

Curriculum Vitae

Personal data

- Name and surname: Stefania Niada
- Date and place of birth: 8th of June 1985, Milan
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Education and training

- 16 January 2014: PhD in Pharmacological Sciences, University of Milan (UNIMI)
- 14 December 2009: Master's degree in Biology Applied to Research in Biomedicine (UNIMI)(110 e lode/110)
- 15 October 2007: Bachelor's degree in Biological Sciences, (UNIMI) (103/110)

Research and Professional experience

- **July 2017 – today:** Research fellow in Dr Brini's labs at IRCCS Galeazzi Orthopaedic Institute
- **July 2014 – June 2017:** PostDoc Fellow in Dr Brini's labs at Department of Biomedical, Surgical and Dental Sciences (UNIMI) and IRCCS Galeazzi Orthopaedic Institute. Her Research was initially focused on bone biology and disease and on investigating Mesenchymal Stem/stromal Cell (MSCs) features, response to estrogens and possible application as therapeutic agents. Due to her interest in human genetics she has also been involved in studying altered genes and associated mechanisms in rare bone tumours and she undertook a significant research experience outside of Italy (see below).
- **November 2014- September 2015:** visiting PostDoc fellow in Prof Latif's lab (Institute of Cancer and Genomic Sciences, University of Birmingham, UK). Dr Niada undertook extensive training in NGS data analysis, Sanger sequencing and isolation and quality check of DNA and RNA.
- **January 2011- December 2013:** PhD Student in Pharmacological Sciences (UNIMI) under the supervision of Dr Brini and sponsored by IRCCS Galeazzi Orthopaedic Institute. The research activity was focused on investigating MSC features and their applications in cell therapy.
- **May 2010 - December 2010:** Research fellow at Dr Brini's lab.

List of Publications

h-index: 7 (Scopus)

*equal contributions

1. Gualerzi A, Niada S, Giannasi C, Picciolini S, Morasso C, Vanna R, Rossella V, Masserini M, Bedoni M, Ciceri F, Bernardo ME, Brini AT, Gramatica F. **Raman spectroscopy uncovers biochemical tissue-related features of extracellular vesicles from mesenchymal stromal cells.** Sci Rep. 2017 Aug 29;7(1):9820. doi: 10.1038/s41598-017-10448-1.
2. Brini AT, Amodeo G, Ferreira LM, Milani A, Niada S, Moschetti G, Franchi S, Borsani E, Rodella LF, Panerai AE, Sacerdote P. **Therapeutic effect of human adipose-derived stem cells and their secretome in experimental diabetic pain.** Sci Rep. 2017 Aug 29;7(1):9904. doi: 10.1038/s41598-017-09487-5. PubMed PMID: 28851944; PubMed Central PMCID: PMC5575274.
3. Niada S, Giannasi C, Ferreira LMJ, Milani A, Arrigoni E, Brini AT. **17 β -estradiol differently affects osteogenic differentiation of mesenchymal stem/stromal cells from adipose tissue and**

