

Atherosclerosis: Molecular Mechanisms, Genomic Modifiers and Therapeutic Strategies

Time: 21 – 23 August 2023

Place: Comwell Klarskovgaard, Korsør

Programme:

21 August 2023

08:30 – 09:00	Arrival & registration
09:00 – 09:15	Welcome
09:15 – 09:45	Lecture: Overview of the atherosclerosis pathology Prof. Jacob Fog Bentzon , AU
09:45 – 09:55	Discussion
09:55 – 10:10	Student presentation 1. Jannik Larsen: "Ccn2 deficiency causes smooth muscle cell de-differentiation and severe atherosclerosis in hyperlipidemic mice"
10:10 – 10:25	Break
10:25 – 10:55	Lecture: Lipids and lipid-lowering strategies Prof. Jan Borén , University of Gothenburg
10:55 – 11:05	Discussion
11:05 – 11:20	Student presentation 2. Esmeralda A. Lewis: "Capacity for LDL retention predicts the course of atherogenesis in the murine aortic arch"
11:20 – 11:35	Student presentation 3. Malene K. Hansen: "Non-HDL cholesterol and residual risk of atherosclerotic cardiovascular disease and death in patients with ischemic heart disease and well-controlled LDL cholesterol: The Western Denmark Heart Registry"
11:35 – 12:05	Atherosclerosis research in the industry Novo Nordisk Director Michael Nyberg , Department of Vascular Biology, Novo Nordisk
12:05 – 12:15	Discussion
12:15 – 12:30	Student presentation 4. Kathrine Væver Jokumsen: "Iodide as a potential therapeutic in atherosclerosis"
12:30 – 13:30	Lunch
13:30 – 14:00	Lecture: Epidemiology and risk prediction of atherosclerotic CVD Assoc. Prof. Martin Bødtker Mortensen , AUH
14:00 – 14:10	Discussion
14:10 – 14:25	Student presentation 5. Andreas Fuchs: "Subclinical coronary atherosclerosis and risk of myocardial infarction in a Danish cohort"
14:25 – 14:40	Break
14:40 – 15:10	Lecture: Atherosclerosis imaging Assoc. Prof. Rozh Al-Mashhadi , AUH
15:10 – 15:20	Discussion

15:20 – 16:30	Small group project discussion Coordinated by: Assoc. Prof. Lasse Bach Steffensen , Postdoc Laura Alonso , Assistant Prof. Julián Juárez , MD Lasse Obel
16:30 – 17:00	Break and check-in
17:00 – 18:30	Free time
18:30 – 20:00	Dinner
20:00 – 22:00	Networking and Drinks

22 August 2023

08:15 – 08:30	Welcome back
08:30 – 09:00	Genetics of atherosclerotic CVD PhD Maria Sabater-Lleal , Sant Pau Biomedical Research Institute
09:00 – 09:10	Discussion
09:10 – 09:25	Student presentation 6. Nirmala Mouttoulngam: "Role of obesogenic diet-shaped microbiota in atherosclerosis"
09:25 – 09:40	Break
09:40 – 10:10	Smooth muscle cells in atherosclerosis Assoc. Prof. Helle Jørgensen , University of Cambridge
10:10 – 10:20	Discussion
10:20 – 10:35	Student presentation 7. Raúl Izquierdo-Serrano: "Hypoxia signaling regulates smooth muscle cell fate in murine atherosclerosis"
10:35 – 10:45	Energizer
10:45 – 11:15	Inflammation and the immune system in atherosclerosis Prof. Daniel Ketelhuth , University of Southern Denmark
11:15 – 11:25	Discussion
11:25 – 11:40	Student presentation 8. Karen C. Yang-Jensen: "Human atherosclerotic plaques contain oxidant-modified extracellular matrix proteins"
11:40 – 11:55	Student presentation 9. Lise F. Jensen: "Uncovering inflammatory signaling in vascular smooth muscle cells using CRISPR-Cas9 screening"
12:00 – 13:00	Lunch
13:00 – 13:30	CHIP - a novel risk factor atherosclerotic CVD Assist. Prof. José Javier Fuster , CNIC
13:30 – 13:40	Discussion
13:40 – 13:55	Student presentation 10. Beatriz López Ramos-Neble: "Downregulation of Y chromosome in blood confers increased risk of atherosclerotic disease"
13:55 – 14:10	Break
14:10 – 14:40	Atherosclerosis models Assist. Prof. Anton Gisterå , Karolinska Institute
14:40 – 14:50	Discussion

14:50 – 16:00	Group task: Research carousel Coordinated by: Assoc. Prof. Lasse Bach Steffensen , Postdoc Laura Alonso , Assistant Prof. Julián Juárez , MD Lasse Obel
16:00 – 18:00	Free time
18:00 – 20:00	Dinner
20:00 – 22:00	Networking and Drinks

23 August 2023

08:15 – 08:30	Welcome back
08:30 – 09:00	Use of biobanks in atherosclerosis research Prof. Lars Melholt Rasmussen , Odense University Hospital
09:00 – 09:10	Discussion
09:10 – 09:25	Student presentation 11. Peter E. Thomas: “High lipoprotein(a) and increased risk of peripheral arterial disease, abdominal aortic aneurysms, and major adverse limb events”
09:25 – 09:40	Break
09:40 – 10:10	What has been learned about atherosclerosis from scRNAseq? Prof. Claudia Monaco , Oxford University
10:10 – 10:20	Discussion
10:20 – 10:35	Student presentation 12. Diana Sharysh: “Gene expression changes in plaque smooth muscle cells during LDL lowering in transgenic pigs with atherosclerosis”
10:35 – 10:45	Break/energizer
10:45 – 11:15	Novel insights in cardiovascular calcification Prof. Elena Aikawa , Harvard Medical School
11:15 – 11:25	Discussion
11:25 – 11:55	Course evaluation
12:00 – 13:00	Lunch & Goodbye