Special Issue

Translational Preclinical Imaging: Techniques, Applications and Perspectives

Message from the Guest Editors

Preclinical imaging in animal models of human disease is progressing rapidly, driven by advances in instrumentation, technology, and comparative medicine. Preclinical imaging techniques comparable to clinical ones help improve the translation of findings from animal models to humans, aligning with the 3Rs. Validating non-invasive imaging methodologies provides insights into disease pathogenesis, progression, and therapeutic responses, improving data quality while reducing animal use and experimental variability. Optimizing imaging methods and avoiding biases related to animal care are urgent challenges that affect the reliability and reproducibility of results, limiting the impact of preclinical imaging in clinical translation.

This Special Issue aims to gather articles showcasing preclinical imaging's role in multidisciplinary translational research. Topics include methodological innovations in animal studies using single- or multimodality imaging, as well as reviews on current applications and translational challenges in preclinical imaging.

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About the Journal

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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