



## **CONTACT INFORMATION:**

**Giovanna Calabrese**

**Associate Professor of Physiology**

**Department of Chemical, Biological,  
Pharmaceutical and Environmental Sciences**

**University of Messina**

**Viale Ferdinando Stagno d'Alcontres, 31**

**98166-Messina, Italy**

**Email Address: gcalabrese@unime.it**

## **EDUCATION:**

**2007-2010:** PhD in Medical Embryology, Pathology and Experimental Hematology at the University of Catania.

**2006:** Degree in Chemistry and Pharmaceutical Technology at the University of Catania.

## **ACADEMIC APPOINTMENTS**

**2021 – Present:** Associate Professor, Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Italy.

**2020-2021:** Postdoctoral Researcher, University of Messina - Department of Chemical, Biological, Pharmaceutical and Environmental Sciences

**2016-2019:** Postdoctoral Researcher, University of Catania - Dept. of BioMedical and Biotechnological Sciences.

**2015-2016:** Researcher at IOM Ricerca s.r.l., Head of the cell and molecular biology laboratory, of animal modeling and Delegate of the Head of Animal Welfare.

**2009-2015:** Researcher at IOM Ricerca s.r.l and head of the cell biology laboratory. She was the scientific coordinator of a research project PON01\_00829 Innovative therapeutic platforms in regenerative medicine and collaborated in the writing of numerous research projects (MISE, POR, PON).

**2006-2009:** Research activity at the Research Institute: Dibit - San Raffaele di Milano - Dept. of Neurosciences.

## **NON-ACADEMIC APPOINTMENTS:**

**2018 – Present:** Scientific Committee Member for "BRAYN" - Scientific Meeting of the Italian Young Neuroscientists.

**2016- Present:** Reviewer board per Annals of Bone Marrow Research-Editorial Board SL Nutrition and metabolism - Scientific Literature; Editorial Board Membership Journal of Hematology and Oncology Forecast; Editorial board Member for Journal of Molecular Histology & Medical Physiology; Invited author for the book: Biomaterials in Regenerative Medicine; Chapter title: INNOVATIVE BIOMATERIALS FOR TISSUE ENGINEERING; Review Editor on the Editorial Board of Integrative Physiology, Journal Frontiers in Physiology; Editorial Board of Neurodegeneration as Review Editor for Frontiers in Neuroscience, Frontiers in Neurology and Frontiers in Psychiatry; Editorial board Member for Biomedicine & Pharmacotherapy.

## **RESEARCH GRANTS:**

**Project:** PON - ADAS+ - ARS01\_00459

**Title:** Development of innovative technologies and systems for car safety through ADAS platforms

**Period:** 2017 - Present

**Role:** Participant Researcher

**Project:** PON - BONE++\_ARS01\_00693

**Title:** Micro and Nanotechnology Development for Predictiveness, Diagnosis, Therapy and Regenerative Treatments of Osteoarthritis and Osteo-Articular Pathologic Alterations

**Period:** 2017 - Present

**Role:** Participant Researcher

**Project:** PO FESR Sicilia 2014-2020\_08CT8610100110

**Title:** DIONCOGEN - Diagnostica ONCOlogica Avanzata: GENomica e patologia digitale.

**Period:** 2017 - Present

**Role:** Participant Researcher

**Project:** PRIN 2017\_2017XKWWK9\_004.

**Title:** PBCT, Proton Boron Capture Therapy.

**Period:** 2017 - Present

**Role:** Participant Researcher

**Project:** PON01\_00829

**Title:** Piattaforme tecnologiche innovative per l'ingegneria tissutale.

**Period:** 2009- 2013

**Role:** Research Unit Component

**Project:** PON01\_02418

**Title:** Medicina translazionale in oncologia: dalla ricerca alla terapia

**Period:** 2009- 2013

**Role:** Research Unit Component

**Project:** PON01\_01078

**Title:** Identificazione di biomarcatori e sviluppo di metodi diagnostici e terapeutici nel campo dell'oncologia e biologia vascolare

**Period:** 2009- 2013

**Role:** Research Unit Component

**Project:** PRIN 2008\_20082H87WP\_002

**Title:** Induzione di precursori neuronali endogeni in modelli animali di lesione del midollo spinale

**Period:** 2008- 2012

**Role:** Research Unit Component

## **PUBLICATIONS:**

Google Scholar Citation Indexes: Total Citations: 678; h-index 14;

