

TUESDAY

15 September

12:15-12:45 LUNCH

12:45-13:00 WELCOME ADDRESS

13:00-13:45 OPENING LECTURE

Gastro-intestinal peptide hormones, from basic research in clinical biochemistry to major public impact

Chairs: Professor *Ebba Nexø* (Aarhus, DK) and Professor *Jens Hannibal* (Copenhagen DK)

Professor *Jens Juul Holst*, The Novo Nordisk Foundation Center for Basic Metabolic Research and Department of Biomedical Sciences, University of Copenhagen, Denmark



Jens Juul Holst is Professor at the Department of Biomedical Sciences and Senior Group Leader at the Novo Nordisk Foundation Centre for Basic Metabolic Research, University of Copenhagen, Denmark. His scientific work has focused on peptide hormones of the gastrointestinal tract. Among his major scientific achievements is work on the peptide hormone GLP-1 (glucagon-like peptide 1) and its significance for insulin secretion, food intake, and appetite control. His work has been of major importance for the development of GLP-1 analogue therapeutics now in use around the world to treat type 2 diabetes and obesity.

14:00 -15:30 SESSION 1

Novel diagnostic opportunities in neurological disease and cognitive decline

Chairs: Professor *Ruth Frikke-Schmidt* (Copenhagen, DK) and Associate professor *Tina Parkner* (Aarhus, DK)

14:00 - 14:25

From Ambulance to Bedside and Back: Blood-Based Biomarkers in Acute Stroke

Associate Professor *Rolf Blauenfeldt*

Department of Neurology, Aarhus University Hospital, Aarhus, Denmark

14:25 - 14:45

Blood-based biomarkers in early Alzheimer's disease

Associate Professor *Niels Okkels*

Department of Neurology, Aarhus University Hospital, Aarhus, Denmark

14:00 -15:30 SESSION 2

Sustainability in the clinical laboratory

Chair: Associate professor *Peter H. Nissen* (Aarhus, DK) and Associate professor *Rie Harboe Nygaard* (Aarhus, DK)

14:00 - 14:35

Sustainability in the clinical laboratory – from procurement to waste

Sustainability consultant *Dang Quang Svend Le*

Central Region Midt, Aarhus, Denmark

14:35 - 15:00

Towards a greener biobank – initiatives in Bio- and GenomBank Denmark

Professor *Estrid V. Høgdall*

Department of Pathology, Copenhagen University Hospital – Herlev and Gentofte, Copenhagen, Denmark

14:00 -15:30 SESSION 3

Thyroid function tests – past, present, and beyond

Chairs: Lead consultant *Stine Linding Andersen* (Aalborg DK) and Professor *Tuija Männistö* (Kuopio, FI)

14:00 - 14:30

Efforts of harmonization and standardization

Chair of the IFCC Committee on Standardization of Thyroid Function Tests *Katleen Van Uytfaange*

Department of Bioanalysis, University of Ghent, Ghent, Belgium
The IFCC Committee for Standardization of Thyroid Function Tests (C-STFT) has established reference systems for TSH harmonization and free T4 standardization. Implementation activities include the maintenance of the reference systems, their use to standardize and harmonize assays, and educational activities to inform stakeholders on anticipated changes in the measurement values.

14:30 - 14:45

Reference intervals in non-pregnant adults

Lead consultant *Stine Linding Andersen*

Department of Clinical Biochemistry, Aalborg University Hospital, Aalborg, Denmark

What if we could identify Alzheimer's disease before symptoms emerge? In this presentation, I will share longitudinal data from Danish blood donors with up to 15 years of follow-up. Our findings suggest that plasma p-tau217 may reveal the disease process more than a decade before diagnosis

14:45 - 15:05

NFL measurements in multiple sclerosis

Professor *Finn Sellebjerg*

Danish Multiple Sclerosis Center,
Rigshospitalet, Copenhagen, Denmark

15:00 - 15:25

Blood collection tubes – from hazardous waste to valuable resource

Special consultant *Caroline Strudwick* and Health Innovation Centre of Southern Denmark and Department of Clinical Biochemistry, Odense University Hospital, Odense, Denmark

How can we reduce laboratory waste and increase circularity in healthcare? Join us to hear the key insights from a promising feasibility study on recycling PET blood collection tubes, a key source of hazardous plastic waste. And learn how these results are shaping the next steps towards a circular model for single use plastics in healthcare laboratories

15:05 - 15:25

Prognostication of cognitive status after cardiac arrest by plasma NFL

Professor *Christian Hassager*

Department of Cardiology, Rigshospitalet, Copenhagen, Denmark

Prediction of outcome in comatose resuscitated out-of-hospital-cardiac arrest patients is difficult and relies on multimodality results obtainable only later than 72 hours after the resuscitation. New studies show that plasma Neurofilament Light chain (NFL) has a strong prognostic value much earlier. This indicates that NFL will allow reliable neuroprognostication already 24 h after cardiac arrest.

