Hypertension and cardiovascular disease
Bridging basic research, clinical science and daily practice

The Second Nordic University Research Course

In relation to The European Society of Hypertension (ESH) Congress in Oslo June 18-21 2010, we offer as a result of a close collaboration between the Danish, Finish, Norwegian and Swedish Societies of Hypertension a Nordic PhD course in hypertension in Oslo on June 16-18 covering:

Epidemiology, Patogenesis, Blood pressure measurements, Metabolic disturbances
Subclinical cardiovascular damage, Risk stratification, Guidelines and Clinical challenges

The course is supported by ESH and participants with an accepted abstract for the ESH Congress (deadline January 15) are encouraged to apply ESH for accommodation grants

Eligible participants are PhD-students at Nordic Universities. For participation a motivated application including a curriculum vitae has to be send to one of following four Country representatives before February 1:

Eva Gerdts eva.gerdts@helse-bergen.no
Michael Hecht Olsen mho@dadlnet.dk
Thomas Kahan thomas.kahan@ds.se
Ilkka Kantola, Ilkka.Kantola@tyks.fi

Participants will be informed about the decision by March 15th 2010. In order to reduce the cost, applicants are recommended to send an abstract to ESH Congress in Oslo June 18-21 2010 and apply for Young Investigator Accommodation Award for presentation of the abstract at the ESH meeting.
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The course is a result of a close collaboration between the Danish, Finnish, Norwegian and Swedish Societies of Hypertension and is ECTS approved for PhD-students by the University of Oslo.

Prior to seminar:
The seminar will be announced through the Journals and websites of National Societies of Hypertension and Cardiology in October/November 2009. Deadline for application February 1st. Eligible participants are PhD-students at Nordic Universities. They are selected by the organizing committee based on curriculum vitae and application and will be informed about the decision by March 15th 2010. In order to reduce the cost, applicants are recommended to send an abstract to The European Society of Hypertensions (ESH) Congress in Oslo June 18-20 2010 and apply for Young Investigator Accommodation Award for presentation of the abstract at the ESH meeting.

Participants are asked to prepare a 10 min talk about their research, which has to be forwarded to the organizers 2 months in advance (before April 16th.). Two of the organizers as well as two of the participants prepare a 1 minute evaluation and 2-3 questions each to be followed by a 10 minutes discussion. Furthermore, participants and organizers are asked to forward a portrait picture and 10-20 lines summarizing their background and research interest to the organizers 2 months in advance (before April 16th.). This information will be assembled in a book and send to the participants and organizers 1 month before the seminar (before May 16th.) in order to prepare ideas for possible research networking in advance.

General rules about lectures
As the concept of this seminar is to create research networks between young and senior researchers within as well as in-between the Nordic Countries all lectures should be focused on research and interactive with room for questions and discussions (5 minutes within each presentation).

Financial support: ESH and to some degree National Universities. DaCRA may support Danish participants.

Location: Oslo, Norway

Fee: 300 Euro
Program:

June 16  -  12.30-13.00: Registration and coffee
   -  13.00-13.30: Concept of seminar and presentation of participants (30 min)
   -  13.30-14.30: Epidemiology (2x30 min=60min)
      - Ordstyrer: Ingrid Os and Hans Ibsen
      - Global burden (Sverre Kjeldsen)
      - Lack of awareness, treatment and control (Peter Nilsson)
   -  14.45-15.10: Long coffee break
   -  15.10-16.10: Patogenesis of hypertension (4x15 min=60min)
      - Ordstyrer: Ingrid Os and Hans Ibsen
      - The importance of the sympatho-adrenergic system (Arnljot Flaa)
      - The importance of obesity and insulin resistance (Johan Sundström)
      - The importance of the kidney (Bjarne Iversen)
      - The importance of salt - the Finnish experience (Antti Jula)
   -  16.20-17.20: Patogenesis of hypertension (3x20 min=60min)
      - Ordstyrer: Ingrid Os and Hans Ibsen
      - The importance of resistance arteries (Kent L. Christensen)
      - Genes associated with essential hypertension (Olle Melander)
      - Discussion (the impact of pathogenesis on the daily clinic)
   -  17.35-18.50: Presentations by participants 4 groups of 7 (3x(10+15)min=75min)
      - Ordstyrer: Eva Gerds, Kristian Wachtell, Per-Henrik Groop, Peter Nilsson
   -  19.00-20.00: Outdoor activity
   -  20.30: Late dinner
June 17 - 08.30-09.50: Prevalence, mechanism, prognostic impact and treatment of metabolic disturbances (4x20min=80min)
  - *Ordstyrer: Ingrid Toft and Peter Nilsson*
  - Hyperlipidemia (*Serana Tonstad*)
  - Overweight (*Tonje Aksnes*)
  - Diabetes (*Ingrid Toft*)
  - Discussion (how to handle metabolic disturbances in the daily clinic)

  - 10.00-11.00: Subclinical vascular damage (3x20min=60min)
    - *Ordstyrer: Ingrid Toft and Peter Nilsson*
    - Molecular (Premature ageing, fx telomer length) (*Per-Henrik Groop?*)
    - Microvascular (UACR) (*Hans Ibsen*)
    - Endotelfunktion (FMD, biokem markörer, invasiva underarmsmätningar) (*Lars Lind*)

