

## **3-day PhD course C275/01**

### **Clinical epidemiology of cardiovascular diseases, type 2 diabetes and obesity**

**Dates:** 19 NOV 09:15 – 21 NOV 2018 16:00

**Place:** Det Blå Auditorium" in "Victor Albeck Bygningen", Vennelyst Boulevard 4, 8000 Aarhus C  
(=Aarhus University Campus, Building 1266, 2nd Floor, Room 2.22)

**Practical info:** <https://service.health.au.dk/modules/Course/mypage/coursecalendar>

**Head of course:** Reimar W. Thomsen, MD, PhD, consultant physician and associate professor in clinical epidemiology, Department of Clinical Epidemiology, Aarhus University Hospital

#### **Programme**

Course starts Monday 19 NOV 2018 at 09:15 and ends Wednesday 21 NOV 2018 at 16:00.

#### **Preparation**

Textbook: Fletcher RH, Fletcher SW, Fletcher GS. Clinical Epidemiology: The Essentials. 5th Edition. Lippincott Williams & Wilkins, Philadelphia, 2013.

255 pages, price appr. 250 dkr. Easy to read, clinically focused.

Key chapters for course: Chapter 2 (Frequency), Chapters 5-6 (Risk), Chapter 7 (Prognosis), Chapter 9 (Treatment).

Vandenbroucke JP et al; STROBE initiative. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): explanation and elaboration. Ann Intern Med. 2007;147(8):W163-94.

<http://annals.org/article.aspx?articleid=737187&resultClick=3>

Selected scientific papers to be read before course, TBD.

## TENTATIVE PROGRAMME

Time	Topic	Instructor
<b>MONDAY 19 NOV 2018</b>		
09:15-10:00	Welcome! Brush-up: Basic concepts in clinical epidemiology: disease frequency, risk factors, and prognosis/treatment. Research questions for group work.	Reimar W. Thomsen, Consultant Physician, Associate Professor of Clinical Epidemiology
10:00-10:15	Coffee Break	
10:15-10:45	Update on Coronary Heart Disease epidemiology: Occurrence and risk factors	Morten Schmidt, Physician, Associate Professor in Clinical Epidemiology
10:45-11:15	Update on Coronary Heart Disease epidemiology: Treatment and prognosis	Hans Erik Bøtker, Consultant Cardiologist, Professor of Cardiology
11:15-11:30	Coffee Break	
11:30-12:00	Update on Heart failure epidemiology: Occurrence and risk factors	Kasper Adelborg, Physician, Postdoc in Clinical Epidemiology
12:00-12:30	Update on Heart failure epidemiology: Treatment and prognosis	Brian Bridal Løgstrup, Specialist Physician in Cardiology
12:30-13:00	Lunch in Dentist's canteen	
13:00-16:00	WORKSHOP: DANISH DATA AND DISEASE OCCURENCE. Why cardiometabolic research based on databases? What data can we use in Denmark and can we trust them? Completeness and validity. Examples of disease frequency studies. Group work.	Morten Schmidt, Physician, Associate Professor in Clinical Epidemiology
<b>TUESDAY 20 NOV 2018</b>		
09:15-09:45	Update on Stroke epidemiology: Occurrence and risk factors	Søren P. Johnsen, Consultant Physician, Professor of Clinical Epidemiology
09:45-10:15	Update on Stroke epidemiology: Treatment and prognosis	Grethe Andersen, Consultant Physician, Professor of Neurology
10:15-10:30	Coffee Break	
10:30-11:00	Update on Atrial Fibrillation epidemiology: Occurrence and risk factors	Søren P. Johnsen, Consultant Physician, Professor of Clinical Epidemiology
11:00-11:30	Update on Atrial Fibrillation epidemiology: Treatment and prognosis	Jens Cosedis Nielsen, Consultant Cardiologist, Professor of Electrophysiology
11:30-11:45	Coffee Break	

<b>11:45-12:30</b>	Pharmaco-epidemiology: studying drug safety and (comparative) effectiveness	Reimar W. Thomsen Consultant Physician, Associate Professor of Clinical Epidemiology
<b>12:30-13:00</b>	Lunch in Dentist's canteen	
<b>13:00-16:00</b>	WORKSHOP: DESIGNING CLINICAL RESEARCH. Observational methodology toolbox for cardiometabolic outcome studies. Matched designs, regression, propensity scores. Examples of cohort and case-control studies. Group work.	Kasper Adelborg & Jens Sundbøll, Physicians & Postdocs in Clinical Epidemiology
<b>WEDNESDAY 21 NOV 2018</b>		
<b>09:15-09:45</b>	Update on Obesity epidemiology: Occurrence and risk factors	Jens Meldgaard Bruun, Consultant endocrinologist, Professor of Obesity
<b>09:45-10:15</b>	Update on Obesity epidemiology: Treatment and prognosis	Bjørn Richelsen, Consultant endocrinologist, Professor of Obesity
<b>10:15-10:30</b>	Coffee Break	
<b>10:30-11:00</b>	Update on type 2 diabetes epidemiology: Occurrence and risk factors	Daniel Witte, Professor of Diabetes Epidemiology
<b>11:00-11:30</b>	Update on type 2 diabetes epidemiology: Treatment and prognosis	Troels Krarup Hansen, Consultant endocrinologist, Professor of Diabetology
<b>11:30-11:45</b>	Coffee Break	
<b>11:45-12:30</b>	Group work and preparation of afternoon presentations	All
<b>12:30-13:00</b>	Lunch in Dentist's canteen	
<b>13:00-16:00</b>	WORKSHOP: INTERPRETATION AND REPORTING OF RESEARCH Student presentations of group work and feedback	Sigrid Gribsholt, Physician, Postdoc in Clinical Epidemiology, with Reimar W. Thomsen and others
<b>16:00</b>	Sum-up and Adjourn	All

**Textbook for course:**

- Textbook: Fletcher RH, Fletcher SW, Fletcher GS. Clinical Epidemiology: The Essentials. 5th Edition. Lippincott Williams & Wilkins, Philadelphia, 2013.

**Scientific papers for course:**

- TBD

**Other useful literature:**

- Vandembroucke JP et al; STROBE initiative. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): explanation and elaboration. *Ann Intern Med.* 2007;147(8):W163-94. <http://annals.org/article.aspx?articleid=737187&resultClick=3>
- Benchimol EI et al; RECORD Working Committee. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement. *PLoS Med.* 2015;12(10):e1001885. <http://www.ncbi.nlm.nih.gov/pubmed/26440803>
- [Clinical Epidemiology: descriptions of the Danish Clinical Quality Databases](#)
- [Clinical Epidemiology series: existing data sources for clinical epidemiology](#)
- [Scandinavian Journal of Public Health special issue on Danish registries](#)

**Useful links for registries and databases in Denmark:**

- [De nationale sundhedsregistre hos Sundhedsdatastyrelsen](#)
- [De nationale kliniske kvalitetsdatabaser](#)
- [Danmarks Statistik - Forskningservice](#)
- [Oversigt danske registre - Dansk Selskab for Farmakoepidemiologi](#)
- [Oversigt danske registerdata - KOR](#)