PERSONAL INFORMATION

Laura Mangiavini
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Sex Female | Date of birth 17/04/1982 | Nationality Italian

ID Number: MNGLRA82D57G842T

WORK EXPERIENCE

From January 2016 to present
Attending Orthopaedic Surgeon
Researcher
IRCCS Istituto Ortopedico Galeazzi

Via R. Galeazzi 4, 20161, Milan, Italy

From September 2013 to July 2015
Research Fellow
University of Michigan, Ann Arbor, Michigan, USA

From July 2011 to August 2013
Research Fellow
Indiana University-Purdue University, Indianapolis, Indiana, USA

From January 2011 to June 2011
Research Fellow
Massachusetts General Hospital and Harvard Medical School, Boston, USA

EDUCATION AND TRAINING

From April 2008 to March 2013
Specialization in Orthopaedics and Traumatology
University of Milano-Bicocca, Milan, Italy

January 2008
Italian National Board in Medicine and Surgery
University of Milan, Milan, Italy

From October 2001 to July 2007
Medical Doctor Degree
University Vita-Salute San Raffaele, Milan, Italy

PERSONAL SKILLS

Mother tongue(s): Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Level C	Level C	Level C	Level C	Level C

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Driving licence: B

ADDITIONAL INFORMATION

Publications

1. Scotti C., Buragas M.S., Mangiavini L., Sosio C., Di Giancamillo A., Domeneghini C., Fraschini G., Peretti G.M. A tissue engineered osteochondral plug: an in vitro morphological evaluation. Knee Surg Sports Traumatol Arthrosc 2007 15: 1363-1369
2. Sosio C., Boschetti F., Bevilacqua C., Mangiavini L., Scotti C., Buragas M.S., Biressi S., Peretti G.M. Effect of blood on the morphological, biochemical, and biomechanical properties of engineered cartilage. Knee Surg Sports Traumatol Arthrosc 2007 May 15: 1251-1257
3. Peretti G.M., Buragas M.S., Scotti C., Mangiavini L., Sosio C., Di Giancamillo D., Domeneghini C., Fraschini G. An in vitro tissue engineered model for osteochondral repair. Sport Sc Health 2006, 1(4):153-157
4. G.M. Peretti, C. Scotti, L. Mangiavini, A. Pozzi, W. Albisetti, G. Fraschini. La patologia del calciatore adolescente. Archivio di Ortopedia e Traumatologia 2007, 118(3): 7-9
5. Scotti C., Pozzi A., Mangiavini L., Vitari F., Boschetti F., Domeneghini C., Fraschini G., Peretti G.M. Healing of meniscal tissue by cellular fibrin glue: an in vivo study. Knee Surg Sports Traumatol Arthrosc 2009 17:645-51
6. Peretti G.M., Mangiavini L., Ballis R. Fisiopatologia del complesso osso-cartilagine. Archivio di Ortopedia e Reumatologia. Volume 120 n. 3-4, 2009 , 3-7
7. Peretti G.M., Mangiavini L., Deponti D., Ballis R. Terapia cellulare nella riparazione meniscale. Giornale Italiano di Ortopedia e Traumatologia XXXV Suppl.1, Settembre 2009, S78-81
8. Peretti G.M., Bonassar L.J., Gill T.J., Randolph M.A., Mangiavini L., Zaleske D.J. Review on a research line for healing and regeneration of cartilage and meniscus tissues. J Orthoped 2009, Vol.1 No.1:1-14
