epub 2019 Jun 27. PMID: 31134718.

Muratori L, Gnani S, Fregnan F, Mancardi A, Raimondo S, Perroteau I, Geuna S. Evaluation of Vascular Endothelial Growth Factor (VEGF) and Its Family Member Expression After Peripheral Nerve Regeneration and Denervation. *Anat Rec (Hoboken).* 2018 Oct;301(10):1646-1656. doi: 10.1002/ar.23842. Epub 2018 May 16. PMID: 29710417.

Muratori L, Ronchi G, Raimondo S, Geuna S, Giacobini-Robecchi MG, Fornaro M. Generation of new neurons in dorsal root Ganglia in adult rats after peripheral nerve crush injury. *Neural Plast.* 2015;2015:860546. doi: 10.1155/2015/860546. Epub 2015 Feb 3. PMID: 25722894; PMCID: PMC4333329.

Cristallini C, Cibrario Rocchi E, Accomasso L, Folino A, Gallina C, **Muratori L**, Pagliaro P, Rastaldo R, Raimondo S, Saviozzi S, Sprio AE, Gagliardi M, Barbani N, Giachino C. The effect of bioartificial constructs that mimic myocardial structure and biomechanical properties on stem cell commitment towards cardiac lineage. *Biomaterials.* 2014 Jan;35(1):92-104. doi: 10.1016/j.biomaterials.2013.09.058. Epub 2013 Oct 4. PMID: 24099712.

Muratori L, Ronchi G, Raimondo S, Giacobini-Robecchi MG, Fornaro M, Geuna S. Can regenerated nerve fibers return to normal size? A long-term post-traumatic study of the rat median nerve crush injury model. *Microsurgery.* 2012 Jul;32(5):383-7. doi: 10.1002/micr.21969. Epub 2012 Mar 21. PMID: 22434492.

Fregnan F, **Muratori L**, Simões AR, Giacobini-Robecchi MG, Raimondo S. Role of inflammatory cytokines in peripheral nerve injury. *Neural Regen Res.* 2012 Oct 15;7(29):2259-66. doi: 10.3969/j.issn.1673-5374.2012.29.003. PMID: 25538747; PMCID: PMC4268726.

15 more relevant publication in the last 5 yrs (2018-2022)

Muratori L, Fregnan F, Maurina M, Haastert-Talini K, Ronchi G. The Potential Benefits of Dietary Polyphenols for Peripheral Nerve Regeneration. *Int J Mol Sci.* 2022 May 5;23(9):5177. doi: 10.3390/ijms23095177. PMID: 35563568; PMCID: PMC9102183.

Sureram S, Arduino I, Ueoka R, Rittà M, Francese R, Srivibool R, Darshana D, Piel J, Ruchirawat S, **Muratori L**, Lembo D, Kittakoop P, Donalisio M. The Peptide A-3302-B Isolated from a Marine Bacterium

Micromonospora sp. Inhibits HSV-2 Infection by Preventing the Viral Egress from Host Cells. *Int J Mol Sci*. 2022 Jan 15;23(2):947. doi: 10.3390/ijms23020947. PMID: 35055133; PMCID: PMC8778767.

Lavorato A, Raimondo S, Boido M, **Muratori L**, Durante G, Cofano F, Vincitorio F, Petrone S, Titolo P, Tartara F, Vercelli A, Garbossa D. Mesenchymal Stem Cell Treatment Perspectives in Peripheral Nerve Regeneration: Systematic Review. *Int J Mol Sci*. 2021 Jan 8;22(2):572. doi: 10.3390/ijms22020572. PMID: 33430035; PMCID: PMC7827385.

Geuna S, **Muratori L**, Fregnan F, Manfredi M, Bertolo R, Porpiglia F. Strategies to improve nerve regeneration after radical prostatectomy: a narrative review. *Minerva Urol Nefrol*. 2018 Dec;70(6):546-558. doi: 10.23736/S0393-2249.18.03157-0. Epub 2018 Jul 23. PMID: 30037210.

Ronchi G, Tos P, Angelino E, **Muratori L**, Reano S, Filigheddu N, Graziani A, Geuna S, Raimondo S. Effect of unacylated ghrelin on peripheral nerve regeneration. *Eur J Histochem*. 2021 Nov 4;65(s1):3287. doi: 10.4081/ejh.2021.3287. PMID: 34734521; PMCID: PMC8586818.

