



The Development and Use of Hybrid MR-PET Imaging in Molecular Science

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Message from the Guest Editors

Dear Colleagues,

Positron emission tomography (PET) is a widely used in vivo imaging modality employed to measure numerous molecular targets in the brain, including glucose metabolism, oxygen usage, and neurotransmitter distribution and concentration. However, although PET provides an unmatched ability to image numerous biochemical and molecular targets, its ability to capture detailed spatial and anatomical information is limited. In contrast, magnetic resonance imaging (MRI) excels in capturing even very small changes in brain structure and function. Thus, the complementary nature of the two modalities makes integration in a simultaneous system highly desirable for both clinical and research applications.

For this Special Issue, we aim to highlight the importance of hybrid MR-PET imaging, detailing methods and applications in human disease. We will also give an overview of current human research, with a particular focus on applications in neuroimaging and cognitive neuroscience or others.

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