CONSIGLIO DIRETTIVO

Frequenze & Armonici APS

Di seguito è indicata la composizione del Consiglio Direttivo di Frequenze & Armonici APS eletto con verbale del 08.10.2025.

Nominativo	**Carica**
Andrea Bonotto	Presidente e Legale Rappresentante
Andrea Magnelli	Consigliere
Fabrizio Russo	Consigliere

Documentazione allegata

Alla presente sezione sono allegati i curricula vitae dei componenti del Consiglio Direttivo.

FREQUENZE & ARMONICI

Andrea Bonotto via Fidene 25 00183 Roma.

Nato a Montebelluna (TV) il 12 Marzo 1975,

Nel 2004 Laurea in Giurisprudenza, Ferrara

Dal 2007 Tod's Collection and Product Develop Director divisione Pelletteria/Accessori,

Dal 2010 anni si occupa del coordinamento a partire dal disegno del designer alla messa in produzione di tutta la divisione pelletteria uomo e donna dell'azienda internazionale del lusso Tod's.

Dal 2014 Responsabile del progetto "Laboratorio di pelletteria presso la Comunità di Sanpatrignano" per Tod's per il Sociale

Dal 2016 Responsabile Tod's per le collaborazioni universitarie nella formazione nel settore fashion pelletteria e sostenibilità etico sociale.

Ventennale esperienza nel mondo dello sviluppo prodotto collezioni e coordinamento degli uffici stile nel settore pelletteria, calzaturiero e RTW.

Ruoli precedenti: Collections and product development, con esperienze in aziende quali Adidas, Cacharel, Paul Smith, Maison Margiela.

Competenze: responsabilità diretta del coordinamento degli uffici prodotto e stile, responsabile dei budget e del conto economico del Dipartimento. Partecipa alla definizione della griglia di collezione ad ogni stagione, seleziona i designer e coordina tutte le attività relative partendo da ideazione progettazione e industrializzazione e produzione dei manufatti artigianali. Partecipa alle strategie di brand e marketing del prodotto e all'analisi degli andamenti dei trend dei mercati in ottica di merchandising.

Arricchiscono il suo curriculum competenze relative alla selezione e alla individuazione dei materiali più consoni alla tipologia di prodotti in fase di sviluppo. In particolare cura progetti di sostenibilità etica e di recupero delle materie prime in ottica circolarità produttiva e riutilizzo delle risorse.

Dal 2010 anni si occupa del coordinamento a partire dal disegno del designer alla messa in produzione di tutta la divisione pelletteria uomo e donna dell'azienda internazionale del lusso Tod's.

Nel 2014 Guest lecturer presso Domus Academy nel corso di fashion design leather goods

Dal 2017 Per IED (istituto universitario paritetico) partecipa al corso di laurea triennale in fashion, comunication and styling e presso il master in fashion business.

Dal 2019 Per Polimoda svolge l'incarico di Tutor per il master in fashion design della pelletteria per conto del gruppo Tod's.

Dal 2020 per Istituto universitario Marangoni partecipa ai corsi di Fashion & communication.

ANDREA MAGNELLI

Di origini calabresi, si laurea con il massimo dei voti in Clarinetto presso il Conservatorio "S. Giacomantonio" di Cosenza, perfezionandosi poi in Direzione d'Orchestra all'Accademia Musicale Pescarese sotto la guida di Donato Renzetti e Dario Lucantoni. Si forma accanto a grandi interpreti come Alessandro Fantini, Domenico Sarcina, il Quintetto Bibiena e Karl Leinster, collaborando anche come assistente con quest'ultimo e con Giuseppe Garbarino, primo clarinetto della Scala di Milano. Come primo clarinetto, ha collaborato con prestigiose orchestre, tra cui la Moscow TV and Radio Symphony Orchestra, partecipando alla prima mondiale dell'opera Shylock di Aldo Finzi al Teatro Dal Verme di Milano, trasmessa in diretta su Sky. La sua attività di direttore d'orchestra lo vede protagonista in importanti produzioni sinfoniche e operistiche, tra cui il Concerto K622 di Mozart, Sogno di una notte di mezza estate di Mendelssohn, Pierino e il lupo di Prokofiev, Cavalleria Rusticana di Mascagni, e concerti con solisti come Francesco Manara, primo violino della Scala di Milano. Selezionato dal progetto ISMEZ per una tournée con incisione discografica, si è distinto conquistando il secondo posto al concorso per direttori d'orchestra "OperaVerona Lab" e ha ricoperto il ruolo di ispettore d'orchestra presso il Teatro "A. Rendano" di Cosenza. Collabora attivamente con istituzioni concertistiche italiane, sia in ambito sinfonico che operistico. È direttore musicale del progetto Opera Lab Edu, con il quale nel 2024 ha diretto 26 rappresentazioni de La Bohème di G. Puccini nei teatri Rendano di Cosenza, Cilea di Reggio Calabria e Brancaccio di Roma.
Negli ultimi anni ha diretto, presso l'Ordinariato Militare per l'Italia, la Petite Messe Solennelle di Rossini e la Sinfonia n.7 di Beethoven con l'Orchestra Sinfonica del Molise. Con la stessa orchestra, nel dicembre 2024 ha diretto diversi concerti per il Giubileo in collaborazione con la Pontificia Fonderia di Agnone esibendosi anche a Roma presso L'Aquario Romano - Casa dell'Architettura. Ad aprile 2025 ha diretto il Requiem di W. A. Mozart presso la Basilica di Santa Maria degli angeli e dei Martiri di Roma con l'International Opera Choir e l'Orchestra sinfonica del Molise. È attivo anche come arrangiatore, firmando numerosi adattamenti per orchestra sinfonica e gruppi da camera.