9. Peretti G.M., Scotti C., Pozzi A., Mangiavini L., Vitari F., Domeneghini C., Fraschini G. Bonding of meniscal tissue: a nude mouse repair model. Sport Sci Health 2008, 3(3):47-52
10. Peretti G.M. Pozzi A., Mangiavini L. Cartilage morphology, biochemistry and biomechanics. Theoretical and practical course for articular cartilage biology and regeneration: basic laboratory techniques. Pag. 1-4. Editors: Andrea Facchini, Giuseppe M. Peretti
11. Mangiavini L. Biochemistry assays: quantification of proteoglycans production and cellularity of 3D cultures vs native cartilage Pag. 107-111. Editors: Andrea Facchini, Giuseppe M. Peretti
12. Peretti G.M. Mangiavini L., Deponti D. Chapter 1.Basic science of articular cartilage repair. Pag. 23-31. In: CARTILAGE REPAIR. Current concepts. Editors: Mats Brittberg, Andreas Imhoff, Henning Madry, Bert Mandelbaum. A DJO Incorporated initiative. International Headquarters – London 2010
13. Scotti C, Mangiavini L, Boschetti F, Vitari F, Domeneghini C, Fraschini G, Peretti GM. Effect of in vitro culture on a chondrocyte-fibrin glue hydrogel for cartilage repair. Knee Surg Sports Traumatol Arthrosc. 2010 Oct;18(10):1400-6
14. Sosio C, Boschetti F, Mangiavini L, Scotti C, Manzotti S, Buragas MS, Biressi S, Fraschini G, Gigante A, Peretti GM. Blood exposure has a negative effect on engineered cartilage. Knee Surg Sports Traumatol Arthrosc. 2011 Jun;19(6):1035-42
15. Deponti D, Di Giancamillo A, Mangiavini L, Pozzi A, Fraschini G, Sosio C, Domeneghini C, Peretti GM. Fibrin-based model for cartilage regeneration: tissue maturation from in vitro to in vivo. Tissue Eng Part A. 2012 Jun;18(11-12):1109-22
16. Aro E, Khatri R, Gerard-O'Riley R, Mangiavini L, Myllyharju J, Schipani E. Hypoxia-inducible factor-1 (HIF-1) but not HIF-2 is essential for hypoxic induction of collagen prolyl 4-hydroxylases in primary newborn mouse epiphyseal growth plate chondrocytes. J Biol Chem. 2012 Oct 26;287(44):37134-44
17. Schipani E, Mangiavini L, Merceron C. ATF4 and HIF-1α in bone: an intriguing relationship. J Bone Miner Res. 2013 Sep;28(9):1866-9
18. Mangiavini L, Schipani E. TUNEL assay on skeletal tissue sections to detect cell death. Methods Mol Biol. 2014;1130:245-8
19. Mangiavini L, Merceron C, Araldi E, Khatri R, Gerard-O'Riley R, Wilson TL, Rankin EB, Giaccia AJ, Schipani E. Loss of VHL in mesenchymal progenitors of the limb bud alters multiple steps of endochondral bone development. Dev Biol. 2014 Sep 1;393(1):124-36
20. Merceron C, Mangiavini L, Robling A, Wilson TL, Giaccia AJ, Shapiro IM, Schipani E, Risbud MV. Loss of HIF-1α in the notochord results in cell death and complete disappearance of the nucleus pulposus. PLoS One. 2014 Oct 22;9(10):e110768
21. Mangiavini L, Merceron C, Araldi E, Khatri R, Gerard-O'Riley R, Wilson TL, Sandusky G, Abadie J, Lyons KM, Giaccia AJ, Schipani E. Fibrosis and Hif1a-dependent tumors of the soft tissue upon loss of Vhl in mesenchymal progenitors. Am J Pathol 2015 185, 3090-3101

