



Frontiers Research in Biomechanics and Rehabilitation Engineering

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Deadline for manuscript submissions:
closed (20 June 2022)

Message from the Guest Editors

Dear Colleagues,

Biomechanics and rehabilitation engineering are two intertwined fields aimed at improving the quality of life of disabled people and the elderly. During the last decade, the rehabilitation routines have moved from the clinical environment to the subject's own home, thanks to the use of compact actuators and energy storage systems. The design of novel rehabilitation devices can benefit from the use of recent but also widespread manufacturing techniques, such as 3D printing, the use of biologically inspired actuators such as Bowden cables, pneumatic muscles or textiles and the use of 'ad hoc' simulation models to characterize the rehabilitation systems and their influence in the rehabilitation process. Topics of interest include, but are not limited to:

- Novel designs of rehabilitation devices for the upper and lower limbs;
- Biologically inspired actuators and control schemes;
- Use of rapid manufacturing techniques in the design of rehabilitation devices
- Assessment of the aforementioned systems for the population of interest;
- Model simulation and validation;
- Characterization of the rehabilitation system constructive materials.





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Message from the Editor-in-Chief

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