FABRIZIO RUSSO MD, PhD

Date of birth:	June 25th, 1988
Address:	Via Giolito De Ferrari 96, 00128 Rome - Italy
Mobile:	+39 349 3601908
E-mail:	fabriz.russo@gmail.com; fabrizio.russo@policlinicocampus.it

EDUCATION AND TRAINING

2/2021 - Present **Assistant Professor (RTDA)**
Campus Bio-Medico University, Rome, Italy

8/2018 - Present **Orthopedic and Trauma Surgeon**
Campus Bio-Medico Foundation, Rome, Italy

10/2017 - 6/2021 **Doctor of Philosophy (PhD)**. Integrated Biomedical Sciences and Bioethics - Osteo-Oncological Diseases
Campus Bio-Medico University, Rome, Italy

8/2013 - 7/2018 **Orthopaedic and Trauma Surgery Residency Program**
Campus Bio-Medico University, Rome, Italy
Grade: 50/50 cum laude

9/2006 - 7/2012: **Doctor of Medicine - MD**. School of Medicine and Surgery
Campus Bio-Medico University, Rome, Italy
Grade: 110/110 cum laude

LICENSURE AND BOARD CERTIFICATION

2023 **Abilitazione Scientifica Nazionale II Fascia.** Malattie Apparato Locomotore e Medicina Fisica e Riabilitativa (06/F4)

2022 **EuroSpine Diploma** by the Spine Society of Europe (EUROSPINE)

2013 **Italian Medical License**
OMCeO RC 8792

2013 **Italian Board Certification of Medicine Exam**
Campus Bio-Medico University, Rome, Italy
Grade: 270/270.

PROFESSIONAL EXPERIENCE

01/2023 - 02/2023 **AOSpine Surgery Fellow**
The Scientific Education and Research Foundation and Center for Spine and Orthopaedics. Denver, Colorado – USA. Directed by Prof. Dr. Michael E. Janssen, DO

05/2017 - 11/2017 **Research Fellow**
Orthopedic Trauma Institute, Zuckerberg San Francisco General Hospital and Trauma Center / University of California - San Francisco, California – USA. Directed by Prof. T. Miclau, MD

03/2017 - 04/2017 **AOTrauma Surgery Fellow**
R Adams Cowley Shock Trauma Center, University of Maryland, Baltimore, Maryland – USA. Directed by Prof. R. O'Toole, MD

10/2016 **Medical Observer**
Joint Replacement and Sports Medicine, Department of Orthopaedic Surgery, Stanford University, Palo Alto, California - USA. Directed by Prof. W. J. Maloney, MD.

2013 - 2016 **Research Fellow**
Preclinical *in vivo* studies for Intervertebral Disc Regeneration - Veterinary Teaching Hospital, Production and Health, University of Padua, Padua, Italy. Directed by Prof. R. Busetto

02/2013 - 05/2013 **Research Fellow**
Ferguson Laboratory for Orthopaedic and Spine Research, Department of Orthopaedic Surgery, University of Pittsburgh. Pittsburgh, Pennsylvania - USA. Directed by Dr. James D. Kang, MD

08/2012 - 10/2012 **North America Spine Society (NASS) Research Fellow**
Ferguson Laboratory for Orthopaedic and Spine Research, Department of Orthopaedic Surgery, University of Pittsburgh. Pittsburgh, Pennsylvania - USA. Directed by Dr. James D. Kang, MD

10/2014 - 02/2015; 06/2014; 04/2014; 02/2013; 12/2011; 04/2012; 08/2011 - 10/2011. **Medical Fellow**
AO Research Institute (ARI), Davos, Switzerland; Musculoskeletal Regeneration Program – Intervertebral Disc Regeneration. Directed by Prof. M. Alini, PhD

HONORS AND AWARDS

2022 **Premio Italia Giovane** - https://premioitaliagiovane.it/edizione-2022/premiati/

2022 **Best Oral Presentation** at the 3rd International Conference of Biomaterials and Novel Technologies for Healthcare (BioMaH)

2019 **Clinical Traveling Fellowship Award** of AOSpine

2019 **Ortho Regeneration Network (ON) / International Combined Orthopaedic Research Societies (ICORS) Education Scholarship**

2018 **AAOS Honorary Mention**. Orthopaedic Video Theater, American Academy of Orthopaedic Surgeons (AAOS) annual meeting, New Orleans, LA, USA

2017 **AAOS Honorary Mention**. Orthopaedic Video Theater, American Academy of Orthopaedic Surgeons (AAOS) annual meeting, San Diego, CA, USA

2016 **Clinical Traveling Fellowship Award** of AOTrauma

2016 **2nd Level Scholarship** by the Italian Society of Orthopedic and Traumatology (SIOT)

