

Editorial

Selected papers from the 13th International Conference BIOMDLORE 2021

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This special section in *Technology and Health Care* contains a collection of selected papers from the 13th International Conference BIOMDLORE 2021, which was planned to be held in October 2020, however due to the worldwide COVID-19 pandemic, the conference was postponed to the year 2021.

BIOMDLORE stands for **BI**Omechanics, **ME**dical **DI**agnostics, **LO**comotion and **RE**habilitation; it is an International Conference, organized by the Lithuanian Society of Biomechanics and non-profit foundation Educating Students in Engineering and Medicine (ESEM), in cooperation with Vilnius Gediminas Technical University (Lithuania), Kaunas University of Technology (KTU) and Biaşystok University of Technology (Poland). The scope of the conference is focused on the various issues of biomedical engineering: human body biomechanics, gait and posture, orthopaedics and traumatology, assistive technologies, rehabilitation engineering, medical diagnostics, biosignal processing, mathematical modelling, sports biomechanics, and robotics in healthcare. As the title of this special section suggests, the research presented here tries to bridge the gap between Engineering and Medicine, raise the problems related to healthcare and provide engineering-based solutions.

The contents of the special section present some of the research problems which are currently explored within the field of biomedical engineering and biomechanics. Three papers presented here are focused on the development of various technological devices in healthcare applications.

In “**A portable plantar pressure system: Specifications, design, and preliminary results,**” Ostaszewski et al. aim to develop an in-shoe foot plantar pressure system that is portable, and which enables to measure the plantar pressure distribution during gait. The developed prototype was tested on 22 healthy subjects and its accuracy was compared to a commercially available similar system.

In “**Effects of an 8-week basketball-specific proprioceptive training with a single-plane instability balance platform,**” Domeika et al. examine the effects of eight weeks of basketball-specific proprioception training program using a newly developed one plane instability board. The results showed improved balance ability of the basketball players that participated in the program.

In “**Quantitative body symmetry assessment during neurological examination,**” Daunoraviciene et al. aim to quantitatively assess the body symmetry of upper and lower limbs using inertial measurement units. The results showed that temporal parameters of the limb movements were the most sensitive to body asymmetry evaluation and differentiating multiple sclerosis patients from healthy individuals.

The results of the research presented here are of interest to experts in engineering, medicine, rehabilitation, orthopaedics and other fields. We hope that readers will enjoy this special section.