

Stefania RAIMONDO

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Curriculum Vitae

PERSONAL

Surname: Raimondo
Name: Stefania
Date of birth: Torino, 25-02-1977



CURRENT POSITION

- Associate professor in Human Anatomy, Department of Clinical and Biological Sciences - University of Turin (IT).

PREVIOUS POSITION

- From December 2011 to November 2018: Assistant Professor in Human Anatomy, Department of Clinical and Biological Sciences - University of Turin (IT).

EDUCATION

- January 2008: PhD degree in Physiology at University of Turin (IT)
- July 2002: Master Degree in Biological Sciences at University of Turin (IT)

PROFESSIONAL EXPERIENCES

- 2015: Internship at IINS of the University of Bordeaux (FR) funded by the World Wide Style program – Outgoing mobility
- Jan 16th-19th 2012: attending to “BIOHYBRID in vitro training course” at the University of Hannover, Germany, organized by European Project FP7-BIOHYBRID.
- 2008- 2011: Post-doctoral fellowship recipient, Department of Clinical and Biological Sciences, University of Turin (IT)
- 2008: Internship at Blond McIndoe Laboratories, School of Medicine, University of Manchester (UK)
- November 2007-February 2008: Research Contract at the University of Turin (IT)
- 2000-2002: Internship at Cell Biology Laboratory and Human Anatomy Laboratory, University of Turin (IT)

TEACHING ACTIVITIES

- 2018-2019: Human Anatomy – Bachelor’s degree course in Psychiatric Rehabilitation Technicians, University of Turin (IT)
- 2017-2019: Human Anatomy – Master degree in Medicine and Surgery, University of Turin (IT)
- 2014-2019: Teacher of the Doctoral School in Life and Health Sciences, PhD programme in Experimental Medicine and Therapy, University of Turin (IT)
- 2012-2019: Human Anatomy – Bachelor’s degree course in Nursing, University of Turin (IT)

- 2012-2014: Human Anatomy – Bachelor’s degree course in Motor Sciences, University of Turin (IT)
- 2012-2014: Lecture in the Reconstructive Microsurgery Course, CTO University Hospital of Turin (IT).
- 2009-2011: Contract Professor of Human Anatomy - Bachelor’s degree course in Motor Sciences, University of Turin (IT).
- 2002-2011: Human Anatomy (Teaching Assistant) - Degree course in Medicine and Surgery, Nursing School and Medical Radiology Techniques for Imaging and Radiotherapy, University of Turin (IT).

COMMISSIONS OF TRUST

- 2018 Guest Associate Editor in *Frontiers in Cellular Neuroscience*
- 2017 to date: Erasmus Coordinator at the Department of Clinical and Biological Sciences, University of Turin (IT)
- 2011- 2015: coordination board member of the project “Biohybrid templates for peripheral nerve regeneration” of EU-FP7-Health-2011 (GA no. 278612).
- 2009 and 2014: organization committee member of the International Symposium on Peripheral Nerve Regeneration
- Reviewer for Scientific International Journal (*Frontiers*, *Acta Biomaterialia*, *Biomaterials*, *International Review of Neurobiology*, *BioMed Research International*, *Anatomical Records*, *Cell Transplantation*, *Pain Research and Management*, *Journal of Microscopy and Ultrastructure*)

INVITED SPEAKER

- IBRO-APRC School on Neural plasticity in health and disease, Department of Physiology, All India Institute of Medical Sciences, Ansari Nagar, New Delhi. October 21th – November 4th 2018. Communication entitled: "Stereological analysis of peripheral nerves".
- 5th Seminar for Young Researchers in SAKURA Science 2018 “Establish of Sustainable Network in Biomedical Field and Encouragement of Future Women Leader” at Kyushu Institute of Technology, Kitakyushu, Japan, July 1st-7th 2018. Communication entitled: “Tubulization techniques for peripheral nerve repair”.
- 2nd International NeuronLine Conference *Frontiers in Neuroscience Teaching & Research*, Torino, November 24th 2017. Communication entitled: “Peripheral nerve injury, repair and re generation”.
- NIS COLLOQUIUM – The interaction between nano-objects and neurons: from biophysic to nanomedicine, Torino, Sala dei mappamondi, Accademia delle Scienze di Torino, November 30th 2015. Communication entitled: “Nanotechnology applied to peripheral nerve re generation”.
- 7th FENS (Forum of European Neuroscience), Amsterdam, July 2010 communication entitled: “Tissue engineering of peripheral nerves”. Authors: Raimondo S, Tos P, Fornaro M, Gambarotta G, Perroteau I, Giacobini-Robecchi MG, Battiston B, Geuna S.

