Collaboration in Science

## Thursday, Nov 21<sup>st</sup>

07:30–08:15 Registration

## WELCOME!

08.15-08.25

Dean KI South, Matti Sällberg

Karolinska University Hospital Director for Research, Education and Innovation, Olof Akre Site Director Huddinge, Karolinska University Hospital Huddinge, Annika Bergquist

	Jan-Åke Gustafsson lecture hall	Erna Möller lecture hall		Gene lecture hall
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	Tissue Immunology Chair: Laura Palma Medina Co-chair: Magda Lourda	Innovation and technology Chair: Torkel Brismar Co-chair: Therese Djärv		Health vs Oral Health - The connection Chair: Abhishek Kumar Co-chair: Ann Langius-Eklöf
08:30	Marcus Buggert: iHOPE and relevance for the clinic	Andreas Claesson: Drones in out-of-hospital cardiac arrest – a novel life saving treatment methodology		Bodil Lund: Oral infections and influence on sepsi
08:40	Helen Kaipe: Tissue-resident T cells in pancreatic cancer	Karin Dembrower: Artificial intelligence for breast cancer detection in screening mammography		Gerd Faxén-Irving: Nutrition and oral health
08:50	Mattias Carlsten: Redirecting NK cell homing to the bone marrow to improve the treat efficacy of myeloid leukemia	Gustaf Ahlén: The pre-GMP facility at KI South: How do I get my product into the clinic?		Mats Trulsson: Chewing impairment and the influence on brain function
09:00-09:10	Questions and discussion	Questions and discussion		Questions and discussion
9:15-10:00	Implementation of AI in care - risks and opportunities Chair: Filip Christiansen Co-chair: Mikael Norman	Cellmigration and metastasis in cancer Chair: Michal Jacek Sobkowiak Co-chair: Jonas Fuxe		Senescence across ages Chair: Ylva Ambrosiani Co-chair: Peter Stenvinkel
09:15	Elisabeth Epstein: Implementing Computer Aided Diagnostic support for ultrasound assessment of ovarian tumours	Jennie Engstrand: Metastasis to the liver – a clinical perspective		Kajsa Bohlin: Neonatal stress and aging
	Stephanie Robertson: Stratipath – implementing Albased diagnostic support for Oncology	Marco Gerling: Decoding the capsule: a new perspective on liver metastasis and patient survival		Federico Pietrocola: Can we reverse aging?
	Emma Svennberg (MedH) - AI in detecting atrial fibrillation	Sara Schmidt: Antioxidants and metastasis		Gabriel Oniscu: Targeting senescence at organ lev
09:45-09:55	Questions and discussion	Questions and discussion		Questions and discussion
0:00-10:30	Со	ffee, poster and core facility exhil	bition	
	Clinical challenges and new therapies in	How to obtain top grants: lessons learnt		Centre for Bioinformatics and
	hematological diseases	from recent grant awardees		Biostatstistics - Educational program
0.00	Chair: Arnika Wagner Co-chair: Rula Zein	Chair: Vanessa Lundin Co-chair: Maria Eriksdotter		Chairs: Carsten Daub & Hannes Hagströ
	Mikael Sundin: New therapies in hematological diseases	Pauliina Damdimopoulou: Safeguarding female Fertility -development of human-relevant in vitro tools for reproductive toxicity (SAFER)		Carsten Daub & Michael Ingre: Why use CBB for your needs in bioinformatics and biostatistics
	Yenan Bryceson: Diagnosing uncommon genetic mutations in hematological diseases	Jenny Mjösberg: GUT-SEQ: Single-cell analysis of intestinal lymphocytes reveals targets for treatment of inflammatory bowel disease		Laura Vossen Engblom: How to avoid an angry statistician and save money - the importance of a structured analysis plan before starting your proje
	Stephan Mielke: Advancements in CAR-T cell therapy	Samir El Andaloussi: In situ engineering of extracellular Vesicles for targeted delivery of biotherapeutics	10.35	
11:00-11:10	Questions and discussion	Questions and discussion	10.55	Michael Ingre: Do and don't:s - what is a power calculation and how do I do it?
1:15-12:00	The new survivors - long term outcomes when growing up after severe disease Chair: Milan Chromek Co-chair: Carl Jorns	Basic and clinical aspects of diabetes and complications Chair: Rongrong Fan Co-chair: Daniel Andersson		How can physical activity prevent and treat symptoms of severe illness? Chair: Ulrica Nilsson Co-chair: Sofia Vikström
	Mikael Norman: Prediction and prospects after preterm birth	Niklas Mejhert: Adipocyte subpopulations and insulin sensitivity		Ann-Helen Patomella: Physical and everyday activities to prevent stroke- an intervention study
11:25	Katarina Grossmann: Long term outcome after hypothermia-treated hypoxic-ischaemic encephalopathy	Cecilia Morgantini: Immunological response of diabetic patients with chronic foot ulcers		<b>Elisabeth Rydwik</b> : Physical activity and exercise for frail older people
	Jeanette Winterling: Innovations for teens and young adults surviving cancer	Ping Chen: Dissecting the complexity of human data through data-driven research		<b>Poorna Anand</b> : Minimizing side effects after treatment for cancer - Exercise oncology
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13:10-13:55	Inflammation and neurodegenerative diseases (Alzheimer's) Chair: Sumonto Mitra Co-chair: Charlotte Ytterberg		Regeneration and repair – how hard can it be? Chair: Shivam Chandel Co-chair: Rachael Sugars		Future of Flemingsberg - centers of excellence Chair: Annika Tibell Co-chair: Maria Eriksdotter				
13:1C	Marianne Schultzberg: Inflammation and its resolution	13:10	Fredrik Lanner: Cells as a conduit for tissue and organ repair	13:10	Johnny Högberg: Future of Flemingsberg				

