

SILVIA PANSERI, PhD

Via Granarolo 64, Faenza (RA) – Italy

+ 39 0546 699785

silvia.panseri@issmc.cnr.it; silvia.panseri@cnr.it

Researcher unique identifiers: [0000-0002-8099-7132](https://orcid.org/0000-0002-8099-7132)

[Scopus Author ID: 24169204600](https://scopus.org/authid/24169204600)

URL for web site: <http://www.issmc.cnr.it/>



My research activity has always been characterized by a multi and interdisciplinary approach at the interfaces between nanotechnology and regenerative medicine; this allowed tackling scientific challenges that required a broad knowledge exceeding one specific field of interest. My research interests focus on novel approaches in tissue engineering and nanomedicine, particularly involving stimuli-responsive biomaterials, 4D *in vitro* cell culture with various biomaterials and *in vivo* regenerative medicine.

Moreover, over the past few years, I've undergone training in BioEntrepreneurship, and I have recently begun to reconsider my approach to science communication.

CURRENT POSITION

01.2023 to present **Research Director** (Dirigente di Ricerca; Level I). **Group leader of the Responsive Biosolutions group and co-head of the Cell-Material BioLAB** at the Institute of Science, Technology and Sustainability for Ceramics, National Research Council of Italy, ISSMC-CNR (Faenza, Italy). PI and Unit coordinator of several national/international projects on stimuli responsive biomaterials for soft tissues and nanomedicine. *Area of Research: nanostructured biomaterials, stimuli-responsive materials, biophysics and cell/biomaterial interaction.*

PREVIOUS POSITIONS

01.2021 to 12.2022 **Senior Researcher** (Primo Ricercatore; Level II). **Co-head of the Cell-Material BioLAB** at the Institute of Science, Technology and Sustainability for Ceramics, National Research Council of Italy, ISSMC-CNR (Faenza, Italy). *Area of Research: nanotechnology, stimuli-responsive materials, and cell/biomaterial interaction.*

11.2019 to 12.2020 **Principal Investigator. Permanent Researcher** (Ricercatore, Level III). Institute of Science, Technology and Sustainability for Ceramics, ISSMC-CNR (Faenza, Italy). National Research Council of Italy, **I set up the first Cell/Biomaterial Interaction Lab of the Institute that I still manage.** *Area of Research: nanostructured biomaterials, stimuli-responsive materials and cell/biomaterial interaction (3D and nanoparticles): design and characterization.*

05.2013 to 11.2019 **Fixed-term Researcher** (Level III) National Research Council of Italy, Institute of Science, Technology and Sustainability for Ceramics, ISSMC-CNR (Faenza, Italy). *Area of Research: hybrid biomaterials for bone regeneration, cell and molecular biology.*

Career break: maternity leave 2014 (6 months), 2017 (6 months).

01.2009 **Postdoctoral fellow.** Bologna University in collaboration with Rizzoli to Orthopaedic Institute Bologna, Italy. *Area of Research: focus on magnetic materials for tissue engineering (in vivo evaluations)*
05.2013

EDUCATION

2019 **Master post lauream in “Science Communication”**
University of Ferrara (Italy). Final grade: *30 cum laude*. Thesis “Science communication evolution: from the first Framework Program towards Horizon Europe” *Learning how to communicate science to the non-expert audience*.

2018 **Business Planning Bootcamp** of the Business Idea Competition 2018 organized by EIT RawMaterials. Anacapri (NA, Italy) 20-22 June 2018.

2016 **Workshop “Soft skills with a special focus on team bulding for H2020 Projects”**. London (UK). *Exploring what are high performing teams and the importance of the relational component in forming those teams*.

2015 **Advanced short course on BioEntrepreneurship “BioBusiness”**
Università della Svizzera Italiana, Lugano (CH) November 23-27 2015.

2013 **Short course on Horizon 2020** - “Verso H2020. Elementi di discontinuità e novità del nuovo programma di finanziamento”, Faenza (RA). 11-15 Nov 2013. *Learning how to write a successful proposal and to manage a project*.

01.07.2009 **PhD in Biology**
University of Milano-Bicocca, Department of Biotechnologies and Biosciences. Stem Cell Research Institute, San Raffaele Scientific Institute, Milan – Italy.
PhD thesis: “Central and peripheral nervous system regeneration via nano-structured scaffolds” PhD supervisor Prof. Angelo L. Vescovi. *Research field: biomaterials and stem cells for central and peripheral nervous system regeneration*.

2009 **National qualification** to pursue professional works as biologist at the University of Urbino “Carlo Bo”.

2005 **M.Sc in Biology**
University of Milano-Bicocca Department of Biotechnologies and Biosciences.

FELLOWSHIPS and AWARDS

2022 **Short Term Mobility.** i3S Institute for Research and Innovation in Health. Microenvironments for new therapies group. Porto, Portugal. *Injectable materials in regenerative medicine*

2018 **Young Investigator Award - Honorable Mention.**
Dept. of Chemical Science and Materials Technology - National Research Council of Italy.

2013 **Best Research Ideas for the Market Competition**
2nd Prize: “Magnetic Bioactive and Biodegradable Micro-Nano beads”. MiMe Int. Conf.

