

curriculum vitae



Personal information

Surname(s) / First name(s)

Visai Livia

Telephone(s)

0039 0382 987725

Fax(es)

0039 0382 423108

E-mail(s)

livia.visai@unipv.it and livia.visai@icsmaugeri.it

Nationality(-ies)

Italian

Gender

Female

Bibliometric data:

Scopus HI: 56

Web of science HI: 53

Google Scholar HI: 68

Occupational field

-Associate Professor in Biochemistry at the Department of Molecular Medicine, Faculty of Medicine, University of Pavia, Italy.

-Associate Professor within the national health service of Scientific Clinical Institutes (ICS) Maugeri, IRCCS, Italy

Work experience

Dates

March 2021

Occupation or position held

Referent of the Lombardy aerospace cluster (<https://www.aerospacelombardia.it/en/>)

Main activities and responsibilities

Scientific advisor

Name and address of employer

c/o Confindustria Varese – Piazza Monte Grappa 5 – 21100 Varese – Italia

Type of business or sector

Aerospace

Dates

June 2020

Occupation or position held

Co-founder of the Start Up Bac3Gel, Portugal (<https://bac3gel.com/home/>)

Main activities and responsibilities

Scientific advisor

Name and address of employer

Bac3gel LTD, Av. Jacques Delors Edifício Inovação II, nº 411, Laboratório 2, 2740-122 - Oeiras

Type of business or sector

Spin off of the Polytechnic of Milano, Milano Italy

Dates

2019 and 2023

Occupation or position held

Vice director of Health professions of rehabilitation of UNIPV, Class 2

Main activities and responsibilities

Vice director

Name and address of employer

University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy

Type of business or sector	Coordination and activities related Health professions of rehabilitation, Class 2
Dates	November 2018 up 2027
Occupation or position held	Referent and coordinator of UNIPV of the "3R Inter-University Center" (https://www.centro3r.it/)
Main activities and responsibilities	Scientific and didactic contacts
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Activities related to the 3R center
Dates	July 2018 up to 2025
Occupation or position held	Nominee as a member of the joint commission of Medicine Faculty
Main activities and responsibilities	Activities related to joint commission of Medicine Faculty
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Activities related to joint commission of Medicine Faculty
Dates	March 2018 - up to now
Occupation or position held	ISTEC-CNR Associate position
Main activities and responsibilities	Research activities
Name and address of employer	Istec CNR (www.istec.cnr.it/), Via Granarolo, 64 - 48018 Faenza (RA), Italy
Type of business or sector	Activity related to research
Dates	January 2018 up to 2024
Occupation or position held	Advisor at Scuola Avanzata di Alta Formazione Dottorale (SAFD) (http://phd.unipv.it/safd-scuola-di-alta-formazione-dottorale/)
Main activities and responsibilities	All the scientific and organizing activities of SAFD
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Activity related to the Ph.D. courses in Science for life
Dates	September 2023 – up to now
Occupation or position held	Member of the Scientific Committee of the Italian Society for Biomaterials (SIB) , http://www.biomateriali.org/ (since 2006)
Main activities and responsibilities	All the scientific and organizing activities of SIB
Name and address of employer	Politecnico di Milano, Milano, Italy
Type of business or sector	Scientific Research and Teaching Activity in Medical Science
Dates	April 2017 up to 2024
Occupation or position held	Vice-Coordinator of the Ph. D programme in Translational Medicine (http://molecularmedicine.unipv.it/phd-programme/)
Main activities and responsibilities	Ph. D programme
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Scientific Research and Teaching Activity in Medical Science
Dates	June 2016- 20219
Occupation or position held	Member of the Scientific Committee of the Foundation of the European Centre for Nanomedicine (CEN) , http://nanomedicen.eu/
Main activities and responsibilities	All the activities that compete as a member of the scientific committee of the CEN.
Name and address of employer	Centro Europeo di Nanomedicina, Piazza Leonardo da Vinci 32, 20133 Milano, Italy
Type of business or sector	Member of the Scientific Committee of CEN

