



## Brain Image Computation for Diagnosis and Treatment

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### Message from the Guest Editor

As imaging is the only technique that can quantify the brain's structure and function in living humans at the system level, the analysis of brain imaging data is uniquely placed to facilitate brain disease diagnosis, as well as treatment planning and follow-ups. Rapid advances in non-invasive neuroimaging methods have increased the possibilities for the use of imaging tools in the clinic and in the development of treatments. These advances can largely be attributed to the development of dedicated computational algorithms, which are used to extract quantitative information from images, aid in the diagnosis of various brain diseases, and make imaging-based predictions at the level of the individual.

This Special Issue of the *Journal of Imaging* aims to feature reports on recent advances in brain image computation that specifically aim to improve diagnoses and treatment. One particular area of focus is that of imaging-based personalized medicine, whereby novel computational methods can facilitate diagnostics and treatment planning.





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## Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

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