



GIADA BASSI

Nationality: Italian

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Date of birth: 14/07/1995

Gender: Female

Profession: BIOTECHNOLOGIST in Human Health

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 **Personal:** via Caduti Sul Lavoro n. 14, 48026 Russi (Italy)

SCIENTIFIC DETAILS

 0000-0001-8496-5077

 57220875280

 1544050

 <https://scholar.google.com/citations?user=&user=RCZ4PisAAAAJ>

BIBLIOMETRICS INDICATORS

7 scientific publications on international scientific journals

A total of 27 citations

H index = 3

(source: [Scopus](https://www.scopus.com/authid/detail.uri?authorId=57220875280) <https://www.scopus.com/authid/detail.uri?authorId=57220875280>)

WORK EXPERIENCE

PhD student in Medical Biotechnologies

At: Institute of Science and Technologies for Ceramics (ISTEC) of National Research Council (CNR)

Affiliation: University of "G. d'Annunzio", Chieti-Pescara

[01/11/2021 - in course]

City: Faenza (RA)

Country: Italy

PhD Research project: development of a more predictive *in vitro* 3D scaffold-based osteosarcoma model with focus on cancer stem cells niche for drug screening and biological studies. Hydroxyapatite-based scaffolds mimicking osteosarcoma extracellular matrix are combined with sarcospheres as Cancer Stem Cells enrichment model, Extracellular vesicles (EVs) and relevant cell types of tumor microenvironment. Final *in vivo* pilot study on the model ability in resembling the disease in mice.

Financed by PRIN “Osteosarcoma and Mesenchymal Stem Cells to assay innovative materials, bioactive injectable bone cements, with drug delivery ability, to contrast spine tumor recurrence and to enhance healthy bone regrowth”, with thematic specificity on “Biomimetic approaches for regenerative medicine and nanomedicine for the development of innovative anti-cancer strategies.

Topics:

Handling of *in vitro* 3D culture systems under static or dynamic conditions by using hydroxyapatite-based scaffolds and bioreactors.

High experience in viability and cytotoxicity assays, apoptosis and necrosis analysis, migration and invasion assays (scratch test and transwell technique) molecular biology techniques (Western Blotting, qRT-PCT, agarose gel-DNA electrophoresis), immunofluorescence, immunohistochemical, fluorescence and histological analysis on both 2D and 3D conditions.

High experience in the handling and characterization of tumor spheroids of osteosarcoma by the optimization of different protocols (sphere-forming efficiency, dilution assay, colony forming ability, migration and invasion assays) on 2D and 3D scaffold-based conditions.

Extracellular vesicles (EVs) isolation and characterization from *in vitro* 2D and 3D cell cultures under static and dynamic conditions. Use of isolated EVs on 2D and 3D cell cultures to improve specific properties and mimic *in vivo* microenvironment.

Statistical analysis of data, exposition of reports on experimental results, Journal clubs.

Research Assistant

At: Institute of Science and Technologies for Ceramics (ISTEC) of National Research Council (CNR)

[13/01/2020 – 31-10-2021]

City: Faenza (RA)

Country: Italy

Scientific research financed by PRIN “Osteosarcoma and Mesenchymal Stem Cells to assay innovative materials, bioactive injectable bone cements, with drug delivery ability, to contrast spine tumor recurrence and to enhance healthy bone regrowth”, with thematic specificity on “Biomimetic approaches for regenerative medicine and nanomedicine for the development of innovative anti-cancer strategies”

Topics:

Handling of *in vitro* 3D culture systems under static or dynamic conditions: experience with scaffolds, nanosystems, bioreactors, functionalized surfaces and hydrogels. Biocompatibility evaluation of materials.

High experience in viability and cytotoxicity assays, apoptosis and necrosis analysis, migration and invasion assays (scratch test and transwell technique) molecular biology techniques (Western Blotting, qRT-PCT, agarose gel-DNA electrophoresis), immunofluorescence, immunohistochemical, fluorescence and histological analysis on both 2D and 3D conditions.

High experience in the handling and characterization of tumor spheroids of osteosarcoma by the optimization of different protocols.

Extracellular vesicles (EVs) isolation and characterization from *in vitro* 2D and 3D cell culture under static and dynamic conditions.

Statistical analysis of data, exposition of reports on experimental results, Journal clubs.

EDUCATION AND TRAINING

Master's Degree in Biotechnologies for environment and human health (LM-8)

University of Ferrara (FE)

[09/2017 - 09/2019]

via Luigi Borsari, 46, 44121 Ferrara (FE) (Italy)

Field(s) of study: life sciences and biotechnology

Curricular internship at: Institute of Science and Technology for Ceramics, National Research Council of Italy (9 months attendance)

Final grade: 110 with Honors

Thesis: Cellular biochemical and regenerative medicine

Thesis: "Cancer Stem Cells and biomimetic materials for the *in vitro* development of a 3D osteosarcoma model" carried out at the Institute of Science and Technology for Ceramics of National Research Council (CNR), Faenza (RA).

