Invitation to the 2009 NOS-M seminar

“Current Approaches to Metabolic and Nutritional Disorders: From Genes to Prevention”

August 26th to August 28th 2009

Soria Moria Conference Centre
Oslo, Norway
Objectives

The aim of NOS-M seminars is to promote:

- Researcher training, particularly at PhD level
- Nordic networks integrating young and senior researchers
- Nordic and international contacts

Target group

The NOS-M seminars are targeted at both young and senior researchers, and offer PhD students an opportunity to interact with senior scientists. The majority of the participants should hence be young researchers from all Nordic countries. This seminar will be open to up to 30 students and will preferably have an equal distribution of participants from all Nordic countries.

The program

The seminar highlights cutting-edge approaches to understanding the development and prevention of metabolic and nutritional disorders with special emphasis on type 2 diabetes and obesity. The seminar is structured to provide an integrative approach to disease development. Lectures will emphasize the importance of the influence of genes, other biological factors and gene-environment interactions.

The seminar is organized into four sessions as listed below:

- Session 1 will provide an overview of genetic, genomic and omic approaches and progress in applying these methods to the study of pathogenesis
- Session 2 focuses on future challenges of Type 2 Diabetes
- Sessions 3 and 4 address obesity including nutrition, intervention, prevention and the genetics of obesity.

The seminar will also include work sessions where the students will have the opportunity to present their research projects and receive comments from the faculty. In addition the seminar will include a Walk & Talk session to allow participants to discuss actively together and strengthen their network.

The seminar will total 12 hours of teaching and presentations from students, breaks and summary not included.

The faculty

The seminar includes world-known experts from Finland, Norway, Denmark, Sweden, Iceland and the United Kingdom whose work reflects broad international experience.

Professor Mark McCarthy, Robert Turner Professor of Diabetes, Oxford Centre for Diabetes, Endocrinology and Metabolism, Churchill Hospital, Oxford, United Kingdom

Professor Matej Oresic, Research Professor of Systems Biology and Bioinformatics and Coordinator of the ETHERPATHS project (EU FP7), VTT Technical Research Centre of Finland, Espoo, Finland

Professor Henning Beck-Nielsen, Institute of Clinical research, Dept. of Endocrinology, Odense University Hospital, Denmark

Dr. Valgerdur Steinthorsdottir, Project Leader in T2D and Metabolic Diseases at DeCode, Reykjavik, Iceland

Professor in Medical Nutrition and Vice Coordinator of The TORNADO Project Joseph Rafter, Department of Biosciences and Nutrition, Karolinska Institutet, Sweden

Research Leader Berit Heitmann, Director of HR, Professor in Nutritional Epidemiology, Research Unit for Dietary Studies at Institute of Preventive Medicine, University of Southern Denmark, Denmark
Professor and Head Physician **Serena Tonstad**, Department of Preventive Cardiology, Ullevål University Hospital. Professor of Public Health and Preventive Medicine, Loma Linda University, California, USA

Associate Professor of Experimental Medicine and Head of Genetic Epidemiology and Clinical Research Group **Paul Franks**, Umeå University Hospital, Sweden

Dr. **Ruth Loos**, Programme Leader, MRC Epidemiology Unit, Institute of Metabolic Science, Addenbrooke’s Hospital, Cambridge, UK

**Talks**

**Session 1 - Overview Session**

The Genetic and Genomic Basis of Metabolic Disease: Lessons Learned so Far

Systems Biology Approaches to Metabolic Disorders

**Professor Mark McCarthy**

**Professor Matej Oresic**

**Session 2 - Type 2 Diabetes**

Clinical Aspects of Type 2 Diabetes

Recent Developments in the Genetics of Type 2 Diabetes/ or Genes Involved in Type 2 Diabetes

Genetics of Common Disease - Challenges for The Future?

**Professor Henning Beck-Nielsen**

**Dr. Valgerdur Steinthorsdottir**

**Professor Mark McCarthy**

**Session 3 – Obesity: Nutrition, Intervention and Integrated Approaches**

Host – Microbe Interactions: Identifying Novel Molecular Targets for Health Promoting Foods

The Causes of Obesity: is our Knowledge Sufficient for Prevention?

Mechanisms of Obesity and Metabolic Syndrome: Implications for Treatment

**Professor Joseph Rafter**

**Research Leader Berit Heitmann**

**Professor Serena Tonstad**

**Session 4 – The Genetics of Obesity**

Introduction to the Concept of Gene-Environment Interaction and How it Might Help us Understand Disease Etiology

Genetics of Common Obesity - What Have We Learned From Genome-Wide Association Studies

**Associate Professor Paul Franks**

**Programme Leader Ruth Loos**

**The organizing committee**

Senior Researcher **Jennifer Harris**, PhD, Department of Genes and Environment Norwegian Institute of Public Health, Norway

Professor of Epidemiology **Jaakko Kaprio**, MD, PhD, Finnish Institute for Molecular Medicine, University of Helsinki, Helsinki, Finland

Professor and vice dean of research **Nancy Pedersen**, PhD, Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden

Director of Population Genomics **Unnur Thorsteinsdottir**, PhD, DeCode Genetics, Reykjavik, Iceland

Head of Institute and Associate Professor **Kirsten Ohm Kyvik**, MD, PhD, Institute of Regional Health Services Research Southern Denmark University, Denmark
**Funding**

The seminar is financed by the Joint Committee of the Nordic Medical Research Councils (NOS-M). Accommodation for two nights, board and travel fees will be fully covered. All participants who are accepted to the seminar will be asked to book low budget airfares or train tickets, for which they will be reimbursed upon return. Original receipts will be required.

**Registration**

All participants will be asked to briefly present their research project and submit a project abstract which will give a short overview of the project’s scope and objectives, methodology used, in which phase the project is and preliminary results. For students who can present advanced results, a poster session will be organised.

The seminar will preferably have an equal distribution of participants from all Nordic countries and places will be distributed according to this principle.

To register to the seminar, please send an e-mail to Isabelle Budin Ljosne, Norwegian Institute of Public Health – E-mail: isabelle.budin.ljosne@fhi.no, including the following information:

- Full name, degree, affiliation and contact information
- Field of interest and the title of your project

**Final date for registration and for submitting abstracts (in a Word format): 15th of June 2009**

**Venue**

The seminar will take place at the Soria Moria Conference Centre, Oslo, located 500 metres above sea level, with stunning views over the city, fjord and surrounding countryside. The Centre is easily reached from Gardermoen airport via Oslo Central Station by either underground (ca. 30 min trip plus a 10 minute walk) or by taxi (ca. 20 min). For more information about the Centre: [www.soriamoria.no](http://www.soriamoria.no)

The seminar will start at lunch time on the 26th and ends at lunch time on the 28th of August.

**Seminar coordinators**

The practical organization of the seminar is supervised by the Norwegian Institute of Public Health, Norway.

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