

Barcelona, Spain

Joint Symposium 11

Neuroimaging Committee / International Society of Cerebral Blood Flow and Metabolism (ISCBFM)

Monday, October 14, 11:30-13:00

Session Title

New Applications for Hybrid Brain PET/MRI

Chairpersons

Henryk Barthel (Leipzig, Germany)

Ronald Boellaard (Amsterdam, Netherlands)

Programme

- 11:30 - 11:50 Henryk Barthel (Leipzig, Germany): Brain PET/MRI - Where Are We Now?
- 11:50 - 12:10 Christin Sander (Boston, United States of America / ISCBFM): Brain PET/MRI for Neuromodulation
- 12:10 - 12:30 Matthias Koepp (London, United Kingdom): Brain PET/MRI in Epilepsy
- 12:30 - 12:50 Ronald Boellaard (Amsterdam, Netherlands): Quantification and Standardization in Brain PET/MRI
- 12:50 – 13:00 Summary and general discussion

Educational Objectives

1. To learn about the state-of-the-art of brain PET/MRI
2. To understand how PET/MRI can be used for measuring neuromodulation
3. To learn about the use of PET/MRI in epilepsy
4. To understand opportunities and pitfalls in quantitative PET/MRI studies

Summary

Hybrid brain PET/MRI offers a complementary combination of two modalities which has often proven itself superior to the single modality approach in the diagnostic work-up of neuropsychiatric diseases. Established and newly emerging PET tracers, technical advances in multi-parametric brain MRI and obvious workflow advantages may enable hybrid PET/MRI to significantly improve brain imaging diagnostics. Moreover, simultaneous PET/MRI is well suited to study complex brain function in which fast fluctuations of brain signals need to be monitored on multiple levels. This joint symposium will discuss the current state and future directions in this regard.

Key Words

PET/MRI, Brain, Neuromodulation, Epilepsy, Quantification, Standardisation