



The Yale PET Center presents

PET Talks

Seminars By and For PET Users



Almost everything you always wanted to know but were afraid to ask about tracer development in PET (Didactic PET Talk Part II)

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Monday August 27, 2012 12 noon

216 Hope, 315 Cedar St. ***Please note different location***

(Please arrive early for lunch)



Abstract: PET is a powerful *in vivo* imaging technique with unparalleled molecular specificity. The high resolution owes much to the physics of PET and the specificity derives from PET chemistry. The availability of specific PET radiotracers is essential to the realization of the full power of PET imaging. PET radiotracers, or PET radiopharmaceuticals, are biologically active molecules labeled with positron-emitting radioisotope. They interact with specific proteins, enzymes and biochemical processes *in vivo*. Information gleaned from these interactions through PET imaging makes it possible to probe the physiology, pharmacology, and the state of biochemical processes in the living system. This presentation will focus on the "magic" of PET chemistry, and seek to illuminate the process for the discovery and development of PET radiotracers: Where do they come from? What makes a "good" radiotracer? How do we sift through chemical entities to find these "good" PET radiotracers? We will conclude with a list of radiotracers available at the Yale PET Center, and how they are being used in a diverse array of biomedical research projects.



For anyone who attended (or missed) the previous didactic PET Talk! and would like to pursue the topic of PET imaging of the brain, Professors Evan Morris and Kelly Cosgrove offer a fall seminar course ENAS 880: "Imaging Drugs in the Brain". If interested please email the instructors for permission to attend.

Last year's syllabus can be found here: http://tauruspet.med.yale.edu/wiki/index.php/PET_Talks!

here: http://tauruspet.med.yale.edu/staff/edm42/courses/ENAS_880_2011/syllabus/Syllabus-weeks1-13.htm

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