Georgios Tsilingaridis: Pulp revitalisation for Knut Steffensen: ATMP center Karolinska Sverker Johansson: Balance training intervention in 13:20 people with MS 13:25 regeneration and repair of the tooth 13:20 Ellen lacobaeus: Mesenchymal stromal cells and Petter Woll: MedH FACS Facility: combining cellular 13:30 Multiple Sclerosis- clinical and experimental studies 13:30 fluorescence and sort-capable imaging 13:40 Questions and discussion 13:40–13:50 Questions and discussion 13:40 Questions and discussion Keynote lecture "My failures as a researcher" with Jonas Ludvigsson 14:00-15:00 Chairs: Annika Bergquist (Jan-Åke Gustafsson, Erna Möller, DNA and Gene lecture hall) Coffee, poster and core facility exhibition 15:00-15:40 Oral presentations OP 01-OP 07 Oral presentations OP 08-OP 14 Oral presentations OP 15-OP 21 (Jan-Åke Gustafsson lecture hall) (Erna Möller lecture hall) (Gene lecture hall) 15:40-16:50 Chairs: Bodil Lund Chairs: Petter Höglund Chairs: Maria Ankarcrona Co-chair: Sumonto Mitra Co-chair: Elisabeth Epstein Co-chair: Jacob Hollenberg OP 01 - Tânia Costa: Role of collagen organization in OP 08 - Ellen Vercalsteren: The SGLT2 inhibitor OP 15- Francesca Eoli: A multiple-drug therapy cancer Empagliflozin promotes post-stroke functional benefits cognition and reduces amyloid plaques in 15:40 APPNL-G knock-in mice, in a sex-specific manner recovery in diabetic mice OP 02 - Elory Leonard: Human skin mesenchymal OP 16 - Javier Oltra: The impact of combined OP 09 - David Moulaee Conradsson: mHealth stem cells provide a unique niche for acute myeloid delivered physical activity for people post stroke or olfactory and cognitive impairments on dementia 15:50 leukemia-initiating stem cells transient ischaemic attack. Is it feasible and risk acceptable? OP 03 - Anna-Karin Welmer: Feasibility of the OP 10 - Ann Frisinger: A model for implementing Al-OP 17 - Cen Chen: Time-varying use of "Preventing functional decline in acutely systems in the clinic cholinesterase inhibitors and memantine and hospitalized older patients (PREV\_FUNC)" study - A predicted Time-varying use of cholinesterase three-armed randomized controlled pilot trial inhibitors and memantine and predicted cognitive trajectories in individuals with Alzheimer's and Mixed dementia: A real-world analysis based on OP 04 - Marion Lieberman: Follow-up of expressive OP 11 - Samsul Arefin: Reduced cardiotoxicity by OP 18 - Andrew Dwi Permana: Enhancing the language and general development at 12, 18 and 36 Prediction of Cognitive Decline by Integrating F-FDG mPGES-1 inhibition in human ex-vivo model of 16:10 months for children with no canonical babbling at PET Radiomics Features and Clinical Variables Using cancer treatment 10 months Machine Learning