Dates	June 2016 – up to now
Occupation or position held	Type A Researcher at INSTM (http://www.instm.it/)
Main activities	Research activities and grant applications
Name and address of employer	INSTM, Via G. Giusti, 9, 50121 Firenze (ITALY)
Type of Business or sector	Scientific Research
Dates	July 2015 – up to now
Occupation or position held	Associate professor at Istituti Clinici Maugeri, IRCCS https://www.icsmaugeri.it/per-i-ricercatori/laboratori-ricerca/laboratorio-di-nanotecnologie
Main activities and responsibilities	Nanotechnology Laboratory
Name and address of employer	ICS Maugeri, Società Benefit SpA, IRCCS, Via S.Boezio, 28, 27100 Pavia, Italy
Type of business or sector	Scientific Research and Teaching Activity in Medical Science
Dates	June 2015
Occupation or position held	Referent of the academic strategic project of Centre for Health Technologies (CHT), http://cht.unipv.it/index.php/it/ (2015-2017)
Main activities and responsibilities	Head of the Nanomedicine pillar
Name and address of employer	Via Ferrata 1, University of Pavia, 27100 Pavia, Italy
Type of business or sector	Scientific Research and Teaching Activity in Medical Science
Dates	June 2015 - up to now
Occupation or position held	Associate Professor in Biochemistry at the Department of Molecular Medicine of Medicine Faculty http://molecularmedicine.unipv.it/research-groups/biochemistry/l-visai/
Main activities and responsibilities	Scientific Research Activities in the application of Nanotechnology on International Space Station (ISS) with Samantha Cristoforetti (2015), on tissue Engineering/ regenerative medicine and on the reduction of bacterial infections. Teaching Activity at the Faculty of Medicine
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Scientific Research and Teaching Activity in Medical Science
Dates	June 2009 up to September 2015
Occupation or position held	Vice-Director of the Interdepartmental Center for Tissue Engineering (CIT)
Main activities and responsibilities	Scientific Research Activities in Tissue Engineering
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Scientific Research in Medical Science
Dates	September 2011 up to December 2014
Occupation or position held	Head of the Nanotechnology Laboratory at Fondazione Salvatore Maugeri, IRCCS
Main activities and responsibilities	Scientific Research Activities in Nanotechnology and Nanomedicine
Name and address of employer	Fondazione Salvatore Maugeri, IRCCS, 27100 Pavia , Italy
Type of business or sector	Scientific Research in Medical Science
Dates	September 2011 and September 2012
Occupation or position held	Visiting Professor in USA
Main activities and responsibilities	Projects discussion
Name and address of employer	Prof Mauro Ferrari, The Methodist Hospital Research Institute (MHRI), Houston, Texas, USA and Prof. Magnus Hook, "Center for Extracellular Matrix Biology" at the Institute of Biosciences and

Type of business or sector	Technology of the Texas A&M University System Health Science Center, Houston, Texas, USA. Scientific Research in Medical Science
Dates	July 2009
Occupation or position held	<u>Visiting Professor in USA</u>
Main activities and responsibilities	Project discussion in a bilateral project USA/ITALY
Name and address of employer	Prof. Magnus Hook, "Center for Extracellular Matrix Biology" at the Institute of Biosciences and Technology of the Texas A&M University System Health Science Center, Houston, Texas, USA
Type of business or sector	Scientific Research in Medical Science
Dates	2006 - 2016
Occupation or position held	Member of the Doctorate "Biologia e Biotecnologia Molecolare" of Perugia University, Italy
Main activities and responsibilities	Ph.D programme in Biochemistry
Name and address of employer	University of Perugia, Perugia, Italy
Type of business or sector	Scientific Research and teaching activity in Medical Science
Dates	2005 - 2015
Occupation or position held	Assistant Professor in Biochemistry
Main activities and responsibilities	Scientific Research Activities and Teaching Activity at the Faculty of Medicine: Degree in Health Care Professions
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Scientific Research in Medical Science
Dates	June - August 2001
Occupation or position held	Research Assistant in Biochemistry in USA
Main activities and responsibilities	Research collaboration with Prof. Magnus Hook
Name and address of employer	Prof. Magnus Hook, "Center for Extracellular Matrix Biology" at the Institute of Biosciences and Technology of the Texas A&M University System Health Science Center, Houston, Texas, USA
Type of business or sector	Scientific research in Medical Science
Dates	1997 – 2005
Occupation or position held	Confirmed Researcher in Biochemistry
Main activities and responsibilities	Scientific Research Activities and Teaching Activity at the Faculty of Medicine: Degree in Health Care Professions
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of Business or Sector	Scientific research in Medical Science
Dates	1994 – 1997
Occupation or position held	Researcher in Biochemistry
Main activities and responsibilities	Scientific Research Activities and Teaching Activity at the Faculty of Medicine: Degree in Health Care Professions
Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Scientific research in Medical Science
Dates	June 1992 – June 1994
Occupation or position held	Post-Doc in Biochemistry
Main activities and responsibilities	Scientific Research Activities on biochemical and immunological characterization of bacterial adhesins