GRANTS RECEIVED AS PRINCIPAL INVESTIGATOR

- 2017-2019: recipient of a research grant for the national project entitled “Raccolta e preparazione di nervi periferici umani per la creazione di una banca del nervo” funded by CRT (Fondazione Cassa di Risparmio di Torino).
- 2015-2017: recipient of a research grant for the national project entitled “Moving Again: Integrated Therapies to Cure Post-Traumatic Paralysis” funded by “Compagnia di San Paolo - Bando per il finanziamento di Progetti di Ricerca di Ateneo/CSP 2014”.

- 2015: grant in the “World Wide Style program – outgoing mobility” for a project in collaboration with the University of Bordeaux (FR) to study miRNA regulation during peripheral nerve regeneration.
- Every year from 2012 to 2018: University research local founding (ex 60%) for the study of peripheral nerve regeneration.
- 2009: recipient of a research grant from the Regione Piemonte (Ricerca Sanitaria Finalizzata) for a pre-clinical study of peripheral nerve regeneration after nerve repair with chitosan membrane and CD34+ stem cells.
- 2008-2009: recipient of a research grant from British Council (Programma Collaborazione Italo-Britannica per giovani ricercatori) for the investigation of peripheral nerve regeneration using an in vitro model of co-culture with adult stem cells and neurons. Collaboration with University of Manchester (UK).
- 2008: recipient of a research grant from the Regione Piemonte (Ricerca Sanitaria Finalizzata) for the investigation of peripheral nerve regeneration after gene therapy and tissue engineering.

TRAVEL GRANTS

- 2011: Individual grant for young researchers to attend the IBRO World congress, Firenze. Italy
- 2007: Individual grant for young researchers to attend the IBRO World congress, Melbourne, Australia
- 2006: Individual grant for young researchers to attend the FENS Forum, Vienna, Austria

SUPERVISION OF UNDERGRADUATE STUDENTS, PhD STUDENTS AND POSTDOCTORAL FELLOWS

- 2018-2019: Scientific responsible of a postdoctoral fellowship in the project entitled “Raccolta e preparazione di nervi periferici umani per la creazione di una banca del nervo” funded by Fondazione CRT
- 2015-2017: Scientific responsible of a postdoctoral fellowship in the project entitled “Moving Again: Integrated Therapies to Cure Post-Traumatic Paralysis” funded by “Compagnia di San Paolo - Bando per il finanziamento di Progetti di Ricerca di Ateneo/CSP 2014”
- From 2014: Member of the Council for PhD course in the Doctoral School in Life and Health Sciences, PhD Programme in Experimental Medicine and Therapy
- From 2014: tutor of PhD students in the Doctoral School in Life and Health Sciences, PhD Programme in Experimental Medicine and Therapy
- From 2011: thesis supervisor of undergraduate students of the University of Turin (SUISM and School of Biotechnology)

MAJOR COLLABORATIONS

Over my research carrier I had the opportunity to meet many colleagues from Italy and from abroad that allowed me to build up several collaborations that are the basis for my research network. My main collaborations are:

National collaborations:

- Dott. Chiara Vitale-Brovarone, Polytechnic of Turin, we are working together on glass fibers as potential material to guide regrowing peripheral axons after nerve repairs.
- Dott. Marco Cecchini, NEST, CNR Nanosciences Istitut of Pisa, we started a collaboration to study how nanostructured surfaces with topographical features can influence cell behavior.
- Dott. Pierluigi Tos, Unità Operativa Dipartimentale di Microchirurgia, CTO University Hospital of Turin, long-term collaboration started more than 10 years ago and he steadily keeps me up to date on surgical needs stimulating my research.

International collaborations:

- Dott. Ana Colette Maurício, Porto University, Porto, Portugal, we met during different

conferences and we began a collaboration some years ago; together, we work on different type of tubulization to improve peripheral nerve regeneration.