2016 **Best Paper Award**, International Society for the Study of the Lumbar Spine (ISSLS) Annual Meeting, SpineWeek 2016, Singapore

2015 **NIRA** (**New Investigator Recognition Awards)** Finalist. Orthopedic Research Society (ORS) Annual Meeting, Las Vegas, NV, USA

2015 **1st Level Scholarship** by the Italian Society of Orthopedic and Traumatology (SIOT)

2013 **Biospina Award** by the Italian Society of Spinal Surgery and Italian Scoliosis Group (SICV&GIS)

2012 **Research Traveling Fellowship Award** of the North American Spine Society (NASS)

RESEARCH GRANTS

2022 **Collaborative Research Project (BRIC) - Italian Workers Compensation Authority (INAIL).** Active and healthy ageing at work: an analysis of the current situation and of barriers and facilitators in the Italian labour force. €90.000 UCBM unit. €239.958,36 Total. PI UCBM unit

2022 PNRR-MAD-2022-12376692. An artificial intelligence approach for risk assessment and prevention of low back pain: towards precision spine care. €1.000.000 Total. **Co-Investigator** UCBM unit

2021 **Collaborative Research Project (BRIC) - Italian Workers Compensation Authority (INAIL).** Development of an innovative, multidisciplinary and integrated approach for workers suffering from degenerative pathologies of the lumbar spine based on advanced technologies, capacity building, and feasibility analysis for the creation of a reference center for prevention, diagnosis, treatment, and professional reintegration (SPINE 4.0). € 1.196.000 UCBM unit, € 1.300.000 total; 2 years; **Co-Investigator** UCBM unit

2020 **Fondo per la Crescita Sostenibile - Sportello "Fabbrica Intelligente" PON Imprese & Competitività 2014-2020**, di cui al D.M. 5 marzo 2018 Capo III. Prog. n. F/190096/01-02X44. TOTal Ergonomics Measurement (TOTEM). €100.000 UCBM unit; 1.842.762,50 total; **Co-Investigator** UCBM unit

2019 **ON Pilot Grant by ON Foundation (Orthoregeneration Network; 18-070).**
Project title: Intraarticular injection of a hyaluronic acid and irisin blend may promote cartilage regeneration in a mouse model of osteoarthritis
25.000,00 CHF; 2 years; **Co-Investigator**

2019 **Research Grant of National Interest (PRIN) of the Italian Minister of Education, University and Research (MIUR) (2017SZ5WZB).**
Project title: Advanced injectable nano-composite biomaterials with dual therapeutic/regenerative behaviors for bone cancer (ACTION).
€ 142.556,31 UCBM unit; € 430.540,00 total; 3 years; **Co-Investigator** UCBM unit

2018 **Collaborative Research Project (BRIC) - Italian Workers Compensation Authority (INAIL).**

Development of a Multidisciplinary and Integrated Approach, for the management of the worker affected by degenerative spine pathologies: study of the occupational aspects and an innovative regenerative treatment of the intervertebral disc to favor return to work (ACTIVE)
€ 660.000 UCBM unit, € 1.000.000 total; 2 years; **Co-Investigator** UCBM unit

2018 **Horizon 2020-SC1-BHC-09-2018; Proposal number: SEP-210513542**
Project title: Induced pluripotent stem cell-based therapy for spinal regeneration (iPSpine)
€ 557.975 UCBM unit, € 15.396.031 total; 4 years; **Co-Investigator** UCBM unit
https://ipspine.eu/

2016 **Horizon 2020-SC1-2016-2017; Proposal number: 732163**
Project title: REgenerative therapy of intervertebral disc: a double blind phase 2b trial of intradiscal injection of mesenchymal stromal cells in degenerative disc disease of the lumbar SPINE unresponsive to conventional therapy (RESPINE)
€ 331.362 UCBM unit, € 5.555.836 total; 4 years; **Co-Investigator** UCBM unit
http://www.chu-montpellier.fr/en/respine/project/

2014 **Short-Term Scientific Mission Grant (STSM) of COST (European Cooperation in Science and Technology) action. MP1301: NEWGEN**
Project title: New Generation Biomimetic and Customized Implants for Bone Engineering
€ 5.000, 1 year; **Principal Investigator**

2012 **Research Travel Grant of Campus Bio-Medico University**
€ 2.000, 1 year; **Principal Investigator**

PUBLICATIONS IN PEER REVIEWED JOURNALS

1. Cicione C, Vadalà G, Di Giacomo G, Tilotta V, Ambrosio L, **Russo F**, Zampogna B, Cannata F, Papalia R, Denaro V. Micro-fragmented and nanofat adipose tissue derivatives: In vitro qualitative and quantitative analysis. Front Bioeng Biotechnol. 2023 Jan 17;11:911600. doi: 10.3389/fbioe.2023.911600. PMID: 36733959; PMCID: PMC9887143.

2. Ambrosio L, Vadalà G, **Russo F**, Pascarella G, De Salvatore S, Papalia GF, Ruggiero A, Di Folco M, Carassiti M, Papalia R, Denaro V. Interventional Minimally Invasive Treatments for Chronic Low Back Pain Caused by Lumbar Facet Joint Syndrome: A Systematic Review. Global Spine J. 2022 Dec 1:21925682221142264. doi: 10.1177/21925682221142264. Epub ahead of print. PMID: 36458366.

