AbstractID: 14534 Title: Recent Advances in PET Quantitation of Myocardial Blood Flow

Absolute myocardial blood flow (MBF) quantitation with dynamic PET has great potential in the assessment of the extent and severity of ischemia in patients without known coronary artery disease (CAD) but is not, to date, part of clinical care.

This lecture will provide an overview of what can be achieved today in terms of accuracy and reproducibility with several PET flow tracers. It will also present recent methodological developments in terms of automated quantitation of MBF using factor and compartment analyses of dynamic PET data that have the potential to bring MBF quantitation to the clinical setting. Finally novel promising tracers will be presented as they can further make MBF quantitation a clinical reality.

Learning Objectives:

- 1. Understand the fundamentals of myocardial blood flow quantitation
- 2. Understand the challenges to accurate and reproducible MBF quantitation with PET
- 3. Understand recent developments and opportunities in MBF quantitation methods using dynamic PET