- Dott. Kirsten Haastert-Talini, Hannover Medical School, Germany, together with me, she is a member of the coordination board of the European project EU-FP7- Health – 2011. We therefore started to collaborate in 2011 on different aspects of the peripheral nerve regenerative process.
- Dott. Paulo Armada-da-Silva, Universidade Técnica de Lisboa, Portugal, we are together developing a protocol to evaluate the efficacy of physical exercise on nerve regeneration.
- Dott. Mehmet Emin Önger, Department of Histology and Embryology, Medical School of Ondokuz Mayıs University, Samsun, Turkey, attended my lab for some months to perform different experiments and we shared our knowledge about stereology.
- Dott. Artur Varejão, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal, we met some years ago and we are still collaborating to develop new therapies to treat spinal cord injuries.

MAIN RESEARCH FIELD

Since the beginning of my research career, my scientific activity has been mainly based on the study of peripheral nerve regeneration in different experimental models, such as crush injury, and microsurgical reconstruction by means of biologic and synthetic scaffolds. Over these years, I have acquired experience in various investigation techniques and protocols including behavioural tests for functional assessment (grasping test) on mouse and rat animal models, various morphological techniques (immunohistochemistry, confocal and transmission electron microscopy), quantitative morphology and stereological methods, and biomolecular techniques (RT-PCR, Western blot).

In addition, in order to improve neural repair using cellular transplantation together with tubular reconstruction, my research has also focused on the study of different types of stem cells that could be employed, in particular bone marrow-derived and adipose tissue-derived stem cells.

Moreover, I recently focused my research also on strategies to recover muscle atrophy that occurs after long period of denervation, in order to allow a better functional recovery after trauma.

LIST OF PUBLICATIONS

Papers published on journal with Impact Factor

1. Geuna S, Raimondo S, Nicolino S, Boux E, Fornaro M, Tos P, Battiston B, Perroteau I. Schwann cell proliferation inside muscle-vein-combined conduits used to bridge rat sciatic nerve defects. *Journal of Reconstructive Microsurgery*, 2003; 19:119-123.
2. Nicolino S, Raimondo S, Tos P, Battiston B, Fornaro M, Geuna S, Perroteau I. Expression of alpha2a-2b neuregulin-1 is associated with early peripheral nerve repair along muscle-enriched tubes. *Neuroreport*, 2003; 14:1541-1545.
3. Varejão ASP, Cabrita AM, Meek MF, Bulas-Cruz J, Melo-Pinto P, Raimondo S, Geuna S, Giacobini-Robecchi MG. Functional and morphological assessment of standardized rat sciatic nerve crush injury with a non-serrated clamp. *Journal of Neurotrauma*, 2004; 21:1652-1670.
4. Raimondo S, Nicolino S, Tos P, Battiston B, Giacobini-Robecchi MG, Perroteau I, Geuna S. Schwann Cell Behaviour After Nerve Repair by means of Tissue-Engineered Muscle-Vein Combined Guides. *Journal of Comparative Neurology*, 2005; 489:249-259.
5. Penna C, Cappello S, Mancardi D, Raimondo S, Rastaldo R, Gattullo D, Losano G, Pagliaro P. Post-Conditioning Reduces Infarct Size in the Isolated Rat Heart: Role of Coronary Flow and Pressure and Nitric Oxide/cGMP Pathway. *Basic Research in Cardiology*, 2006; 101:168-179.
6. Penna C, Rastaldo R, Mancardi D, Raimondo S, Cappello S, Gattullo D, Losano G, Pagliaro P. Post-Conditioning induced cardioprotection requires signaling through a redox-sensitive mechanism, mitochondrial ATP-sensitive K⁺ channel and protein kinase C activation. *Basic Research in Cardiology*, 2006; 101:180-189.