- 2011 **Marco Polo Fellowship.** Columbia University, Department of Biomedical Engineering, Cellular Engineering Laboratory, New York (USA). [Magnetic materials in medicine](#)
- 2011 **2011 Materials Today cover competition.** Inspired by nature: Bio-inspired artificial scaffolds and the quest to replicate biology. [Materials Today 2012, 15\(5\): 223 doi.org/10.1016/S1369-7021\(12\)70098-6](#)
- 2010 **Best PhD Thesis of 2009 in Biological Field** - SIBS award (Italian Society Spermental Biology)
- 2006 Keck Center for Collaborative Neuroscience – Rutgers University, Piscataway, New Jersey (USA). (Short stay) [Learning spinal cord injury research methods](#)
- 2005 Brain Research Institute, Laboratory of Neural Regeneration and Repair – University of Zurich and Swiss Federal Institute of Technology Zurich (Prof. Schwab’s Lab) – Switzerland. (Short stay). [Learning different aspects of spinal cord injury](#)

ORGANISATION OF SCIENTIFIC CONFERENCES and SCIENTIFIC ADVISORY BOARD

- 2024 Member of Local Organizing Committee – Congresso Nazionale Società Italiana Biomateriali (SIB 2024). 8-10 July 2024. Faenza (RA), Italy
- 2023 International Scientific Advisory Board – International Conference and Startup Summit on Functional Biomaterials and Synthetic Biology (FBSB-2023). 31 August-1 September 2023. Coimbatore, India.
- 2022 Member of Organizing Committee of “BioCeramics 32 – Annual Meeting of the International Society for Ceramics in Medicine”, 20-23 September 2022, Venice Mestre, Italy.
- 2013 Member of Organizing Committee of “Materials in Medicine International Conference”, 8-11 October 2013, Faenza (RA), Italy.

INSTITUTIONAL RESPONSIBILITIES

- 2023-present Communication and Press contact person for CNR-ISSMC
- 2013 – 2020 In charge of technical relationship with private companies in the biomedical field (FinCeramica spa and GreenBone Ortho srl) for biological evaluations.
- 2016 – 2019 Scientific manager of the formal collaboration with Rizzoli Ortophaedic Institute, Bologna (Italy) for ISTECCNR.

TEACHING ACTIVITIES

- 2023 Lesson on Cell/Biomaterial interactions (2h/y), Biomaterials for biomedical industry course, Industrial Biotechnology. Università degli Studi di Modena e Reggio Emilia.

- 2019 – Lessons on Nanotechnology + Practical course (40 hours/y), high school students. present (STEAM Outreach program).
- 2019 Lesson on Cell/Biomaterial interactions (2 hours/year). Master post lauream II level “Blood plasma derivatives and cells for regenerative medicine”. Medical School. University of Piemonte Orientale.
- 2018 Lesson on Bioceramics in regenerative medicine (2 hours/year). PhD students in Chemistry - Faculty of Industrial Chemistry. University of Bologna.
- 2018 – Practical course (4 hours/y), high school students. Supervisor of high school students present for 3 weeks/y, 2 students/y.

SUPERVISION OF STUDENTS

Institutions	Undergraduates		Master student		PhD students		Postdoctoral Fellows	
	Ongoing	Compl.	Ong.	Compl.	Ong.	Compl.	Ong.	Compl.
Bologna University (Italy)	1	4	0	7	1		0	1
Ferrara University (Italy)			0	2				
Chieti-Pescara University (Italy)					1	1		
University of Messina (Italy)					0	1		

EDITORIAL ACTIVITIES

- 2021 Topic Editor of the Research Topic “Biomaterials for Microenvironment Immunomodulation”. Front. Bioeng. Biotechnol, section Tissue Engineering and Regenerative Medicine (IF 5.890; eISSN: 2296-4185).
- 2021- Section Board Member of International Journal of Molecular Sciences – Open 2024 Access Journal by MDPI (IF 5.923; ISSN 1422-0067).
- 2020 Guest Editor. Special issue “Cell – Biomaterial Interaction”, International Journal of Molecular Sciences; section “Biomaterial Sciences”. IF 5.923 (ISSN 1422-0067). IV edition.
- 2020 Guest Editor. Special issue “Cell – Biomaterial Interaction”, International Journal of Molecular Sciences; section “Biomaterial Sciences”. IF 5.923 (ISSN 1422-0067). III edition.
- 2019 Guest Editor. Special issue “Cell-Instructive Microenvironment to Direct Stem Cell Fate”, Stem Cell International. (ISSN 1687-9678).
- 2018 Guest Editor. Special issue “Cell – Biomaterial Interaction”, International Journal of Molecular Sciences; section “Biomaterial Sciences”. IF 5.923 (ISSN 1422-0067). II edition.
- 2014 Guest Editor. Special issue “Cell – Biomaterial Interaction”, International Journal of Molecular Sciences; section “Biomaterial Sciences”. IF 5.923 (ISSN 1422-0067). I ed.

- 2011 Editor of the eBook 'Biomimetic approaches for tissue healing', Ed. Panseri S, Taraballi F, Cunha C. Publisher: OMICS Group International. (ISBN No: 978-1-63278-053-9).
- 2009 – present Guest Editor of the Research Topic “Microenvironment modulation of multipotent stem cells”, Front. Bioeng. Biotechnol, section Stem Cell Research. (ISSN: 2296-4185).
- Editorial board member of Am. Journal of Biomedical Engineering (ISSN: 2163-1077).
- Review Editor of Front. Bioeng. Biotechnol (Tiss Eng and Regen Med section) (ISSN: 2296-4185).
- Peer-reviewer for several journals (e.g. Nature Comm, Biomaterials, Nanomedicine, Advanced Materials, ACS nano).