Scopus: Total Citations: 530; h-index 12

1. Nocito, G.; **Calabrese, G.**; Forte, S.; Petralia, S.; Puglisi, C.; Campolo, M.; Esposito, E.; Conoci, S. Carbon Dots as Promising Tools for Cancer Diagnosis and Therapy. *Cancers* 2021, 13, 1991. <https://doi.org/10.3390/cancers13091991>
2. Ardizzone A, **Calabrese G**, Campolo M, Filippone A, Giuffrida D, Esposito F, Colarossi C, Cuzzocrea S, Esposito E, Paterniti I. Role of miRNA-19a in Cancer Diagnosis and Poor Prognosis. *Int J Mol Sci.* 2021 Apr 29;22(9):4697. doi: 10.3390/ijms22094697.
3. **Calabrese G**, Ardizzone A, Campolo M, Conoci S, Esposito E, Paterniti I. Beneficial Effect of Tempol, a Membrane-Permeable Radical Scavenger, on Inflammation and Osteoarthritis in In Vitro Models. *Biomolecules.* 2021 Feb 25;11(3):352. doi: 10.3390/biom11030352.
4. M.G. Rizzo, S. Carnazza, L.M. De Plano, D. Franco, M.S. Nicolò, V. Zammuto, S. Petralia, **G. Calabrese**, C. Gugliandolo, S. Conoci, S.P.P. Guglielmino. Rapid detection of bacterial pathogens in blood through engineered phages-beads and integrated Real-Time PCR into MicroChip, *Sensors and Actuators B: Chemical*, 329, 2021, 129227, <https://doi.org/10.1016/j.snb.2020.129227>.
5. Franco D, **Calabrese G**, Petralia S, Neri G, Corsaro C, Forte L, Squarzone S, Guglielmino S, Traina F, Fazio E, Conoci S. Antimicrobial Effect and Cytotoxic Evaluation of Mg-Doped Hydroxyapatite Functionalized with Au-Nano Rods. *Molecules.* 2021 Feb 19;26(4):1099. doi: 10.3390/molecules26041099.
6. **Calabrese G**, Petralia S, Franco D, et al. A new Ag-nanostructured hydroxyapatite porous scaffold: Antibacterial effect and cytotoxicity study. *Materials Science & engineering. C, Materials for Biological Applications.* 2021 Jan; 118:111394. DOI: 10.1016/j.msec.2020.111394.
7. Szychlinska, M.A.; **Calabrese, G.**; Ravalli, S.; Dolcimascolo, A.; Castrogiovanni, P.; Fabbi, C.; Puglisi, C.; Lauretta, G.; Di Rosa, M.; Castorina, A.; Parenti, R.; Musumeci, G. Evaluation of a Cell-Free Collagen Type I-Based Scaffold for Articular Cartilage Regeneration in an Orthotopic Rat Model. *Materials* 2020, 13, 2369.
8. Pisciotta P, Costantino A, Cammarata FP, Torrisi F, **Calabrese G**, Marchese V, et al. (2020). Evaluation of proton beam radiation-induced skin injury in a murine model using a clinical SOBP. *PLoS ONE* 15(5): e0233258. doi:10.1371/journal.pone.0233258
9. Szychlinska MA, **Calabrese G**, Ravalli S, Parrinello NL, Forte S, Castrogiovanni P, Pricoco E, Imbesi R, Castorina S, Leonardi R, Di Rosa M, Musumeci G. Cycloastragenol as an Exogenous Enhancer of Chondrogenic Differentiation of Human Adipose-Derived Mesenchymal Stem Cells. A Morphological Study. *Cells.* 2020 Feb 3;9(2). pii: E347. doi: 10.3390/cells9020347.
10. Emanuele Luigi Sciuto, Salvatore Petralia, **Giovanna Calabrese** and Sabrina Conoci. Integrated Biosensor Platform for Nucleic Acids Extraction and Detection. *Biotechnology and Bioengineering.* 2020; 1– 8. <https://doi.org/10.1002/bit.27290>.
11. Lucia Salvatorelli, **Giovanna Calabrese**, Rosalba Parenti, Giada Maria Vecchio, Lidia Puzzo, Rosario Caltabiano, Giuseppe Musumeci, Gaetano Magro. Immunohistochemical expression of Wilms' tumor 1 (WT1) protein in human tissues: from ontogenesis to neoplastic tissues. *Appl. Sci.* 2020, 10, 40; doi:10.3390/app10010040.
12. **G Calabrese**, Salvatore Petralia, Claudia Fabbi, Stefano Forte, Domenico Franco, Salvatore Guglielmino, Emanuela Esposito, Salvatore Cuzzocrea, Francesco Traina, Sabrina Conoci,