15:45 - 17:15 SESSION 4

What's new: Lipids, lipoproteins, and cardiovascular risk

Chairs: Professor *Marianne Benn* (Copenhagen, DK) and Professor *Pia Rørbaek Kamstrup* (Copenhagen, DK)

15:50 - 16:10

Lipid metabolism – an overview

Professor *Jan Boren*
Department of Molecular and Clinical Medicine, University of Gothenburg, Gothenburg, Sweden

16:10 - 16:25

Lipoprotein(a)

Professor *Pia Rørbaek Kamstrup*

Symptoms of thyroid diseases are often unspecific and biochemical assessment of thyroid function plays a key role in patient diagnosis and monitoring. Clinical laboratories have an important role in establishment and verification of reference intervals, and certain aspects apply to the establishment of reference intervals for thyroid function tests in non-pregnant adults.

14:45 - 15:05

Considerations in pregnant women

Professor *Tuija Männistö*

University of Eastern Finland, Kuopio, Finland

Thyroid diseases are common in pregnant women and may affect the health of the mother and the fetus. Pregnancy is a physiological stress test for the thyroid gland that challenges the biochemical assessment. Several hormonal changes, including the rise in human chorionic gonadotropin and binding proteins, affect maternal thyroid function parameters in pregnancy.

15:05 - 15:30

Free thyroid hormones measured with mass spectrometry

Research Scientist *Alexander Bauer Westbye*

Hormone Laboratory, Department of Medical Biochemistry, Oslo University Hospital, Oslo, Norway

The 'gold standard' for measurements of free T4 and free T3 uses equilibrium dialysis followed by liquid chromatography tandem mass spectrometry (ED-LC-MS/MS). These methods overcome many interferences of immunoassays and can be implemented in specialized laboratories. Pros and cons of mass spectrometry-based measurements of free thyroid hormones in a clinical setting is discussed.

15:45 - 17:15 SESSION 5

ctDNA for early detection and screening

Chairs: Postdoctoral researcher *Sia Viborg Lindskrog* (Aarhus, DK) and Associate professor *Ole Halfdan Larsen* (Aarhus, DK)

15:45 - 16:05

ctDNA in cancer screening of the general population: Navigating test statistics and downstream harms

Professor *Stig Egil Bøjesen*
Department of Clinical Biochemistry, Herlev Gentofte Hospital, Copenhagen University Hospital, Copenhagen, Denmark

16:05 - 16:25

Tissue-naive tumour detection using plasma cell-free DNA

Professor *Jakob Skou Pedersen*

15:45 - 17:15 SESSION 6

Establishing robust pediatric reference intervals

Chairs: Associate professor *Ingrid Alsos Lian* (Trondheim NO) and Dr *Lea Tybirk* (Aarhus DK)

15:45 - 16:15

Pediatric reference intervals in newborns and at 2 and 14-16 months of age - data from the Copenhagen Baby Heart Study

Professor *Ruth Frikke-Schmidt*
Department of Clinical Biochemistry, Herlev Gentofte Hospital, Copenhagen University Hospital, Copenhagen, Denmark

16:15 - 16:45

Pediatric reference intervals from the joint Nordic study including Swedish and Danish data, and challenges of the pediatric reference intervals

Associate professor *Peter Ridel felt*

Department of Clinical Biochemistry, Herlev
and Gentofte Hospital, Copenhagen, Denmark

16:25 - 16:40

[Remnant cholesterol](#)

Professor *Børge Nordestgaard*

Department of Clinical Biochemistry, Herlev
and Gentofte Hospital, Copenhagen, Denmark

16:40 - 16:55

[Women, lipids and cardiovascular risk](#)

Professor *Kirsten Bjørklund Holven*

Institute for Nutrition Research, University of

16:55 - 17:15

[Cardiometabolic disease](#)

Professor *Stefano Romeo*

Department of Medicine, Karolinska Institute,

Department of Molecular Medicine (MOMA),
Aarhus University Hospital, Aarhus, Denmark

16:25 - 16:45

[ctDNA guided vs opportunistic colonoscopy
screening for CRC detection after acute
colonic diverticulitis](#)

Associate prof *Thomas Bjørsum-Meyer*

Department of Surgery, Odense University
Hospital, Odense, Denmark

16:45 - 17:15

[Selected abstract](#)

Department of Medical Sciences, Clinical
Chemistry, Uppsala University, Uppsala,
Sweden

16:45 - 17:00

[Selected abstract](#)

17:00 - 17:15

[Selected abstract](#)

17:30 -18:00 OPENING CEREMONY