PhD THESIS EXAMINER

- 2022 External examiner – PhD thesis in Bioengineering (XXXIV cycle), Politecnico di Milano (Italy).
- 2022 Member of the Board of Examiners – PhD program in Bioengineering (XXXIV cycle), Politecnico Milano (Italy)
- 2022 External examiner – PhD thesis, Faculty of technology Anna University, Chennai (India).
- 2019 Member of the Commission for the final exam and PhD thesis evaluation – PhD program in Medical Biotechnology (XXXI cycle) at the University of Chieti-Pescara

GRANT EVALUATOR

- 2024 Grant Evaluator, CaixaResearch Health 2024 Call, la Caixa Foundation
- 2024 Grant Evaluator “Connect with Wallonia – Come 2 Wallonia” (C2W) Programme - Marie Skłodowska Curie COFUND action
- 2023 - present Remote Referee, Science Fund of the Republic of Serbia.
- 2023 Remote Expert, National Research, Development and Innovation Office, Hungary
- 2022 Remote Referee - European Research Council (ERC), panel LS9. ERC-2023-STG
- 2021 Grant Evaluator, “FAR 2022 call” - Univ. of Modena and Reggio Emilia (Italy).
- 2021 Member of ESF (European Science Foundation) College of Expert Reviewers - <https://www.esf.org>
- 2021 Grant Evaluator, “Competitive-projects” call for young researchers 2022-23 – Univ. of Firenze (Italy).
- 2021 External reviewer VQR 2015-19. National Agency for the Evaluation of Universities and Research Institutes (ANVUR).

ONGOING GRANTS

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role</i>
Innovative technology to regenerate spinal cord lesions MIS RIGENERA	Italian Ministry of Defence	190,000	2020-2026	Principal Investigator
Harnessing the potential of the THP: moving toward the development of a clinical-grade kit for a peptide-based PET imaging agent for real-time imaging and treatment of aberrant c-Met cancers for another giant step in cancer treatment – DREAMi (project N. 2022BAN3TB)	Italian Ministry of University and Research	261,437 (49,972 for ISSMC-CNR)	2023-2025	Co-PI
Natural bio-mass and microbial bio-control agent solutions for the Replacement of contentious inputs in organic farming – BIO2 (Project: 101181331 — BIO2 — HORIZON-CL6-2024-FARM2FORK-02)	European Commission	5,998,209 (670,816 for ISSMC-CNR coordinator)	2025-2029	Key staff member
Strengthening excellence for advanced osteosarcoma's predictive models PREDICTOS - HORIZON-WIDERA-2021-ACCESS-03-01-Twinning-101079372	European Commission	1,375,188 (252,813 for ISTEC-CNR)	2023-2025	Key staff member
Comprehensive STRategies to tackle malignant tumors: from nanomedicine and theranostic to precision medicine. STRIKE HORIZON-MSCA-2021-DN-101072462	European Commission	2,106,835 (259,437 for ISTEC-CNR)	2023-2026	Key staff member
Ecosystem for Sustainable Transition in Emilia-Romagna” Dalla ricerca all’impresa Investimento 1.5 – NextGenerationEU GRAM, Spoke 1	Italian Ministry of University and Research		2024-2025	Key staff member
Ricerca e Sviluppo di tecnologie per la filiera dell'idrogeno	Italian Ministry of Environment	340,000 ISSMC-CNR	2021-2025	Key staff member

Piano Nazionale di Ripresa e Resilienza (PNRR)	and Energy Security (MASE) and Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA)	(LA 1.1.1; LA 2.3.4.)		
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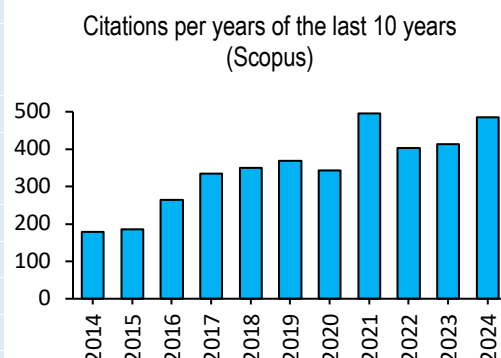
PREVIOUS GRANTS

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role</i>
Advanced hybrid theranostic nanoplatforms for an active drug delivery in the cancer treatment NANO4TARMED H2020-WIDESPREAD-2020-5-952063	European Commission	744,898 (159,195 for ISTEC-CNR)	2021-2024	Unit Coordinator
A multistage model of thyroid gland function for screening endocrine-disrupting chemicals in a biologically sex-specific manner SCREENED SC1-BHC-27-2018-825745	European Commission	5,655,088 (400,000 for ISTEC-CNR)	2019-2024	Key staff member
Enlarging cancer research knowledge and medication discovery of novel drugs and novel targets for cancer therapy DRUG MOLECULE	National Program “European Scientific Networks” – Bulgarian Ministry of Education and Science	200,000 (16,500 for ISTEC-CNR)	2020-2023	Unit Coordinator
Multifunctional biomaterials for tissues and organs self-repair Mat2Rep	Regional Funding – POR FESR Emilia-Romagna	1,117,015 (84,000 for ISTEC-CNR)	2019-2022	Unit Coordinator
Development and validation of nanostructured biomedical device to treat and regenerate metastatic bone tissue DINAMICA	Regional Funding – POR FESR Emilia-Romagna	1,117,084 (189,875 for ISTEC-CNR)	2019-2022	Key staff member

