

## Contact information

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## Education

- *PhD in Biotechnology* - **2023**. São Paulo State University (UNESP);
- *Master in Biotechnology* - **2017**. São Paulo State University (UNESP);
- *BSc in Medical Physics* - **2015**. São Paulo State University (UNESP);

## Experience

### Teaching Experience

- *Maths teacher (Volunteer)*, **2011-2011**. Cursinho Desafio;
- *Maths teacher (Volunteer)*, **2012-2013**. Cursinho Eukaípia;
- *Marketing director (Junior company)*, **2013-2014**. Nucleon JR;
- *Maths teacher (Volunteer)*, **2015-2015**. Cursinho do IB;
- *Physics teacher (Volunteer)*, **2016-2017**. Cursinho do IB;
- *Discipline Coordinator of Physics (Volunteer)*, **2016-2017**. Cursinho do IB;

### Professional Experience

- *Master's Degree student (FAPESP scholarship)*, **2015-2017**. LaBIO - Laboratory of bioassays and cell dynamics;
- *PhD student (FAPESP scholarship)*, **2017-2023**. LaBIO - Laboratory of bioassays and cell dynamics. LaBIO - Laboratory of bioassays and cell dynamics;
- *Visiting scholar (FAPESP scholarship)*, **2022-2022**. Witek Lab, NYU - New York University, Dental School;
- *Data consultant*, **since 2023**. dm2, fruits and juices.
- *Postdoc (CAPES scholarship)*, **since 2023**. GemBio - Molecular Genetics and Bioinformatics Laboratory - Experimental Research Unity, School of Medicine, UNESP Botucatu.

## Skills

- *Communication*;
- *Leadership*;
- *Problem-solving*;
- Creative thinking;
- *Transferable skills*;
- *Interpersonal skills*;

- *Active listening.*

## Publications

- Nano hydroxyapatite-blasted titanium surface affects pre-osteoblast morphology by modulating critical intracellular pathways - F Bezerra, MR Ferreira, GN Fontes, CJ da Costa Fernandes, DC Andia, ...-Biotechnology and bioengineering,114 (8), 1888-1898,2017
- GSVA score reveals molecular signatures from transcriptomes for biomaterials comparison - MR Ferreira, GA Santos, CA Biagi, WA Silva Junior, WF Zambuzzi-Journal of Biomedical Materials Research Part A,109 (6), 1004-1014,2021
- Nano hydroxyapatite-blasted titanium surface creates a biointerface able to govern Src-dependent osteoblast metabolism as prerequisite to ECM remodeling - CJC Fernandes, F Bezerra, MR Ferreira, AFC Andrade, TS Pinto, ...-Colloids and Surfaces B: Biointerfaces,163, 321-328,2018
- Zirconia stimulates ECM-remodeling as a prerequisite to pre-osteoblast adhesion/proliferation by possible interference with cellular anchorage - CJ da Costa Fernandes, MR Ferreira, FJB Bezerra, WF Zambuzzi-Journal of Materials Science: Materials in Medicine,29, 1-11,2018
- HOXA cluster gene expression during osteoblast differentiation involves epigenetic control - RA da Silva, GM Fuhler, VT Janmaat, CJC Fernandes, G da Silva Feltran, ...-Bone,125, 74-86,2019
- Cobalt-chromium-enriched medium ameliorates shear-stressed endothelial cell performance - MIP Machado, AM Gomes, MF Rodrigues, TS Pinto, ...-Journal of Trace Elements in Medicine and Biology,54, 163-171,2019
- Nanohydroxyapatite-blasted bioactive surface drives shear-stressed endothelial cell growth and angiogenesis - TS Pinto, BR Martins, MR Ferreira, F Bezerra, WF Zambuzzi-BioMed Research International,2022,2022
- The impact of bioactive surfaces in the early stages of osseointegration: An in vitro comparative study evaluating the HAnano® and SLActive® super hydrophilic surfaces - RA Da Silva, G da Silva Feltran, MR Ferreira, PF Wood, F Bezerra, ...-BioMed Research International,2020,2020
- LncRNA HOTAIR is a novel endothelial mechanosensitive gene - RA da Silva, MR Ferreira, AM Gomes, WF Zambuzzi-Journal of Cellular Physiology,235 (5), 4631-4642,2020
- The role of triiodothyronine hormone and mechanically-stressed endothelial cell paracrine signalling synergism in gene reprogramming during hBMSC-stimulated osteogenic ... - RA da Silva, AF de Camargo Andrade, G da Silva Feltran, ...-Molecular and cellular endocrinology,478, 151-167,2018
- Non-coding RNAs repressive role in post-transcriptional processing of RUNX2 during the acquisition of the osteogenic phenotype of periodontal ligament mesenchymal stem cells - RIF Assis, GS Feltran, MES Silva, IC do Rosário Palma, ES Rovai, ...-Developmental Biology,470, 37-48,2021
- A novel member of GH16 family derived from sugarcane soil metagenome - TM Alvarez, MV Liberato, JPLF Cairo, DAA Paixão, BM Campos, ...-Applied biochemistry and biotechnology,177, 304-317,2015
- A novel BSA immobilizing manner on modified titanium surface ameliorates osteoblast performance - OP Gomes, GS Feltran, MR Ferreira, CS Albano, WF Zambuzzi, ...-Colloids and Surfaces B: Biointerfaces,190, 110888,2020
- Differential inflammatory landscape stimulus during titanium surfaces obtained osteogenic phenotype - G da S. Feltran, F Bezerra, CJ da Costa Fernandes, MR Ferreira, ...-Journal of Biomedical Materials Research Part A,107 (8), 1597-1604,2019
- Platelet microparticles load a repertoire of miRNAs programmed to drive osteogenic phenotype - MR Ferreira, WF Zambuzzi-Journal of Biomedical Materials Research Part A,109 (8), 1502-1511,2021