7. Raimondo S*, Penna C*, Pagliaro P, Geuna S. Morphological Characterization of GFP-stably-transfected Adult Mesenchymal Bone Marrow Stem Cells. *Journal of Anatomy*, 2006; 208:3-12.
8. Papalia I, Tos P, Scevola A, Raimondo S, Geuna S. The ulnar test: A method for the quantitative functional assessment of posttraumatic ulnar nerve recovery in the rat. *Journal of Neuroscience Methods*, 2006; 154:198-203.
9. Savoia D, Scutera S, Raimondo S, Conti S, Magliani W, Polonelli L. Activity of an engineered synthetic killer peptide on *Leishmania major* and *Leishmania infantum* promastigotes. *Experimental Parasitology*, 2006; 113:186-192.
10. Tos P, Battiston B, Nicolino S, Raimondo S, Fornaro M, Lee JM, Chirila L, Geuna S, Perroteau I. Comparison of fresh and pre-degenerated muscle-vein-combined guides for the repair of rat median nerve. *Microsurgery*, 2007; 27:48-55.
11. Manasseri B, Raimondo S, Geuna S, Risitano G, D'alcontres FS. Ulnar nerve repair by end-to-side neurorrhaphy on the median nerve with interposition of a vein: An experimental study. *Microsurgery*, 2007; 27:27-31.
12. Geuna S, Nicolino S, Raimondo S, Gambarotta G, Battiston B, Tos P, Perroteau I. Nerve regeneration along bioengineered scaffolds. *Microsurgery*. 2007; 27: 429-438.
13. Lee JM, Tos P, Raimondo S, Fornaro M, Papalia I, Geuna S, Giacobini-Robecchi MG. Lack of topographic specificity in nerve fiber regeneration of rat forelimb mixed nerves. *Neuroscience*, 2007; 144:985-990.
14. Luis AL, Rodrigues JM, Lobato JV, Lopes MA, Amado S, Veloso AP, Armada-da-Silva PA, Raimondo S, Geuna S, Ferreira AJ, Varejao AS, Santos JD, Mauricio AC. Evaluation of two biodegradable nerve guides for the reconstruction of the rat sciatic nerve. *Biomed Mater Eng*, 2007; 17:39-52.
15. Luis AL, Rodrigues JM, Amado S, Veloso AP, Armada-Da-Silva PA, Raimondo S, Fregnan F, Ferreira AJ, Lopes MA, Santos JD, Geuna S, Varejao AS, Mauricio AC. PLGA 90/10 and caprolactone biodegradable nerve guides for the reconstruction of the rat sciatic nerve. *Microsurgery*, 2007; 27: 125-137.
16. Luis AL, Amado S, Geuna S, Rodrigues JM, Simoes MJ, Santos JD, Fregnan F, Raimondo S, Veloso AP, Ferreira AJ, Armada-da-Silva PA, Varejao AS, Mauricio AC. Long-term functional and morphological assessment of a standardized rat sciatic nerve crush injury with a non-serrated clamp. *Journal of Neuroscience Methods*, 2007; 163: 92-104.
17. Fornaro M, Raimondo S, Lee JM, Giacobini-Robecchi MG. Neuron-specific Hu protein sub-cellular localization in primary sensory neurons. *Annals of Anatomy*, 2007; 189: 223-228.
18. Penna C*, Raimondo S*, Ronchi G, Rastaldo R, Mancardi D, Cappello S, Losano G, Geuna S, Pagliaro P. Early Homing of Adult Mesenchymal Stem Cells in Normal and Infarcted Isolated Beating Hearts. *Journal of Cellular and Molecular Medicine*, 2008; 12: 507-521.
19. Penna C, Mancardi D, Raimondo S, Geuna S, Pagliaro P. The paradigm of postconditioning to protect the heart. *Journal of Cellular and Molecular Medicine*, 2008; 12: 435-458.
20. Tos P, Ronchi G, Nicolino S, Audisio C, Raimondo S, Fornaro M, Battiston B, Graziani A, Perroteau I, Geuna S. Employment of the mouse median nerve model for the experimental assessment of peripheral nerve regeneration. *Journal of Neuroscience Methods*, 2008; 169: 119-27.
21. Di Scipio F*, Raimondo S*, Tos P, Geuna S. A simple protocol for myelin sheath staining with osmium tetroxide for light microscope observation. *Microscopy Research and Technique*, 2008; 71: 497-502.
22. Fornaro M, Lee JM, Raimondo S, Nicolino S, Geuna S, Giacobini-Robecchi MG. Neuronal intermediate filament expression in rat dorsal root ganglia sensory neurons: an in vivo and in vitro study. *Neuroscience*, 2008; 153: 1153-1163.
23. Amado S, Simões MJ, Armada da Silva PAS, Luís AL, Shirosaki Y, Lopes MA, Santos JD, Fregnan F, Gambarotta G, Raimondo S, Fornaro M, Veloso AP, Varejão ASP, Maurício AC,