Topics:

Preparation of *in vitro* 3D culture systems under static conditions: experience with scaffolds for the realization of 3D *in vitro* models of osteosarcoma.

Analysis of 3D culture models by histological, fluorescent, electron microscopy analysis. Gene and protein expression evaluation by qRT-PCR and Western blotting.

Optimization of sphere forming culture for Cancer Stem Cells (CSCs) enrichment.

Optimization of histological protocols on 3D scaffold-based *in vitro* models.

Bachelor's Degree in Biological Science (L-13)

University of Ferrara (FE)

[09/2014 - 09/2017]

via Luigi Borsari, 46, 44121 Ferrara (FE) (Italy)

Field(s) of study: life Sciences

Curricular internship at: Department of Medical Science of University of Ferrara (FE) (3 months attendance)

Final grade: 98/110

Thesis: Pharmacology

Thesis in Pharmacology: "Signal pathways involved in the anti-inflammatory effect by pulsed electromagnetic fields on murine microglia cells stimulated with LPS".

Topics:

Management of 2D cell culture under hypoxic and normoxic conditions.

Protein and cytokines analysis by ELISA assay and Alpha Technology

High school qualification in linguistic studies

Classic High school "Dante Alighieri"

[certificate on 2014]

Piazza Anita Garibaldi, 2, 48121 Ravenna (RA) (Italy)

Final grade: 73/100

LANGUAGE SKILLS

Mother tongue(s): **Italian**

Other language(s): **English (B2) - Spanish (B2)**

DIGITAL SKILLS

Microsoft Office: Word, Excel, Power Point, Outlook. / EndNote X7 / Adobe Photoshop / Graphpad prism (Version: 8.00 and 6.00) / Gimp Photoshop (photo editing) / PubMed / Image Lab Software / Google (Google Drive, Google Docs, Google Slides).

PUBLICATIONS

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.* 14;23(2):894, 2022 Jan
DOI: 10.3390/ijms23020894. PMID: 35055097; PMCID: PMC8776110
Journal article

Landesmann, B. and Paini, A., Preface - JRC Summer School on Non-animal Approaches in Science, May 2021, ATLA-ALTERNATIVES TO LABORATORY ANIMALS, ISSN 0261-1929 (online), 49 (6), 2021, p. 235-300, JRC126829.
DOI = 10.1177/02611929211065919
Preface

Moynihan E; **Bassi G**; Ruffini A; Panseri S; Montesi M; Velasco-Torrijos Trinidad; Montagner Diego. Click Pt(IV)-Carbohydrates Pro-Drugs for Treatment of Osteosarcoma. *Frontiers in Chemistry*, 9:795997, 2021
DOI=10.3389/fchem.2021.795997
Journal Article

M.A. Grimaudo; G.S. Krishnakumar; E. Giusto; F. Furlani; **G. Bassi**; A. Rossi; F. Molinari; F. Lista; M. Montesi; S Panseri. Bioactive injectable hydrogels for on demand molecule/cell delivery and for tissue regeneration in the central nervous system. *Acta Biomaterialia* 2021.

DOI: [10.1016/j.actbio.2021.11.038](https://doi.org/10.1016/j.actbio.2021.11.038)

Review

Campodoni, E.; Montanari, M.; Artusi, C.; **Bassi, G.**; Furlani, F.; Montesi, M.; Panseri, S.; Sandri, M.; Tampieri, A. Calcium-Based Biomineralization: A Smart Approach for the Design of Novel Multifunctional Hybrid Materials. *J. Compos. Sci.* 2021, 5(10), 278.

DOI: [10.3390/jcs5100278](https://doi.org/10.3390/jcs5100278)

Review

Mulazzi, M.; Campodoni, E.; **Bassi, G.**; Montesi, M.; Panseri, S.; Bonvicini, F.; Gentilomi, GA.; Tampieri, A.; Sandri, M. Medicated Hydroxyapatite/Collagen Hybrid Scaffolds for Bone Regeneration and Local Antimicrobial Therapy to Prevent Bone Infections. *Pharmaceutics*. 2021 Jul 16;13(7):1090.

DOI: [10.3390/pharmaceutics13071090](https://doi.org/10.3390/pharmaceutics13071090); PMID: 34371782; PMCID: PMC8309148

Journal article

Bassi, G.; Grimaudo, MA.; Panseri, S.; Montesi, M. Advanced Multi-Dimensional Cellular Models as Emerging Reality to Reproduce In Vitro the Human Body Complexity. *Int J Mol Sci.*, 2021

DOI: [10.3390/ijms22031195](https://doi.org/10.3390/ijms22031195); PMID: 33530487

Review

Bassi, G.; Panseri, S.; Dozio, S.M.; Sandri, M.; Campodoni, E.; Dapporto, M.; Sprio, S.; Tampieri, A.; Montesi, M. Scaffold-based 3D cellular models mimicking the heterogeneity of osteosarcoma stem cell niche. *Scientific reports* 2020, 10, 22294.

