

# COURSE PROGRAM

College Station (April 27- 28, 2013)  
Hilton Hotel & Conference Center, Brazos Amphitheatre  
**SATURDAY APRIL 27th**

9:00-9:15	Nicolaas Deutz	Course Introduction
<b>Introduction to Tracer Methodology</b>		
9:15-9:45	1 Olav Rooyackers	Introduction to the use of stable and radioactive isotopes
9:45-10:30	2 Dwight Matthews	Basic tracer calculations
10:30-11:00		Coffee break
11:00-12:00	3 Dwight Matthews	Mass spectrometer methods to measure stable isotope tracers: GC-MS/GC-IRMS/LC-MS
12:00-13:00	4 Yves Boirie	Isotope dilution vs isotope incorporation
13:00-14:00		Lunch break
<b>Carbohydrate Metabolism</b>		
14:00-14:45	5 Olav Rooyackers Dwight Matthews & Olav	Glucose turnover and gluconeogenesis
14:45-15:30	6 Rooyackers	Workshop 1: Basic tracer and whole body glucose kinetics calculations
15:30-16:00		Coffee break
<b>Fat Metabolism &amp; Substrate Oxidation</b>		
16:00-16:45	7 John Miles	Fatty acid kinetics – Substrate oxidation
16:45-17:30	8 John Miles	Lipoprotein and glycerol kinetics
<b>Dinner with the experts</b>		
19:30	Departure bus	Please be ready at the Hilton Lobby at 19:30
20:00		Happy hour and Dinner at Pebble Creek Country Club
21:00-21:30	9 Dwight Matthews	Dinner with the experts! Dr. Dwight Matthews will present his world famous lecture on “Lessons Learned: Problems and Pitfalls of Using Tracers”
23:15:00	Departure bus	Return to Hilton Hotel

## SUNDAY APRIL 28th

<b>Fat Metabolism &amp; Substrate Oxidation</b>		
09:00-10:00	10 All faculty	Workshop 2: Whole body and tissue free fatty acids/triglyceride kinetics and oxidation calculations
<b>Protein &amp; Amino Acid Metabolism</b>		
10:00-11:00	11 Yves Boirie	Whole body protein kinetics during fasting and feeding
11:00-11:30		Coffee break
11:30-12:00	12 Nicolaas Deutz	Protein transorgan and fractional synthesis and breakdown rates
12:00-12:30	13 Nicolaas Deutz	Misc topics (D2O/protein FSR_FBR/GSH FSR/Pulse)
<b>Energy Expenditure</b>		
12:30-13:00	14 Dwight Matthews	Energy expenditure – Doubly labeled water
13:00-14:00		Lunch break
14:00-15:00	15 All faculty	Workshop 3: Whole body and tissue amino acid kinetics calculations
<b>Participants presentations</b>		
15:00-16:00	16 All faculty	Workshop 4-5: Discussion on tracer protocols mainly on carbohydrate and energy-related projects. Participants present their tracer protocols and discuss them with the faculty and fellow students
16:00-16:30		Coffee Break
16:30-17:30	17 All faculty	Workshop 5: Discussion on tracer protocols mainly on lipid and protein-related projects. Participants present their tracer protocols and discuss them with the faculty and fellow students
17:30	All faculty	Closure of the course

## INTERNET

Network option 1:	attwifi OR hhonors	Passcode: c8129
Network option 2:	hilton-meeting	Passcode: a8129

<b>Workshop 4</b>		
Presenter	Topic	
Julia Steinhoff-Wagner	Glucose metabolism in newborn calves in regard to colostrum feeding and development	
<b>Workshop 5</b>		
Presenter	Topic	
Srinivasan Dasarathy	Mechanisms of muscle loss in cirrhosis	
Anna Anderson	The turnover between cortisol and cortisone using deuterated tracers (D4-cortisol and D2-cortisone) across skeletal muscle and adipose tissue through the use of arteriovenous blood sampling, comparing the rate and overall directionality of this turnover between lean and obese healthy male volunteers and the impact of hyperinsulinaemia	
Rosemary Naylor	MPS responses in horses	
Dillon Walker	Simultaneous isotopic measurement of fat synthesis and breakdown	
Merel Hommen	Three compartmental model	
Renate Jonker	ARG-CIT pulse model	
Nicholas Hurren	Calculate secretion and breakdown of VLDL-triacylglycerol, using two different stable isotopes of palmitate	