Design of multifunctional heat and moisture exchanger filters MedFIL	Regional Funding – POR FESR ER	1,115,000 (250,000 for ISTE-CNR)	2019-2022	Key staff member
La natura ispira processi innovativi per lo sviluppo di impianti per la medicina rigenerativa a elevato grado di vascolarizzazione e performance meccaniche	Regional Funding – POR FESR Emilia-Romagna	999,767 (455,250 for my unit)	2016-2018	Key staff member
New Generation Biomimetic and Customized Implants for Bone Engineering – MP1301 NEWGEN	European Commission COST Action	Meetings	2013-2017	Cost action Member
BioTechMA: Teaching biotechnology for human health: from the bench to the market ERASMUS+ 2014-1-IT02-KA203-003482	European Commission FP7	295,627 (24,678 for my unit)	2015-2017	Key staff member
NANOMAX – Sottoprogetto miRnano “Face up Cardiac Hypertrophy via microRNA Carried by Electrically Charged Nanoparticles”	Progetti Bandiera – Piano Nazionale della Ricerca	827,000 (370,000 for my unit)	2013-2016	Key staff member
Porous silica nanoparticles as controlled drug delivery system in osteoporosis	Fond. Del Monte di Bologna e Ravenna	10,000	2015-2016	Principal Investigator
SMILEY: Smart nano-structured devices hierarchically assembled by biomineralization processes NMP4-SL-2012-310637	European Commission FP7	3,996,130 (1,417,360 for my unit)	2013-2015	Key staff member
OPHIS: Composite phenotypic triggers for bone and cartilage repair FP7-NMP-2009-SMALL-3-246373	European Commission FP7	3,939,927 (704,427 for my unit)	2010-2013	Key staff member
MAGISTER: MAGnetic Scaffolds for in vivo Tissue EngineeriNg - NMP3-LA-2008-214685	European Commission FP7	11,085,124 (1,993,388 for my unit)	2009-2012	Key staff member
Nano-structured biomaterial functionalization to treat cartilage defects	Fond. Cariplo	350,000 (150,000 for my unit)	2011-2012	Unit Coordinator

SCIENTIFIC TRACK RECORD

Publications in peer-reviewed journals	103
H-index	36 (Scopus); 40 (Google scholar)
First Author Papers	12
Paper since becoming Principal Investigator or Group Leader	40
Papers as corresponding author (*)	19
Numbers of Citations	> 4450
Book chapters	15
Patents	2
Invited talks	11
Articles of Science Communication	5 (including La.Repubblica.it)



PUBLICATIONS IN PEER-REVIEWED JOURNALS

* = Corresponding author, # = shared first authorship

Papers since becoming Principal Investigator or Group Leader

- Rossi A, Bassi G, Cunha C, Baldisserri C, Ravaglia N, Gardini D, Molinari F, Lista F, Teran FJ, Piperno A, Montesi M, **Panseri S***. Magnetically Induced Anisotropic Structure in an Injectable Hydrogel for Skeletal Muscle Regeneration. **J Colloid Interface Sci.** **2025. 678: 334–345 doi.org/10.1016/j.jcis.2024.09.121.**
- Almeida AC, Pacheco D, Mateus A, Montesi M, **Panseri S**, Alves N, Sprio S, Fernandes Patrício TM. Magnetic-responsive materials tailored to enhance the cascade of bone regeneration and immune response. **Materials & Design.** **2025:251, 113645. doi.org/10.1016/j.matdes.2025.113645.**
- Rossi A, Furlani F, Bassi G, Cunha C, Lunghi A, Molinari F, Teran FJ, Lista F, Bianchi M, Piperno A, Montesi M, **Panseri S***. Contactless magnetically responsive injectable hydrogel for aligned tissue regeneration. **Mater Today Bio.** **2024. 27, 101110. doi.org/10.1016/j.mtbio.2024.101110**
- Degli Esposti L, Squiteri D, Fusacchia C, Bassi G, Torelli R, Altamura D, Manicone E, **Panseri S**, Adamiano A, Giannini C, Montesi M, Bugli F, Iafisco M. Bioinspired oriented calcium phosphate nanocrystal arrays with bactericidal and osteogenic properties. **Acta Biomaterialia.** **2024. doi.org/10.1016/j.actbio.2024.08.001**
- Bassi G, Rossi A, Campodoni E, Sandri M, Sarogni P, Fulle S, Voliani V, **Panseri S**, Montesi M. 3D tumor-engineered model replicating the osteosarcoma stem cell niche and *in vivo* tumor complexity. **ACS Appl Mater Interfaces.** **2024. DOI 10.1021/acsami.4c02567.**
- Zarska L, Moynihan E, Rossi A, Bassi G, Balatkova P, Campodoni E, Galiana Cameo M, Montesi M, Montagner D, Ranc V, **Panseri S***. Dual drug delivery in cancer therapy using graphene oxide-based nanoplateforms. **Adv. NanoBiomed Res.** **2024, 2400026. DOI: 10.1002/anbr.202400026**
- Oliva R, Torcasio SM, Coulembier O, Piperno A, Mazzaglia A, Rossi A, Bassi G, **Panseri S**, Montesi M, Scala A. RGD-tagging of star-shaped PLA-PEG Micellar Nanoassemblies