Fregnan F, **Muratori L**, Bassani GA, Crosio A, Biagiotti M, Vincoli V, Carta G, Pierimarchi P, Geuna S, Alessandrino A, Freddi G, Ronchi G. Preclinical Validation of SilkBridge™ for Peripheral Nerve Regeneration. *Front Bioeng Biotechnol*. 2020 Aug 7;8:835. doi: 10.3389/fbioe.2020.00835. PMID: 32850714; PMCID: PMC7426473.

Hoxha E, Balbo I, Parolisi R, Audano M, Montarolo F, Ravera F, Guglielmotto M, **Muratori L**, Raimondo S, DiGregorio E, Buffo A, Brusco A, Borroni B, Mitro N, Caruso D, Tempia F. Elov15 is required for proper action potential conduction along peripheral myelinated fibers. *Glia*. 2021 Oct;69(10):2419-2428. doi: 10.1002/glia.24048. Epub 2021 Jun 17. PMID: 34139039; PMCID: PMC8453547.

Carta G, Fornasari BE, Fregnan F, Ronchi G, De Zanet S, **Muratori L**, Nato G, Fogli M, Gambarotta G, Geuna S, Raimondo S. Neurodynamic Treatment Promotes Mechanical Pain Modulation in Sensory Neurons and Nerve Regeneration in Rats. *Biomedicines*. 2022 May 31;10(6):1296. doi: 10.3390/biomedicines10061296. PMID: 35740318; PMCID: PMC9220043.

Fornaro M, Giovannelli A, Foggetti A, **Muratori L**, Geuna S, Novajra G, Perroteau I. Role of neurotrophic factors in enhancing linear axonal growth of ganglionic sensory neurons in vitro. *Neural Regen Res*. 2020 Sep;15(9):1732-1739. doi: 10.4103/1673-5374.276338. PMID: 32209780; PMCID: PMC7437584.

Pinho AC, Vieira Branquinho M, Alvites RD, Fonseca AC, Caseiro AR, Santos Pedrosa S, Luís AL, Pires I, Prada J, **Muratori L**, Ronchi G, Geuna S, Santos JD, Maurício AC, Serra AC, Coelho JFJ. Dextran-based tube-guides for the regeneration of the rat sciatic nerve after neurotmesis injury. *Biomater Sci*. 2020 Feb 7;8(3):798-811. doi: 10.1039/c9bm00901a. Epub 2020 Jan 6. PMID: 31904045.

Carta G, Gambarotta G, Fornasari BE, **Muratori L**, El Soury M, Geuna S, Raimondo S, Fregnan F. The neurodynamic treatment induces biological changes in sensory and motor neurons in vitro. *Sci Rep*. 2021 Jun 24;11(1):13277. doi: 10.1038/s41598-021-92682-2. PMID: 34168249; PMCID: PMC8225768.

Mancini C, Hoxha E, Iommarini L, Brussino A, Richter U, Montarolo F, Cagnoli C, Parolisi R, Gondor Morosini DI, Nicolò V, Maltecca F, **Muratori L**, Ronchi G, Geuna S, Arnaboldi F, Donetti E, Giorgio E, Cavalieri S, Di Gregorio E, Pozzi E, Ferrero M, Riberi E, Casari G, Altruda F, Turco E, Gasparre G, Battersby BJ, Porcelli AM, Ferrero E, Brusco A, Tempia F. Mice harbouring a SCA28 patient mutation in AFG3L2 develop late-onset ataxia associated with enhanced mitochondrial proteotoxicity. *Neurobiol Dis*. 2019 Apr;124:14-28. doi: 10.1016/j.nbd.2018.10.018. Epub 2018 Oct 30. PMID: 30389403.

Muratori L, Fregnan F, Ronchi G, Haastert-Talini K, Metzen J, Bertolo R, Porpiglia F, Geuna S. New basic insights on the potential of a chitosan-based medical device for improving functional recovery after radical prostatectomy. *BJU Int*. 2019 Dec;124(6):1063-1076. doi: 10.1111/bju.14834. Epub 2019 Jun 27. PMID: 31134718.

Muratori L, Gnani S, Fregnan F, Mancardi A, Raimondo S, Perroteau I, Geuna S. Evaluation of Vascular Endothelial Growth Factor (VEGF) and Its Family Member Expression After Peripheral Nerve Regeneration and Denervation. *Anat Rec (Hoboken)*. 2018 Oct;301(10):1646-1656. doi: 10.1002/ar.23842. Epub 2018 May 16. PMID: 29710417.