- Au, Pd and maghemite nanofunctionalized hydroxyapatite scaffolds for bone regeneration, *Regenerative Biomaterials*, Volume 7, Issue 5, October 2020, Pages 461–469, <https://doi.org/10.1093/rb/rbaa033>
13. Nocito, Giuseppe; Petralia, Salvatore; Malanga, Milo; Beni, Szabolcs; **Calabrese, Giovanna**; Parenti, Rosalba; Conoci, Sabrina; Sortino, Salvatore. "A New Biofriendly Route to Gold Nanostructures with Near Infrared Localized Surface Plasmon Resonance through Nitric Oxide Photorelease". *ACS Appl. Nano Mater.* 2019, 2, 12, 7916-7923. <https://doi.org/10.1021/acsnm.9b01925>.
  14. **Giovanna Calabrese\***, Anna Dolcimascolo, Giuseppe Caruso, and Stefano Forte. MiR-19a is involved in progression and malignancy of anaplastic thyroid cancer cells. Accepted *OncoTargets and Therapy*, ID 221733.
  15. Anna Dolcimascolo, **Giovanna Calabrese\***, Sabrina Conoci, Rosalba Parenti. *Innovative Biomaterials for Tissue Engineering. Biomaterials in Regenerative Medicine*, ISBN 978-953-51-7393-9, DOI: 10.5772/intechopen.83839 (Capitolo libro).
  16. Gulino Rosario, Vicario Nunzio, Giunta Maria, Spoto Graziana, **Calabrese Giovanna**, Vecchio Michele, Gulisano Massimo, Leanza Giampiero, Parenti Rosalba (2019). Neuromuscular Plasticity in a Mouse Neurotoxic Model of Spinal Motoneuronal Loss. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, vol. 20, ISSN: 1422-0067, doi:10.3390/ijms20061500.
  17. Zappalà Agata, Vicario Nunzio, **Calabrese Giovanna**, Turnaturi Rita, Pasquinucci Lorella, Montenegro Lucia, Spadaro Angelo, Parenti Rosalba, Parenti Carmela (2019). Neuroprotective effects of Rosmarinus officinalis L. extract in oxygen glucose deprivation (OGD)-injured human neural-like cells. *NATURAL PRODUCT RESEARCH*, p. 1-7-7, ISSN: 1478-6419, doi:10.1080/14786419.2019.1587428.
  18. **Calabrese Giovanna\***, Dolcimascolo Anna, Torrisi Filippo, Zappalà Agata, Gulino Rosario, Parenti Rosalba (2018). MiR-19a Overexpression in FTC-133 Cell Line Induces a More Differentiated and Aggressive Phenotype. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, vol. 19, ISSN:1422-0067, doi: 10.3390/ijms19123944.
  19. Salvatore Petralia, Nunzio Vicario, **Giovanna Calabrese**, Rosalba Parenti and Sabrina Conoci, An Advanced, Silicon-Based Substrate for Sensitive Nucleic Acids Detection, *Sensors*, 2018, 18, 3138; - doi:10.3390/s18093138- ISSN 1424-8220.
  20. Raimondo Stefania, Cristaldi Marta, Fontana Simona, Saieva Laura, Monteleone Francesca, **Calabrese Giovanna**, Giavaresi Gianluca, Parenti Rosalba, Alessandro Riccardo (2018). The phospholipase DDHD1 as a new target in colorectal cancer therapy. *JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH*, vol. 37, ISSN: 1756-9966, doi:10.1186/s13046-018-0753-z.
  21. Vicario Nunzio, **Calabrese Giovanna**, Zappalà Agata, Parenti Carmela, Forte Stefano, Graziano Adriana Carol, Vanella Luca, Pellitteri Rosalia, Cardile Venera, Parenti Rosalba (2017). Inhibition of Cx43 mediates protective effects on hypoxic/reoxygenated human neuroblastoma cells. *JOURNAL OF CELLULAR AND MOLECULAR MEDICINE*, vol. May, ISSN: 1582-4934, doi: 10.1111/jcmm.13177.
  22. Szychlinska MA, CASTROGIOVANNI Paola, Nsir H, Di Rosa M, Guglielmino C, PARENTI Rosalba, **CALABRESE GIOVANNA**, Pricoco E, Salvatorelli L, MAGRO Gaetano Giuseppe, IMBESI Rosa, Mobasher A, MUSUMECI GIUSEPPE (2017). Engineered cartilage regeneration from adipose tissue derived-mesenchymal stem cells: A morphomolecular study on osteoblast, chondrocyte and apoptosis evaluation. *EXPERIMENTAL CELL RESEARCH*, vol. 357, p. 222-235, ISSN: 0014-4827, doi: 10.1016/j.yexcr.2017.05.018.
  23. Zito Giovanni, Naselli Flores, Saieva Laura, Raimondo Stefania, **Calabrese Giovanna**, Guzzardo Claudio, Forte Stefano, Rolfo Christian, Parenti Rosalba, Alessandro Riccardo

