

Special Issue

Physiological Responses to Exercise in Extreme Environments in Humans: Cellular and Physiological Adaptations to Extreme Conditions

Message from the Guest Editor

A wide variety of physiological responses and adaptations characterize human interactions with extreme environments. The understanding of the functioning of the human body under a variety of environmental (e.g. altitude, climatic, gravitational, climate change) coupled with exercise conditions are vital to inform the knowledge of how the physical world shapes human biology. Settings include those relating to occupational, sport performance, recreational and daily activities throughout the human lifespan. Additionally, although environmental stress often induces common responses, individual variability seems to play a role in tolerance to exercise in stressful environments. This special issue focuses on the common and individual reactions to these environmental stressors in the realms of cellular/molecular and whole organism physiology and will add to the understanding of how exercise training, nutritional interventions and other countermeasures (e.g. pre-cooling, heat acclimation, intermittent altitude exposure, cold habituation) protect and lower the impact of extreme environments on human survival.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Sports (ISSN 2075-4663) is a peer-reviewed scientific journal that publishes original articles, critical reviews, research notes and short communications in the interdisciplinary area of sport sciences and public health. It links several scientific disciplines in an integrated fashion, to address critical issues related to sport science and public health. The journal presents diverse original articles, including systematic and narrative reviews, cohort and case control studies, innovative randomized trials, and formative research using qualitative and quantitative methods with the aim to provide information for researchers to plan intervention programs. It addresses diverse public health, physical activity and exercise science topics.

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