- bone marrow.** Differentiation. 2016 Dec;92(5):291-297. doi: 10.1016/j.diff.2016.04.001. Epub 2016 Apr 14. PubMed PMID: 27087652.
4. Brini AT, Ceci C, Taschieri S, Niada S, Lolato A, Giannasi C, Del Fabbro M. **Effect of an Activated Platelet Concentrate on Differentiated Cells Involved in Tissue Healing: a Preliminary In Vitro Study.** J Craniofac Surg. 2016 May;27(3):656-61. doi: 10.1097/SCS.0000000000002540. PubMed PMID: 27054419.
 5. Ceci C, Niada S, Del Fabbro M, Lolato A, Taschieri S, Giannasi C, Brini AT. **Does Freeze-Thawing Influence the Effects of Platelet Concentrates? An In Vitro Study on Human Adipose-Derived Stem Cells.** J Craniofac Surg. 2016 Feb 10. [Epub ahead of print]
 6. Petrangeli E, Coroniti G, Brini AT, de Girolamo L, Stanco D, Niada S, Silecchia G, Morgante E, Lubrano C, Russo MA, Salvatori L. **Hypoxia Promotes the Inflammatory Response and Stemness Features in Visceral Fat Stem Cells From Obese Subjects.** J Cell Physiol. 2016 Mar;231(3):668-79.
 7. de Girolamo L, Niada S, Arrigoni E, Di Giancamillo A, Domeneghini C, Dadsetan M, Yaszemski MJ, Gastaldi D, Vena P, Taffetani M, Zerbi A, Sansone V, Peretti GM, Brini AT. **Repair of osteochondral defects in the minipig model by OPF hydrogel loaded with adipose-derived mesenchymal stem cells.** Regen Med. 2015;10(2):135-51.
 8. Alholle A, Brini AT, Bauer J, Gharanei S, Niada S, Slater A, Gentle D, Maher ER, Jeys L, Grimer R, Sumathi VP, Latif F. **Genome-wide DNA methylation profiling of recurrent and non-recurrent chordomas.** Epigenetics. 2015;10(3):213-20.
 9. Franchi S, Castelli M, Amodeo G, Niada S, Ferrari D, Vescovi A, Brini AT, Panerai AE, Sacerdote P. **Adult stem cell as new advanced therapy for experimental neuropathic pain treatment.** Biomed Res Int. 2014;2014:470983. doi:10.1155/2014/470983. Epub 2014 Aug 13. Review.
 10. Foudah D, Monfrini M, Donzelli E, Niada S, Brini AT, Orciani M, Tredici G, Miloso M. **Expression of neural markers by undifferentiated mesenchymal-like stem cells from different sources.** J Immunol Res. 2014;2014:987678. doi:10.1155/2014/987678. Epub 2014 Mar 5.
 11. Ferreira LMJ*, Niada S*, Monici F, Garbieri A, Giannasi C, Brini AT. **Valutazione dell'utilizzo terapeutico di cellule staminali equine autologhe e allogene derivate da tessuto adiposo per patologie a carico di tessuti muscolo-scheletrici: uno studio pilota.** Journal of Sports Traumatology, Vol 31, No. 1, Pag: 32-42, Marzo 2014.
 12. Niada S*, Ferreira LM*, Arrigoni E, Addis A, Campagnol M, Broccaioli E, Brini AT. **Porcine adipose-derived stem cells from buccal fat pad and subcutaneous adipose tissue for future preclinical studies in oral surgery.** Stem Cell Res Ther. 2013;4(6):148.
 13. Brini AT, Niada S, Lambertini E, Torreggiani E, Arrigoni E, Lisignoli G, Piva R. **Chondrogenic potential of human mesenchymal stem cells and expression of Slug transcription factor.** J Tissue Eng Regen Med. 2015 Jun;9(6):740-4. doi: 10.1002/term.1772. Epub 2013 Jul 21.
 14. Arrigoni E*, Niada S*, Ferreira LM, de Girolamo L, Brini AT. **Two bone substitutes analyzed in vitro by porcine and human Adipose-derived Stromal Cells.** Int J Immunopathol Pharmacol. 2013 Vol. 26, no. 1 (S), 0-0.
 15. de Girolamo L, Stanco D, Salvatori L, Coroniti G, Arrigoni E, Silecchia G, Russo MA, Niada S, Petrangeli E, Brini AT. **Stemness and osteogenic and adipogenic potential are differently impaired in subcutaneous adipose derived stem cells (ASCs) isolated from obese donors.** Int J Immunopathol Pharmacol. 2013 Vol. 26, no. 1 (S), 0-0.
 16. Broccaioli E*, Niada S*, Rasperini G, Ferreira LM, Arrigoni E, Yenagi V, Brini AT. **Mesenchymal stem cells from Bichat's fat pad: in vitro comparison from Adipose-derived stem cells from subcutaneous tissue.** Biores Open Access. 2013 Apr;2(2):107-17.
 17. Sacerdote P, Niada S, Franchi S, Arrigoni E, Rossi A, Yenagi V, de Girolamo L, Panerai AE, Brini AT. **Systemic administration of human Adipose-derived Stem Cells (hASCs) reverts**

- nociceptive hypersensitivity in an experimental model of neuropathy.** Stem Cells Dev. 2013 Apr 15;22(8):1252-63.
18. Maroni P, Brini AT, Arrigoni E, de Girolamo L, Niada S, Matteucci E, Bendinelli P, Desiderio MA. **Chemical and genetic blockade of HDACs enhance osteogenic differentiation of human Adipose-derived Stem Cells by oppositely affecting osteogenic and adipogenic transcription factors.** Biochem Biophys Res Commun. 2012 Nov 16;428(2):271-7.