- (2017). Retinoic Acid affects Lung Adenocarcinoma growth by inducing differentiation via GATA6 activation and EGFR and Wnt inhibition. *SCIENTIFIC REPORTS*, vol. 7, ISSN: 2045-2322, doi: 10.1038/s41598-017-05047-z.
24. **Calabrese, G.**, Giuffrida, R., Forte, S., Fabbi, C., Figallo, E., Salvatorelli, L., Memeo, L., Parenti, R., Gulisano, M., Gulino, R. (2017). Human adiposederived mesenchymal stem cells seeded into a collagen-hydroxyapatite scaffold promote bone augmentation after implantation in the mouse. *OPEN ACCESS SCIENTIFIC REPORTS*, vol. Volume 7, ISSN: 2332-2675, doi:10.1038/s41598-017-07672-0.
  25. **Giovanna Calabrese**, Rosario Gulino, Raffaella Giuffrida, Stefano Forte, Elisa Figallo, Claudia Fabbi, Lucia Salvatorelli, Lorenzo Memeo, Massimo Gulisano, Rosalba Parenti (2017). In vivo evaluation of biocompatibility and chondrogenic potential of a cell-free collagen-based scaffold. *FRONTIERS IN PHYSIOLOGY*, vol. 8, ISSN: 1664-042X, doi: 10.3389/fphys.2017.00984.
  26. **Calabrese, Giovanna**, FORTE, STEFANO, Gulino, Rosario, Cefali Francesco, Figallo, Elisa, Salvatorelli, Lucia, MANISCALCHI, EUGENIA TIZIANA, ANGELICO, Giuseppe, Parenti, Rosalba, Gulisano, Massimo, MEMEO, LORENZO, GIUFFRIDA, Raffaella (2017). Combination of collagen based scaffold and bioactive factors induces adipose-derived mesenchymal stem cells chondrogenic differentiation In Vitro. *FRONTIERS IN PHYSIOLOGY*, vol. 8, ISSN: 1664-042X, doi: 10.3389/fphys.2017.00050.
  27. Nunzio Vicario, Agata Zappalà, **Giovanna Calabrese**, Rosario Gulino, Carmela Parenti, Massimo Gulisano, Rosalba Parenti (2017). Connexins in the central nervous system: physiological traits and neuroprotective targets. *FRONTIERS IN PHYSIOLOGY*, vol. Dec, ISSN: 1664-042X, doi:10.3389/fphys.2017.01060
  28. Bellavia D, Raimondo S, **Calabrese G**, Forte S, Cristaldi M, Patinella A, Memeo L, Manno M, Raccosta S, Diana P, Cirrincione G, Giavaresi G, Monteleone F, Fontana S, De Leo G, Alessandro R (2017). Interleukin 3- receptor targeted exosomes inhibit in vitro and in vivo Chronic Myelogenous Leukemia cell growth. *THERANOSTICS*, vol. 7, p. 1333-1345, ISSN: 1838-7640, doi: 10.7150/thno.17092.
  29. **CALABRESE, GIOVANNA**, GIUFFRIDA, Rosario, Fabbi C, Figallo E, Lo Furno D, GULINO, ROSARIO, Colarossi C, Fullone F, Giuffrida R, PARENTI Rosalba, Memeo L, Forte S. (2016). Collagen-Hydroxyapatite Scaffolds Induce Human Adipose Derived Stem Cells Osteogenic Differentiation In Vitro. *PLOS ONE*, vol. 11, e0151181, ISSN: 1932-6203. doi:10.1371/journal.pone.0151181.
  30. **CALABRESE, GIOVANNA**, Giuffrida R, Forte S, Salvatorelli L, Fabbi C, Figallo E, GULISANO, Massimo, PARENTI, Rosalba, MAGRO, Gaetano Giuseppe, Colarossi C, Memeo L, GULINO, ROSARIO (2016). Bone augmentation after ectopic implantation of a cell-free collagen-hydroxyapatite scaffold in the mouse. *SCIENTIFIC REPORTS*, vol. 6, 36399, ISSN: 2045-2322, doi: 10.1038/srep36399.
  31. Vicari L, **Calabrese G**, Forte S, Giuffrida R, Colarossi C, Parrinello NL, Memeo L (2016). Potential role of transcription factor 5 during osteogenesis. *INTERNATIONAL JOURNAL OF STEM CELLS*, vol. 2016, ISSN: 2005-3606, doi: 10.1155/2016/5282185.
  32. Vicari L, La Rosa C, Forte S, **Calabrese G**, Colarossi C, Aiello E, Salluzzo S, Memeo L (2016). Differential expression of two activating transcription factor 5 isoforms in papillary thyroid carcinoma. *ONCOTARGETS AND THERAPY*, vol. 9, p. 6225-6231, ISSN: 1178-6930, doi: 10.2147/OTT.S113194.
  33. Di Giacomo C, Vanella L, Sorrenti V, Santangelo R, Barbagallo I, **Calabrese G**, Genovese C, Mastrojeni S, Ragusa S, Acquaviva R. (2015). Effects of *Tithonia diversifolia* (Hemsl.) A. Gray extract on adipocyte differentiation of human mesenchymal stem cells.. *PLOS ONE*, vol. 10, e0122320, ISSN:1932-6203, doi: 10.1371/journal.pone.0122320.
  34. **CALABRESE, GIOVANNA**, GIUFFRIDA, Rosario, LO FURNO D, PARRINELLO NL, FORTE S, GULINO, ROSARIO, COLAROSSO C, SCHINOCCA LR, GIUFFRIDA R,

