



medicina



an Open Access Journal by MDPI

The Impact of Altitude on Exercise Tolerance of Various Patients

Guest Editors:

Prof. Dr. Martin Bartscher

Department of Sport Science,
University of Innsbruck,
Fürstenweg 185, A-6020
Innsbruck, Austria

Dr. Daniel Neunhaeuserer

Sport and Exercise Medicine
Division, Department of
Medicine, University of Padova,
35122 Padova, Italy

Prof. Dr. Silvia Ulrich

Director Clinic of Pulmonology,
Head of Pulmonary Vascular
Unit, University and University
Hospital of Zurich, Rämistrasse
100, 8091 Zürich, Switzerland

Deadline for manuscript
submissions:

30 September 2024

Message from the Guest Editors

More than 500 million humans live at or above the altitude of 1500 m, and many more people transiently sojourn at such altitudes for recreation, athletic training, or work. Barometric and related oxygen partial pressure continuously decrease with increasing altitude (hypobaric hypoxia), thereby negatively affecting aerobic exercise capacity and the associated activities of daily living and quality of life. Gas exchange in the lungs, oxygen delivery to exercising muscles, and the use of oxygen in the mitochondria of these muscles are the main determinants of an individual's aerobic exercise capacity. Any impairment of these mechanisms and/or their control by the autonomous nervous system will negatively impact on exercise tolerance, which is especially pronounced when ambient oxygen availability is reduced, i.e., at high altitude.

Thus, this Special Issue is primarily aimed to uncover disease-dependent pathophysiological mechanisms affecting exercise capacity at high altitudes and provide helpful management strategies.



mdpi.com/si/196589

Special Issue



medicina



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Edgaras Stankevičius

Medical Academy, Lithuanian
University of Health Sciences,
Kaunas, Lithuania

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Medicina* (ISSN: 1648-9144). *Medicina* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on medicine. The scientific community and the general public can access the content free of charge as soon as it is published.

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](#), [MEDLINE](#), [PMC](#), and [other databases](#).

Journal Rank: CiteScore - Q2 (*General Medicine*)

Contact Us

Medicina Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/medicina
medicina@mdpi.com