Name and address of employer	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Type of business or sector	Scientific research in Medical Science
Dates	June 1989 – June 1992
Occupation or position held	Fellowship in Biochemistry
Main activities and responsibilities	Scientific Research Activities on biochemical and immunological characterization of bacterial adhesins
Name and address of employer	Officina Farmaceutica Mastelli of San Remo, San Remo, Italy
Type of business or sector	Scientific research in Medical Science

Education and training

Dates	July 1985- July 1989
Title of qualification awarded	PhD in biochemistry
Principal subjects/Occupational skills covered	Scientific Research Activities on biochemical and immunological characterization of bacterial adhesins
Name and type of organisation providing education and training	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Level in national or international classification	National
Dates	July 1985- July 1987
Title of qualification awarded	Research Fellowship in biochemistry In USA
Principal subjects/Occupational skills covered	Scientific Research Activities on biochemical and immunological characterization of bacterial adhesins
Name and type of organisation providing education and training	Prof. Magnus Hook, at the Department of Biochemistry of the Diabetes Hospital In Birmingham, AL; USA
Level in national or international classification	International
Dates	July 1988
Title of qualification awarded	Title of Italian Biologist
Name and type of organisation providing education and training	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Level in national or international classification	National
Dates	October 1980- March 1985
Title of qualification awarded	Degree in Biological Science
Principal subjects/Occupational skills covered	Experimental Thesis: Study on collagens binding to hepatocytes and bacteria: an analysis of specificity
Name and type of organisation providing education and training	University of Pavia, Corso Strada Nuova 65, 27100 Pavia, Italy
Level in national or international classification	National

Personal skills and competences

Mother tongue(s)	Italian
Other language(s)	English

Other language(s)
Self-assessment
European level (*)
Language

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
Good	Good	Good	Good	Good

(*) Common European Framework of Reference (CEF) level

Social skills and competences

- Good team spirit;
- Ability to adapt to multicultural environments;
- Good communication skills to write clearly or transmit information effectively;
- Capacity and Social skills acquired during sports and cultural activities.

Organisational skills and competences

Coordinator of the 1st year teaching at the university of Pavia for the Degree in Health Care Professions, class 2", Faculty of Medicine, 2006.

ABILITY TO ORGANIZE NATIONAL AND INTERNATIONAL CONFERENCES

NATIONAL:

-February 1, **2019 HealthTech World Cancer Day 2019 "Smart technological solutions to defeat cancer: possible challenge?"** Università di Pavia, Aula Magna del Collegio Alessandro Volta, Via Adolfo Ferrata 17, Pavia

-February 2, **2017 Nanoworld Cancer Day 2017 "Nanomedicine: Smart Solution to beat cancer"** Università di Pavia, Palazzo San Tommaso, Aula G1, P.ssa del Lino, Pavia

-**International Symposium in Nanomedicine "Towards translation and European networking"**, October 18, **2016**, Milano Bicocca.

-From **1997 to 2013** she has been member of the **Organizing Committee of the National Meeting of Ph.D. students in biochemical disciplines** that takes place every year in Brallo di Pregola, Pavia; <http://www.unipv.it/bralweb>

-**In 2009** she was a member and chairman of the scientific and organizing committee of the **national congress of the Italian Biomaterial Society (Sib)** held in Salice Terme at President Hotel in June 15-17. Since 2006 up to now She is member of the Scientific committee of the SIB annual national Congress.

-**In 2006** she was member and chairmen of the scientific and organizing committee of the congress of the Italian **Society of Biochemistry and Molecular Biology (SIB)** held in Pavia on May 19 at the Volta College;

-Member of the **Scientific committee of the annual congress of the Italian Society for Biomaterials** (<http://www.biomateriali.org/>) 2006-2022

INTERNATIONAL:

-She organized the **second "Immunotherapy for Infectious Diseases conference"** Pavia, Italy., 20-23 June 2022, <https://www.idimmunotherapy.com/>

-**In November 2018**, member of scientific committee of the first **"Immunotherapy for Infectious Diseases conference"**, held in Galvestone, Texas (USA).

-She had been part of the organizing committee of **"Molecular Mechanisms of Microbial Adhesion"** the Second Gulf Shores Symposium, held at Gulf Shores State Park Resort, **May 6–8 1988**, sponsored by the Department of Biochemistry, Schools of Medicine and Dentistry, **University of Alabama at Birmingham (AL, USA)**

PARTICIPATION IN AUDITORS COMMITTEES OF NATIONAL AND INTERNATIONAL FINANCING

- Member of the **MIUR** audit committee for the evaluation of **PRIN projects** (Research Projects of National Interest) – **2007**;

- External auditor for **"Fundação para a Ciência e Tecnologia" (FCT)**, Lisboa, Portugal for the evaluation of national projects in the **"Bioengineering, biotechnology and biochemistry"** sector. Year June **2011** and August year **2012**.

