



Stem Cell Niche

SUNDAY | 21 May 2023

16:00 - 17:00	Scientific Committee meeting (members only)
17:15	Transportation to Favrholt from Hotel Hillerød
17:30 - 18:45	Informal dinner at Favrholt
18:45 - 19:00	Official opening by Birgitte Holst , Scientific Director, Medical Science, The Novo Nordisk Foundation
19:00 - 20:15	SESSION 1 Deconstructing and reconstructing development
	Welcome by the Scientific Committee: Joshua Mark Brickman , NNF Center for Stem Cell Medicine (reNEW), Denmark
	INVITED SPEAKER: Jacob Hanna , Weizmann Institute of Science, Israel <i>Synthetic ex utero embryogenesis: From naive pluripotent stem cells to bona fide human and mouse embryo-models</i>
	SHORT TALK: Irene Zorzan , Babraham Institute, Cambridge, United Kingdom <i>Developing new technologies to study human blastoids beyond implantation</i>
	INVITED SPEAKER: Olivier Pourquie , Harvard University, United States <i>Reconstructing human Brown Fat developmental trajectory in vitro</i>
	CHAIR: Joshua Mark Brickman , NNF Center for Stem Cell Medicine (reNEW), Denmark
20:15 - 22:30	Drinks & Networking

MONDAY | 22 May 2023

09:00 - 10:30	SESSION 2 Encoding stem cell fate
	INVITED SPEAKER: Kathrin Plath , University of California, Los Angeles, United States <i>Dosage compensation of the X chromosome</i>
	SHORT TALK: Teresa Rayon , Babraham Institute, Cambridge, United Kingdom <i>Mechanistic control of timescales in development</i>
	SHORT TALK: Madeleine Linneberg-Agerholm , NNF Center for Stem Cell Medicine (reNEW), Denmark <i>Oct4 supports enhancer priming in the mouse primitive endoderm to enable plasticity in regulative development</i>
	INVITED SPEAKER: Pablo Navarro , Institut Pasteur, France <i>Gene regulation through mitosis</i>
	CHAIR: Jan Zylicz , NNF Center for Stem Cell Medicine (reNEW), Denmark
10:30 - 11:00	Coffee break
11:00 - 12:30	SESSION 3 Intrinsically controlling and programming cell fate
	INVITED SPEAKER: Thomas Graf , Centre for Genomic Regulation, Spain <i>Arginine methylation of C/EBPs by Carm1 regulates the speed and directionality of transdifferentiation</i>
	SHORT TALK: Hannah Stuart , Institute for Molecular Pathology, Austria <i>Self-organisation of dorsal-ventral pattern in mouse and human neural tube organoids</i>
	SHORT TALK: Mustafa Mir , University of Pennsylvania/Children's Hospital of Philadelphia, United States <i>Molecular kinetics of transcription regulation and nuclear organization in embryonic development</i>
	INVITED SPEAKER: Thomas Gregor , Princeton University, United States <i>Precise and scalable self-organization in mammalian pseudo-embryos</i>
	CHAIR: Bo Porse , Copenhagen University Hospital / University of Copenhagen, Denmark
12:30 - 13:30	Lunch
13:30 - 14:45	SESSION 4 Extrinsic control of cell decisions
	INVITED SPEAKER: Jean Paul Vincent , Francis Crick Institute, United Kingdom <i>Towards a model of Wnt gradient formation</i>
	SHORT TALK: Sirio Dupont , Department of Molecular Medicine, University of Padova, Italy <i>A unifying mechanotransduction system based on mitochondrial fission coordinates the transcriptional and metabolic responses to extracellular forces</i>
	SHORT TALK: Martti Maimets , NNF Center for Stem Cell Medicine (reNEW), Denmark <i>Engineering intestinal maturation through the microenvironment</i>
	CHAIR: Ditte Skovaa Andersen , NNF Center for Stem Cell Medicine (reNEW), Denmark
14:30 - 15:00	Coffee break

15:00 - 16:15	SESSION 5 Monitoring the evolution of programs controlling stem cell identity
	INVITED SPEAKER: Prisca Liberali , Friedrich Miescher Institute for Biomedical Research, Switzerland <i>Symmetry breaking and self-organization in intestinal organoids</i>
	SHORT TALK: Benjamin Furtwängler , University of Copenhagen, Denmark <i>Single-cell proteomics recapitulates the human hematopoietic stem and progenitor hierarchy and identifies proteins associated with stem cell quiescence</i>
	INVITED SPEAKER: Samantha Morris , Washington University, St. Louis, United States <i>Multi-omic lineage tracing: Insights into reprogramming cell identity</i>
	CHAIR: Ala Trusina , Niels Bohr Institute, University of Copenhagen, Denmark
16:15 - 17:45	POSTER SESSION
18:00 - 20:00	Dinner
20:00 - 22:00	PI Pub / Editors' Corner