- enhances Doxorubicin Efficacy against Osteosarcoma. **Int J Pharm.** **2024.** **657:** **124183.** <https://doi.org/10.1016/j.ijpharm.2024.124183>
8. Montagner D, Moynihan E, Galiana-Cameo M, Sandri M, Ruffini A, **Panseri S**, Velasco-Torrijos T, Montesi M. 2D and 3D Anticancer properties of C2-functionalised glucosamine-Pt(IV) prodrugs based on cisplatin scaffold. **Front Chem (section Inorganic Chemistry).** **2024.** **12:****1388332.** doi: **10.3389/fchem.2024.1388332**
 9. Furlani F, Pota G, Rossi A, Luciani G, Campodoni E, Mocerino F, D'Errico G, Pezzella A, **Panseri S**, Vitiello G, Sandri M. Designing bioinspired multifunctional nanoplatfoms to support wound healing and skin regeneration: Mg-hydroxyapatite meets melanins. **Colloids Surf B: Biointerfaces.** **2024.** **235,** **March 2024,** **113756.** <https://doi.org/10.1016/j.colsurfb.2024.113756>
 10. Rossi A, Stagno C, Piperno A, Iraci N, **Panseri S**, Montesi M, Feizi-Dehnayebi M, Bassi G, Di Pietro ML, Micale N. Anticancer activity and morphological analysis of Pt(II) complexes: their DFT approach, docking simulation and ADME-Tox profiling. **Appl Organomet Chem.** **2024;****e7403.** <https://doi.org/10.1002/aoc.7403>
 11. Zoli L, Servadei F, Bassi G, Rossi A, Montesi M, Vinci A, Sciti D, **Panseri S**. From Outer Space to Inside the Body: Ultra-high temperature ceramic matrix composites for biomedical applications. **J Eur Ceram.** **2024,** **44:** **729-737** doi.org/10.1016/j.jeurceramsoc.2023.10.007.
 12. Luciano G, Vignolo M, Galante D, D'Arrigo C, Furlani F, Montesi M, **Panseri S**. Designing and Manufacturing of Biocompatible Hydroxyapatite and Sodium Trisilicate Scaffolds by Ordinary Domestic Microwave Oven. **Compounds** **2024,** **4,** **106–118.** <https://doi.org/10.3390/compounds4010005>.
 13. Furlani F, Campodoni E, Sangiorgi N, Montesi M, Sanson A, Sandri M, **Panseri S***. Electroconductive scaffolds based on gelatin and PEDOT:PSS for cardiac regeneration. **Int. J. Biol. Macromol.** **2023,** **224,** **266** doi.org/10.1016/j.ijbiomac.2022.10.122
 14. Anichina K, Mavrova A, Vuchev D, Popova-Daskalova G, Bassi G, Rossi A, Montesi M, **Panseri S**, Fratev F, Naydenova E. Benzimidazoles containing piperazine skeleton at C-2 position as promising tubulin modulators with anthelmintic and antineoplastic activity. **Pharmaceuticals.** **2023.** **16,** **1518.** <https://doi.org/10.3390/ph16111518>
 15. Takhsha M, Furlani F, **Panseri S**, Casoli F, Uhlir V, Albertini F. Magnetic shape-memory Heuslers turn to bio: cytocompatibility of Ni-Mn-Ga films and biomedical perspective. **ACS Applied Bio Materials.** **ACS Appl. Bio Mater.** **2023,** **6,** **11,** **5009-5017** <https://doi.org/10.1021/acsabm.3c00691>
 16. Campodoni E, Montanari M, Artusi C, Bergamini L, Bassi G, Destro E, Fenoglio I, **Panseri S**. Tampieri A, Sanson A, Sandri M. Biomineralization: a new tool for developing eco-sustainable Ti-doped hydroxyapatite-based hybrid UV filters. **Biomater Adv.** **2023.** **151,** **213474.** <https://doi.org/10.1016/j.bioadv.2023.213474>
 17. Marin E, Bassi G, Yoshikawa O, Zhu W, Rossi A, Lanzutti A, Xu H, Montesi M, **Panseri S**, Pezzotti G. On the role of Y₂O₃ in the bioactivity of ceramics and composites. **J Mater Sci.** **2023.** **58:****11218-11234** doi.org/10.1007/s10853-023-08608-y
 18. Mancini F, Menichetti A, Degli Esposti L, Montesi M, **Panseri S**, Bassi G, Montalti M, Lazzarini L, Adamiano A, Iafisco M. Fluorescent carbon dots from food-industry by-products for cell imaging. **J Funct. Biomater.** **2023,** **14(2),** **90;** <https://doi.org/10.3390/jfb14020090>