- CARDILE, Venera, MEMEO L. (2015). Potential effect of CD271 on human mesenchymal stromal cell proliferation and differentiation. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*, vol. 16, p. 15609-15624, ISSN: 1422-0067, doi:10.3390/ijms160715609.
35. FORTE S, PAGLIUCA A, MANISCALCHI ET, GULINO R, **CALABRESE G**, RICCI-VITIANI L, PALLINI R, SIGNORE M, PARENTI R, DE MARIA R, GULISANO M. (2013). Gene expression analysis of PTEN positive glioblastoma stem cells identifies DUB3 and Wee1 modulation in a cell differentiation model. *PLOS ONE*, vol. 8, e81432, ISSN: 1932-6203, doi:10.1371/journal.pone.0081432.
36. Onorati M, Binetti M, Conti L, Camnasio S, **Calabrese G**, Albieri I, Di Febo F, Toselli M, Biella G, Martynoga B, Guillemot F, Consalez GG, Cattaneo E. (2011). Preservation of positional identity in fetus-derived neural stem (NS) cells from different mouse central nervous system compartments. *CELLULAR AND MOLECULAR LIFE SCIENCES*, vol. 68, p. 1769-1783, ISSN: 1420-682X, doi: 10.1007/s00018-010-0548-7.
37. Albieri Ilaria, Onorati Marco, **Calabrese Giovanna**, Moiana Alessia, Biasci Daniele, Badaloni Aurora, Camnasio Stefano, Spiliotopoulos Dimitrios, Ivics Zoltán, Cattaneo Elena, Consalez G. Giacomo (2010). A DNA transposonbased approach to functional screening in neural stem cells. *JOURNAL OF BIOTECHNOLOGY*, vol. 150, p. 11-21, ISSN: 0168-1656, doi:10.1016/j.jbiotec.2010.07.027.

#### **BOOK CHAPTERS:**

Dolcimascolo A, Calabrese G\*, Conoci S, Parenti R. Innovative Biomaterials for Tissue Engineering. *Biomaterials in Regenerative Medicine*, ISBN 978-953-51-7393-9.

