A quest towards curing childhood cancer by pinpointing better molecular biomarkers

Every year around 300 children get cancer in Sweden. Some get cancer because of genetic causes, others get cancer because of factors in their surrounding nature, while some seem to get cancer because of a combination of genetic and environmental factors. A better understanding of how cancer develops can help us to find individual cares/cures for every patient. Biomarkers will help us identify cancer in an early stage as well as the exact nature of the cancer. Extracellular vesicles and better identification of immune cells for immunotherapy will also improve therapies of cancer in the future. **Organizer: Sofia Johansson and Maria Lindqvist**

**Number of participants:** 60  
**Date and Place:** 8/5-9/5-2017. Kungliga Myntkabinettet, hörsalen  
**Registration:** Register before 4/5-2017 by sending the organizer Sofia Johansson (Sofia.e.Johansson@ki.se) a mail and cc it to Maria Lindqvist at (Maria.lindqvist@ki.se or lindqvist_mariapia@yahoo.com). Please mention if you are bringing along a poster and if you want lunch. Please mention if you have some specific food allergy

**Program**  
**Day 1**  
8:30-9.00 Registration  
9.00-9.10 Welcoming address  
9.10-9.50 Systems Medicine in Oncology: Signaling Network Modeling and New - Generation Decision-Support Systems, Silvio Parodi, University of Genoa, Italy  
9.50-10.20 Receptor dynamics as markers of efficient Natural Killer cells, Sofia Johansson, Karolinska Institutet, Stockholm, Sweden  
10.20-10.50 Coffee  
10.50-11.20 Better cancer treatment by studying singel tumour cells, Joakim Lundeberg, Science for Life Laboratory, Stockholm, Sweden  
11.20-11.50 Precise CRISPR/Cas9 mediated genome editing opening new doors, Anja Martinez, Thermofisher  
11.50-12.20 Using exosomes for cancer immunotherapy and biomarkers Susanne Gabrielsson, Karolinska Institutet, Stockholm, Sweden  
12.20-13.20 Lunch  
13.20-13.50 SOX5/6/21 transcription factors prevent oncogene-driven transformation of brain stem cells, Idha Kursdotter, Karolinska Institutet, Stockholm, Sweden  
13.50-14.20 Mass Spectrometry Cancer diagnostic strategies used in early discovery and clinical research, Ingvar Betner, Waters Sverige AB  
14.20-14.50 Coffee  
14.50-15.20 Epigenetics paves the way for new treatment of pediatric Acute Myeloid Leukemia, Andreas Lennartsson, Karolinska Institutet, Stockholm, Sweden  
15.20-15.50 Targeting the invasive niche in brain tumors, Karin Forsberg Nilsson, Uppsala University, Uppsala, Sweden  
15.50-16.50 Discussion and mingle with the speakers
Day 2
9.00-9.30 Coffee
9.30-10.00 Analysis tools for coding and non-coding RNA in cancer research, Björn Rosen, thermofisher.
10.00-10.30 Droplet Digital™ PCR, Liquid Biopsies and Cancer, Eddy van Collenburg, Bio-Rad.
10.30-11.00 Epigenetics as a tool in studying different diseases, Maria Lindqvist, Karolinska Institutet, Stockholm, Sweden
11.00-11.30 Boost Brittle Bones Before Birth (BOOSTB4), Cecilia Götherström, Karolinska Institutet, Stockholm, Sweden
11.30-12.30 Lunch
12.30-13.00 SPR based protein interaction studies in basic science and drug development, Ewa Pol, GE Healthcare
13.00-13.30 PDGF receptors as biomarkers and therapeutic targets, Monika Ehnman, Karolinska Institutet, Stockholm, Sweden
13.30-14.00 Coffee
14.00-14.30 Network analysis of patients' molecular data for tumor classification and biomarker discovery, Andrey Alexeyenko, Karolinska Institute, Stockholm, Sweden
14.30-15.00 Targeting E3 ubiquitin ligases to restore treatment sensitivity in leukaemia, Alena Malyukova, Karolinska Institutet, Stockholm, Sweden
15.30-16.00 Omics analysis for cancer research, Cristina Al-Khalili, Royal school of Technology, Stockholm, Sweden
16.00-17.00 Poster session and Discussion Panel with the speakers
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