

# The 18th KICancer/StratCan Retreat September 16-17<sup>th</sup> 2019

## General program outline

### Monday, September 16

08.30 Departure by bus from the City Terminal, Klarabergs-viadukten, Stockholm

09.30 Arrival conference center Djurönäset, Coffee & tea

#### **09.50 – 12.20 Scientific Presentations, Plenary 1**

Chairs: Maria Kasper, Jonas Bergh,

09.50 Opening of meeting & Welcome Remarks.  
**Kamila Czene**

**Keynote Speaker**  
10.00 – 10.45 **Nicholas Turner**, The Institute of Cancer research, London UK  
*Treatment strategies to tackle breast cancer heterogeneity*

10.45 – 11.00 **Tânia D. F. Costa**, KI, Dept. of Biosciences and Nutrition  
*PAK4 suppresses RELB to prevent senescence-like growth arrest in breast cancer.*

11.00 – 11.15 **Theodoros Foukakis**, KI, Dept. of Oncology-Pathology  
*Deciphering the role of immune microenvironment in breast cancer: expressing patterns, prognostic/predictive value and therapeutic implications.*

**Invited Short Talk**  
11.15 – 11.35 **Lisa Westerberg**, KI, Dept. of Microbiology, Tumor and Cell Biology  
*Understanding cancer in immune deficiency diseases.*

11.35 – 11.50 **Jean Hausser**, University of Lausanne, Ludwig Institute for Cancer Research  
*Universal cancer tasks, evolutionary tradeoffs, and the functions of driver mutations.*

**Invited Short Talk**  
11.50 – 12.10 **Simon Ekman**, KI Dept. of Oncology-Pathology  
*Brain Metastasis in Non-Small Cell Lung Cancer - Biomarkers and Therapeutic Aspects*

12.10 – 12.20 **Photo session** (Group photo of all taken outside)

12.20 – 13.15 LUNCH

**13.15 – 16.10 Scientific Presentations, Plenary 2**

Chairs: Sonia Lain, Arne Östman

**Keynote speaker**

13.15 – 14.00 **Matthew G. Vander Heiden**, Koch Institute for Cancer Research at MIT, Massachusetts  
*Understanding metabolic limitations in cancer*

**Invited Short Talk**

14.00 – 14.20 **Seishi Ogawa**, Dep. Pathology and Tumor Biology, Institute for the Advanced Study of Human Biology (WPI-ASHBi), Kyoto University, Kyoto; KI, Dep. of Molecular Hematology,  
*On the Origin of Cancer*

14.20 – 14.35 **Irena Roci**, KI, Dept. of Medicine, Unit of Computational Medicine  
*Identifying arginase 2 as a potential cancer vulnerability in SG2M phases.*

14.35 – 14.50 **Hong Qian**, KI, Dept. of Medicine, Huddinge  
*Laminin A4 deletion leads to impaired hematopoietic regeneration following irradiation-induced injury and accelerates the progression of acute myeloid leukemia.*

14.50 – 15.20 COFFEE BREAK & CHECK IN

**Invited Short Talk**

15.20 – 15.40 **Johan Lundin**, KI, Department of Public Health Sciences  
*Machine Intelligence for Outcome Prediction in Cancer*

**Invited presentation**

15.40 – 15.55 **Marisol Soengas**, CNIO – Centro Nacional de Investigaciones Oncológicas, Madrid, Spain  
*Overview of Cancer Research at CNIO*

**Invited presentation**

15.55 – 16.10 **Harald Blegen & Jonas Bergh**  
*New Cancer organisation at KI, Updates activities Theme Cancer, progress Comprehensive Cancer Center (CCC)*

**16.35 – 17.50 Scientific Break Out Sessions I-V**

**Break out session NUMBER ONE (I) Selection from abstracts.**

**House 6, ROOM 6A 16.35 – 17.50**

**Session Title: Mechanisms of Cancer Progression**

Chairs: Lisa Westerberg, Elena Kashuba

- 16.35 – 16.50      **Ola Hermanson**, Dept. of Neuroscience  
*Bioprinting for stem cell and cancer research in 2-3-4D: new possibilities, new problems.*
- 16.50 – 17.05      **Sophia Ceder**, KI, Dept. of Oncology-Pathology  
*Disrupting redox homeostasis in cancer cells enhances efficacy of mutant p53 reactivator APR-246*
- 17.05 – 17.20      **Carlos Benitez-Buelga**, KI, Dept. of Oncology-Pathology  
*OGG1 inhibitors: a new way of exploiting DNA damage to treat cancer*
- 17.20 – 17.35      **María Victoria Ruiz-Pérez**, KI, Dept. of Microbiology, Tumor and Cell Biology  
*Fatty acid metabolism is fundamental for neuroblastoma.*
- 17.35 – 17.50      **Lena Ström**, KI, Dept. of Cell and Molecular Biology  
*Importance of the cohesion network for genome integrity, based on its role during DNA damage response and repair.*

