

ESPEN INTENSIVE COURSE IN TRACER METHODOLOGY IN METABOLISM

Preliminary program
Maastricht (May 25-26, 2024)

Saturday May 25th: Maastricht UMC+ (Greep Hall - 4.E2.020)

	Speaker(s)	Title
The Basics		<i>Morning coffee/tea</i>
9:00-9:15	Olav Rooyackers	Course Presentation
9:15-9:45	Olav Rooyackers	Introduction to the use of stable isotopes
9:45-10:45	Dwight Matthews	Mass spectrometer methods to measure stable isotope tracers: GC-MS/GC-IRMS/LC-MS
<i>10.45-11.15</i>		<i>Coffee/tea break</i>
11:15-12:00	Dwight Matthews	Basic tracer calculations
<i>12:00-12:45</i>		<i>Lunch</i>
12:45-13:30	Yves Boirie	Isotope dilution vs isotope incorporation
Carbohydrate Metabolism – Energy Expenditure		
13:30-14:00	Dwight Matthews	Energy expenditure – Doubly labelled water
<i>14:00-14:30</i>		<i>Coffee/tea break</i>
14:30-15:15	Olav Rooyackers	Glucose turnover and gluconeogenesis
15:15-16:15	<i>All Faculty</i>	<i>Workshop 1: Basic tracer calculations and whole-body glucose kinetics</i>
16:15-17:00	<i>All Faculty</i>	<i>Workshop 2: Discussion of protocols</i>
MORE Basics		
18:00		<i>Transfer</i>
19:00	Dwight Matthews	BBQ and drinks with the experts! Dr. Dwight Mathews will present his world famous lecture on “Lessons Learned: Problems and Pitfalls of Using Tracers”
23:30		<i>Transfer</i>

Sunday May 26th: Maastricht UMC+ (Greep Hall - 4.E2.020)

Fat Metabolism – Substrate Oxidation

9:00-9:30 Elisabet Børshheim
9:30-10:15 Elisabet Børshheim
10:15-10:45
10:45-11:15 *All Faculty*

Morning coffee/tea

Substrate oxidation
Fatty acids, glycerol, and lipoprotein kinetics

Coffee/tea break

Workshop 3: Whole body and tissue amino acids and protein kinetics OR
Workshop 4: Whole body and tissue FFA - TG kinetics and oxidation calculations

Protein and Amino Acid Metabolism

11:15-11:45 Yves Boirie
11:45-12:30 Nicolaas Deutz
12:30-13:15
13:15-14:00 Andy Holwerda
14:00-14:30
14.30-15.15 *Jorn Trommelen*
15:15-17:00 *All Faculty*
17:00 *All Faculty*

Whole body protein kinetics with primed-constant infusion approaches
Whole body amino acid kinetics with pulse tracer approaches. Transorgan balance approaches

Lunch

Use of D₂O as a tracer

Coffee/tea break

Post-prandial protein handling
Workshop 5: Discussion of protocols
Closure of the course

FACULTY:

Yves Boirie INRA, Clermont Ferrand, France
Nicolaas Deutz Texas A&M University, College Station, USA
Dwight Matthews Vermont Univesity, Burlington, USA
Olav Rooyackers Karolinska Institutet, Stockholm, Sweden
Elisabet Børshheim UAMS, Little Rock, USA

LOCAL FACULTY:

Jorn Trommelen Maastricht University Medical Centre +
Andy Holwerda Maastricht University Medical Centre +
Luc van Loon Maastricht University Medical Centre +