3. Papalia GF, **Russo F**, Vadalà G, Pascarella G, De Salvatore S, Ambrosio L, Di Martino S, Sammartini D, Sammartini E, Carassiti M, Papalia R, Denaro V. Non-Invasive Treatments for Failed Back Surgery Syndrome: A Systematic Review. Global Spine J. 2022 Nov 22:21925682221141385. doi: 10.1177/21925682221141385. Epub ahead of print. PMID: 36412047.

4. Eliodoro Faiella, Giuseppina Pacella, Carlo Altomare, Caterina Bernetti, Marina Sarli, Laura Cea, **Fabrizio Russo**, Gianluca Vadalà, Bruno Beomonte Zobel, Rosario Francesco Grasso. Percutaneous Vertebroplasty: A Minimally Invasive Procedure for the Management of Vertebral Compression Fractures. Osteology 2022, 2(4), 139-151; doi: 10.3390/osteology2040017.

5. Vadalà G, Di Giacomo G, Ambrosio L, Cicione C, Tilotta V, **Russo F**, Papalia R, Denaro V. The Effect of Irisin on Human Nucleus Pulposus Cells: New Insights into the Biological Crosstalk between the Muscle and Intervertebral Disc. Spine (Phila Pa 1976). 2022 Sep 20. doi: 10.1097/BRS.0000000000004488. Epub ahead of print. PMID: 36149858.

6. Bacco L, **Russo F**, Ambrosio L, D'Antoni F, Vollero L, Vadalà G, Dell'Orletta F, Merone M, Papalia R, Denaro V. Natural language processing in low back pain and spine diseases: A systematic review.

Front Surg. 2022 Jul 14;9:957085. doi: 10.3389/fsurg.2022.957085. PMID: 35910476; PMCID: PMC9329654.

7. D'Antoni F, **Russo F**, Ambrosio L, Bacco L, Vollero L, Vadalà G, Merone M, Papalia R, Denaro V. Artificial Intelligence and Computer Aided Diagnosis in Chronic Low Back Pain: A Systematic Review. Int J Environ Res Public Health. 2022 May 14;19(10):5971. doi: 10.3390/ijerph19105971. PMID: 35627508; PMCID: PMC9141006.

8. Papalia GF, Petrucci G, **Russo F**, Ambrosio L, Vadalà G, Iavicoli S, Papalia R, Denaro V. COVID-19 Pandemic Increases the Impact of Low Back Pain: A Systematic Review and Metanalysis. Int J Environ Res Public Health. 2022 Apr 11;19(8):4599. doi: 10.3390/ijerph19084599. PMID: 35457462; PMCID: PMC9027663.

9. Mallio CA, Vadalà G, **Russo F**, Bernetti C, Ambrosio L, Zobel BB, Quattrocchi CC, Papalia R, Denaro V. Novel Magnetic Resonance Imaging Tools for the Diagnosis of Degenerative Disc Disease: A Narrative Review. Diagnostics (Basel). 2022 Feb 6;12(2):420. doi: 10.3390/diagnostics12020420. PMID: 35204509; PMCID: PMC8870820.

10. Faiella E, Santucci D, Calabrese A, **Russo F**, Vadalà G, Zobel BB, Soda P, Iannello G, de Felice C, Denaro V. Artificial Intelligence in Bone Metastases: An MRI and CT Imaging Review. Int J Environ Res Public Health. 2022 Feb 8;19(3):1880. doi: 10.3390/ijerph19031880. PMID: 35162902; PMCID: PMC8834956.

11. Carassiti M, Pascarella G, Strumia A, **Russo F**, Papalia GF, Cataldo R, Gargano F, Costa F, Pierri M, De Tommasi F, Massaroni C, Schena E, Agrò FE. Epidural Steroid Injections for Low Back Pain: A Narrative Review. Int J Environ Res Public Health. 2021 Dec 26;19(1):231. doi: 10.3390/ijerph19010231. PMID: 35010492; PMCID: PMC8744824.

12. Petrucci G, Papalia GF, **Russo F**, Vadalà G, Piredda M, De Marinis MG, Papalia R, Denaro V. Psychological Approaches for the Integrative Care of Chronic Low Back Pain: A Systematic Review and Metanalysis. Int J Environ Res Public Health. 2021 Dec 22;19(1):60. doi: 10.3390/ijerph19010060. PMID: 35010319; PMCID: PMC8751135.

13. Cannata F, Laudisio A, Ambrosio L, Vadalà G, **Russo F**, Zampogna B, Napoli N, Papalia R. The Association of Body Mass Index with Surgical Time Is Mediated by Comorbidity in Patients Undergoing Total Hip Arthroplasty. J Clin Med. 2021 Nov 28;10(23):5600. doi: 10.3390/jcm10235600. PMID: 34884302; PMCID: PMC8658336.

14. **Russo F**, Papalia GF, Vadalà G, Fontana L, Iavicoli S, Papalia R, Denaro V. The Effects of Workplace Interventions on Low Back Pain in Workers: A Systematic Review and Meta-Analysis. Int J Environ Res Public Health. 2021 Nov 30;18(23):12614. doi: 10.3390/ijerph182312614. PMID: 34886343; PMCID: PMC8657220.

