



Epigenesis and epigenetics

- Physiological consequences of perinatal programming -

International advanced course

24-26 November

Wageningen, The Netherlands

Organised by the Graduate School Wageningen Institute of Animal Sciences (WIAS), in co-operation with the Graduate School Food Technology, Agrobiotechnology, Nutrition and Health Sciences (VLAG), Wageningen University, The Netherlands

Who can attend?

The course is aimed at postgraduates (MSc, PhD) with a background in animal, veterinary, biological, health, or food sciences and open for participants from both industry and universities/research centers. Participants are challenged to actively contribute to discussions.

Course contents

Course background and aim

Environmental conditions in early life may, through epigenetic processes, have profound effects on physiological functioning and health in later life. The course aims to provide a detailed scientific background on the mechanisms that may underlie these early-life effects, both at the physiological and gene expression level. The programme combines knowledge on perinatal programming in humans, laboratory and farm animals.

Course design

The course consists of a series of lectures and several workshops providing the latest scientific knowledge on the different subjects.

Programme topics

The following topics will be addressed:

Prenatal metabolic pressure

- Prenatal programming; mechanisms and implications
- Hunger winter studies
- Leptin during lactation and body weight control in later life
- Uterine crowding in pigs
- Egg-incubations in poultry and effects on development and adult performance

Maternal and early nutrition and implications for DNA methylation

- Allergy development in early life
- Probiotics and allergy: results of the PANDA study

- Perinatal Fe deficiency: molecular approach
- Folic acid and DNA methylation

Epigenetics

- State of the art methods and techniques
- Epigenetic epidemiology in human populations
- Modifying DNA methylation by nutritional interventions
- Methylation of stem cells
- Epigenetic applications in livestock species

Organisation

Course coordinators

Dr. Wouter Hazeleger, Adaptation Physiology Group, WUR

Prof. Edith Feskens, Human Nutrition, WUR

Dr. Ariëtte van Knegsel, Adaptation Physiology Group, WUR

Other lecturers

Prof. Kevin Sinclair, University of Nottingham, UK

Dr. Tessa Roseboom, Academic Medical Centre, Amsterdam

Dr. Catalina Picó, University of the Balearic Islands, Spain

Dr. Henry van den Brand, Adaptation Physiology Group, WUR

Dr. Ger Rijkers, University Medical Centre, Utrecht

Prof. Huub Savelkoul, Cell Biology and Immunology, WUR

Prof. Harry McArdle, University of Aberdeen, UK

Prof. Henk Blom, VU Medical Centre, Amsterdam

Dr. Bas Heijmans, Leiden University Medical Centre

Prof. Ellen Kampman, Human Nutrition, WUR

Dr. Bart Vaes, Human Nutrition, WUR

Dr. Liesbeth van der Waaij, Adaptation Physiology Group, WUR

General information

Date & duration

The course is scheduled for 24 – 26 November 2008.

Study load

The study load of this course is 0.8 ECTS credits.

Language

The course will be conducted in English.

Location & accommodation

Lectures will be given at the Hof van Wageningen, former Wageningen International Conference Centre (WICC). The conference centre (www.wicc.nl) can be reached by train (5 km to railway station Ede-Wageningen) and bus/taxi (to bus station in Wageningen) in less than two hours from Amsterdam Schiphol Airport or Eindhoven airport (for train schedules please visit www.ns.nl).

Hotelrooms are available at the Hof van Wageningen. Accommodation costs are approximately € 75,- (single room; bed & breakfast) per night. Participants have to book their own hotel room. Hotel reservation is handled by Hof van Wageningen (WICC), see www.wicc.nl.

Social programme

On Tuesday evening an excursion and course dinner are organised.

Contact information

For registration and information please contact Ariette van Knegsel, phone: +31 317 483653 (ariette.vanknegsel@wur.nl).

Registration & course fee

Please register by sending an e-mail with your name, affiliation and address to ariette.vanknegsel@wur.nl

The final registration date is November 1, 2008. You will be notified within 2 working days on acceptance of your registration and you will receive instructions for payment, and further information. Cancellations may be made free of charge until November 1, 2008. After that date the charge will be 25% of the fee paid or due. Substitutions can be made at any time.

The course fee includes printed materials, coffee/tea during breaks, lunches and one dinner but does not cover accommodation. The course fee depends on the participant's affiliation:

University Staff / Industry	€ 900
PhD students	€ 500
PhD students affiliated with Graduate School VLAG	€ 150
PhD students affiliated with Graduate School WIAS	Free of charge