- Geuna S. Use of hybrid chitosan membranes and N1E-115 cells for promoting nerve regeneration in an axonotmesis rat model. *Biomaterials*, 2008; 29: 4409-4419.
24. Pasquinelli G, Orrico C, Foroni L, Bonafè F, Carboni M, Guarnieri C, Raimondo S, Penna C, Geuna S, Pagliaro P, Freyrie A, Stella A, Caldarera CM, Muscari C. Mesenchymal stem cell interaction with a non-woven hyaluronan-based scaffold suitable for tissue repair. *J Anatomy*, 2008, 213: 520-30.
 25. Penna C, Tullio F, Merlino A, Moro F, Raimondo S, Rastaldo R, Perrelli MG, Mancardi D, Pagliaro P. Postconditioning cardioprotection against infarct size and post-ischemic systolic dysfunction is influenced by gender. *Basic Research In Cardiology*, 2009; 104: 390-402.
 26. Piskin A, Kaplan S, Aktaş A, Ayyildiz M, Raimondo S, Aliç T, Bozkurt HH, Geuna S. Platelet gel does not improve peripheral nerve regeneration: An electrophysiological, stereological, and electron microscopic study. *Microsurgery*, 2009; 29: 144-153.
 27. Ronchi G, Nicolino S, Raimondo S, Tos P, Battiston B, Papalia I, Varejão A, Giacobini-Robecchi MG, Perroteau I, Geuna S. Functional and morphological assessment of a standardized crush injury of the rat median nerve. *Journal of Neuroscience Methods*, 2009, 179: 51-57.
 28. Nicolino S, Panetto A, Raimondo S, Gambarotta G, Guzzini M, Fornaro M, Battiston B, Tos P, Geuna S, Perroteau I. Denervation and reinnervation of adult skeletal muscle modulate mRNA expression of Neuregulin-1 and ErbB receptors. *Microsurgery*, 2009; 29: 464-472.
 29. Penna C, Perrelli MG, Raimondo S, Tullio F, Merlino A, Moro F, Geuna S, Mancardi D, Pagliaro P. Postconditioning induces an anti-apoptotic effect and preserves mitochondrial integrity in isolated rat hearts. *Biochimica et biophysica acta-bioenergetics*, 2009; 1787: 794-801.
 30. Aragno M, Meineri G, Vercellinato I, Bardini P, Raimondo S, Peiretti PG, Vercelli A, Alloatti G, Tomasinelli CE, Danni O, Boccuzzi G. Cardiac impairment in rabbits fed a high-fat diet is counteracted by dehydroepiandrosterone supplementation. *Life Sciences*, 2009; 85: 77-84.
 31. Geuna S, Raimondo S, Ronchi G, Di Scipio F, Tos P, Czaja K, Fornaro M. Histology of the peripheral nerve and changes occurring during nerve regeneration. *Int Rev Neurobiol*, 2009; 87: 27-46.
 32. Raimondo S, Fornaro M, Di Scipio F, Ronchi G, Giacobini-Robecchi MG, Geuna S. Methods and protocols in peripheral nerve regeneration experimental research: part II-morphological techniques. *Int Rev Neurobiol*. 2009; 87: 81-103.
 33. Battiston B, Raimondo S, Tos P, Gaidano V, Audisio C, Scevola A, Perroteau I, Geuna S. Tissue engineering of peripheral nerves. *Int Rev Neurobiol*, 2009; 87: 227-249.
 34. Audisio C*, Raimondo S*, Nicolino S, Gambarotta G, Di Scipio F, Macrì L, Montarolo F, Giacobini-Robecchi MG, Porporato P, Filigheddu N, Graziani A, Geuna S, Perroteau I. Morphological and biomolecular characterization of the neonatal olfactory bulb ensheathing cell line. *Journal of Neuroscience Methods*, 2009; 185: 89-98.
 35. Ronchi G, Raimondo S, Varejão AS, Tos P, Perroteau I, Geuna S. Standardized crush injury of the mouse median nerve. *J Neurosci Methods*. 2010; 188: 71-75.
 36. Amado S, Rodrigues JM, Luís AL, Armada-da-Silva PA, Vieira M, Gartner A, Simões MJ, Veloso AP, Fornaro M, Raimondo S, Varejão AS, Geuna S, Maurício AC. Effects of collagen membranes enriched with in vitro-differentiated N1E-115 cells on rat sciatic nerve regeneration after end-to-end repair. *J Neuroeng Rehabil*. 2010; 7:7.
 37. Sinis N, Manoli T, Schiefer JL, Werdin F, Jaminet P, Kraus A, Fornaro M, Raimondo S, Geuna S, Schaller HE. Application of 2 different hemostatic procedures during microsurgical median nerve reconstruction in the rat does not hinder axonal regeneration. *Neurosurgery*. 2011; 68:1399-1403.

