



Danish Diabetes Academy

DDA Summer School on
Diabetes & Metabolism
for PhD Students
- Scientific Programme

26-29 August 2019

Sinatur Hotel Gl. Avernæs
Helnæsvej 9,
DK-5631 Ebberup

Session overview



Day 1

Monday 26 August

Session I

Welcome & Signaling Networks

Session II

Ectopic Fat Deposition – Where does the fat go?

Poster session I

Posters no. 1-21 (PI: 1-21)

Day 2

Tuesday 27 August

Session III

Drug Targets/Discovery

Workshop 1-3

Session IV

Mechanism & Metabolism of Obesity

Poster session II

Posters no. 22-39 (PI: 22-39)

Day 3

Wednesday 28 August

Session V

Sex Hormones & Metabolism

Workshop 4-7

Day 4

Thursday 29 August

Session VI

Type 1 Diabetes

Programme

Monday 26 August

10:00–10:30 Registration, breakfast & mounting of posters

10.30–11:00 Welcome, meet & greet

Professor **Nils Færgeman**, University of Southern Denmark (DK) and Education Manager Jette Husum, DDA (DK)

Session I Signaling Networks

Chair: PhD Candidate **Elise Needham**, The Charles Perkins Centre School of Life and Environmental Sciences and Sydney Medical School (AU)

11:00–11:40 Biology is Complex

Professor **David James**, The Charles Perkins Centre School of Life and Environmental Sciences and Sydney Medical School (AU)

11:40– 11:50 Questions & answers

11:50– 12:00 Energizer

12:00–12:30 The Many GAPs in Insulin Action

Professor **Hadi Al-Hasani**, Deutsches Diabetes-Zentrum, (DE)

12:30–12:40 Questions & answers

12:40–13:30 Lunch break

Session II Ectopic Fat Deposition – Where does the fat go?

Chair: Professor **Jørgen Wojtaszewski**, University of Copenhagen (DK)

- 13:30–14.00 Metabolic Adaptations to Dietary Fatty Acids
Professor **Bente Kiens**, University of Copenhagen, (DK)
- 14:00–14:10 Questions & answers
- 14:10– 14:20 Energizer
- 14:20–14:50 Following the Fat: The Use of Stable-Isotope Tracers
Professor **Leanne Hodson**, University of Oxford, (GB)
- 14.50 –15.00 Questions & answers
- 15:00 –15:20 Coffee break
- 15:20 –16:20 Chair: Professor **Jørgen Wojtaszewski**, University of Copenhagen (DK)

Panel discussion with speakers from session I & II
- 16:20 –16:40 Oral presentation

Uncovering the Molecular Basis for Nutritional Reprogramming of Pancreatic β -Cells Using Novel in Situ and Genome-wide Approaches

PhD student, **Kari Østerli Frafjord**, University of Southern Denmark (DK)
- 16:40 – 17:10 One-minute poster presentations/ teasers

Chair: Managing Director **Tore Christiansen**, DDA (DK)
- 17:10 – 18:00 Poster session I (PI: 1-21)
- 18:00 -19:00 Free time
- 19:00 Dinner in groups

Programme

Tuesday 27 August

07:00– 08:30 Morning exercise & breakfast

08:30– 08:40 Morning assembly

Session III Drug Targets/Discovery

Chair: PhD, MD **Esben Søndergaard**, Aarhus University Hospital (DK)

08:40 – 09:10 Emerging Combination Pharmacotherapies for the Treatment of Metabolic Diseases

Associate Professor **Christoffer Clemmensen**, University of Copenhagen (DK)

09:10 – 09:30 Questions & answers

09:30 – 09:45 Short break

09:45 – 10:15 Target Discovery in Gut and BRAin

Co-founder **Jacob Jelsing**, Gubra (DK)

10:15 -10:35 Questions & answers

10:35– 10:55 Coffee break

10:55 –11:15 Oral presentation

Ketone Body Infusion Increases Circulating Erythropoietin and Bone Marrow Glucose Uptake

PhD student **Katrine Meyer Lauritsen**, Aarhus University (DK)

11:15 - 12:30 Workshop 1

A: Professor **Bjørn Richelsen**, Aarhus University:
Is the Best Treatment of Type 2 Diabetes Surgery? Implications of Bariatric Surgery

B: PhD Candidate **Elise Needham**, The Charles Perkins Centre School of Life and Environmental Sciences and Sydney Medical School (AU):
Introduction to R

C: Professor **Tune Pers**, University of Copenhagen:
Single-Cell RNA-Sequencing Analysis: What It Can and Cannot Tell Us

12:30 -13:30 Lunch break

Session IV Mechanism & Metabolism of Obesity

Chair: Professor **Nils Færgeman**, University of Southern Denmark (DK)

13:30-14:00 GWAS for BMI: A Treasure Trove of Fundamental Insights into the Genetic Basis of Obesity

Professor **Ruth Loos**, Icahn School of Medicine at Mount Sinai (US)