15. Veronica Tilotta, Gianluca Vadalà, Luca Ambrosio , **Fabrizio Russo** , Claudia Cicione , Giuseppina Di Giacomo, Rocco Papalia and Vincenzo Denaro. Mesenchymal Stem Cell-Derived Exosomes: The New Frontier for the Treatment of Intervertebral Disc Degeneration. Appl. Sci. 2021, 11, 11222. https://doi.org/10.3390/app112311222

16. D'Antoni F, **Russo F**, Ambrosio L, Vollero L, Vadalà G, Merone M, Papalia R, Denaro V. Artificial Intelligence and Computer Vision in Low Back Pain: A Systematic Review. Int J Environ Res Public Health. 2021 Oct 17;18(20):10909. doi: 10.3390/ijerph182010909. PMID: 34682647; PMCID: PMC8535895.

17. Fosca M, Basoli V, Della Bella E, **Russo F**, Vadalà G, Alini M, Rau JV, Verrier S. Raman Spectroscopy in Skeletal Tissue Disorders and Tissue Engineering: Present and Prospective. Tissue Eng Part B Rev. 2022 Jan 5. doi: 10.1089/ten.TEB.2021.0139. Epub ahead of print. PMID: 34579558.

18. Cannata F, Laudisio A, Russo F, Ambrosio L, Vadalà G, Cardinale ME, Bartolomei C, Iannone G, Napoli N, Papalia R. Weight Loss in Patients Waiting for Total Hip Arthroplasty: Fiber-Enriched High Carbohydrate Diet Improves Hip Function and Decreases Pain before Surgery. J Clin Med. 2021 Sep 17;10(18):4203. doi: 10.3390/jcm10184203. PMID: 34575314; PMCID: PMC8467056.

19. Papalia R, Cicione C, **Russo F**, Ambrosio L, Di Giacomo G, Vadalà G, Denaro V. Does Vancomycin Wrapping in Anterior Cruciate Ligament Reconstruction Affect Tenocyte Activity In Vitro? Antibiotics (Basel). 2021 Sep 8;10(9):1087. doi: 10.3390/antibiotics10091087. PMID: 34572669; PMCID: PMC8466500.

20. Fadeeva IV, Goldberg MA, Preobrazhensky II, Mamin GV, Davidova GA, Agafonova NV, Fosca M, Russo F, Barinov SM, Cavalu S, Rau JV. Improved cytocompatibility and antibacterial properties of zinc-substituted brushite bone cement based on β-tricalcium phosphate. J Mater Sci Mater Med. 2021 Aug 18;32(9):99. doi: 10.1007/s10856-021-06575-x. PMID: 34406523; PMCID: PMC8373736.

21. **Russo F**, De Salvatore S, Ambrosio L, Vadalà G, Fontana L, Papalia R, Rantanen J, Iavicoli S, Denaro V. Does Workers' Compensation Status Affect Outcomes after Lumbar Spine Surgery? A Systematic Review and Meta-Analysis. Int J Environ Res Public Health. 2021 Jun 7;18(11):6165. doi: 10.3390/ijerph18116165. PMID: 34200483; PMCID: PMC8201180.

22. Vadalà G, Ambrosio L, **Russo F**, Papalia R, Denaro V. Stem Cells and Intervertebral Disc Regeneration Overview-What They Can and Can't Do. Int J Spine Surg. April 2021. doi: 10.14444/8054.

23. De Salvatore S, Vadalà G, Oggiano L, **Russo F**, Ambrosio L, Costici P. Virtual Reality in Preoperative Planning of Adolescent Idiopathic Scoliosis Surgery Using Google Cardboard. Neurospine. March 2021. 18(1):199-205. doi: 10.14245/ns.2040574.287

24. **Russo F**, Ambrosio L, Peroglio M, Guo W, Wangler S, Gewiess J, Grad S, Alini M, Papalia R, Vadalà G, Denaro V. A Hyaluronan and Platelet-Rich Plasma Hydrogel for Mesenchymal Stem Cell Delivery in the Intervertebral Disc: An Organ Culture Study. Int J Mol Sci. March 2021. 22(6):2963. doi: 10.3390/ijms22062963.

25. Rivera KO, **Russo F**, Boileau RM, Tomlinson RE, Miclau T, Marcucio RS, Desai TA, Bahney CS. Local injections of β-NGF accelerates endochondral fracture repair by promoting cartilage to bone conversion. Sci Rep. 2020 Dec 17;10(1):22241. doi: 10.1038/s41598-020-78983-y. PMID: 33335129; PMCID:PMC7747641.

26. Ambrosio L, Vadalà G, **Russo F**, Papalia R, Denaro V. The role of the orthopaedic surgeon in the COVID-19 era: cautions and perspectives. J Exp Orthop. 2020 May 27;7(1):35. doi: 10.1186/s40634-020-00255-5. PMID: 32458150.

27. **Russo F**, Di Tecco C, Fontana L, Adamo G, Papale A, Denaro V, Iavicoli S. Prevalence of work related musculoskeletal disorders in Italian workers: is there an underestimation of the related occupational risk factors? BMC Musculoskelet Disord. 2020 Nov 12;21(1):738. doi: 10.1186/s12891-020-03742-z. PMID: 33183245; PMCID: PMC7659235.