38. Raimondo S, Fornaro M, Tos P, Battiston B, Giacobini-Robecchi MG, Geuna S. Perspectives in regeneration and tissue engineering of peripheral nerves. *Ann Anat.* 2011; 193:334-40.
39. Tonda-Turo C, Audisio C, Gnani S, Chiono V, Gentile P, Raimondo S, Geuna S, Perroteau I, Ciardelli G. Porous poly(μ -caprolactone) nerve guide filled with porous gelatin matrix for nerve tissue engineering. *Advanced Engineering Materials.* 2011; 13: 151- 164.
40. Vitale-Brovarone C, Novajra G, Lousteau J, Milanese D, Raimondo S, Fornaro M. Phosphate glass fibres and their role in neuronal polarization and axonal growth direction. *Acta Biomater.* 2012; 8:1125-36.
41. Lanza C, Raimondo S, Vergani L, Catena N, Sénès F, Tos P, Geuna S. Expression of antioxidant molecules after peripheral nerve injury and regeneration. *J Neurosci Res.* 2012; 90(4):842-8.
42. Gärtner, A, Pereira, T, Simões, M.J, Armada-da-Silva, P.A.S, França, M.L, Sousa, R, Bompasso, S, Raimondo, S, Shirotsaki, Y, Nakamura, Y, Hayakawa, S, Osakah, A, Porto, B, Luís, A.L, Varejão, A.S.P, Maurício, A.C Use of hybrid chitosan membranes and human mesenchymal stem cells from the Wharton jelly of umbilical cord for promoting nerve regeneration in an axonotmesis rat model. *Neuronal Regeneration Research.* 2012
43. Raimondo S, Maltez L, Pereira JE, Koopmans G, Varejao A, Geuna S. Stereology of posttraumatic spinal cord injury. *NeuroQuantology* 2012
44. Audisio C, Mantovani C, Raimondo S, Geuna S, Perroteau I, Terenghi G. Neuregulin1 administration increases axonal elongation in dissociated primary sensory neuron cultures. *Exp Cell Res.* 2012 Mar 10;318(5):570-7.
45. 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.
46. Sprio AE, Di Scipio F, Raimondo S, Salamone P, Pagliari F, Pagliari S, Folino A, Forte G, Geuna S, Di Nardo P, Berta GN. Self-renewal and multipotency coexist in a long-term cultured adult rat dental pulp stem cell line: an exception to the rule? *Stem Cells Dev.* 2012 Dec 10;21(18):3278-88.
47. Mantovani C, Raimondo S, Haneef MS, Geuna S, Terenghi G, Shawcross SG, Wiberg M. Morphological, molecular and functional differences of adult bone marrow- and adipose-derived stem cells isolated from rats of different ages. *Exp Cell Res.* 2012 Oct 1;318(16):2034-48.
48. Accomasso L, Cibrario Rocchietti E, Raimondo S, Catalano F, Alberto G, Giannitti A, Minieri V, Turinetto V, Orlando L, Saviozzi S, Caputo G, Geuna S, Martra G, Giachino C. Fluorescent silica nanoparticles improve optical imaging of stem cells allowing direct discrimination between live and early-stage apoptotic cells. *Small.* 2012 Oct 22;8(20):3192-200.
49. Fregnan F, Muratori L, Rodriguez Simões A, Giacobini-Robecchi MG, Raimondo S. Role of inflammatory cytokines in peripheral nerve injury. *Neural Regeneration Research.* 2012; 7: 2259- 2266.
50. Geuna S, Raimondo S, Fornaro M, Robecchi MG. Morpho-Quantitative Stereological Analysis of Peripheral and Optic Nerve Fibers. *Neuroquantology.* 2012, 10: 76-86.
51. Molinari E, Mirabelli M, Raimondo S, Brussino A, Gennarelli G, Bongioanni F, Revelli A. Sperm macrocephaly syndrome in a patient without AURKC mutations and with a history of recurrent miscarriage. *Reprod Biomed Online.* 2013 Feb;26(2):148-56.
52. Papalia I, Raimondo S, Ronchi G, Magaudda L, Giacobini-Robecchi MG, Geuna S. Repairing nerve gaps by vein conduits filled with lipoaspirate-derived entire adipose tissue hinders nerve regeneration. *Ann Anat.* 2013;195(3):225-30
53. Costa LM, Pereira JE, Filipe VM, Magalhães LG, Couto PA, Gonzalo-Orden JM, Raimondo S, Geuna S, Maurício AC, Nikulina E, Filbin MT, Varejão AS. Rolipram promotes

