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# PET Talks

*Seminars By and For PET Users*



## Quantitative PET of the Liver

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**Wednesday, November 12, 2014**

\*\*\*Note change of time\*\*\*

2PM (Please arrive early for refreshments)

**Brady B131 Auditorium, 310 Cedar St.**

### **Abstract:**

Quantitative PET of the liver is complicated by the organ's dual blood supply from the portal vein (75%) and the hepatic artery (25%). This is particularly true when estimating kinetic parameters such as  $K_1$  and hepatic blood flow because these parameters are determined primarily from the initial distribution of tracer in the tissue. When (quasi) steady state is reached, the arterial input will often suffice for calculation of metabolic clearance rates providing that the tracer is not trapped in the prehepatic splanchnic bed. These aspects are discussed and illustrated using experimental data. Translational validation of novel PET tracers and kinetic models is also discussed.