#### **INVITED TALKS AT MEETINGS, ACADEMIC INSTITUTIONS AND PHARMACEUTICAL COMPANIES:**

**09/2018:** Biomaterials and Adipose-Derived Stem Cells for Osteo-Chondral Regeneration in vitro and in vivo. Department of Civil, Building, and Environmental Engineering, University of Rome, Sapienza. Details: Invited by NanoInnovation Scientific committee.

**10/2018:** Combination of 3D scaffold, mesenchymal stem cells and bioactive factors for osteo-chondral tissue engineering. V Congresso Nazionale SIMCRI", Taormina, UNAhôtel Capotaormina. Details: Invited by SIMCRI Scientific committee.

**04/2019:** Seminar activities for the II level Master in Molecular Imaging and Radiopharmaceuticals: from "Preclinic to the Clinic", physiological modules entitled: a) Evasion from cellular homeostasis; b) In vitro models.

#### **TEACHING AND MENTORING ACTIVITIES:**

**2016-2020:** Examination commission member for teaching General Physiology and Nutrition Physiology, Degree in Pharmacy.

**2019:** Subject expert for the discipline of General and Nutrition Physiology, Degree in Pharmacy.

**2017-2019:** Subject expert for the discipline of General Physiology Degree in Medical Biotechnology.

**2018:** Qualified Tutor for the teaching of physiology, Degree

**2018:** Qualified Tutor for the teaching of Anatomy-Physiology, Degree in Medical Biotechnology and Applied Pharmaceutical Sciences.

**2016-2018:** Subject expert for the discipline of General Physiology Biomedical Laboratory Techniques.

**Undergraduate Student Thesis Supervised:**

- 1) II level Master in MOLECULAR DIAGNOSTICS AND TRANSLATIONAL MEDICINE:

**Title:** Isolation, characterization and differentiation of adipose-derived mesenchymal stem cells into osteocytes (A.Y. 2013-2014).

**Title:** Gene profiling of Human Adipose derived Stem Cells (hADSCs) during osteogenic differentiation (A.Y. 2013-2014).

- 2) II level Master in OMICS Sciences in Biomedicine

**Title:** Gene profiling of mesenchymal stem cells (MSCs) from adipose tissue during osteogenic differentiation (A.Y. 2013-2014).

- 3) Experimental Degree Theses

**Title:** Expression analysis of miRNAs involved in thyroid carcinomas (Degree in Pharmacy, A.Y. 2015- 2016).

**Title:** Evaluation of potential diagnostic and therapeutic targets for the treatment of basal ganglia diseases (Degree in Pharmacy, A.Y. 2016-2017).

**Title:** miR-19a overexpression in papillary and follicular thyroid tumor cell lines (Degree in Pharmacy, A.Y. 2016-2017).

**Title:** Effects of miR-19a inhibition in anaplastic thyroid cancer in vitro (Degree in Pharmacy, A.Y. 2016-2017).

**Title:** Combination of mesenchymal stem cells and 3D scaffolds for cartilage regeneration in vitro (Degree in Pharmacy, A.Y. 2016-2017).

**Title:** Applications of biomimetic scaffolds for in vitro and in vivo cartilage repair and regeneration (Degree in Medical Biotechnology, A.Y. 2017-2018).

**Title:** miR-19a induces de-differentiation and increased aggression in papillary thyroid tumor cells (Degree in Chemistry and Pharmaceutical Technology A.Y. 2017-2018).

**Title:** Combination of 3D scaffolds and mesenchymal stem cells in osteogenic differentiation in vitro (Degree in Chemistry and Pharmaceutical Technology A.Y. 2017-2018).

**Title:** Combination of scaffolds and mesenchymal stem cells for bone tissue regeneration (Degree in Medical Biotechnology, A.Y. 2017-2018).

**Title:** Role of miR-19a in undifferentiated thyroid tumors. (Degree in Pharmacy, A.Y. 2017-2018).

**Title:** New biotechnological approaches for bone tissue regeneration (Degree in Pharmacy, A.Y. 2017-2018).

**Title:** Evaluation of the osteo-conductive / inductive properties of chemically functionalized 3d scaffolds (Degree in Medical Biotechnology, A.Y. 2018-2019).

**Title:** Evaluation of the anti-inflammatory and anti-osteoarthritic properties of olive extract in vitro (Degree in Medical Biotechnology, A.Y. 2018-2019).