14:00 -14:15 Questions & answers

14:15-14:45 Routes of Leptin Signaling in the Medio-Basal Hypothalamus

Associate Professor **Maia Kokoeva**, Department of Medicine Research Institute of the McGill University Health Centre (CA)

14:45 - 15:00 Questions & answers

15:00 -15:20 Coffee break

15:20 – 15:40 Oral presentation

Cycling Reduces Blood Glucose Excursions After an Oral Glucose Tolerance Test in Pregnant Women

PhD student **Mette Bisgaard Andersen**, Aarhus University (DK)

15:40 – 16:10 **Summary - Kahoot**

16:10 – 17:10 Afternoon with a brain

Get feedback from a PI on your own research

17:30- 18:15 Voluntary networking activity

18:30 – 20:00 Dinner

20:00 – 20:30 **One-minute poster presentations/ teasers**

Chair: Managing Director **Tore Christiansen**, DDA (DK)

20:30 – 21:30 Poster session II (PI: 22-39)

Programme

Wednesday 28 August

07:00–08:30 Morning exercise & breakfast

08:30–08:40 Morning assembly

Session V Sex Hormones & Metabolism

Chair: Professor **Dorte Møller Jensen**, Odense University Hospital (DK)

08:40–09:10 Testosterone, Body Composition and Insulin Sensitivity

Professor **Marianne. S. Andersen**, University of Southern Denmark (DK)

09:10-09:25 Questions & Answers

09:25 – 09:40 Short break

09:40-10:00 Oral presentation

Phosphoproteomic screening of exercise-like treatments reveals drug interactions regulating protein secretion

PhD Candidate **Elise Needham**, The Charles Perkins Centre School of Life and Environmental Sciences and Sydney Medical School (AU)

10:00–10:20 Oral presentation

PF739, A Specific Pan-AMPK Activator, Indicates that Several AMPK Complexes are Applicable for Antidiabetic Pharmacological Intervention

PhD Student **Nicolas Oldenburg Jørgensen**, University of Copenhagen (DK)

10:20 -11:00 Coffee break and group photo

11:00 – 12:30 Workshop 2

D: Postdoc **Adam Hulman**, Aarhus University (DK):
Should We Change the Diagnostic Criteria of (Pre-) Diabetes?

E: Professor **Glenn McConell**, Victoria University (AU):
Exercise and Insulin Sensitivity: Mechanism in Health and Disease

F: Head of Diabetes Management Research **Ingrid Willaing Tapager**, Steno Diabetes Center Copenhagen (DK):
How To - and Why - Combine Qualitative and Quantitative Methods? What More Do You Achieve?

G: Professor **Anand Hardikar**, University of Sydney (AU):
Developing a Molecular Biomarker Signature of Diabetes Progression

12:30 – 13:30 Lunch break

13:30 – 14:15 Group work: Walk & talk
Preparation of questions for the plenum debate

14:15 – 15:00 Plenum debate
Chair: Professor Glenn McConell, Victoria University (AU)

15:00 – 15:20 Coffee break

15:20 – 16:20 Afternoon with a brain
Get feedback from a PI on your own research

16:20 – 19:00 Voluntary networking activity

19:00 – Pre-dinner drinks & gala dinner

Programme

Thursday 29 August

07:30–09:30 Morning exercise & breakfast

09:30– 09:40 Morning assembly

Session VI Type 1 Diabetes

Chair: Professor **Louise Dalgaard**, Roskilde University (DK)

09:40–10:10 Don't Blame the Immune System: Islets Talking Back

Professor **Bart Roep**, The Beckman Research Institute, City of Hope (US)

10:10 – 10:25 Preparation of questions for Professor Bart Roep

10:25 –10:35 Energizer

10:35 – 10:55 Oral presentation

Prediction of time to insulin requirement in patients with type 2 diabetes using artificial intelligence: A GoDARTS study.

PhD Student **Rikke Linnemann Nielsen**, Technical University of Denmark (DK)

10:55 –11:15 Coffee break

11:15 –11:45 Is Type 1 Diabetes an Autoimmune or an Infectious Disease?

Professor **Mikael Knip**, University of Helsinki (FI)

11:45 –11:55 Preparation of questions for Professor Mikael Knip

11:55–12:20 Professors Bart Roep & Mikael Knip answer questions

12:20-12:45 Closing remarks

12:45-13.15 Lunch-to-go & goodbye
Bus transportation to Odense Central Station

Organising Committee

Scientific Programme

Professor **Nils Færgeman**,
University of Southern Denmark (DK) (Chair)

Professor **Jørgen Wojtaszewski**,
University of Copenhagen (DK)

Professor **Dorte M. Jensen**,
University of Southern Denmark (DK)

Professor **Louise T. Dalgaard**,
Roskilde University (DK)

PhD, MD **Esben Søndergaard**,
Aarhus University (DK)

Professor **Torben Hansen**,
University of Copenhagen (DK)



Danish Diabetes Academy

Funded by the Novo Nordisk Foundation