Curriculum Vitae

PERSONAL INFORMATION

Letizia Pelusi

Work address: Laboratory of Vascular and Stem Cell Biology, Department of Medical, Oral and Biotechnological Sciences, University "G. d'Annunzio" CHIETI – PESCARA
Center for Advanced Studies and Technology (CAST, ex CeSI-MeT) via Luigi Polacchi, 11-13 (ex via Colle dell'Ara) 66100, Chieti Scalo - Chieti (Italy)

Laboratory (+39) 0871541438

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Sex Female | Date of birth 23/05/1995 | Nationality Italian

POSITION

PhD Student
Laboratory of VASCULAR AND STEM CELL BIOLOGY, Department of di Medical, Oral, and Biotechnological Science; University of "G. d'Annunzio" Chieti – Pescara, Center for advanced Studies and Technology (CAST-ex CeSI-MeT)

WORK EXPERIENCE

MAY 2020 – DECEMBER 2020

Fellowship
Title: "Development of innovative systems for 2D and 3D Coltures useful for the advancement of current regenerative therapies"
Mentor: Prof. Assunta Pandolfi, Laboratory of Vascular and Stem Cell Biology, CAST – Center for Advanced Studies and Technology (ex CeSi-Met).
Department of Medical, Oral and Biotechnological Sciences
University G. d'Annunzio Chieti-Pescara.

Activity or sector Basical research in the field of Stem Cells and Regenerative Medicine

APRIL 2020 – ONGOING

Voluntary Internship at Genetic Molecular Laboratory - Test diagnosys SARS-CoV-2
Mentor: Prof. Liborio Stuppia. CAST – Center for Advanced Studies and Technology (ex CeSi-Met).
University G. d'Annunzio Chieti-Pescara.

Activity or sector Molecular research for the diagnosys from SARS-CoV-2

MARCH 2019 -1 MARCH 2020

Experimental Master's Thesis Internship
Thesis's title: "Development of innovative 3D Cellular Systems for studying the role of nutrients in bone health: focus on Vitamin K2"
Mentor: Prof.ssa Assunta Pandolfi
Laboratory of Vascular and Stem Cell Biology, CAST – Center for Advanced Studies and Technology (ex CeSi-Met).
University G. d'Annunzio Chieti-Pescara.

Activity or sector Basical research in the field of Stem Cells and Regenerative Medicine of Bone Tissue

MARCH 2017 – JUNE 2017

Bachelor's Thesis Internship
Thesis's title: "Bioactive Lipids and their role in the inflammatory process"
Mentor: Prof.ssa Natalia Battista
Biochemistry and Molecular Biology Laboratory
University of Teramo (IT), CAMPUS Universitario "A. Saliceti".

Activity or sector Basical research in the field of Biochemistry

EDUCATION AND QUALIFICATION

OCTOBER 2017 – APRIL 2020

Master Thesis in Medical, Veterinary and Pharmaceutical Biotechnology
Degree mark: **110/110 *cum laude***

Research Project Title: "Development of 3D Cellular systems innovative for studying the role of nutrients in bone tissue: focus on Vitamin K2".

University of Parma (IT)

Tutor: Prof. Roberto Sala
Co-tutor: Prof.ssa Assunta Pandolfi
Laboratory of Vascular and Stem Cell Biology. CAST – Center for Advanced Studies and Technology (ex CeSi-Met).
University G. d'Annunzio Chieti-Pescara.

OCTOBER 2014 – JULY 2017

BACHELOR DEGREE IN BIOTECHNOLOGIES
Degree mark**: 105/110**
Research Project Title: "Bioactive Lipids and their role in the inflammatory process"

Mentor: Prof.ssa Natalia Battista

Biochemistry and Molecular Biology Laboratory

University of Teramo (IT).

SEPTEMBER 2010 – JULY 2014

Diploma

Degree mark: 80/100

High school: Liceo Classico Statale Saffo, Roseto degli Abruzzi (TE)

PERSONAL SKILLS

MOTHER TONGUE: Italian

OTHER LANGUAGES

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken Interaction	Spoken production	
English	B2	B2	B2	B2	B2
French	A1	A1	A1	A1	A1

Levels: A1/2 Basic user - B1/2 Independent user- C1/2 Proficient user
Common European Framework of Reference for Languages

COMMUNICATION SKILLS: Excellent capacity of relationship and *team-working* attitude

ORGANIZATION SKILLS: Excellent sense of organization and problem-solving

PROFESSIONAL SKILLS

Excellent teoretical-practical knowledge of:

Culture and Co-Culture 3D Cell Systems through the use of bioreactor RCCS - 4TM and High Aspect Ratio Vessel (HARV; provided by Synthecon™, Houston, TX, USA)

