SILVIA PANSERI, PhD

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 that exceed one specific field of interest. My interests are focused on novel approaches in tissue engineering and nanomedicine, and I had acquired expertise in *in vitro* 3D cell culture with several biomaterials and *in vivo* regenerative medicine.

CURRENT POSITION

2013 - present **Researcher - Group leader.** National Research Council of Italy, Institute of Science and Technology for Ceramics, ISTEC-CNR (Faenza, Italy). *Research field: nanostructured biomaterials and cell/biomaterial interaction (3D and nanoparticles): design and characterization.*

PREVIOUS POSITIONS

2009 - 2012 **Postdoctoral fellow.** Bologna University in collaboration with Rizzoli Orthopaedic Institute. *Research field: focus on magnetic materials for tissue engineering (in vivo evaluations)*

EDUCATION

2019 **Master post lauream in "Science Communication"** University of Ferrara (Italy). Final grade: *30 cum laude*. *Learning how to communicate science to the non-expert audience.*

2009 **PhD in Biology** University of Milano-Bicocca and Stem Cell Research Institute, San Raffaele Scientific Institute, Milan – Italy. *Research field: biomaterials for nervous system regeneration.*

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

FELLOWSHIPS and AWARDS

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

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*

2010 **Best PhD Thesis of 2009 in Biological Field -** SIBS award (Italian Society Sperimental Biology)

SUPERVISION OF STUDENTS

n. 4 undergraduate students, n. 7 master students, n.1 PhD student and n. 1 postdoctoral fellow of the University of Bologna, Univ. Of Ferrara and Univ. Of Chieti-Pescara (Italy).

EDITORIAL ACTIVITIES

2021-present: 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-present: Section Board Member of International Journal of Molecular Sciences (IF 5.923; ISSN 1422-0067))

2018- present: Guest Editor. Special issue "Cell – Biomaterial Interaction", International Journal of Molecular Sciences; section "Biomaterial Sciences". (ISSN 1422-0067). I; II, III and IV edition.

2015: 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).

2015: Guest Editor of the Research Topic "Microenvironment modulation of multipotent stem cells", Front. Bioeng. Biotechnol, section Stem Cell Research. (ISSN: 2296-4185).

SCIENTIFIC TRACK RECORD

Publications in peer-reviewed journals	74
H-index (based on Scopus)	26
First Author Papers	11
Papers as corresponding	12
Numbers of Citations	>2500
Book chapters	14
Patents	2
Invited talks	7
Articles of Science Communication	5 (including La.Repubblica.it)

ONGOING GRANTS

Project Title	*Funding source*	*Amount (Euros)*	*Period*	*Role*
Advanced hybrid theranostic nanoplatforms for an active drug delivery in the cancer Treatment H2020-WIDESPREAD-2020-5-952063	European Comm.	744,898 (159,195 for ISTEC-CNR)	2021-2023	*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 Comm.	5,655,088 (400,000 for ISTEC-CNR)	2019-2023	*Key staff member*
Innovative technology to regenerate spinal cord lesions	Italian Ministry of Defence	190,000	2020-2022	*Principal Investigator*
Multifunctional biomaterials for tissues and organs self-repair	Regional Funding POR FESR	1,117,015 (84,000 for ISTEC-CNR)	2019-2021	*Unit Coordinator*
Development and validation of nanostructured biomedical device to treat and regenerate metastatic bone tissue	Regional Funding POR FESR	1,117,084 (189,875 for ISTEC-CNR)	2019-2021	*Key staff member*
Design of multifunctional heat and moisture exchanger filters	Regional Funding POR FESR	1,115,000 (250,000 for ISTEC-CNR)	2019-2021	*Key staff member*

PREVIOUS GRANTS

European projects:

• **Activity leader**: ERASMUS + "BioTechMA" Teaching biotechnology for human health: from the bench to the market" 2014-1-IT02-KA203-003482.

• **Key personnel**: "MAGISTER: MAGnetIc Scaffolds for in vivo Tissue EngineeRing" - NMP3-LA-2008-214685.

• **Key personnel**: "OPHIS: Composite phenotypic triggers for bone and cartilage repair" - FP7-NMP-2009-SMALL-3-246373.

• **Key personnel**: "SMILEY: Hierarchical assembly of nano-scale building blocks" - NMP4-SL-2012-310637.

National Projects:

• **Principal Investigator** Porous silica nanoparticles as controlled drug delivery system in osteoporosis". Fondazione Del Monte di Bologna e Ravenna" (Italy). 2015-2016.

Key personnel: "La natura ispira processi innovativi per lo sviluppo di impianti per la medicina rigenerativa" NIPROGEN CUP B42I16000020005 POR-FERS 2014-2020 della Regione Emilia-Romagna. 2014-2020.

• **Activity leader**: Fondazione CARIPLO "Biomaterial functionalization for treatment of articular cartilage defects" Grant No.2010-03782010-0378.

• **Key personnel**: Flagship Projects coordinated by the Italian National Research Council ("Invecchiamento 2012-2014" and "NanoMax 2011-2013").

• **Key personnel**: PRIN Project "Innovative chemical methodologies for smart biomaterials" (prot. 2010L9SH3K).