**Break out session NUMBER TWO (II). Selection from abstracts.**

**House 3, ROOM 3A, 16.35 – 17.50**

**Session Title: Cancer Resistance and Prognosis**

Chairs: Nina Gustafsson, Kristina Viktorsson

- 16.35 – 16.50      **Muhammad Kashif**, KI, Dept. of Biosciences and Nutrition  
*Redox regulation of NRas- and BRAf-mutant malignant melanoma metastasis.*
- 16.50 – 17.05      **Madhurendra Singh**, KI, Dept. of Microbiology, Tumor and Cell Biology  
*Overcoming tamoxifen resistance in breast cancer by SULT1A1-activated compounds.*
- 17.05 – 17.20      **Shixing Zheng**, KI, Dept. of Microbiology, Tumor and Cell Biology  
*Downregulation of adipose triglyceride lipase by EBV-encoded latent membrane protein 2A is associated with aggressive tumor phenotypes and poor prognosis.*

- 17.20 – 17.35      **Lidia Moyano-Galceran**, KI, Dept. of Microbiology, Tumor and Cell  
*Adaptive RSK-EPHA2-GPRC5A signaling switch triggers chemotherapy  
resistance in ovarian cancer.*
- 17.35 – 17.50      **Benjamin Gebhard**, KI, Dept. of Oncology-Pathology  
*Profiling of small extra cellular derived vesicles from EGFR-mutant  
NSCLC cells- identification of resistance drivers and EGFR-TKI treatment  
biomarkers.*

***Break out session NUMBER THREE (III). Selection from abstracts.***

***House 3, ROOM 3E, 16.35 – 17.50***

**Session Title: Epidemiology and Translational research**

Chairs: Mattias Rantalainen, Louise Eriksson

- 16.35 – 16.50      **Felix Grassmann**, KI, Dept. of Medical Epidemiology & Biostatistics  
*X chromosome mosaicism in lymphocytes is associated with breast  
cancer risk and prognosis.*
- 16.50 – 17.05      **Mark Clements**, KI, Dept. of Medical Epidemiology & Biostatistics  
*The cost-effectiveness of prostate cancer screening using the STHLM3  
test.*
- 17.05 – 17.20      **Nicholas P. Tobin**, KI, Dept. of Oncology-Pathology  
*A pan-cancer analysis of the frequency of DNA alterations across cell  
cycle activity levels.*
- 17.20 – 17.35      **Shadi Azam**, KI, Dept. of Medical Epidemiology & Biostatistics  
*Determinants of mammographic density change.*
- 17.35 – 17.50      **Pär Sparén**, KI, Dept. of Medical Epidemiology and Biostatistics  
*Effectiveness of HPV vaccination against cervical cancer.*

***Break out session NUMBER FOUR (IV) Artificial Intelligence.***

***House4, ROOM 4A, 16.35 – 17.50***

**Session Title: Artificial Intelligence**

Chairs: Iurii Petrov, Benedek Bozoky

- 16.35 – 16.50      **Carlos Fernandez Moro**, KI, Dept. of Laboratory Medicin,  
*The dawn of AI digital pathology for cancer diagnosis - The Karolinska  
University Hospital experience*
- 16.50 – 17.05      **Nina Linder** Institute for Molecular Medicine Finland (FIMM),

University of Helsinki and International Maternal and Child Health (IMCH), Uppsala University

*AI for tissue based cancer research- where are we now?*

17.05 – 17.20 **Jonas Maaskola**, Dept. of Biochemistry and Biophysics, Stockholm University

*Diagnosis of prostate cancer heterogeneity using AI*

17.20 – 17.40 **Jan Komorowski**, Dept. of Cell and Molecular Biology, Computational Biology and Bioinformatics, Uppsala University

*Explainable Machine Learning - Answering the Question “Why do we have this prediction?”*