- Sonic hedgehog drives layered double hydroxides-induced acute inflammatory landscape - G da Silva Feltran, CJ da Costa Fernandes, MR Ferreira, HR Kang, ...-Colloids and Surfaces B: Biointerfaces,174, 467-475,2019
- Oxidative cleavage of polysaccharides by a termite-derived superoxide dismutase boosts the degradation of biomass by glycoside hydrolases - JPLF Cairo, F Mandelli, R Tramontina, D Cannella, A Paradisi, L Ciano, ...-Green Chemistry,24 (12), 4845-4858,2022
- OsteoBLAST: Computational Routine of Global Molecular Analysis Applied to Biomaterials Development - MR Ferreira, R Milani, EC Rangel, M Peppelenbosch, W Zambuzzi-Frontiers in Bioengineering and Biotechnology,8, 565901,2020
- Osteogenic differentiation and reconstruction of mandible defects using a novel resorbable membrane: An in vitro and in vivo experimental study - ETP Bergamo, ÍF Balderrama, MR Ferreira, R Spielman, BV Slavin, ...-Journal of Biomedical Materials Research Part B: Applied Biomaterials,111 ... ,2023
- Titanium-Enriched Medium Promotes Environment-Induced Epigenetic Machinery Changes in Human Endothelial Cells - CJC Fernandes, RAF da Silva, PF Wood, MR Ferreira, GS de Almeida, ...-Journal of Functional Biomaterials,14 (3), 131,2023
- Combination of in silico and cell culture strategies to predict biomaterial performance: Effects of sintering temperature on the biological properties of hydroxyapatite - GS de Almeida, MR Ferreira, CC Fernandes Jr, CAO de Biagi Jr, ...-Journal of Biomedical Materials Research Part B: Applied Biomaterials,112 (2 ... ,2024
- Development of cobalt (Co)-doped monetites for bone regeneration - GS de Almeida, MR Ferreira, CJ da Costa Fernandes, LC Suter, ...-Journal of Biomedical Materials Research Part B: Applied Biomaterials,112 (1 ... ,2024
- MicroRNA biogenesis machinery activation and lncRNA and REST overexpression as neuroprotective responses to fight inflammation in the hippocampus - LB Carvalho, PL dos Santos Sanna, CC dos Santos Afonso, EF Bondan, ...-Journal of Neuroimmunology,382, 578149,2023
- The Multifarious Functions of Leukotrienes in Bone Metabolism - F Amadeu de Oliveira, CK Tokuhara, V Veeriah, JP Domezi, MR Santesso, ...-Journal of Bone and Mineral Research,38 (8), 1135-1153,2023
- Cyclopamine targeting hedgehog modulates nuclear control of the osteoblast activity - CJ da Costa Fernandes, MR Ferreira, WF Zambuzzi-Cells & Development,174, 203836,2023
- Epigenetic Differences Arise in Endothelial Cells Responding to Cobalt–Chromium - CJ da C. Fernandes, RAF da Silva, GS de Almeida, MR Ferreira, ...-Journal of Functional Biomaterials,14 (3), 127,2023