PARTICIPATION TO DOCTORAL PROGRAMME AND FINAL COMMITTEE

- Participation in the review hearing for the **Doctoral Programs (DK) "Biomedical Engineering for Musculoskeletal Disorders"**, at the Medical University of Vienna and Vienna University of

Technology, Vienna, June 30, **2011**

-Participation as a member of the final doctoral exam commission:

University of Perugia, Department of Chemistry, Biology and Biotechnology, Italy - 2020

Aarhus University, Faculty of Science and Technology, Denmark - 2020

Politecnico di Torino, Italy - 2020

University of Saragoza, Spain -2020

Politecnico di Torino, Italy – 2022

Politecnico di Milano, Italy – 2022

Politecnico di Torino, Italy – 2023

HIGHER EDUCATIONAL ACTIVITIES

- **Ph.D Trasversal Course for UNIPV of "SCIENTIFIC RESEARCH AND THE 3R'S PRINCIPLE" SINCE 2020**

- **European Master in "NANOMED"** (<http://master-nanomed.eu/>) at UNIPV since 2017

- **Ph.D Trasversal Course for UNIPV of "RESEARCH AND NANOMEDICINE"** since 2016

- **XVIII School of Pure and Applied Biophysics Venice**, Scientific and organizing committee, "Nanomechanics in biomolecular adhesion", Campo Santo Stefano, Venice, January 27th-31th, 2014 venice2014@mechanobiology.eu

-**School of Bioengineering Bressanone**, Scientific and organizing committee, XXXII Scuola Annuale, "Approccio Integrato per la Medicina Rigenerativa", Bressanone, 16 - 20 settembre 2013
http://www.bioing.it/archiviodati/scuola_bressanone/BRESS13/index.html

PARTICIPATION TO EUROPEAN COST ACTIONS

-COST Action TD 1204: MODENA - **Modelling the Toxicity of Nanoparticles** (2013-2017) - <http://www.iom-world.org>.

-COST Action MP 1206: **Electrospun Nano-Fibres for Bio Inspired Composite Materials and Innovative Industrial Applications** (2013 - 2017) - www.electrospinning-cost.eu.

-COST Action BM 1309: EMF-MED - **European network for innovative uses of EMFs in biomedical applications.** (2014-2018) (http://www.cost.eu/COST_Actions/bmbs/Actions/BM1309).

-COST Action iPROMEDAI TD1305 (2014-2018)
(http://www.cost.eu/COST_Actions/TDP/Actions/TD1305).

- **Representation to the Academic Bodies and Faculty of Pavia University** (2000-2005) and part of its commissions.

- Capacity and Organizational skills acquired in the professional context.

- Good attitude to the management of projects and research groups.

Technical skills and competences

- Nanotechnology in Space: Study of osteoporosis on ground, in simulated microgravity and on the International Space Station (ISS) - Agenzia Spaziale italiana (ASI), ESA and NASA;

- Nanotechnology in cancer: Breast cancer: defeat it with smart gold nanospheres (University of Pavia, www.universitiamo.eu) ;

- Nanotechnology in infection and against biofilm formation : Study of the interaction of Gram-positive and Gram-negative bacteria with extracellular matrix; isolation, biochemical and immunological characterization of bacterial adhesins; characterization of biomaterials with surface properties of anti-adhesive and antibacterial activity (anatase titanium, or surfaces containing zinc, silver, gold or gallium nanoparticles); Photodynamic treatment as an alternative approach for the inactivation of bacterial biofilm by use of substances such as Toluidine blue, Menocianina 540 and porphyrins;

- Nanotechnology in tissue engineering and regenerative medicine: Characterization of the calcified matrix produced by stem cells (pluripotent or multipotent or iPSCs) on biomaterials (titanium and titanium alloys, hydroxyapatite, keratin, absorbable biocompatible polymers, nano and micro electrospun materials etc.), following the application of the "shear stress" produced from a perfusion bioreactor, or by exposure to electromagnetic (PEMF), ultrasound or laser treatment (LLLI);

- Antibodies: Production of polyclonal and monoclonal antibodies in mice and rabbits and their characterization; human antibodies by phage display technology;

- Biocompatibility and toxicity studies: Characterization of biomaterials (variously treated polyurethanes, polyurethane foams and shape memory polyurethanes, hydroxyapatite, metal foams etc.) and their capacity to adsorb plasma-derived proteins; study of their cytotoxicity and biocompatibility with different cell lines (epithelial, endothelial, macrophages, fibroblasts, platelets).