17:00 →

OP 05 - Estelle Pitti: An experimental setup for

16:20 brain deformation in vacuum-assisted delivery

care setting

16:40

assessment of traction force and associated fetal

OP 07 - Rickard Strandberg: CORE: a new risk score

measuring GGT, AST, and ALT outperforms FIB-4

when predicting the risk of cirrhosis in a primary

Mingle, music, poster and core facility exhibition

hospital cardiac arrest with initial shockable rhythm

OP 12 - Daniel Andersson: The Karolinska Pilot

Cardiac Magnetic Resonance Imaging (KaPSICA-

OP 13 - Anna Witasp: Clonal hematopoiesis - a

in chronic kidney disease?

novel opportunity to target cardiovascular disease

OP 14 - Emelie Dillenbeck: The PRINCESS 2 trial: A randomized study to assess the impact of ultrafast

hypothermia on neurologic function in out-of-

CMR)

Study Comparing Invasive Coronary Angiography to

OP 19 - Ghada Nouairia: Serum based test to assist

OP 20 - Susanna Österman: Effectiveness of guided

health anxiety: a cohort study in routine psychiatric

OP 21 - Oihane Garcia-Irigoyen: Hepatocyte-specific

depletion of the corepresson GPS2 alleviates

atherosclerosis and dyslipidemia in mice

internet-based cognitive behavioural therapy for

preoperative decision making in suspected gall

bladder cancer

care

Music: Stockholms Musikpedagogiska Institut (SMI), Campus Flemingsberg

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			Friday, Nov 22 <sup>nd</sup>				
	Jan-Åke Gustafsson lecture hall		Erna Möller lecture hall		Gene lecture hall		
08:30-9:15	The microbiome in infection, protection and antibiotic treatment Chair: Malin Flodström Tullberg Co-Chair: Camilla Lagheden		Oligonucleotide therapy Chair: Joel Nordin Co-Chair: Joakim Dillner		Teaching and science in collaboration Chair: Charlotte Leanderson Co-chair: Agneta Månsson-Broberg		
08:30	Piotr Novak: The role of microbiome in chronic infections		Rula Zain: From Nucleic acid modalities to advanced therapeutics and medical products (ATMP)		Irene Sterpu: TBL in clinical disciplines (15 min)		
08:40	Nagihan Bostanci: Oral Microbiome and Immunity at the Forefront of Precision Care		<b>Tea Umek</b> : Oligonucleotide therapeutics in tandem-repeat diseases	08:45	Jonas Nordquist: From PBL to TBL (15 min)		
08:50	Viveka Nordberg: New strategies to identify virulent and multidrug-resistant bacteria in neonates in low-resource settings		Yang Liu / Maria Morello: Gene editing in sickle cell disease	09:00			
09:00-09:10	Questions and discussion		Questions and discussion		Questions and discussion (15 min)		
9:15-09:55	Oral presentations OP 22-OP 25 (Jan-Åke Gustafsson lecture hall) Chair: Jonas Fuxe Co-chair: Kajsa Bohlin		Oral presentations OP 26-OP 29 (Erna Möller lecture hall) Chair: Lars Henningsohn Co-chair: Nicole Marquardt		Oral presentations OP 30-OP 33 (Gene lecture hall) Chair: Erik Melén Co-chair: Ewa Stenwall		
