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## **ADVANCED ROBOTICS    Call for Papers**

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# ***Special Issue on Hyper-Adaptability for Overcoming Body-Brain Dysfunction***

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With coming of a super-aging society, we are facing the urgent problems of sensory-motor impairments caused by aging and brain disorders. In order to overcome this body-brain dysfunction, “hyper-adaptability”, where human brains manages impairment by new computational principle of adaptation, plays an important role. It is important to elucidate the neural and computational principles of hyper-adaptability by linking neuroscience with systems engineering in order to understand acute impairments and the principle of frailty.

This special issue will focus on adaptation mechanism used in animals and robots and application of such mechanism for rehabilitation of motor impaired patients. In particular, authors who perform collaborative research in brain science, rehabilitation medicine and engineering are encouraged to submit their work. Papers on all aspects of adaptive intelligence and neuroscience are welcome, including, but not limited to the following topics

- Mathematical/statistical modeling of brain function
- Computational principle of adaptation mechanism
- Robotic-intervention neuroscience
- Modeling of neuro-musculoskeletal system
- Rehabilitation robotics for motor impairment

*Submission:* The full-length manuscript (either PDF file or MS word file) should be sent by **September 30, 2020** to the office of Advanced Robotics, the Robotics Society of Japan through the homepage of Advanced Robotics (<https://www.rsj.or.jp/pub/ar/submission.html>). Sample manuscript templates and detailed Instructions for Authors are available from the journal homepage.