

18 - 22 November 2024

Metabolism in Action

Time, Space and Treatment

Monday 18 November 2024

17:30 - 18:45 Informal dinner at Favrholm

18:45 - 19:00 **Official Opening by NNF**

19:00 - 20:15 **SESSION 1: Welcome and Keynote lecture**

Welcome by Committee Chair: Juleen R. Zierath

KEYNOTE SPEAKER: David Ludwig (Harvard University)
The carbohydrate-insulin model of obesity: A focus on metabolic fuels

20:15 - 22:30 Drinks & Networking

Tuesday 19 November 2024

09:00 - 10:15 **SESSION 2: From genetic variants to function**

INVITED SPEAKER: Jorge Ferrer (Imperial College London)
Molecular insights and therapeutic strategies for T2D

INVITED SPEAKER: Nicole Soranzo (University of Cambridge)
Population-scale single cell technologies in cohorts with embedded medical record data

SHORT TALK: Sophia Metz
Mapping genetic effects of cardiometabolic traits on stem cell commitment and early adipogenesis

CHAIR: Tune H. Pers

10:15 - 10:45 Coffee break

10:45 - 12:00 **SESSION 3: From genetics through electronic health register data to treatment**

INVITED SPEAKER: Nancy Cox (Vanderbilt University)
The value of longitudinal medical phenome integration with omics data for identifying in advance medical phenome impacted by a target

INVITED SPEAKER: Andrea Ganna (University of Helsinki)
Leveraging GWAS results of cardiometabolic traits for disease progression and clinical trial design

SHORT TALK: Ekaterina Esenkova
Unbiased multi-omics data integration and metabolic subtyping of individuals with heart failure

CHAIR: Ruth Loos

12:00 - 13:00 Lunch

13:00 - 14:15 **SESSION 4: Metabolic signaling and cellular/organismal adaptation**

INVITED SPEAKER: Meng Wang (Jenelia)
Metabolic regulation of longevity across the domain

INVITED SPEAKER: Jared Rutter (University of Utah)
Metabolism, cellular decisions and the language that unites them

SHORT TALK: Frédéric Gachon
Glycogen metabolism links feeding rhythms and diurnal hepatic protein secretion

CHAIR: Kei Sakamoto

14:15 - 14:45 Break

14:45 - 16:00 SESSION 5: Cellular signaling and energy dynamics: Novel approaches and tools

INVITED SPEAKER: Martin Lohse (University of Würzburg)
Abstract title

INVITED SPEAKER: Li Ye (Scripps Research Institute)
Metabolic interactions between the brain and body

SHORT TALK: Olivia Conway
Dynamic subcellular proteomics identifies novel regulators of insulin signalling

CHAIR: Christoffer Clemmensen

16:00 - 16:15 Break

16:15 - 17:15 METABOLIC RESEARCH IN SOCIAL AND CULTURAL CONTEXTS

INVITED SPEAKER: Vanessa Heggie (University of Birmingham)
One antarctic experiment, four points of view

SHOW AND TELL: An insight into Medical Museion's object-based learning work

CHAIRS: Ken Arnold and Karin Tybjerg

17:30 - 19:15 Poster session

19:15 - 20:45 Dinner

20:45 - 22:15 PI Pub / Editors' Corner

Wednesday 20 November 2024

09:00 - 10:15 SESSION 6: Proteins in time and space

INVITED SPEAKER: Manuel Leonetti (Chan Zuckerberg Biohub)
Global organelle profiling reveals subcellular localization and remodeling at proteome scale

INVITED SPEAKER: Florian Rosenberger
Decoding metabolic diseases in space and time: Insights from single-cell proteomics

SHORT TALK: Helen Farrants
Modular chemigenetic fluorescent indicators for multiplexed imaging of cellular physiology in space and time

CHAIR: Atul Deshmukh

10:15 - 10:45 Break

10:45 - 12:30 SESSION 7: Tracking physical activity: Uncovering exercise adaptations and muscle inflammation in diabetes

INVITED SPEAKER: Barbara Ainsworth (Arizona State University)
Why we should measure physical activity in our research studies

INVITED SPEAKER: Kristin Eckel-Mahan (UTHealth, University of Texas)
Abstract title

INVITED SPEAKER: Christoph Handschin (University of Basel)
The molecular underpinnings of exercise adaptation of skeletal muscle

SHORT TALK: Nicolas Pillon (Karolinska Institutet)
Inflammatory mediators regulating skeletal muscle remodeling, metabolism, and dysfunction in type 2 diabetes

CHAIR: Juleen R. Zierath

12:30 - 12:45 Group Photo

12:45 - 13:45 Lunch

13:45 - 15:30	POSTER SESSION
15:30 - 16:00	Break before social outing
16:00 - 17:00	Transportation to Elsinore
17:00 - 18:45	Social outing
18:45 - 21:00	Dinner
21:00 - 22:00	Transportation back to Favrholm/hotel

Thursday 21 November 2024

09:00 - 10:15	SESSION 8: Organ crosstalk and metabolic homeostasis
	INVITED SPEAKER: Silvia Corvera (UMass Chan Medical School) <i>Human thermogenic adipocyte development and metabolic disease</i>
	INVITED SPEAKER: Steven Kahn (UW Medicine) <i>Abstract title</i>
	SHORT TALK: Trisha Grevenoged <i>An inflammation-regulated metabolite, arachidonoyl-taurine, protects from diet-induced hepatic steatosis and fibrosis in mice</i>
	CHAIR: Camilla Schéele
10:15 - 10:45	Coffee break
10:45 - 11:45	ROUNDTABLE DISCUSSIONS
12:00 - 13:00	Lunch
13:00 - 14:15	SESSION 9: Novel mechanisms of action to treat cardiometabolic diseases
	INVITED SPEAKER: Timo Müller (Helmholtz Munich) <i>Novel Insights into regulation of energy metabolism by GIPR agonism and antagonism</i>
	INVITED SPEAKER: Kirsten Raun (Novo Nordisk A/S) <i>Abstract title</i>
	SHORT TALK: Jenny Brown <i>Single-cell transcriptomics reveals the effects of high-fat diet on glucose sensing in the arcuate nucleus, ventromedial nucleus, and dorsal vagal complex</i>
	CHAIR: Zach Gerhart-Hines
14:15 - 14:45	Coffee break
14:45 - 15:45	SESSION 10: Keynote lecture
	KEYNOTE SPEAKER: Stephen O’Rahilly (University of Cambridge) <i>Novel insights into the control of human metabolism from the study of carriers of loss of function mutations</i>
	CHAIR: Ruth Loos
15:45 - 16:00	Closing remarks by Scientific Committee, Kei Sakamoto and Ruth Loos
16:00 - 19:00	Transportation
19:15	Welcome drinks at Favrholm
19:45 - 02:00	Dinner & party

Friday 22 November 2024

09:00	Check-out from hotels
09:15	Bus departure from Hillerød → Favrholm campus → City centre → Copenhagen airport