17.40 – 17.50 **General discussion**

***Break out session NUMBER FIVE (V) Meet the Editor***

***House 5, ROOM 5A, 16.35 – 17.50***

**Session Title: Meet the Editor**

Chairs: Boris Zhivotovsky, Per Hall

16.35 – 16.50 **Boris Zhivotovsky**, KI, Dept. Institute of Environmental Medicine  
*Editor of Cell death & Disease*

16.50 – 17.05 **Per Hall**, KI, Dept. Department of Medical Epidemiology and Biostatistics  
*AI Editor of British Journal of Cancer*

17.05 – 17.50 **Discussion and questions from the audience**

18.15 DINNER

19.30 – 20.00 Mounting of posters

20.00 – 22.00 **Poster session with discussions & mingle**

## Tuesday, September 17

07.30 – 08.45 BREAKFAST & CHECK OUT

### **09.00 – 11.50 Scientific Presentations, Plenary 3**

Chairs: Bertrand Joseph, Kamila Czene

#### **Keynote Speaker**

09.00 – 09.45 **Marisol Soengas**, CNIO – Centro Nacional de Investigaciones Oncológicas, Madrid, Spain  
*MetAlert mice: a platform for whole-body imaging and pharmacological targeting of metastatic niches.*

#### **Invited Short Talk**

09.45 – 10.05 **Mattias Carlsten**, KI, Dept. of Medicine, Huddinge  
*NK cell immunotherapy against AML and MDS – Can outcomes be further improved by modulation of homing?*

10.05 – 10.20 **Alessandro Mega**, KI, Department of Oncology-Pathology  
*The astrocyte-driven enhancement of glioblastoma growth as a therapeutic target.*

10.20 - 10.50 COFFEE BREAK

#### **Invited Short Talk**

10.50 - 11.10 **Linda Lindström** KI, Dept. of Biosciences and Nutrition  
*The importance of tumor characteristics and benefit from treatment on the long-term risk of fatal breast cancer*

#### **Invited Short Talk**

11.10 – 11.30 **Johanna Ungerstedt**, KI, Dept. of Medicine  
*Chronic myelomonocytic leukemia (CMML) as a model disease for understanding the consequences of TET2 mutation*

#### **Invited Short Talk**

11.30 – 11.50 **Päivi Östling**, KI, Dept. of Oncology-Pathology  
*Functional Precision Cancer Medicine - Beyond Genomics*

11.50 – 12.50 LUNCH

### **12.50 – 14.00 Scientific Presentations, Plenary 4**

Chairs: Marie Arsenian Henriksson, Nick Tobin

12.50 – 13.05      **Yinxi Wang**, KI, Dept. of Medical Epidemiology and Biostatistics  
*Improving breast cancer histologic grading using deep learning.*

#### **Invited Short Talk**

13.05 – 13.25      **Magnus Nilsson**, KI, Dept. of Clinical Science, Intervention and  
Technology  
*Clinical trials in esophageal cancer in an expanding Scandinavian  
multicenter trial network*

13.25 – 13:40      **Stina Wickström**, KI, Dept. of Oncology-Pathology  
*Adoptive cell transfer combined with DC vaccination in patients with  
metastatic melanoma.*

#### **Invited Short Talk**

13.40 – 14.00      **Lars Eriksson**, KI, Dept. of Learning, Informatics, Management and  
Ethics; Karolinska University Hospital, Department of Infectious  
Diseases; City, University of London, School of Health Sciences.  
*Patient-reported early symptoms and sensations in lung cancer*

14.00 – 14.30      COFFEE BREAK

### **14.30 – 15.15 Scientific Presentations, Plenary 5**

Chairs: Helene Rundqvist, Ingemar Ernberg

#### **Invited Short talk**

14.30 – 14.50      **Maria Kasper**, KI, Dept. of Biosciences and Nutrition  
*Developmental Biology meets Tumor Biology*

14.50 – 15.05      **Shi Yong Neo**, KI, Dept. of Oncology-Pathology  
*CD73 immune checkpoint defines inducible regulatory NK cells in the  
tumor microenvironment.*

#### **Invited Short talk**

15.05 – 15.25      **Per Hall**, KI, Dept. of Medical Epidemiology and Biostatistics,  
*The latest evidence from current practice on breast cancer prevention*

15.25- 15.40      **Poster prizes**  
Ingemar Ernberg

15.40- -15.45	<b>Closing of the meeting</b> Kamila Czene
16.00	<b>Bus departure</b>
17.00 appr	Arrival Stockholm City Terminal