

WORKSHOP: TRAINING IN EARNEST

Title:

Methods for the investigation of energy and substrate metabolism in pigs and mice

Organisation:

PD Dr. Cornelia C. Metges (FBN); kandera@fbn-dummerstorf.de

Phone: +49 (0)38208-68651; Fax +49 (0)38208-68693

Dates:

October 8 - October 12, 2007

Participants: max. of 6

Location:

Research Institute for the Biology of Farm Animals
Research Unit Nutritional Physiology (Animal facilities and mass spectrometry laboratory)
Wilhelm-Stahl-Allee 2
18196 Dummerstorf
Germany

Dummerstorf is close (15 km) to the city of Rostock (<http://www.rostock.de>) at the Baltic Sea (Northeast of Germany) (<http://www.viamichelin.co.uk>). It's a 2 h drive from Germany's capital city Berlin.

Focus of methodological and practical training:

Total energy expenditure (TEE) and substrate oxidation by indirect calorimetry

TEE by doubly labelled water method (H_2^{18}O , D_2O)

Glucose production and oxidation using ^{13}C labelled glucose

Fees:

200 € (for consumables, secretarial work, transfer Rostock-Dummerstorf-Rostock, get together dinner)

Travel and accommodation has to be covered by the participants.

Registration:

In order to secure lodging and arrange for transfers the **deadline for registration is August 21, 2007**. After this date registration can only be accepted pending availability. Please register on the attached registration form. It is most important that you include information about arrival and departure to secure a sufficient number of hotel nights. We ask you to do your own hotel booking (hotel details below).

Online registration is also possible starting at 25 May 2007. Please go to <http://nutrition.fbn-dummerstorf.de/en> and click the 'Workshop EARNEST' button.

Banking details of FBN:

Bank account number: 14001518

Bank routing code: 140 000 00

Bank: BBK Schwerin

Receiver: Landeszentalkasse Schwerin

SWIFT Code (BIC): MA RK DEF 11 40

IBAN: DE 98 14 00 00 00 00 14 00 15 18

Please note that the following must be mentioned on the transfer form:

"EARNEST 0100101003831 + your name"

How to get there:

We have a full program and therefore expect you to travel the days before and after the 5 days training course. To take advantage of cheaper flights you might want to arrive already on Saturday or leave Sunday after the training course. If you are interested to visit Berlin on the weekend we can give recommendations for the hotel and/or a guided tour (extra costs on request depending on the hotel you pick; please ask us).

If you need travel instructions in advance to secure tickets etc. please contact us (metges@fbn-dummerstorf.de or kandera@fbn-dummerstorf.de).

By plane: Airports Hamburg or Berlin-Tegel,

Transfer Airport to Rostock:

from Hamburg 2.5 h by train, one-way ticket 37 € (sometimes special offers available)

from Berlin-Tegel 3.5 h by train, one-way Ticket 39 € (sometimes special offers)

A car service can be organized to pick you up at the airport (costs: 40-130 € depending on the number of people; duration: approx 2 h).

We offer to arrange for a pick up in Berlin on Sunday afternoon or Monday morning that several people can share the costs for the transfer. **Note: The driver must be payed directly in cash.**

There is also a daily direct flight from Munich to Rostock once a day except Saturday, and a direct flight from Cologne to Rostock on Monday, Thursday and Friday once a day, too.

Hotel accommodation (please make your own booking):**a) Hotel Am Hopfenmarkt**

per night/Person

Single room: starting at 39 € incl. breakfast

Address: Buchbinderstr. 10 (check in) and Kistenmacherstr. 20
18055 Rostock

Phone: +49 (0) 381-4583443

Fax: +49 (0) 381-4583443

URL: www.am-hopfenmarkt.de

b) Ibis Hotel

per night/Person

Single room: 52,00 € (Online Booking 49,00 €) plus 9,50 € breakfast

Address: Warnowufer 42/43

18057 Rostock

Phone: +49 (0) 381-24221-0

URL: www.ibishotel.com

c) Hanse-Hostel

per night/Person

Single room: 26,00 € plus 4,00 € breakfast

Adress: Doberaner Str. 136

18057 Rostock

Phone: 0381/1286006

Fax: 0381/1286005

E-mail: info@hanse-hostel.de

URL: www.hanse-hostel.de

Programme:

Day 1, 11.00h	Arrival in Dummerstorf - Welcome and introduction of the participants
12.00h - 13.00h	Lunch
13.00h -18.00h	Introduction to indirect calorimetry and generation of experimental protocol
Day 2, 7.30h - 12.00h	Indirect calorimetry experiment (pig); measurement of TEE and substrate oxidation, data generation and documentation
12.00h - 13.00h	Lunch
13.00h - 18.00h	Introduction to stable isotope labelled tracers and mass spectrometry
Day 3, 7.00h - 9.00h	Demonstration indirect calorimetry in mice, data generation and documentation
9.00h - 12.00h	Experiment ¹³ C glucose oxidation (mice)
12.00h - 13.00h	Lunch
13.00h - 18.00h	Sample preparation and derivatization to analyse ¹³ C glucose in plasma (laboratory work)
Day 4, 8.00h - 12.00h	Data evaluation indirect calorimetry and ¹³ C glucose oxidation and tracer concentration in plasma
12.00h - 13.00h	Lunch
13.00h - 18.00h	Introduction to doubly labelled water (DLW) method
19.00h	Get together dinner in Rostock
Day 5, 8.00h - 12.00h	Demonstration DLW experiment in mice, mass spectrometric tracer analysis
12.00h - 13.00h	Lunch
13.00h - 15.00h	DLW data evaluation
15.00h - 17.00h	General discussion and closure of the course

Literature:

Speakman JR. The history and theory of the doubly labeled water technique. Am J Clin Nutr. 1998 Oct;68(4):932S-938S.

Junghans P, Derno M et al. Calorimetric validation of ¹³C bicarbonate and doubly labeled water method for determining the energy expenditure in goats. Z Ernahrungswiss. 1997 Dec;36(4):268-72

Schoeller DA. Uses of stable isotopes in the assessment of nutrient status and metabolism. Food Nutr. Bull. 2002 Sept; 23 (3 Suppl):17-20

Spadanao JL, Bandini LG. Must A, Dallal GE, Dietz WH. Longitudinal changes in energy expenditure in girls from late childhood through midadolescence. Am J Clin Nutr. 2005 May;81(5):1102-9

Registration Form

**Please email to kandera@fhn-dummerstorf.de
or fax to +49 (0)38208-68693**

TRAINING IN EARNEST

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Organisation: Dr. Cornelia C. Metges (FBN); metges@fhn-dummerstorf.de
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Location: Research Institute for the Biology of Farm Animals (FBN)
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Germany

Note: Registration will only be valid after transfer of the course fee (200 €) to our bank account until August 21, 2007 the latest (banking details are given above).

Name:

Organisation/Institute:

Full street address:

City:

Postal code:

Country:

Email:

Phone:

Fax:

I am a participant in EARNEST Theme; workpackage(please fill)

Arrival Date in Rostock/Dummerstorf:

Departure Date from Rostock/Dummerstorf:

I want transfer (car service) from Airport Berlin-Tegel to Rostock (please check):

Date: Time: Flight-No.:

I want transfer (car service) from Airport Hamburg to Rostock (please check):

Date: Time: Flight-No.:

I want transfer (car service) from Rostock to Airport Berlin-Tegel (please check):

Date: Time: Flight-No.:

I want transfer (car service) from Rostock to Airport Hamburg to Rostock (please check):

Date: Time: Flight-No.: