

Monica MATTIOLI BELMONTE CIMA - CV

Prof. Monica Mattioli-Belmonte holds a PhD degree in Cytomorphology in 1995. From 1996 to 2004 she worked at the Institute of Normal Human Morphology, School of Medicine, Ancona University, first as a post-doc, then as a Research Fellow. From 2005 to 2016, she held the position of Assistant Professor and then from 2016 to 2020 as Associate Professor of Histology at DISCLIMO. In 2010, she received a grant award for Best Lecturer and Researcher at Università Politecnica delle Marche. From 2018 to 2021, she was appointed as Vice-Director of DISCLIMO.

Her research activity concerned the morpho-functional study of the cellular and tissue response (extracellular and microenvironmental components) induced using implant materials, 2D and 3D scaffolds for the regeneration of osteochondral tissues and polymeric coatings with controlled release of drugs to promote osseointegration and/or prevent associated degenerative phenomena. Aspects of more recent interest are also those related to the phenomena of aging, focused on tissue regeneration, as well as the development of multi-tissue culture systems or modular bioengineered multi-organ in vitro platform (MOP) as in vitro tools to adequately address the recapitulation of multi-system human pathophysiological conditions. She is a co-author of more than 200 scientific publications (166 research articles, 16 Reviews; 2 book chapters) (in national and international relevant journals in the field of morphology, biomaterials, and tissue engineering. (orcid.org/0000-0002-2087-2776; Scopus H Index=40; 5406 citations;)).

Research Network: Colleagues from the Polytechnic University of Marche; Department of Biomedical and Neuromotor Sciences – University of Bologna; Department of Experimental and Clinical Medicine – University of Florence; Department of Chemistry - University of Bari; Research Center "E. Piaggio" – University of Pisa; Department of Applied Science and Technology, of Control and Computer Science and, Department of Mechanical and Aerospace Engineering of the Polytechnic of Turin; Laboratory of Biomechanic and technological Innovation-Rizzoli Orthopedic Institutes, Bologna, ISTECCNR, Faenza; ICMB-CNR, Naples) and School of Engineering Newcastle University (UK).

Member of: Italian Society of Anatomy and Histology; Italian Society of Histochemistry; Italian Orthopedic Research Society (IORS); Italian Society of Biomaterials (Vice-president); International Society for Biofabrication (ISBF); Interuniversity Center for the Promotion of the 3Rs Principles in Teaching and Research (Centro 3R) and National Interuniversity Consortium of Materials Science and Technology (INSTM).

Grants/fundings

- Research Unit of the national PRIN 2010-2011 (Protocol 2010J8RYS7) Engineering physiologically and pathologically relevant organ Models for the Investigation of age-related Diseases (MIND).
- CHETCH (CHina and Europe Taking Care of Healthcare solutions) European Project in the 7th European Framework (MARIE CURIE ACTIONS - International Research Staff Exchange
- PI in a biological unit of the ERC – BOOST (GA 681798) "Biomimetic trick to re-balance osteoblast-osteoclast loop in osteoporosis treatment: a topological and material driven approach"
- PNRR "Vitality"