28. Cannata F, Vadalà G, **Russo F**, Papalia R, Napoli N, Pozzilli P. Beneficial Effects of Physical Activity in Diabetic Patients. J Funct Morphol Kinesiol. September 2020. 5(3):70. doi: 10.3390/jfmk5030070

29. Papalia R, Zampogna B, **Russo F**, Vasta S, Campi S, Saccone L, Di Giacomo G, Vadalà G, Denaro V. Adipose-derived stromal vascular fraction processed with different systems for the treatment of knee osteoarthritis: a pilot study on cell proliferation and clinical results. J Biol Regul Homeost Agents. 2020 Sep-Oct;34(5 Suppl. 1):113-119. IORS Special Issue on Orthopedics. PMID: 33739015.

30. Piccoli A, Cannata F, Strollo R, Pedone C, Leanza G, **Russo F**, Greto V, Isgrò C, Quattrocchi CC, Massaroni C, Silvestri S, Vadalà G, Bisogno T, Denaro V, Pozzilli P, Tang SY, Silva MJ, Conte C,

Papalia R, Maccarrone M, Napoli N. Sclerostin Regulation, Microarchitecture, and Advanced Glycation End-Products in the Bone of Elderly Women With Type 2 Diabetes. J Bone Miner Res. 2020 Dec;35(12):2415-2422. doi: 10.1002/jbmr.4153. Epub 2020 Oct 2. PMID: 32777114.

31. Cancilleri F, **Russo F***, Torre G, Vadalà G, Marineo G, Papalia R, Denaro V. Weil osteotomy for the treatment of grade III hallux rigidus: a case series. J Biol Regul Homeost Agents. 2020 Jul-Aug;34(4 Suppl. 3):337-343. Congress of the Italian Orthopaedic Research Society. PMID: 33261298.

32. Vadalà G, Ambrosio L, Portaccio I, Accoto D, **Russo F**, De Salvatore S, Papalia R, Denaro V. Validation of a novel smart drilling system to monitor bone impedance during transpedicular screw placement: a pilot study. J Biol Regul Homeost Agents. 2020 Jul-Aug;34(4 Suppl. 3):251-257. Congress of the Italian Orthopaedic Research Society. PMID: 33261286.

33. Vadalà G, **Russo F***, De Salvatore S, Cortina G, Albo E, Papalia R, Denaro V. Physical Activity for the Treatment of Chronic Low Back Pain in Elderly Patients: A Systematic Review. J Clin Med. 2020 Apr 5;9(4). pii: E1023. doi: 10.3390/jcm9041023. Review. PubMed PMID: 32260488.

34. Vadalà G, De Salvatore S, Ambrosio L, **Russo F***, Papalia R, Denaro V. Robotic Spine Surgery and Augmented Reality Systems: A State of the Art. Neurospine. 2020 Mar;17(1):88-100. doi: 10.14245/ns.2040060.030. Epub 2020 Mar 31. PubMed PMID: 32252158; PubMed Central PMCID: PMC7136092.

35. Vadalà G, Ambrosio L, **Russo F**, Papalia R, Denaro V. Interaction between Mesenchymal Stem Cells and Intervertebral Disc Microenvironment: From Cell Therapy to Tissue Engineering. Stem Cells International. 2019. https://doi.org/10.1155/2019/2376172.

36. **Russo F**, Ambrosio L, Ngo K, Vadalà G, Denaro V, Fan Y, Sowa G, Kang JD, Vo N. The Role of Type I Diabetes in Intervertebral Disc Degeneration. Spine (Phila Pa 1976). 2019 Sep 1;44(17):1177-1185. doi: 10.1097/BRS.0000000000003054. PubMed PMID: 30973512; PubMed Central PMCID: PMC6697217.

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INTERNATIONAL MEETING ABSTRACTS

ORAL PRESENTATIONS

- Veronica Tilotta, Giuseppina Di Giacomo, Claudia Cicione, Luca Ambrosio, **Fabrizio Russo**, Gianluca Vadalà, Russo Papalia, Vincenzo Denaro. Esosomi da cellule stromali mesenchimali della gelatina di

Wharton del cordone ombelicale: approccio innovativo per la rigenerazione del disco intervertebrale. Italian Orthopaedic Research Society (IORS). Bologna, Italy. 10 – 11 June 2022.

- Luca Ambrosio, **Fabrizio Russo**, Gianluca Vadalà, Cristina Di Tecco, Sergio Iavicoli, Rocco Papalia, Vincenzo Denaro. Il ruolo dello smart-working nei pazienti aetti da lombalgia durante la pandemia da COVID-19: uno studio cross-sectional. Italian Orthopaedic Research Society (IORS). Bologna, Italy. 10 – 11 June 2022.

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- Gianluca Vadalà, **Fabrizio Russo**, Giuseppe Francesco Papalia, Luca Ambrosio, Sergio De Salvatore, Rocco Papalia, Vincenzo Denaro. Artrodesi per via posteriore con viti transpeduncolari guidate da navigazione 3D vs fluoroscopia 2D nella spondilolistesi ad un singolo livello. Italian Orthopaedic Research Society (IORS). Bologna, Italy. 10 – 11 June 2022.