AWARDS

- Premium “Lombardia è Creatività” for the crowdfunding project “Breast cancer: Defeat It with intelligent gold nanospheres” (November 2017) <http://news.unipv.it/?p=26802>

-1st place on the Competition “Switch2Product” - National Congress of Bioengineering 2018 with: “Bac3Gel: a Universal 3D Matrix for Bacterial Culture” Paola Petrini, Daniela P. Pacheco, Natalia Suarez Vargas, Sonja Visentin, Livia Visai, Federico Bertoglio. (<https://s2p.it/vincitori-2018/>), Innovation in Bioengineering Award and Finalist in StartCup Lombardia;

- eligible for funding for the PoC Instrument call (PoC – Proof of Concept) [Convenzione sottoscritta con la Compagnia di San Paolo, per il triennio 2019-2021, con 5 università italiane: Politecnico di Torino, Università degli Studi di Torino, Università del Piemonte Orientale, Università degli Studi di Genova e Università degli Studi di Napoli Federico II] con il progetto “Nanoparticelle per combattere la resistenza batterica” (<https://linksfoundation.com/poc-instrument/>) April 2020

Computer skills and competences

- Computer skills and abilities acquired in the professional context.
- Good command of Microsoft Office TM (Word TM, Excel TM and PowerPoint TM);
- Basic knowledge of graphic design applications (Adobe Illustrator TM, PhotoShop TM, GraphPad etc).

Artistic skills and competences

Sport (aquatic and mountain), reading, music, drawing.
Artistic skills and competences acquired in free time

Other skills and competences

Publishing activity at the publishing house **The McGraw Hill Companies, Milan headquarters – Italy**

Translation of the following books from English into Italian language:

- "Biochemistry" JD Rawn, and the entire "Exercise book" Biochemistry of the same author;
- Part of the book "Biology" by J. Postlethwaite, J. Hopson, R. Veres;
- "Biochemistry" by Laurence A. Moran.

- Consultant to the translation from the English dictionary, "The Dictionary of Cell Biology" by John M. Lackie and Julian A.T. Dow

Editorial Board Member

-Biochemistry & Analytical Biochemistry, <https://www.longdom.org/biochemistry-and-analytical-biochemistry/editorial-board.html> (since 2011)

-Journal of Applied Materials & Functional Materials , <https://journals.sagepub.com/home/jbf> (since 2012, Section Editor)

GUEST EDITOR

-**Frontiers in Public Health** (<https://www.frontiersin.org/research-topics/12855/recent-advances-in-recombinant-antibody-therapeutics-for-infectious-diseases>)

Research Topic: Recent Advances in Recombinant Antibody Therapeutics For Infectious Diseases
Topic Editors: Theam Soon Lim Universiti Sains Malaysia (USM), Penang, Malaysia; Michael Hust, Technische Universität Braunschweig, Braunschweig, Germany; Livia Visai, University of Pavia, Pavia, Italy

-**Frontiers in Bioengineering and Biotechnology** :<https://www.frontiersin.org/research-topics/27396/cells-biomaterials-and-biophysical-stimuli-for-bone-cartilage-and-muscle-regeneration>
Research Topic: Special Issue “Cells, Biomaterials, and Biophysical Stimuli for Bone, Cartilage, and Muscle Regeneration”

Topic Editors: Lorenzo Fassina, Nora Bloise , **Livia Visai** and Gabriella Cusella of **University of Pavia, Pavia, Italy** and Murugan Ramalingam VIT University, Vellore, India

-International Journal of Molecular Sciences:

https://www.mdpi.com/journal/ijms/special_issues/nanomaterials_bioscience

Research Topic: Special Issue "Cutting-Edge Research of Nanoscience and Nanomaterials Use in Biosciences"

Topic Editors: **Livia Visai, University of Pavia, Pavia, Italy** and Giuseppina Rea Institute of Crystallography (IC), National Research Council of Italy (CNR), Monterotondo St., Rome, Italy

Driving licence(s)

Driving Licence Type B

Additional information

Further info can be found at the following web sites:

<https://pubmed.ncbi.nlm.nih.gov/?term=visai+l&sort=pubdate&size=50>

<https://unipv.unifind.cineca.it/individual?uri=http://irises.unipv.it/resource/person/656921>

<https://medicinamolecolare.dip.unipv.it/it/ricerca/linee-e-gruppi-di-ricerca/biochimica/nanotecnologie-interazioni-cellule-e-biomateriali-ncbi>

<https://www.icsmaugeri.it/professionisti/livia-visai?p=curriculum-vitae>

Attached files

Signature

Date October 2025

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.

Livia Visai