- functional recovery after contusive thoracic spinal cord injury in rats. *Behav Brain Res.* 2013 Jan 4;243C:66-73.
54. Moimas S, Novati F, Ronchi G, Zacchigna S, Fregnan F, Zentilin L, Papa G, Giacca M, Geuna S, Perroteau I, Arnež ZM, Raimondo S. Effect of vascular endothelial growth factor gene therapy on post-traumatic peripheral nerve regeneration and denervation-related muscle atrophy. *Gene Ther.* 2013 May 30.
 55. Haastert-Talini K, Geuna S, Dahlin LB, Meyer C, Stenberg L, Freier T, Heimann C, Barwig C, Pinto LF, Raimondo S, Gambarotta G, Samy SR, Sousa N, Salgado AJ, Ratzka A, Wrobel S, Grothe C. Chitosan tubes of varying degrees of acetylation for bridging peripheral nerve defects. *Biomaterials.* 2013 Dec;34(38):9886-904.
 56. Raimondo S, Ronchi G, Geuna S, Pascal D, Reano S, Filigheddu N, Graziani A. Ghrelin: a novel neuromuscular recovery promoting factor? *Int Rev Neurobiol.* 2013;108:207-21.
 57. Cristallini C, Rocchietti EC, 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.
 58. Novajra G, Tonda-Turo C, Vitale-Brovarone C, Ciardelli G, Geuna S, Raimondo S. Novel systems for tailored neurotrophic factor release based on hydrogel and resorbable glass hollow fibers. *Mater Sci Eng C Mater Biol Appl.* 2014;36:25-32.
 59. Colakoğlu S, Aktaş A, Raimondo S, Türkmen A, Altunkaynak B, Odacı E, Geuna S, Kaplan S. Effects of prenatal exposure to diclofenac sodium and saline on the optic nerve of 4- and 20-week-old male rats: a stereological and histological study. *Biotech Histochem.* 2014; 89(2):136-44.
 60. Romeo M, Cuccia G, Qiu SS, Raimondo S, Geuna S, Hontanilla B. Innervation of a prefabricated flap: a new experimental model. *Biomed Res Int.* 2014;2014:549819.
 61. Ronchi G, Jager SB, Vaegter CB, Raimondo S, Giacobini-Robecchi MG, Geuna S. Discrepancies in quantitative assessment of normal and regenerated peripheral nerve fibers between light and electron microscopy. *J Peripher Nerv Syst.* 2014;19(3):224-33.
 62. 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.
 63. Catalano F, Accomasso L, Alberto G, Gallina C, Raimondo S, Geuna S, Giachino C, Martra G. Factors Ruling the Uptake of Silica Nanoparticles by Mesenchymal Stem Cells: Agglomeration Versus Dispersions, Absence Versus Presence of Serum Proteins. *Small.* 2015; 11(24):2919-28.
 64. Gambarotta G, Pascal D, Ronchi G, Morano M, Jager SB, Moimas S, Zentilin L, Giacca M, Perroteau I, Tos P, Geuna S, Raimondo S. Local delivery of the Neuregulin1 receptor ecto-domain (ecto-ErbB4) has a positive effect on regenerated nerve fiber maturation. *Gene Ther.* 2015; Nov;22(11):901-7.
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