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- Gianluca Vadala, V. Tilotta, C. Cicione, G. Di Giacomo, L. Ambrosio, **F. Russo**, R. Papalia, V. Denaro. Effects of exosomes from mesenchymal stem cells on nucleus pulposus cells: a potential cell-free therapy. ISSLS 2021

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POSTER PRESENTATIONS

- Giuseppina Di Giacomo, Gianluca Vadalà, Veronica Tilotta, Claudia Cicione, Luca Ambrosio, **Fabrizio Russo**, Rocco Papalia, Vincenzo Denaro. Irisina e tendinopatia: ruolo della miochina nell'infiammazione dei tenociti in un modello in vitro. Italian Orthopaedic Research Society (IORS). Bologna, Italy. 10 – 11 June 2022.

- Claudia Cicione, Gianluca Vadalà, Veronica Tilotta, Giuseppina Di Giacomo, Luca Ambrosio, **Fabrizio Russo**, Rocco Papalia, Vincenzo Denaro. Analisi qualitativa e quantitativa in vitro di tessuto adiposo minimamente manipolato ottenuto con due diverse metodiche. Italian Orthopaedic Research Society (IORS). Bologna, Italy. 10 – 11 June 2022.

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- G. Vadalà, **F. Russo**, A. Giacalone, R. Papalia, V. Denaro. Intra-articular injection of humanized monoclonal anti-VEGF antibody in an osteoarthritis rabbit model is related to positive restorative changes on cartilage. Società Italiana Ginocchio Artroscopia Sport Cartilagine Tecnologie Ortopediche (SIGASCOT), Florence, Italy, September 2016

- **Russo F**, Pohl P, Ngo K, Yurube T, Dong Q, Fan Y, Massimo T, Sowa G, Kang J, Vo N; The role of diabetes Type I in intervertebral disc degeneration. International Society for the Study of the Lumbar Spine (ISSLS), Seoul, South Korea, June 2014

- **F. Russo**, G. Vadalà, R.A. Hartman, K.M. Bell, G.A. Sowa, N. Vo, J.D. Kang, V. Denaro "L'instabilità Segmentaria Nella Degenerazione Discale: Studio Biomeccanico Su Modello Di Nucleotomia Transpeduncolare". Congresso Nazionale Società Italiana di Chirurgia Vertebrale e Gruppo Italiano Scoliosi (SICV&GIS). Milano, Italy, May 2014

- Vadala Gianluca; **Russo Fabrizio**; De Strobel Francesca; Marco Bernardini; Peroglio Marianna; Alini Mauro; Denaro Vincenzo. "The Transpedicular Approach For The Study Of Intervertebral Disc Regeneration Strategies: In Vitro And In Vivo Characterisation". European Federation of National Associations of Orthopaedics and Traumatology (EFORT). London, UK, June 2014

- **F. Russo**, G. Vadalà, R.A. Hartman, K. Bell, G. Sowa, N. Vo, V. Denaro, J. Kang. "Biomechanical evaluation of the transpedicular nucleotomy with intact annulus fibrosus". Orthopaedic Research Society (ORS). New Orleans, LA – USA. March 2014

- **F. Russo**, V. Denaro, G. Vadalà, K. Ngo, T. Yurube, Q. Dong, Y. Fan, M. Trucco, G. Sowa, J. Kang, N. Vo. "The role of Diabetes type I in intervertebral disc degeneration". Combined Orthopedic Research Society (CORS), Venice, Italy, October 2013

- G. Vadalà, **F. Russo**, G. Patappa, M. Peroglio, S. Grad, V. Stadelmann, M. Alini, V. Denaro. "A novel nucleotomy model with intact annulus fibrosus to test intervertebral disc regeneration strategies". Italian Society of Spinal Surgery (GIS), Rome, Italy, May 2013

- G. Vadalà, **F. Russo**, G. Pattappa, D. Schiuma, M. Peroglio, S. Grad, L. M. Benneker, M. Alini, V. Denaro. "The transpedicular approach as new route for intervertebral disc regeneration". International Society for the Study of the Lumbar Spine (ISSLS), Scottsdale, AZ – USA, May 2013

- G. Vadalà, **F. Russo**, G. Patappa, M. Peroglio, S. Grad, V. Stadelmann, M. Alini, V. Denaro. "A novel nucleotomy model with intact annulus fibrosus to test intervertebral disc regeneration strategies". International Society for the Study of the Lumbar Spine (ISSLS), Scottsdale, AZ – USA, May 2013

- G. Vadalà, **F. Russo**, G. Pattappa, D. Schiuma, M. Peroglio, S. Grad, L. M. Benneker, M. Alini, V. Denaro. "The transpedicular approach as new route for intervertebral disc regeneration". European Orthopaedic Research Society (EORS). Amsterdam, September 2012

- G. Vadalà, **F. Russo**, G. Pattappa, D. Schiuma, M. Peroglio, S. Grad, L. M. Benneker, M. Alini, V. Denaro. "The transpedicular approach as new route for intervertebral disc regeneration and biological fusion". World Forum for Spine Research (WFSR), Helsinki, Finland, June 2012