19. Haladjova E, **Panseri S**, Montesi M, Rossi A, Skandalis A, Pispas S, Rangelov S. Influence of DNA type on the physicochemical and biological properties of polyplexes based on star polymers bearing different amino functionalities. **Polymers**. **2023**, **15**, 894. <https://doi.org/10.3390/polym15040894>.
20. Moynihan E, **Panseri S**, Bassi G, Rossi A, Campodoni E, Dempsey E, Montesi M, Velasco Torrijos T, Montagner D. Development of novel Pt(IV)-Carbohydrate derivatives as targeted anticancer agents against Osteosarcoma. **Int. J. Mol. Sci.** **2023**, **24**, 6028. <https://doi.org/10.3390/ijms24076028>
21. Grimaudo MA, Krishnakumar GS, Giusto E, Furlani F, Bassi G, Rossi A, Molinari F, Lista F, Montesi M, **Panseri S***. Bioactive injectable hydrogels for on demand molecule/cell delivery and for tissue regeneration in the central nervous system. **Acta Biomaterialia**. **2022**. **140**: 88-101. [Doi.org/10.1016/j.actbio.2021.11.038](https://doi.org/10.1016/j.actbio.2021.11.038)
22. Furlani F, Rossi A, Grimaudo MA, Bassi G, Giusto E, Molinari F, Lista F, Montesi M, **Panseri S***. Controlled liposome delivery from chitosan-based thermosensitive hydrogel for regenerative medicine. **Int J Mol Sci.** **2022**, **23**, 894. <https://doi.org/10.3390/ijms23020894>
23. Giusto E, Zarska L, Beirne DF, Rossi A, Bassi G, Ruffini A, Montesi M, Montagner D, Ranc V, **Panseri S***. Graphene oxide nanoplateforms to enhance cisplatin-based drug delivery in anticancer therapy. **Nanomaterials** **2022**. **12**, 2372. <https://doi.org/10.3390/nano12142372>
24. Iwanov I, Rossi A, Montesi M, Doytchinova I, Sargsyan A, Momkov G, **Panseri S***, Naydenova E. Peptide-based targeted cancer therapeutics: design, synthesis and biological evaluation. **Eur J Pharm Sci.** **2022**. **176**: 106249. doi.org/10.1016/j.ejps.2022.106249
25. Montanari M, Sangiorgi A, Campodoni E, Bassi G, Gardini D, Montesi M, **Panseri S**, Sanson A, Tampieri A, Sandri M. Additive-Free Gelatine-Based Devices for Chondral Tissue Regeneration: Technological Process Comparison Among Mould Casting and Three-Dimensional Extrusion-Based Printing. **Polymers** **2022**. **14**(5), 1036; <https://doi.org/10.3390/polym14051036>
26. Furlani F, Montanari M, Sangiorgi N, Saracino E, Campodoni E, Sanson A, Benfenati V, Tampieri A, **Panseri S**, Sandri M. Electroconductive and injectable hydrogels based on gelatin and PEDOT:PSS for mini-invasive approaches in nervous tissue regeneration. **Biomaterials Science** **2022**, **10**, 2040-2053. DOI: 10.1039/d2bm00116k.
27. Torcasio SE, Oliva R, Montesi M, **Panseri S**, Bassi G, Mazzaglia A, Piperno A, Coulembier O, Scala A. Three-armed RGD-decorated starPLA-PEG nanoshuttle for docetaxel delivery. **Biomater Adv.** **2022 Sep**;140:213043. doi: 10.1016/j.bioadv.2022.213043.
28. **Panseri S***, Montesi M, Hautcoeur D, Dozio SM, Chamary S, De Barra E, Tampieri A, Leriche A. Bone-like ceramic scaffolds designed with bioinspired porosity induce a different stem cell response. **J Mater Sci Mater Med.** **2021 Jan** **20**;32(1):3. doi: 10.1007/s10856-020-06486-3.
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BOOK CHAPTERS

* = Corresponding author, # = shared first authorship

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4. Sprio S, Sandri M, Ruffini A, Adamiano A, Iafisco M, Dapporto M, **Panseri S**, Montesi M, Tampieri A. Tissue Engineering and Biomimetics with Bioceramics. In: Advances in ceramic biomaterials: Medical and commercial requirements. Ed. Cambier F, De Barra E, Palmero P. **Woodhead Publishing. 2017 (ISBN: 978-0-08-100881-2) doi.org/10.1016/B978-0-08-100881-2.00014-2.**
5. Sprio S, Sandri M, Iafisco M, **Panseri S**, Montesi M, Ruffini A, Adamiano A, Ballardini A, Tampieri A. Nature-Inspired Nanotechnology and Smart Magnetic Activation: Two Groundbreaking Approaches Toward a New Generation of Biomaterials for Hard Tissue Regeneration. In "Advanced Techniques in Bone Regeneration". Ed. A Rozim Zorzi and J Batista de Miranda. **Intech, 2016. DOI: 10.5772/63229 (ISBN 978-953-51-2539-6).**
6. Tampieri A, Sandri M, **Panseri S**, Adamiano A, Montesi M, Sprio S. Biologically Inspired Nanomaterials and Nanobiomagnetism: A Synergy among New Emerging Concepts in Regenerative Medicine. In "Bio-inspired Regenerative Medicine: Materials, Processes and Clinical Applications". Ed. Tampieri A and Sprio S. **Pan Stanford Publishing, 2015. DOI: 10.1201/b19914-2. (ISBN: 978-981-4669-14-6).**
7. Montesi M[#] and **Panseri S[#]**. Triggering cell-biomaterial interaction: recent approaches for osteochondral regeneration. In "Bio-inspired Regenerative Medicine: Materials, Processes and Clinical Applications". Ed. Tampieri A and Sprio S. **Pan Stanford Publishing, 2015. DOI: 10.1201/b19914-12. (ISBN: 978-981-4669-14-6).**
8. Montesi M[#] and **Panseri S[#]**. Advanced tissue engineering approaches in neurotrauma therapies. In "Biomimetic approaches for tissue healing", Ed. Panseri S, Taraballi F., Cunha C. **OMICS Group International 2015. (ISBN No: 978-1-63278-053-9).**
9. Tampieri A, Iafisco M, Sprio S, Ruffini A, **Panseri S**, Montesi M, Adamiano A, Sandri M. Hydroxiapatite: from nanocrystals to hybrid nanocomposites for regenerative medicine. In "Handbook of Bioceramics and Biocomposites", Ed. Antoniac I. **Meteor Springer International Publishing Switzerland, 2015. DOI: 10.1007/978-3-319-12460-5_6. (ISBN 978-3-319-09230-0).**
10. Sprio S, Sandri M, Iafisco M, **Panseri S**, Filardo G, Kon E, Marcacci, M, Tampieri A. Composite biomedical foams for engineering bone tissue. In "Biomedical foams for tissue engineering applications", Ed: Netti PA. **Woodhead Publishing Limited, 2014, Cambridge (UK), 249-280. (ISBN: 978-0-85709-696-8).**
11. Sprio S, Sandri M, **Panseri S**, Iafisco M, Ruffini A, Minardi S, Tampieri A. Bone substitutes based on biomineralization. In: "Bone substitutes biomaterials", **Ed. Mallick KK. Woodhead Publishing, 2014 July 21, 3-29. (ISBN 0 85709 497 1).**
12. **Panseri S***, Valentini F, D'Alessandro T, Cunha C. Emerging nanomedicine approaches for osteochondral tissue regeneration. In "Nanomedicine for Drug Delivery and Therapeutics". Ed: Ajay Kumar Mishra. **Wiley-Scrivener, 2013 (Print ISBN: 9781118414095, Online ISBN: 9781118636299, DOI: 10.1002/9781118636299).**
13. Sprio S, Sandri M, Iafisco M, **Panseri S**, Cunha C, Ruffini A, Zini N, Toni R, Tampieri A. Biomimetic materials in regenerative medicine. In: Ruys AJ, editor. Biomimetic biomaterials: Structure and applications, **Woodhead Publishing Limited, 2013, Cambridge (UK) 3-45. (ISBN 0 85709 416 5).**