TUESDAY | 23 May 2023

09:00 - 10:30	SESSION 6 Progenitor cells supporting tissue homeostasis and ontogenesis
	INVITED SPEAKER: Kara L. McKinley , Harvard University, United States <i>Regeneration in the uterus</i>
	SHORT TALK: Maria A. Christophorou , Babraham Institute, Cambridge, United Kingdom <i>Extracellular chromatin as a cell communication signal in reprogramming and regeneration</i>
	SHORT TALK: Sean Wilson , NNF Center for Stem Cell Medicine (reNEW), Denmark, Murdoch Children's Research Institute, Melbourne, Australia <i>Derivation of renal stromal precursors from human iPSC-derived paraxial mesoderm-like cultures</i>
	INVITED SPEAKER: Elizabeth Robertson , Oxford University, United Kingdom <i>An expanding job description for the Tbx transcription factor Eomesodermin in the developing embryo</i>
	CHAIR: Jakub Sedzinski , NNF Center for Stem Cell Medicine (reNEW), Denmark
10:30 - 11:00	Break
11:00 - 12:15	SESSION 7 Tissue regeneration and stem cell mediated repair
	INVITED SPEAKER: Sharagim Tajbakhsh , Institut Pasteur, France <i>Functional diversity and dynamics of muscle stem and niche cells</i>
	INVITED SPEAKER: Peter Currie , Monash University, Australia <i>Muscle growth mechanisms and the role of growth specific muscle stem cells and their different niches across the vertebrate phylogeny</i>
	INVITED SPEAKER: Ana Martin-Villalba , German Cancer Research Center, Germany <i>The molecular secrets of stemness in the young, injured and aging brain</i>
	CHAIR: Mirna Perez Moreno , University of Copenhagen, Denmark
12:15 - 12:30	Group photo
12:30 - 13:30	Lunch
13:30 - 15:00	POSTER SESSION
15:00 - 15:50	SESSION 8 Regulation of stem cell behaviour
	INVITED SPEAKER: Tariq Enver , University College London, United Kingdom <i>Extrinsic transcriptional noise as a regulator of stem cell behaviour</i>
	SHORT TALK: Mariaceleste Aragona , NNF Center for Stem Cell Medicine (reNEW), Denmark <i>Exploring the cellular and molecular mechanisms controlling stretch-mediated tissue expansion in vivo</i>
	CHAIR: Kim Theilgaard-Mönch , University of Copenhagen, Denmark
15.50 - 16.50	Transport to social outing
17:00 - 18:00	Social outing
18:00 - 22:30	Dinner
22:30 - 23:30	Transport to Favrholm

WEDNESDAY | 24 May 2023

09:00 - 10:30	SESSION 9 Stem cells and cancer
	INVITED SPEAKER: Ulrich Steidl , Albert Einstein College of Medicine, United States <i>Understanding and targeting non-genetic stem cell heterogeneity</i>
	SHORT TALK: Claudia Waskow , Leibniz Institute on Aging, Jena, Germany <i>Mechanism of the engraftment of human HSCs in NSGW41 mice</i>
	SHORT TALK: Lindsey Seldin , Emory University, Atlanta, United States <i>Inflammasome signaling activation during cutaneous skin cancer development</i>
	INVITED SPEAKER: Simona Parrinello , UCL Cancer Institute, United Kingdom <i>Glioma initiation from the neurogenic niche</i>
	CHAIR: Julien Colombani , University of Copenhagen, Department of Biology, Denmark
10:30 - 11:00	Coffee break
11:00 - 12:15	Panel discussion
	INVITED SPEAKER: Doug Sipp , RIKEN Center for Biosystems Dynamics Research, Japan <i>Regulatory fracture</i>
	PANEL DISCUSSION:
	Lotte Dahl Nissen , Danish Medicines Agency, Denmark
	Agnete Kirkeby , NNF Center for Stem Cell Medicine (reNEW), Denmark
	Lorenz Studer , Memorial Sloan Kettering Cancer Center, United States
	Kim Theilgaard-Mönch , NNF Center for Stem Cell Medicine (reNEW), Denmark
	MODERATOR: Douglas Sipp , RIKEN Center for Biosystems Dynamics Research, Japan
12:30 - 13:30	Lunch
13:30 - 15:00	SESSION 10 Cell growth, tissue size and modulating stem cell behaviour
	INVITED SPEAKER: Bruce Edgar , University of Utah Health, United States <i>Inter-cell type signaling in the Drosophila intestinal stem cell niche</i>
	SHORT TALK: Christian Fokdal Christensen , University of Copenhagen, Denmark <i>Drosophila activins adapt gut size to food intake and promote regenerative growth</i>
	SHORT TALK: Derk ten Berge , Erasmus MC, University Medical Center Rotterdam, Netherlands <i>Pluripotency, morphogenesis, and the modular control of embryonic self-organization</i>
	INVITED SPEAKER: Laure Bally-Cuif , Institut Pasteur, France <i>Single cell and population mechanisms controlling adult neural stem cell maintenance</i>
	CHAIR: Agnete Kirkeby , NNF Center for Stem Cell Medicine (reNEW), Denmark
15:00 - 15:30	Coffee break
15:30 - 17:00	SESSION 11 Clinical translation of stem cells
	INVITED SPEAKER: Margaret Goodell , Baylor College of Medicine, United States <i>Immortal hematopoietic stem cells and their regulation by DNA methylation</i>
	SHORT TALK: Berenika Plusa , Faculty of Biology, University of Manchester, United Kingdom <i>Deep learning pipeline reveals key moments in human embryonic development predictive of live birth in IVF</i>
	SHORT TALK: Steven Pollard , University of Edinburgh, United Kingdom <i>Synthetic super-enhancers enable selective expression of anti-cancer payloads for viral gene therapy</i>
	INVITED SPEAKER: Lorenz Studer , Memorial Sloan Kettering Cancer Center, United States <i>From cell fate to maturation – directing human PSC-derived neural lineages</i>
	CHAIR: Kim Bak Jensen , NNF Center for Stem Cell Medicine (reNEW), Denmark
17:00 - 17:15	Closing remarks by the Chair of the Scientific Committee
17:15 - 19:00	Transportation Favrholm → Hotel Hillerød → Favrholm
19:15 - 19:45	Welcome drinks at Favrholm
19:45 - 02:00	Dinner & party

THURSDAY | 25 May 2023

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