DOI: [10.1038/s41598-020-79448-y](https://doi.org/10.1038/s41598-020-79448-y); PMID: 33339857

Journal article

CONFERENCES AND MEETINGS

XXVII National congress of Italian Chemistry Company - SCI2021

Topic “Chemistry guides the sustainable development”

[Italy, 14/09/2021 - 23/09/21]

Oral presentation: “Synthesis and biological profile of novel three-arms star-shaped PLAPEG amphiphilic copolymers”

Serena Maria Torcasio^{a,b}, Monica Montesi^c, Silvia Panseri^c, Arianna Rossi^c, Giada Bassi^c, Antonino Mazzaglia^d, Anna Piperno^b, Olivier Coulembier^a, and Angela Scala^b

^a Center of Innovation and Research in Materials and Polymers (CIRMAP), Laboratory of Polymeric and Composite Materials, University of Mons, Place du Parc 23, 7000 Mons, Belgium; ^b Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, V.le F. Stagno d'Alcontres 31, 98166 Messina, Italy (ascalet@unime.it); ^c CNR-ISTEC, Institute of Science and Technology for Ceramics, National Research Council of Italy, Via Granarolo 64, 48018 Faenza, RA, Italy; ^d CNR-ISMN, Istituto per lo Studio dei Materiali Nanostrutturati, V.le F. Stagno d'Alcontres 31, 98166, Messina, Italy.

Conference of European Society for Biomaterials (ESB)

[Porto, Portugal, 05/09/2021 - 09/09/2021]

Oral presentation: "Scaffold-based 3D cellular models mimicking the heterogeneity of osteosarcoma stem cell niche"

Giada Bassi, Silvia Panseri, Arianna Rossi, Elisabetta Campodoni, Monica Sandri, Massimiliano Dapporto, Simone Sprio, Anna Tampieri, Monica Montesi.

Institute of Science and Technology for Ceramics, National Research Council of Italy (ISTEC-CNR), Via Granarolo, 64; 48018 Faenza (RA)- Italy.

EURION-European Cluster to Improve Identification of Endocrine Disruptors

[28/01/2021]

Poster presentation: “Magnetic cell labelling with bioresorbable nanoparticles: an attractive advanced approach to guide cells in a 3D thyroid gland model”

Silvia Panseri, Monica Montesi, Giada Bassi, Elisabetta Campodoni, Margherita Montanari, Anna Tampieri, Monica Sandri

Institute of Science and Technology for Ceramics, National Research Council of Italy (ISTEC-CNR), Via Granarolo, 64; 48018 Faenza (RA)- Italy.

COURSES AND CERTIFICATIONS

JRC Summer School 2021 “Non-Animal Approaches in Science. The Three R...evolution” by the European Commission’s science and knowledge service.

[17/05/2021 - 21/05/2021]

Poster abstract titled “Tumor Engineering 3D approaches as more predictive *in vitro* preclinical models. Scaffold-based 3D cellular models mimicking the heterogeneity of osteosarcoma stemcell niche”.

Certificate of attendance

Abstract publication in SAGE PUBLICATIONS LTD: <https://journals.sagepub.com/doi/full/10.1177/02611929211065919>
<https://publications.jrc.ec.europa.eu/repository/handle/JRC126829>



europass

DICHIARAZIONI SOSTITUTIVE DI CERTIFICAZIONI (art. 46 D.P.R. n. 445/2000) E DELL'ATTO DI NOTORIETÀ (art. 47 D.P.R. n. 445/2000):

La sottoscritta Bassi Giada, nata a Ravenna (RA) il 14/07/1995, attualmente residente a Russi (RA) 48026 in Via Caduti sul Lavoro n. 14, telefono +39 3333872002, visto il D.P.R. 28 dicembre 2000, n. 445 concernente "T.U. delle disposizioni legislative e regolamentari in materia di documentazione amministrativa" e successive modifiche ed integrazioni, vista la Legge 12 novembre 2011, n. 183 ed in particolare l'art. 15 concernente le nuove disposizioni in materia di certificati e dichiarazioni sostitutive (*), consapevole che, ai sensi dell'art. 76 del DPR 445/2000, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono punite ai sensi del Codice penale e delle leggi speciali vigenti in materia, dichiara sotto la propria responsabilità:

che quanto dichiarato nel presente curriculum vitae et studiorum comprensivo delle informazioni sulla produzione scientifica corrisponde a verità.

Russi, 17/02/2022

Il dichiarante

(*) ai sensi dell'art. 15, comma 1 della Legge 12/11/2011, n. 183 le certificazioni rilasciate dalla P.A. in ordine a stati, qualità personali e fatti sono valide e utilizzabili solo nei rapporti tra privati; nei rapporti con gli Organi della Pubblica Amministrazione e i gestori di pubblici servizi, i certificati sono sempre sostituiti dalle dichiarazioni sostitutive di certificazione o dall'atto di notorietà di cui agli artt. 46 e 47 del DPR 445/2000.

Autorizzo il trattamento dei miei dati personali, ai sensi del D.lgs 196 del 30 Giugno 2003.

Russi, 17/02/2022

Il dichiarante