O9:15	OP 22- <b>Nicole Wild:</b> Distinct Granzyme A high Natural Killer cell populations in the ileum are linked to gut inflammation		OP 26 - Aline Pfefferle: Pan-cancer profiling of tumor-infiltrating natural killer cells through transcriptional reference mapping		OP 30 - <b>Rosaleena Mohanty:</b> Differential cerebrovascular pathways associated with distinct neurodegenerative patterns in Alzheimer's diseas		
09:25	OP 23 - Zara Ahmad Khan: The mechanism of survival of pancreas tumor microbes and their ability to metabolized chemotherapy drugs		OP 27 - Caroline Eriksson: Generation and evaluation of IL-2 transgene constructs to promote autonomous NK cell persistence for improved NK		OP 31 - <b>Annegret Habich:</b> Association between gene expression and neurodegeneration in dementia with Lewy bodies		
09:35	OP 24 - <b>Kai Bao:</b> Subgingival Host-Microbial Signatures in At-Risk Children for Periodontitis		OP 28 - <b>Nutsa Burduli</b> : Genome-wide CRISPR-Cas9 screen for the elucidation of novel mediators of cytotoxicity and cytokine production in natural killer cells		OP 32 - <b>Filip Christiansen</b> : Al-driven ultrasound detection of ovarian cancer that generalizes: an international multicentre validation study		
09:45	OP 25 - <b>Fredrik Johansson</b> : Early change in Specific Depression Symptoms and Later Outcome in Internet-Delivered Psychotherapy for Depression: A Cohort Study and Cross-lagged Network Analysis		OP 29 - Mahin Ghorbani: The role of oral microbiota in mRNA-vaccine effectiveness in immunocompromised individuals – Result from the COVAXID trial		OP 33 - <b>Shivam Chandel:</b> Generation of stem cell derived islets with enhanced purity and functionality for treatment of type-1 diabetes		
0:00-10:30		Coffee	e, poster and core facility exh	ibition			
10:30-11:30	Keynote lecture: "Challenges in collaboration" with Annika R Malmberg Chairs: Matti Sällberg and Annika Bergquist (Jan-Åke Gustafsson, Erna Möller, DNA and Gene lecture hall)						
11:30	Prepardness for future pandemics Chair: Christian Molnar Co-chair: Sara Gredmark-Russ		Clinical application of tracing methods to understand disease Chair: Daniel Ferreira Co-chair: Amit Kumar		Translating Al research results into the clinic Chair: Fernando Seoane Co-chair: Farhad Abtahi		
11:30	Annika Karlsson: Current approaches at ANA Futura to prepare for future pandemics		Uwe Tietge: Metabolomics in clinical chemistry		Alireza Salehi: Standardization of Health-Related Products and Services with Testbeds and Digital Platforms Connected to Al Services and Cybersecurity		
11:40	Hans-Gustaf Ljunggren: What did we learn from COVID-19 for future pandemics?		Eric Westman: Neuroimaging biomarkers in Alzheimer's disease		Martin Jacobson & Greg Winski: Reliable predicti of intraoperative hypotension using machine learning		
11:50	Maria Cronhjort: COVID-19 pandemic - critically ill patients treatment and risc of thromboemolic manifestations		Nicolas Tardif: Stable isotope tracingand its clinical applications		Jacob Emad-Andersson: Improving HF care in Stockholm through AI-driven analysis of ECG		
12:00-12:10	Questions and discussion		Questions and discussion		Questions and discussion		
2:15 - 12:30	_ ·	CIMED D	earch Awards & Closing remandation of the Closin	iversity H			