Publications

22. Agarwal S, Loder S, Brownley C, Cholok D, Mangiavini L, Li J, Breuler C, Sung HH, Li S, Ranganathan K, Peterson J, Tompkins R, Herndon D, Xiao W, Jumlongras D, Olsen BR, Davis TA, Mishina Y, Schipani E, Levi B. Inhibition of Hif1α prevents both trauma-induced and genetic heterotopic ossification. Proc Natl Acad Sci U S A. 2016 Jan 19;113(3):E338-47. doi: 10.1073/pnas.1515397113. Epub 2015 Dec 31
23. Choi H, Merceron C, Mangiavini L, Seifert EL, Schipani E, Shapiro IM, Risbud MV. Hypoxia promotes noncanonical autophagy in nucleus pulposus cells independent of MTOR and HIF1A signaling. Autophagy. 2016 Sep;12(9):1631-46
24. Wang H, Lindborg C, Lounev V, Kim JH, McCarrick-Walmsley R, Xu M, Mangiavini L, Groppe JC, Shore EM, Schipani E, Kaplan FS, Pignolo RJ. Cellular Hypoxia Promotes Heterotopic Ossification by Amplifying BMP Signaling. J Bone Miner Res. 2016 Sep;31(9):1652-65
25. Mangiavini L, Merceron C, Schipani E. Analysis of Mouse Growth Plate Development. Curr Protoc Mouse Biol. 2016 Mar 1;6(1):67-130. doi:10.1002/9780470942390.mo150094
26. Di Giancamillo A, Mangiavini L, Tessaro I, Marmotti A, Scurati R, Peretti GM. The meniscus vascularization: the direct correlation with tissue composition for tissue engineering purposes. J Biol Regul Homeost Agents. 2016 Oct-Dec;30(4 Suppl 1):85-90. PubMed PMID: 28002904
27. Marmotti A, Mattia S, Mangiavini L, Bonasia DE, Bruzzone M, Dettoni F, Rosso F, Blonna D, Rossi R, Castoldi F, Peretti GM. Tranexamic acid effects on cartilage and synovial tissue: an in vitro study for a possible safe intra-articular use. J Biol Regul Homeost Agents. 2016 Oct-Dec;30(4 Suppl 1):33-40. PubMed PMID: 28002898
28. Gervaso F, Mangiavini L, Di Giancamillo A, Boschetti F, Izzo D, Zani DD, Di Giancamillo M, Tessaro I, Domenicucci M, Scalera F, Domeneghini C, Crovace AM, Sannino A, Peretti GM. Comparison of three novel biphasic scaffolds for one-stage treatment of osteochondral defects in a sheep model. J Biol Regul Homeost Agents. 2016 Oct-Dec;30(4 Suppl 1):24-31. PubMed PMID: 28002897
29. Di Giancamillo A, Deponti D, Raimondi MT, Boschetti F, Gervaso F, Modina S, Mangiavini L, Peretti GM. Comparison between different cell sources and culture strategies for tendon tissue engineering. J Biol Regul Homeost Agents. 2017 Oct-Dec,;31(4 suppl 1):61-66. PubMed PMID: 29185297
30. Di Giancamillo A, Deponti D, Gervaso F, Salvatore L, Scalera F, Mangiavini L, Scurati R, Sannino A, Peretti GM. The analysis of different scaffolds and the benefit of fibrin glue for tendon tissue engineering at different culture times. J Biol Regul Homeost Agents. 2017 Oct-Dec,;31(4 suppl 1):67-73. PubMed PMID: 29185298
31. Marmotti AG, Peretti GM, Mattia S, Mangiavini L, Bonasia DE, Dettoni F, Bellato E, Schwienbacher S, Castoldi F. One-step cartilage repair with minced chondral fragment on a composite scaffold: an in vitro human study at low oxygen tension. J Biol Regul Homeost Agents. 2017 Oct-Dec;31(4 suppl 1):113-120. PubMed PMID: 29186947
32. Peretti GM, Tessaro I, Montanari L, Polito U, Di Giancamillo A, Di Giancamillo M, Marmotti A, Montaruli A, Roveda E, Mangiavini L. Histological changes of the meniscus following an osteochondral lesion. J Biol Regul Homeost Agents. 2017 Oct-Dec,;31(4 suppl 1):129-134. PubMed PMID: 29187260
33. Verdoni F, D'Amato RD, Mangiavini L, Lombardo MD, Peretti GM. The treatment of low-grade septic non-unions. J Biol Regul Homeost Agents. 2017 Oct-Dec,;31(4 suppl 1):135-140. PubMed PMID: 29188196
34. Marmotti A, Mattia S, Castoldi F, Barbero A, Mangiavini L, Bonasia DE, Bruzzone M, Dettoni F, Scurati R, Peretti GM. Allogeneic Umbilical Cord-Derived Mesenchymal Stem Cells as a Potential Source for Cartilage and Bone Regeneration: An In Vitro Study. Stem Cells Int. 2017;2017:1732094. doi: 10.1155/2017/1732094. Epub 2017 Nov 16. PubMed PMID: 29358953; PubMed Central PMCID: PMC5735324
35. Fisher JN, Tessaro I, Bertocco T, Peretti GM, Mangiavini L. The Application of Stem Cells from Different Tissues to Cartilage Repair. Stem Cells Int. 2017;2017:2761678. doi: 10.1155/2017/2761678. Epub 2017 Dec 10. Review. PubMed PMID: 29375622; PubMed Central PMCID: PMC5742463
36. Antonio Marmotti, Giuseppe M Peretti, Silvia Mattia, Laura Mangiavini, Laura De Girolamo, Marco Viganò, Stefania Setti, Davide Edoardo Bonasia, Davide Blonna, Enrico Bellato, Giovanni Ferrero and Filippo Castoldi. Pulsed Electromagnetic Fields improve tenogenic commitment of umbilical cord-derived mesenchymal stem cells: a potential strategy for tendon repair. An in vitro study. Stem Cells Int. In Press