PRACTICAL COURSES

2016 SIGASCOT Cadaver Lab – Hands-On Lab for Young Surgeons, Arezzo – Italy

2016 SIGASCOT Hands-On Cartilage Laboratory Course - Bridging The Gap Between Surgery And Biology, Milan –Italy

2016 Basic Life Support and Defibrillation (BLSD) Course, Rome - Italy

2015 AOTrauma Course - Advanced Principles of Fracture Management, Davos – Switzerland

2014 AOTrauma Course - Basic Principles of Fracture Management, Davos – Switzerland

2014 AO Clinical Investigation and Documentation (AOCID) Good Clinical Practice (GCP) Course, Davos – Switzerland

TEACHING POSITIONS

Since 2022 **Personal Tutor.** CdLM **Medicine and Surgery - MedTech**

Since 2021 **Personal Tutor.** CdLM a Ciclo Unico in **Medicina e Chirurgia - II triennio**

Since 2020 **Orientation and tutoring activities. Residency School in Orthopaedics and Traumatology.** Campus Bio-Medico University, Rome – Italy. Directed by Prof. Rocco Papalia.

2019 **Teaching assignment for the Master's Degree Course in Nursing and Instrumentation in the Operating Room - 7th edition,** at the Postgraduate Training Service of the University Campus Bio-Medico, Rome – Italy.

PROFESSIONAL AND SCIENTIFIC SOCIETY MEMBERSHIPS

- Society for Minimally Invasive Spine Surgery (SMISS)
- AO SPINE
- AO TRAUMA
- Orthopaedic Research Society (ORS)
- Osteoarthritis Research Society International (OARSI)
- European Orthopedic Research Society (EORS)
- Italian Orthopedic Research Society (IORS)
- Italian Society of Orthopedics and Traumatology (SIOT)

- Società Italiana Ginocchio Artroscopia Sport Cartilagine Tecnologie Ortopediche (SIAGASCOT)
- Federation of Orthopaedic Trainees in Europe (FORTE)

PROFESSIONAL AND SCIENTIFIC SOCIETY COMMITTEES AND APPOINTMENTS

- **2023 Education Committee** of European Orthopaedic Research Society
- **Moderator** at the "ROBOTICS, NAVIGATION AND VIRTUAL REALITY" session at 29th Annual Meeting of the European Orthopaedic Research Society, Rome, Italy, 15-17 September 2021
- **Organizing Committee** of the 29th Annual Meeting of the European Orthopaedic Research Society, Rome, Italy, 15-17 September 2021
- **Organizing Committee** of the Orthopedics and Rheumatology World Forum, Toronto – Canada, 2020
- **Organizing Committee** of the International Congress on Biotechnologies for Spinal Surgery - Biospine 7th. Rome, Italy. April 3-5, 2019.
- **Organizing Committee** Series of Arthroplasty Conferences (12th and 13th International Conference on Arthroplasty), 2018 - 2019
- **Organizing Committee** Biospine 7th – International Congress on Biotechnologies for Spinal Surgery. Rome, Italy. April 3-5, 2019.
- **Moderator** at The 32nd International Congress on Occupational Health, Dublin – Ireland, 2018.
- **Scientific Committee** XVIII Congresso Nazionale Italian Orthopaedic Research Society (IORS). Rome, Italy. 9-10 Dicembre 2016

APPOINTMENTS FOR INTERNATIONAL PEER-REVIEWED JOURNALS

- **Editorial Board Member** of Journal of Clinical Medicina
- **Editorial Board Member** of Archives of Orthopedics and Rheumatology
- **Editorial Board Member** of Journal of Orthopaedics and Physiotherapy (JOP)
- **Editorial Board Member** of Archives of Physical Health and Sports Medicine
- **Editorial Board Member** of Current Advances in Rheumatology (CAR)
- **Editorial Board Member** of CPQ Orthopaedics
- **Editorial Board Member** of BMC Research Notes
- **Editorial Board Member** of BMC Musculoskeletal Disorders
- **Editorial Board Member** Journal of Surgical Case Reports and Images
- **Editorial Board Member** of Health Sciences BMC Resarch Notes
- **Editorial Board Member** of Journal Intelligent Surgery

- **Associate Editor** of Orthopedics, Traumatology and Sports Medicine International Journal (OTSMIJ)
- **Academic Editor** of Archives of Orthopaedics (AO)
- **Topic Editor** of International Journal of Environmental Research and Public Health (IJERPH)
- **Reviewer** for Journal of Tissue Engineering
- **Reviewer** for BioResearch Open Access
- **Reviewer** for BMC Musculoskeletal Disorders
- **Guest Editor** of the Special Issue of the 29th Annual Meeting of the European Orthopaedic Research Society (EORS 2021) on Applied Sciences
- **Guest Editor** of the Special Issue "Low Back Pain (LBP)" on International Journal of Environmental Research and Public Health
- **Guest Editor** of the Special Issue "2nd Edition: Low Back Pain (LBP)" on International Journal of Environmental Research and Public Health
- **Guest Editor** of the Special Issue "New Perspectives and Innovative Techniques in Contemporary Spine Surgery" on Frontiers in Surgery
- **Guest Editor** of the Special Issue "Biomaterials and Novel Technologies for Healthcare" on in vitro models