  - 11.10-12.10: Subclinical vascular damage (3x20min=60min)
    - *Ordstyrer: Ingrid Toft and Peter Nilsson*
    - Macrovascular (PWV, augmentation-index and central BP) (*Tosten Länne*)
    - Macrovascular (IMT, atherosclerotic plaques and calcium score) (*Lars Lind*)
    - Discussion (Which marker to measure and why)(prognosis, treatment choice or monitoring)

  - 12.15-14.45: Lunch and outdoor activity
- 14:45-15:45: Subclinical and clinical heart disease (3x20min=60min)
  - Ordstyrer: Eva Gerds and Thomas Kahan
  - Subclinical heart disease (Eva Gerds)
  - ”Syndroma X”, coronary flow reserve and res. arteries (KL. Christensen)
  - Coronary artery disease (Eva Staal)

- 15:55-17:05: Subclinical and clinical heart disease (20+2x15+20min=70min)
  - Ordstyrer: Eva Gerds and Thomas Kahan
  - Atrial fibrillation (Kristian Wachtell)
  - From hypertension to heart failure (fibrosis) (Thomas Kahan)
  - From hypertension to heart failure (functional) (Kristian Wachtell)
  - Discussion (what to measure and how to treat?)

- 17:20-18:30: Cardiovascular risk stratification (30+2x20min=70min)
  - Ordstyrer: Eva Gerds and Thomas Kahan
  - ESH risk chart, Heart Score and importance of subclinical cardiovascular damage (Thomas Sehestedt)
  - The importance of biochemic risk markers (Michael H. Olsen)
  - Discussion (when to measure subclinical CV damage or biomarkers)

- 18:40-20:20: Presentations by participants 4 groups of 7 (4x(10+15)min=100min)
  - Ordstyrer: Ingrid Os, Hans Ibsen, Thomas Kahan, Antti Jula

- 20:45: Late dinner
June 18  -  08.30-09.50: When to use ambulatory blood pressure (4x20min=80min)
  •  **Ordstyrer: Kent Lodberg Christensen and Per-Henrik Groop**
  •  To assess cardiovascular risk (**Tine W. Hansen**)
  •  To find white-coat and/or masked hypertension or to monitor treatment (**Ingrid Os**)
  •  When to use ambulatory or self-measured home blood pressure (**Ilkka Kantola or Teemu Niiranen**)
  •  Discussion (the use of ambulatory blood pressure in the daily clinic)
    –  10.10-11.30: Challenges for ESH guidelines (4x20min=80min)
      •  **Ordstyrer: Kent Lodberg Christensen and Per-Henrik Groop**
      •  Resistant hypertension (**Lars Lindholm**)
      •  Evidence for treating low risk and very old patients (**karin Manhem**)
      •  Evidence for lower targets in patients with cardiovascular disease (**Thomas Kahan**)
      •  Discussion (how to use ESH guidelines in daily practice)
    –  11.30-12.00: Written and oral evaluation (30 min)
    –  12.00-13.00: Lunch
    –  13.00: End
Organizing committee:

Norway: Professor Sverre E. Kjeldsen (SEK)

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Department of Cardiology, Ullevaal University Hospital, Oslo
(Past President of the European Society of Hypertension)

Professor Eva Gerdts (EG)
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(President of the Norwegian Society of Hypertension)

Professor Ingrid Toft (IT),
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Department of Nehrology, Tromsø University Hospital
(Vice-President of the Norwegian Society of Hypertension)

Denmark: Professor Hans Ibsen (HI)
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Department of Internal Medicine, Holbæk Hospital
(President of the Danish Society of Hypertension)

Associated professor Michael Hecht Olsen (MHO)
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(Council Member of the European Society of Hypertension)

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Associated Professor Peter Nilsson (PN)
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**Finland:**  Associate Professor Ilkka Kantola (IK)
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Associated Professor Antti Jula (AJ)
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Public Health Institute, Turku
Title of the course: Hypertension and cardiovascular disease - Bridging basic research, clinical science and daily practice. The Second Nordic University Research Course

Aim:
1) Based on the hypothesis that hypertension is one of the most important risk factors for cardiovascular disease we aim to bridge basic research and clinical science connecting new research in subclinical cardiovascular damage with clinical trials in hypertension.
2) To help Nordic PhD student to develop research networks among other Nordic PhD students as well as among different senior Nordic researchers within the area of hypertension and cardiovascular disease.

Content:
The content of the course cover following parts:
I) The epidemiology and pathogenesis of hypertension
II) Metabolic disturbances, subclinical CV damage and risk calculation
III) Subclinical and clinical heart disease
IV) Ambulatory blood pressure measurements
V) Clinical trials and guidelines

Participants: PhD students
Language: English
Dates: June 16-18 2010
Place: Oslo, Norway
Fee: Euro 300

Form.
Short “State of the art” lectures followed by lively discussions supplemented with two sessions during which the participants shall present their work followed by short expert comments and discussions.

Teachers.

Support.
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Application:
Eligible participants are PhD-students at Nordic Universities. For participation a motivated application including curriculum vitae has to be send to one of following four Country representatives before February 1:
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