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