



life



an Open Access Journal by MDPI

Advances in Space Biomedicine and Disease Pathogenesis

Guest Editors:

Dr. Ian R.D. Johnson

Clinical & Health Sciences,
University of South Australia,
Adelaide 5000, Australia

Dr. Roxy Fournier

Schlegel-University of Waterloo
Research Institute for Aging,
University of Waterloo, Waterloo,
ON N2G 0E2, Canada

Prof. Dr. Nathaniel Szewczyk

Heritage College of Osteopathic
Medicine, Ohio University,
Athens, OH 45701, USA

Deadline for manuscript
submissions:

closed (26 April 2023)

Message from the Guest Editors

Dear Colleagues,

This Special Issue focuses on recent advances investigating biomedicine and disease pathogenesis in space environments ranging from simulated to orbital/suborbital microgravity, and cosmic radiation exposure. These reveal novel mechanically or gravity-driven processes that influence human development and health, with key pathways initiated during the onset of disease pathogenesis providing new biomarkers to monitor cellular and physiological stress or provide targets for novel therapeutic countermeasures. This has significant benefit not only for the next generation of spacefarers, but critically, in combatting diseases on Earth that are frequently associated with aging, or deleterious effects of limited mobility. Further, manuscripts are invited in research that exploits the challenges of research in simulated or orbital/suborbital microgravity, through biomedical advancements in device miniaturization to improve biomedical diagnostic tools that have applications in remote or extreme environments, or through developments in tissue engineering.

Dr. Ian R.D. Johnson

Dr. Roxy Fournier

Prof. Dr. Nathaniel Szewczyk

Guest Editors



mdpi.com/si/117454

Special Issue



life



an Open Access Journal by MDPI

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

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.

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](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

Contact Us

Life Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/life
life@mdpi.com
[X@Life_MDPI](#)