Special Issue

Impact of Physical Exercises on Bone Activities

Message from the Guest Editors

Bone tissue is a dynamic tissue that is modeled and reshaped according to the constraints applied to it. In particular, the development of bone mass in the absence of exercise is estimated at only 30 to 50% of its potential. As with muscle, exercise and mechanical strains are therefore necessary for bone strengthening. Physical exercise causes mechanical stresses. Exercise is also recognized to have a positive effect on the human skeleton and to contribute to the prevention and treatment of Bone. Nowadays, it is generally accepted that without considering the specific effects of the bone cells, whatever the theoretical model, the prediction of bone remodeling remains at best phenomenologically driven. Although at the continuous level (scale of the bone) the continuum mechanics is “manageable”, the integration of continuum biology is highly risky since, for the time being, there are no experimental measurements available in the literature able to link the local cells phenomena to the bone continuum. The full understanding of the bone mechanobiology is still unknown.

Guest Editors

Dr. Hugues Portier

Department of Bioengineering and Osteoarticular Bioimaging (B2OA), Universite d'Orleans, 45100 Orléans, France

Dr. Stéphane Pallu

Multiscale Multimodal Imaging and Modeling of Bone and Joint Tissue Laboratory, University of Orléans, 45100 Orléans, France

Deadline for manuscript submissions

closed (1 March 2021)

Life

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/54908

Life
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

mdpi.com/journal/life

Life

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed

mdpi.com/journal/life

MDPI

About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana
Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)