Honours and awards

1. 2004: Co-investigator in the grant BAYER: Controlled, Double Blind, randomized dose-ranging study on the prevention of VTE in patients undergoing elective total Hip replacement-ODIX aHip IIb study. Euro 50,000
2. 2005: Co-investigator in the grant BAYER: Controlled, Double Blind, randomized dose-ranging study of once-daily regimen of BAY 59-7939 on the prevention of VTE in Patients Undergoing Elective Total Hip Replacement-ODIX aHip-OD study. Euro 28,200

Honours and awards

3. 2006: Co-investigator in the grant BAYER: Regulation of coagulation in orthopaedic surgery to prevent DVT and PE, controlled, double-blind, randomized study of BAY 59-7939 in the extended prevention of VTE in patients undergoing elective total hip replacement. RECORD I study. Euro 49,000
4. 2007: Magna Cum Laude in Medicine and Surgery, University Vita-Salute san Raffaele, Milan, Italy
5. 2008: Co-investigator in the biannual grant CARIPLO FOUNDATION: "Tissue engineered osteochondral composite for the repair of articular cartilage lesions. In vitro completion and in vivo study on articular cartilage lesions in large animal model" 2008—2009. Euro 340,000 funded at 50% (euro 170,000 from Cariplo Foundation)
6. 2008: Winner of the Rossoni Award 2008 as Presenting Author, given for the best scientific presentation in the session young surgeons at the 46° Meeting of the SICM (= Italian Society of Hand Surgery), Trapani, 15 - 18 September. "An osteochondral composite for cartilage repair: an in vitro study"
7. 2008: Winner of the Best Paper Award 2008 as Presenting Author, given for the best scientific presentation in the 2nd Meeting of the SIGASCOT (= Italian Society of Knee, Arthroscopy, Sports, Cartilage and Orthopaedic Technologies), Bari 9-11 October, 2008. "A cartilaginous engineered tissue: an in vitro and in vivo study"
8. 2010: Winner of the Best Paper Award 2010 as Presenting Author, given for the best scientific presentation in the 15th National Meeting of the Orthopaedics and Traumatology residents. March 19, 2010, Parma. Mangiavini. L., Deponti D., Scotti C., Pozzi A., Sosio C., Fraschini G., Zatti G., Peretti G.M. Espressione genica e analisi biochimica di un tessuto cartilagineo ingegnerizzato: maturazione in vitro e in vivo [gene expression and biochemical analysis of an engineered cartilage tissue: in vitro and in vivo maturation]
9. 2012: Winner of a Poster Travel Award as Presenting Author, in the American Society for Bone and Mineral Research. October 12-15. L. Mangiavini, C. Merceron, T.L. Wilson, A. Robling, I.M. Shapiro, M. Risbud, E. Schipani. HIF-1α is Essential for the Development of the Nucleus Pulposus.
10. 2013: Winner of the Young Investigator Award in the 13th International Workshop The Tumor Microenvironment. May 2-4. L. Mangiavini M., C. Merceron, T.L. Wilson, R. O'Riley, A. J. Giaccia and E. Schipani. Loss of VHL in limb bud mesenchyme causes HIF-1 dependent fibroblastic tumors of the soft tissue
11. 2013: Winner of a Poster Travel Award as Presenting Author, in the American Society for Bone and Mineral Research. October 4-7. L. Mangiavini, C. Merceron, T.L. Wilson, R. O'Riley, A. J. Giaccia and E. Schipani. Loss of the E3 Ubiquitin Ligase Von Hippel Lindau (VHL) in Limb Bud Mesenchyme causes dwarfism and tumors of the soft tissue

La sottoscritta è a conoscenza che, ai sensi dell'art. 26 della legge 15/68, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali. Inoltre, la sottoscritta autorizza al trattamento dei dati personali, secondo quanto previsto dalla Legge 196/03.

May 10, 2018

Sincerely,

Laura Mangiavini