Molecular Biology Techniques: polymerase chain reaction (PCR), reverse transcription (RT- PCR), *real time* RT-PCR. Extraction methods of Nucleic Acids (DNA ed RNA) and proteins from cell culture and tissue; Western Blot

Transfection and silencing methods (small interfering RNA, siRNA)

Cell biology: human primary cell cultures (corneal keratocytes, amniotic fluid mesenchymal stem cells, Wharton Jelly stem cells, bone marrow mesenchymal stem cell, stem cells and gingival fibroblasts, human umbelical vein endothelial cells, osteoclast and osteoblast). Cellular biology and cells cryopreservation techniques

Flow Cytometry Techniques (FACS canto e AMNIS ImageStream Imaging)

Immunoistochemistry, Immunocytochemistry and Immunofluorency Techniques

Istology techniques: use of microtome, immunocytochemistry, immunochemistry analyses and good theoretical-practical knowledge of main istological staining

Microscopy Techniques (confocal and electronic)

Electrophoretic Technique

ELISA, EIA methods

DIGITAL SKILLS

Excellent knowledge of Microsoft Office™ package (Word™, Excel™ and PowerPoint™)
Excellent knowledge of programs for the elaboration of scientific data (GraphPad Prism 5 e 6)
Excellent knowledge of Macintosh system

IN EXTENSO INTERNATIONAL PUBBLICATIONS

- **Letizia Pelusi**, Valeria Schiavone, Giuseppina Bologna, Pietro Cerritelli, Deborah Lezza, Andrea Pantalone, Manuela Santalucia, Roberto Buda, Assunta Pandolfi, Domitilla Mandatori. **Cytotoxic and Genotoxic Effects of Composite Resins on Cultured Human Gingival Fibroblasts.** Journal of Orthopedic Research and Therapy. December 31, 2021.

- Francesco De Angelis, Domitilla Mandatori, Valeria Schiavone, Francesco Paolo Melito, Silvia Valentinuzzi, Mirco Vadini, Pamela Di Tomo, Lorenzo Vanini, **Letizia Pelusi**, Caterina Pipino, Piero Del Boccio, Camillo D'Arcangelo, and Assunta Pandolfi
Cytotoxic and Genotoxic Effects of Composite Resins on Cultured Human Gingival Fibroblasts. Materials. September 11, 2021.

- Domitilla Mandatori, **Letizia Pelusi,** Valeria Schiavone, Caterina Pipino, Natalia Di Pietro, Assunta Pandolfi. **Three-dimensional co-culture system of human osteoblasts and osteoclast precursors from osteoporotic patients as an innovative model to study the role of nutrients: Focus on vitamin k2.** Nutrients. April 7, 2021

- Domitilla Mandatori, **Letizia Pelusi,** Valeria Schiavone, Caterina Pipino, Natalia Di Pietro, Assunta Pandolfi. **The Dual role of Vitamin K2 in "Bone-Vascular Cross-talk": opposite effects on bone loss and vascular calcification.** Nutrients. April 7, 2021.

- Piero Di Carlo, Piero Chiacchiaretta, Bruna Sinjari, Eleonora Aruffo, Liborio Stuppia, Vincenzo De Laurenzi, Pamela Di Tomo, **Letizia Pelusi,** Francesca Potenza, Angelo Veronese, Jacopo Vecchiet, Katia Falasca, Claudio Ucciferri. "**Air and surface measurements of SARS-CoV-2 inside a bus during normal operation".** PLoS One. November 5, 2020. 15(11):e0235943

IN EXTENSO NATIONAL PUBBLICATIONS

- D. Mandatori, P. Di Tomo, **L. Pelusi**, A. Pandolfi
News dalla scienza di base. *Giornale Italiano di Ortopedia e Traumatologia 2019;45 (Suppl. 1): S103-S107.* ***104° CONGRESSO NAZIONALE S.I.O.T.***

