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# Symmetric/Asymmetric Studies in Biomedical Engineering: Topics, Advances and Applications

Guest Editor:

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### Message from the Guest Editor

Dear Colleagues,

This Special Issue focuses on the role of symmetry in the design, evaluation, and development of biomedical tools and applications. It covers a wide range of topics, incorporating symmetry/asymmetry into the fields of biomedical engineering and brain science, and into the study of cardiovascular, digestive, and respiratory systems. Further topics include the role of symmetry in the evaluation and treatment of populations, e.g., individuals with hemiparesis or unilateral amputees. Special interventions, such as exo-skeletons, specialized shoes and prostheses, and splints and braces-all designed to promote body symmetry/asymmetry-are encouraged herein. This Special Issue will hereby promote a discussion mechanisms surrounding symmetrical regarding conditions, which contribute to the improvement of our daily lives by enhancing health, functionality, and overall participation in daily activities. I would like to invite authors with relevant manuscripts to contribute research papers, communications, and reviews to this Special Issue of Symmetry.

Dr. Takahiro Emoto *Guest Editor* 





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### **Editor-in-Chief**

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### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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