

# Sex specific aspects in cardiometabolic research

## - Why, how and when to consider?

**Date:** 20th-21st January, 2025  
**Venue:** Comwell Borupgaard, Nørrevej 80, 3070 Snekkersten  
**Course Leaders:** Janne Lebeck, Ylva Hellsten and Lasse Gliemann



## PROGRAMME

### 20th January, 2025

08:00 - 08:45 Registration and coffee  
08:45 - 09:00 **Welcome and introduction to the course**

### Session 1: Sexhormones and their physiological impact

Chairs: Charlotte Usselman and Ylva Hellsten

09:00 - 09:30 **Female sexhormones and receptors' role in cardiometabolic health - what we do and do not know**  
Susana Novella, Department of Physiology, University of Valencia (ES)

09:30 - 10:00 **Male sexhormones and receptors' role in cardiometabolic health - what we do and do not know**  
Anne Skakkebaek, MOMA, Aarhus University Hospital (DK)

10:00 - 10:30 **Group discussion followed by common discussion with coffee**

10:30 - 11:00 **The influence of aging on sexhormone levels and how it affects cardiometabolic health**  
Kerrie Moreau, The Department of Medicine, Division of Geriatrics at the University of Colorado (US)

11:00 - 11:30 **Pharmacological alterations in sexhormones and their influence on cardiometabolic health**  
Ellen Løkkegaard, Nordsjællands Hospital, Copenhagen University Hospital (DK)

11:30 - 12:00 **Group discussion on posed questions from lecturers followed by common discussion**

12:00 - 12:45 Lunch

12:45 - 14:45 Break - with a fun joint activity

### Session 2: To what extent do sexhormones influence the development of cardiometabolic disease?

Chairs: Susana Novella and Janne Lebeck

14:45 - 15:30 **Influence of sex and gender on cardiovascular disease: epidemiology/mechanisms**  
Eva Prescott, Copenhagen University Hospital, Bispebjerg (DK) and Amani Meaidi, Danish Cancer Society (DK)

15:30 - 16:00 **Influence of sex and gender on metabolic disease: epidemiology/mechanisms**  
Susanna Hofmann, German Center for Diabetes Research, Ludwig-Maximilians University Munich (DE)

16:00 - 16:30 **Walk and talk and refreshments**

16:30 - 17:00 **Women, plasma lipids, and atherosclerotic cardiovascular disease**  
Marianne Benn, University of Copenhagen (DK)

17:00 - 17:30 **Menopause and changes in metabolic health**  
Steen Larsen, University of Copenhagen (DK)

17:30 - 18:00 **Group discussion on posed questions from lecturers followed by common discussion**

18:00 - 18:10 Short break

18:10 - 19:20 **Project Pitches Part 1**

19:20 - 22:30 Dinner and networking

## 21st January, 2025

08:20 - 08:30 **Welcome: introduction to the content of the day**

### Session 3: Prevention and treatment of cardiometabolic disease: relation to sex and gender

Chairs: Kerrie Moreau and Lasse Gliemann

- 08:30 - 09:30 **The relevance and value of considering both sex and gender in study design**  
Charlotte Usselman, Kinesiology & Physical Education, McGill University (CA)
- 09:30 - 10:00 **Do sex differences in metabolic physiology warrant sex specific nutrition recommendations?**  
Faidon Magkos, NEXS, University of Copenhagen (DK)
- 10:00 - 10:20 **Break & coffee**
- 10:20 - 10:50 **Do sex differences in cardiovascular and metabolic physiology warrant sex specific exercise recommendations?**  
Kerrie Moreau, University of Colorado (US) and Ylva Hellsten, NEXS, University of Copenhagen (DK)
- 10:50 - 11:20 **Sex hormones and brain insulin sensitivity - implications for whole body metabolism and eating behavior**  
Martin Heni, Division of Endocrinology and Diabetology, University Hospital of Ulm (DE)
- 11:20 - 11:50 **Group discussion on posed questions from lecturers followed by common discussion**
- 11:50 - 12:35 **Lunch**
- 12:35 - 13:35 **Project Pitches Part 2**

### Session 4: Methods and Experimental models in sex specific research: considerations

Chairs: Yaël Nossent and Christian Aalkjaer

- 13:35 - 14:05 **Experimental investigation of gene expression**  
Yaël Nossent, NEXS, University of Copenhagen (DK)
- 14:05 - 14:25 **Animal and cell models and methods to study sex specific aspects**  
Yaël Nossent, University of Copenhagen (DK) and Steen Larsen, University of Copenhagen (DK)
- 14:25 - 14:45 **Human/clinical models to study sex specific aspects**  
Lasse Gliemann, NEXS, University of Copenhagen (DK)
- 14:45 - 16:15 **Workshop on animal and cell models and on human/clinical models (with coffee and refreshments)**
- 16:15 - 16:30 **Short break**

### Session 5: Getting ready for tomorrow's symposium

Chairs: Eva Prescott and Viviany Taqueti

- 16:30 - 17:00 **"Crash course" on tomorrow's topics**  
Eva Prescott, Copenhagen University Hospital, Bispebjerg (DK) and Viviany Taqueti, Harvard Medical School, Brigham and Women's Hospital (US)
- 17:00 - 17:30 **In groups: Dive into the programme for the symposium and research the speakers**
- 17:30 - 18:00 **Present your group's research for the co-participants of the course**
- 18:00 - 18:20 **In groups: What can I do to get the most out of the symposium?**
- 18:20 - 18:30 **Short break**

### Session 6: Concluding Session

Chair: Janne Lebeck

- 18:30 - 19:00 **Festive talk: Lex Sex – Regulation of sex representation in medical research**  
Jakob Wested, Faculty of Law, University of Copenhagen (DK)
- 19:00 - 19:15 **Final remarks for the course and oral evaluation**  
Course leaders
- 19:15 - 22:30 **Dinner, networking and drinks**

## 22nd January, 2025

- 08:10 - Check out and bus to the symposium at Novo Nordisk Foundation, Hellerup
- 09:00 - 17:30 **Symposium**
- 17:30 - 20:00 **Reception**  
Network, informal dinner and drinks