CONFERENCES, MEETINGS AND SEMINARS

- Workshop MIVO based 3D cell models and fluid-dynamic tissue culture, Milan 13-14 December 2021.
- Next generation GISM Realtà a confronto: ricercar pubblica e industriale sulle MSC in Italia e all'estero. 22 October 2020.
- 5 days of Stem Cells. Gibco, by Thermo Fisher. 12-16 October 2020.
- X Meeting of Stem Cell Research Italy (SCR Italy) Naples, 5-7 June 2019
- Seminar "VaccinarSì: tra scienza e società", Prof. Roberto Burioni 19 February 2019, Aula Filosofi del Palazzo Centrale (Via Università 12, Parma, IT)
- La Dieta Mediterranea Patrimonio Immateriale dell'umanità: Convegno della Facoltà di Bioscienze 15 October 2014 - 10.00 am - Sala Conferenze Facoltà di Scienze della Comunicazione, P.O. University of Teramo (IT)
- La luce e le applicazioni biotecnologiche nello studio degli organismi viventi.13 October 2015- Sala delle lauree Facoltà di Giurisprudenza, P.O. University ofTeramo (IT)
- Training Course in Health and Security on Work Places for the students of Bioscience and Agroalimentary and Environmental Technologies - A.Y. 2014- 2015 (Formazione dei Lavoratori, art. 37, D.Lgs. n. 81 del 9 aprile 2008 e Accordo Stato Regioni 21/12/2011)
- Training Course in Health and Security on Work Places for the students of Bioscience and Agroalimentary and Environmental Technologies - A.Y. 2015- 2016 (Formazione Dei Lavoratori, Art. 37, D.Lgs. N. 81 del 9 aprile 2008 E Accordo Stato Regioni 21/12/2011)

- Training Course in Health and Security on Work Places for the students of Bioscience and Agroalimentary and Environmental Technologies - A.Y. 2016- 2017 (Formazione Dei Lavoratori, Art. 37, D.Lgs. N. 81 Del 9 Aprile 2008 E Accordo Stato Regioni 21/12/2011)

ABSTRACTS AT NAZIONAL CONFERENCES

- Francisco José Nicolás, Caterina Pipino, Ángel Bernabé-García, Pamela Di Tomo, Javier Stelling-Férez, Ilaria Cappellacci, Silvia Pappadà, Domitilla Mandatori, **Letizia Pelusi**, Assunta Pandolfi. **Anti-inflammatory and pro-angiogenic role of amniotic membrane on endothelial cells derived from umbilical cord of women affected by gestational diabetes mellitus: new insights in diabetic foot ulcer.** Termis 2021 6TH World Congress, 15-19 November 2021, Maastricht.

- **Letizia Pelusi**, Domitilla Mandatori, Mario Nubile, Manuela Santalucia, Valeria Schiavone, Simone De Fabritiis, Pasquale Simeone, Erminia D'Ugo, Luca Agnifili, Leonardo Mastropasqua, Assunta Pandolfi. **Human Stromal Lenticule as a bio-scaffold for mesenchymal stem cells and extracellular vesicles: potential innovative model for posterior ocular disease treatment**. Stemnet 2021 Conference, 22-24 September 2021, Padova.

- Di Pietro Natalia, Di Pietrantonio Nadia, Palmerini Carola, Di Tomo Pamela, Mandatori Domitilla, **Pelusi Letizia**, Mohn Angelika, Bologna Giuseppina, Formoso Gloria, Chiarelli Fran- cesco, Pandolfi Assunta.
"Insulino-resistenza ed infiammazione nell'obesità infantile: studio in vitro"
SID (Società Italiana Diabetologia), XXVIII Congresso Nazionale.

- D. Mandatori, P. Di Tomo, **L. Pelusi**, A. Pandolfi
News dalla scienza di base. *Giornale Italiano di Ortopedia e Traumatologia 2019;45 (Suppl. 1): S103-S107.* ***104° CONGRESSO NAZIONALE S.I.O.T.***

TUTORING ACTIVITIES

- Medical Students' related to SISM Italy and the standing commitee on research exachange of international federation of medical student association (IFMSA). Grazia Senatore e Myriam Adele Traulo. Laboratory of Vascular and stem cells Biology (Professor A.Pandolfi) CAST, University of G.d'Annunzio. Project: **"Potential protective role of nutritional molecules in caridovasculare in bone diseases: use of innovative cell culture models"**. October 2021.

- Medical Student related to SISM Italy and the standing commitee on research exachange of international federation of medical student association (IFMSA). Adrian Alejandro Moreno Mares. Laboratory of Vascular and stem cells Biology (Professor A.Pandolfi) CAST, University of G.d'Annunzio. Project **"Potential protective role of nutritional molecules in caridovasculare in bone diseases."** Luglio 2021.

- Assistant supervisor for thesis. Title: **"Differenziamento cartilagineo di cellule staminali mesenchimali: ruolo di una formulazione innovativa di acido ialuronico"**
Student: Federica Fortuna
Degree in Biotechnology, University of Ferrara
Academic year 2020-2021

- Assistant supervisor for thesis. Title: **"Differenziamento cartilagineo di cellule staminali mesenchimali umane: ruolo di una formulazione innovativa di acido ialuronico"**
Student:Deborah Lezza
Degree in Biomedical Laboratory Techniques, University of G.D'Annunzio
Academic year 2020-2021

ADDITIONAL INFORMATION

Member of Scientific society

SCR Italy (Stem Cell Research Italy)

Stem TeCh group (gruppo di studio delle cellule staminali Chieti-Teramo)