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# **Applications of Entropy in Health Care**

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Deadline for manuscript submissions: closed (24 October 2023)



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### Message from the Guest Editors

Dear Colleagues,

Entropy is generally described as a measure of order related to the amount of "useful" information or energy. Entropy was first recognized in thermodynamics and has become a central concept in the field of information theory, but there is a further growing interest in other disciplines and across disciplines.

Entropy can be broadly applied in healthcare. For example, the entropy concept can help to model human physiology as well as explain information processing when measuring the cognitive ability of a patient performing a task of a certain level of difficulty. Entropy also finds application when handling information exchange and communication throughout healthcare, ranging from the setting of performance measures for diagnoses to optimizing the organization of queuing. Recent research, including entropy-related tools such as item response theory, psychometrics, and construct specification equations, promises to modernize classic and traditional approaches to make healthcare more efficient, effective, and with better quality.

In this Special Issue, we aim to collect a series of papers addressing the applications of entropy in healthcare.







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

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### Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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