# Special Issue

# Advanced Medical Technology for Human Movement and Neurorehabilitation

# Message from the Guest Editor

Advanced medical technology is transforming human movement and neurorehabilitation. Robotics, Virtual Reality (VR), Artificial Intelligence (Al), and wearable devices enhance therapeutic practices, improve patient outcomes, and expand traditional methods. These advancements enable real-time monitoring and personalized interventions based on individual patient needs. Integrating AI and machine learning algorithms enhances diagnostic accuracy, prognostic assessments, and adaptive neurorehabilitation strategies. Technologies such as brain-computer interfaces (BCIs), exoskeletons, and neurostimulation devices empower patients with neurological conditions, such as spinal cord or brain injuries, to regain functional independence, significantly improving the management and treatment of neurological disorders. This Special Issue on "Advanced Medical Technology for Human Movement and Neurorehabilitation" invites submissions that shape a dynamic medical technology. Topics include, but are not limited to, the following:

- Al and VR for Neurorehabilitation
- Neurostimulation Devices
- Robotics and Wearable Devices in Therapy
- Technology for Precision Recovery and Therapeutic

#### **Guest Editor**

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## Deadline for manuscript submissions

closed (31 August 2025)



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# Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

# **Editor-in-Chief**

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