Book chapters

- Arrigoni E, Niada S, Brini AT. Rabbit **Adipose-derived Stem Cells and tibia repair Stem Cells and Bone Tissue.** Published CRC Press, Taylor and Francis Group. 23 Gennaio 2013.
- Arrigoni E, de Girolamo L, Di Giancamillo A, Stanco D, Niada S, Yenagy V, Domeneghini C, Brini AT. **Preclinical studies with autologous adipose-derived stem cells (ASCs) in regenerative medicine for orthopaedic applications.** Proceedings of II international conference on tissue engineering (ICTE 2011). P.R. Fernandes et al. (Eds), pg 143-148

Grants/awards

- **Best poster** award for the poster “17 β -estradiol (E2) differently affects osteogenic differentiation of mesenchymal stem cells from bone marrow and adipose tissue” at the 36° Congresso Nazionale della Società Italiana di Farmacologia (SIF), Torino, Italy, 23-26 October 2013
- **Grant for young researchers** (Finanziamento per progetti di ricerca dipartimentali proposti da giovani ricercatori) of Dipartimento di Scienze Biomediche, Chirurgiche e Odontoiatriche for the project “Valutazione del potere proliferativo e differenziativo del concentrato piastrinico umano (PRGF) su vari tipi cellulari”; 2014
- **Travel grant** "Borsa di ricerca della SIF"; 1000 euros; November 2014-September 2015

Technical skills and competences

- Primary cell isolation and culture, PCR, RT-PCR, qRT-PCR, Western blot, Sanger sequencing, DNA and RNA isolation, data analyses and bioinformatic databases.
- Collaboration with peer-reviewed journals as reviewer

Teaching activities

- Thesis revision and teaching activities during undergraduate student (Francesco Sangalli, Lorena Maria Josè Ferreira, Silvia Molinari, Patrizio Mancuso, Angela Licciardello e Anna Milani) internships, in Dr Brini's Labs.

Presentations at international conferences

- Ferreira LM, Broccaioli E, Niada S, Arrigoni E, Yenagi V, Rasperini G, and Brini AT. **Study on Stem/Stromal Cells from Buccal Fat Pad and Subcutaneous Adipose Tissue for Periodontal and Oral Bone Regeneration In Vitro.** The Tissue Engineering and Regenerative Medicine International Society (TERMIS), Istanbul, Turkey, 17-20 June 2013 Oral presentation
- Arrigoni E, Ferreira LM, Niada S, Brini AT **Synthetic Bone Substitutes Differently Influence Human and Porcine Adipose-derived MSCs.** The Tissue Engineering and Regenerative Medicine International Society (TERMIS), Istanbul, Turkey, 17-20 June 2013 Poster Presentation

- Niada S, Franchi S, Arrigoni E, Sacerdote P, De Girolamo L, Brini AT. **Neuropathic pain treatment in a mouse model with human Adipose-derived Stem Cells**. The Tissue Engineering and Regenerative Medicine International Society (TERMIS), Vienna, Austria, 5-8 September 2012 _ Poster Presentation
- Arrigoni E, Ferreira M, Niada S, De Girolamo L, Yenagi V, Campagnol M, Addis A, Brini AT. **Comparison of human and porcine mesenchymal stem cells from adipose tissue (ASCs) and their growth in the presence of different sera**. The Tissue Engineering and Regenerative Medicine International Society (TERMIS), Vienna, Austria, 5-8 September 2012_ Oral presentation
- S. Niada, A. Rossi, E. Arrigoni, S. Franchi, ,Ae. Panerai, P. Sacerdote, A. T. Brini. **Use of human Adipose-derived Stem Cells in a mouse model of neuropathic pain**. 6th European Congress of Pharmacology, Granada, Spain, 17-20 July 2012 _ Poster Presentation

Presentations at national conferences

- Niada S, Giannasi C, Ferreira LMJ, Milani A, Arrigoni E, Brini AT. **17 β -estradiol differently affects osteogenic differentiation of MSCs from adipose tissue and bone marrow, both expressing a novel variant of estrogen receptor α** . 2015 GISM Annual Meeting, Brescia, 8-9 October 2015_ Poster Presentation
- Niada S, Franchi S, Ferreira LMJ, Arrigoni E, Panerai AE, Sacerdote S, A. T. Brini. **Human Adipose-derived Stem Cells (ASCs) and their conditioned medium as a therapy in a mouse model of neuropathic pain**. 6th Meeting FIRST (Forum of Italian Researchers on Mesenchymal and Stromal Stem Cells), Milan, 12-13 May 2014_ Poster Presentation
- Niada S, Ferreira LMJ, Arrigoni E, Brini AT- **17 β -estradiol (E2) differently affects osteogenic differentiation of mesenchymal stem cells from bone marrow and adipose tissue**. 36° Congresso Nazionale della Società Italiana di Farmacologia (SIF), Torino, 23-26 October, 2013_ Poster Presentation
- Niada S, Ferreira L, Arrigoni E, Broccaioli E, Yenagi V, Campagnol M, Addis A, Brini AT. **Buccal fat pad as a novel source for Adipose-derived Stem Cells**. XIV CONGRESSO IORS - Italian Orthopaedic Research Society, Brescia, 8-9 June 2012_ Oral presentation