14. Cunha C, **Panseri S**, Gelain F. Engineering of a 3D nanostructured scaffold made of functionalized self-assembling peptides and encapsulated neural stem cells. In "Nanotechnologies in Stem Cell. Methods in Molecular Biology". Ed. **K Turksen. Springer, 2012. (ISBN 978-1-62703-570-5; doi: 10.1007/7651_2012_2).**
15. Lowery J, **Panseri S**, Cunha C, Gelain F. Title: Electrospinning for Tissue Engineering Applications. In "Electrospun Nanofibers Research: Recent Developments". Ed. **A.K. Haghi. NOVA Publishers, 2009 (ISBN-978-1-60741-834-4).**

GRANTED PATENTS

1. Process for obtaining fluoride-doped citrate-coated amorphous calcium phosphate nanoparticles. Inventors: Delgado Lopez JM, Gomez Morales J, Fernandez Penas R, Iafisco M, Tampieri A., **Panseri S**. Serial PCT/EP2015/066651. Registration date: 21/07/2015. WO 2016/012452 A1. Licensed to Kalichem Italia srl.
2. Injectable apatitic cement ionically multi-substituted for regenerative vertebroplasty and kyphoplasty Inventors: Sprio S, Tampieri A, Sandri M, **Panseri S**, Logroscino G. Serial: PCT/IB2015/054594. WO 2015/193836. Registration date: 19/06/2014. Licensed to Fin-ceramica Faenza SpA for 6 months.

SPEAKER AT INTERNATIONAL CONFERENCES

1. ESB 2025 34th Annual Conference of the European Society for Biomaterials. 7-11 September 2025. Turin (Italy)
2. CRS 2025 Annual Meeting & Exposition, 14-18 July 2025. Philadelphia (USA).
3. 8th International Conference on Multifunctional, Hybrid and Nanomaterials, 3-6 March 2025. Montpellier (France)
4. Biomaterials and Novel Technologies for Healthcare 4th International Biennial Conference (BioMaH 2024), 15-18 October 2024, Rome (Italy). *Keynote Speaker*
5. 7th Tissue Engineering and Regenerative Medicine World Congress (TERMIS WC 2024), 25-28 June 2024 Seattle (USA)
6. 12th World Biomaterials Congress (WBC 2024) – 26-31 May 2024 Daegu (Republic of Korea)
7. International conference and startup summit on Functional Biomaterials and Synthetic Biology. 31 Aug-1 Sept 2023. Coimbatore (India). *Invited Plenary Speaker*
8. Workshop with International Participation "Drug-Molecules: stages in the discovery and development. 17-21 July 2022 Hisarya (Bulgaria) *Invited Plenary Lecture*
9. 2023 MRS Spring Meeting & Exhibit – Materials Research Society. 10-14 April 2023 San Francisco (USA).
10. Bioceramics32 – Symposium and Annual Meeting of the International Society for Ceramics in Medicine. 20-23 September 2022 Venice Mestre (Italy). *Invited Keynote Speaker*
11. National Conference with International Participation "Innovations In Drug Molecules". 19-22 July 2022 Hisarya (Bulgaria). *Invited Plenary Lecture*
12. TERMIS 2021, 6th World Congress - Tissue Engineering and Regenerative Medicine International Society. 15-19 November 2021. Maastricht (NL).
13. NanoMedicine International Conference 2019. 23-25 October 2019 Lisbon (Portugal). *Invited Keynote Speaker*

14. World Congress on Functional Materials and Nanotechnology. May 13-14, 2019 Valencia (Spain). *Invited speaker*
15. Italian National Conference on Materials Science and Technology, 22-26 October 2018 Bologna (Italy).
16. 25th Nano Congress for Future Advancements - 2018 Dublin (Ireland). *Invited Plenary Lecture*
17. Clinical Research and Innovation in Regenerative Medicine - 2017 Turin (Italy). *Invited speaker*
18. Nanotechnology Focus, Italian Orthopaedic Research Society - 2017 Pisa (Italy).
19. 1st International Translational Course in Osteoncology - 2016 Meldola (FC, Italy). *Invited speaker*
20. 10th World Biomaterials Congress - 2016 Montreal (Canada).
21. 1st Biennial Conference on: Biomaterials for tissue and genetic engineering and the role of nanotechnology. 2016 Rome (Italy). *Invited Keynote Lecture*
22. 26th Annual Conference European Society for Biomaterials. 2014 Liverpool (UK).
23. Materials in Medicine International Conference 2013. 2013 Faenza (RA), Italy. *Invited Keynote Lecture*
24. Mesenchymal stromal cells advances. 4th International Satellite Symposium - 2013 Brescia (Italy).
25. World Biotechnology Congress - 2013 Boston, (USA).
26. 2nd Global Congress NanoEngineering for Medicine and Biology – 2013 Boston, (USA).
27. 9th World Biomaterials Congress - 2012 Chengdu (China).

ARTICLES OF SCIENCE COMMUNICATION

1. **Panseri S.** Seno, un modello 3D per studiare la diffusione del tumore. La.Repubblica.it – Salute Seno. 10 July 2018
2. **Panseri S.** Un database per fermare gli atleti “geneticamente modificati” Galileonet.it 23 May 2018.
3. **Panseri S**, Sprio S, Tampieri A. Nanotecnologie: una rivoluzione nella cura delle malattie degenerative. DA40. Anno XV, N. 2 – Luglio 2014. pp 28-30.
4. Tampieri A, Minardi S, Ruffini A, **Panseri S**, Sprio S. Biomateriali per la rigenerazione e la funzione endocrina dell’osso. Endocrinologo August 2013. Vol 14, Issue 4, pp 163-168 10.1007/BF03346081 (ISSN 1720-8351).
5. Cunha C, **Panseri S**, Villa O, Silva D, Gelain F. Coltura tridimensionale di cellule staminali neurali su scaffold costituiti da peptidi autoassemblanti. Laboratorio 2000, Aprile 2012. (ISSN 1120-8376).

TECHNICAL SKILLS

Cell and Biology techniques. Histological techniques. Perfusion bioreactor for 3D long term cell culture. Using of fluorescence and confocal microscope, TimeLapse system, Scanning Electron Microscope, image processing with ImageJ software.

Using of biomaterials *in vitro* (cell culture with ceramic porous scaffolds, bio-hybrid materials, magnetic scaffolds, self-assembling peptide, electrospun materials, carbon nanotubes) and *in*

vivo (magnetic scaffolds in rabbit model osteochondral and long bone defects; self-assembling peptides and electrospinning channels transplantation in central and peripheral rat nervous system).

Animal experimentation skills: animal surgery (scaffold implantation in osteochondral and long bone defects in rabbit, spinal cord lesion using MASCIS Impactor Device, sciatic nerve transection, prosthesis implantation in central and peripheral nervous system, animal handling, animal care and behavioural tests).

TRANSVERSAL-SOFT SKILLS

Team working, interdisciplinarity, problem-solving, scientific communication and networking, critical thinking, creativity, project management and intellectual property rights, data management process and analysis, coordinating with others and people management.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2018 – present	Euroscience (European association for the advancement of science and technology)
2013 – present	
2013 – 2016	Italian Ceramic Society Cell Culture Italian Society

OTHER

2024	Chairman at BioMaH 2024, 15-18 October 2024, Rome (Italy).
2024	Chairman at SIB 2024 (Italian Society of Biomaterials), 8-10 July 2024, Faenza (Italy).
2023	Member of COST Action CA22170 TENET – Tendon Regeneration Network (2023-2027).
2022	Member of the round table on Antimicrobial Materials - Bioceramics32, 20-23 September 2022, Venice Mestre (Italy).
2022	Chairman at the Session “Cell-Material Interactions and co-cultures”, Bioceramics32, 20-23 September 2022, Venice Mestre (Italy).
2019	Chairman at the Session of “Bioinspired Materials/Nanotechnology in therapy/Pharmaceutical Nanotechnology”, NanoMed2019 23-25 October, 2019. Lisbon (Portugal)
2019	Member of the External Jury of the National Contest “Torricelli Web 2019” for science communication dedicated to high school. Faenza (Italia)
2018	Member of the External Jury of the Galileo Literary Prize for Science Communication - XII edition. Padova (Italia), 17-18 May 2018
2018-2024	Founder of the non-profit organization with the vision to see more scientists engage effectively in the public discussions and communication of science: “ Ruote Quadrate – La Scienza Inaspettata” www.ruotequadrate.it
2017-2013	Member of COST Action MP1301 NEWGEN – New Generation Biomimetic and Customized Implants for Bone Engineering (2013-2017).
2016	Chairman at the Session of “Biomaterials as stem cell microenvironments”, 10 th World

Biomaterials Congress 2016, 17-22 May, 2016. Montreal (Canada)

CAREER BREAKS

2014	Maternity leave (6 months)
2017	Maternity leave (6 months)