

28th KWF Cancer Biology meeting 2019

Hotel 'de Werelt' Lunteren

Tuesday November 19th, 2019

09.00 **Registration and coffee**

10.00 **Opening** *Marcel Spaargaren, Chair*

Session I: Target & therapy discovery I

Chairs: Linda Smit and Frank van Leeuwen

10.15 **The RECQL helicase prevents replication fork collapse during replication stress**

Bente Benedict, The Netherlands Cancer Institute, Amsterdam

10.30 **TLR-controlled aberrant expression of HCK has prognostic value and is a therapeutic target in mantle cell lymphoma**

Hildo Lantermans, Cancer Center Amsterdam, Amsterdam UMC (AMC) and LYMMCARE

10.45 **Bugs as drugs to target the tumour microenvironment**

Alexandra Mowday, Precision Medicine, GROW, Maastricht University

11.00 **Manipulating pro-survival protein MCL-1 for treatment of multiple myeloma**

Victor Peperzak, UMC Utrecht

11.15 **Coffee/Tea**

Session II: Target & therapy discovery II

Chairs: Esther Hulleman and Michiel Pegtel

- 11.45** **Genome wide screens for senescence inducers: using a suicide switch to deplete unwanted populations**
Arnout Schepers, The Netherlands Cancer Institute, Amsterdam
- 12.00** **Pharmacological Inhibition of Heat Shock Protein 90 Promotes the Effects of Mild Hyperthermia-Based Anti-Cancer Therapies**
Enzo Scutigliani, Amsterdam UMC (AMC)
- 12.15** **Integrating phenotypic search and phosphoproteomic profiling of active kinases for optimization of drug mixtures for renal cell carcinoma treatment**
Judy van Beijnum, Amsterdam UMC (VUmc)
- 12.30** **IGFBP7 activates the retinoid acid-induced differentiation pathway in acute myeloid leukemia by reducing GFI1**
Noortje van Gils, Amsterdam UMC, location VUmc, Cancer Center Amsterdam
- 12.45** **FTO-mediated RNA demethylation promotes breast cancer growth and migration**
Hidde Zuidhof, ERIBA, UMC Groningen, University of Groningen
- 13.00** **Lunch and poster pre-viewing (at 14.00 hr: meeting project leaders)**
- 14.30** **Invited lecture**
Control of cell migration by dynamic microtubules
Anna Akhmanova, Cell Biology, Faculty of Science, Utrecht University

Session III: Cancer metabolism

Chairs: Jeroen Guikema and Maria Rodriguez Colman

- 15.15 **Metabolic remodelling boosts 5-FU response in heterogeneous colorectal tumour organoids**
Marlies Ludikhuize, UMC Utrecht
- 15.30 **Suppression of sAC leads to a Warburg-phenotype that confers resistance to oxidative stress-induced apoptosis**
Jung-Chin Chang, Tytgat Institute for Liver and Intestinal Research, Amsterdam UMC (AMC)
- 15.45 **A screening approach to target the non-canonical role of FANCA in cellular metabolism**
Amr Zaini, Amsterdam UMC (VUmc)
- 16.00 **Coffee/Tea**

Session IV: Cancer Biology I

Chairs: Ed Schuurin and Ruben van Boxtel

- 16.30 **Mutational signatures of defective base excision repair in hereditary polyposis and colorectal cancer**
Judith Grolleman, Radboudumc, Nijmegen
- 16.45 **Increased mutation accumulation during fetal development in Down syndrome**
Karlijn Hasaart, Princess Maxima Center for Pediatric Oncology and OncoCode Institute

- 17.00 **Using plasma membrane markers to detect clonal heterogeneity and track disease progression in acute myeloid leukemia**
Roos Houtsma, CRCG, UMC Groningen, University of Groningen
- 17.15 **Functional and molecular characterisation of prospectively isolated subclones in individual acute myeloid leukaemia patients**
Shanna Hogeling, CRCG, UMC Groningen, University of Groningen
- 17.30 **Misoriented cell divisions in the initiation of Diffuse Gastric Cancer**
Jooske Monster, CMM, UMC Utrecht
- 17.45 **KWF presentation**
Nora Liu
- 18.00 **Dinner**
- 20.00 **Keynote Lecture**

Regenerative landscape of intestinal organoids

Prisca Liberali

Friedrich Miescher Institute for Biomedical Research, Basel, Switzerland
- 21.00 **Posters and Laptops**
- 22.00 **Disco** (sponsored by BIOKÉ) and drinks

Wednesday November 20th, 2019

Session V: Cancer biology II

Chairs: Roland Kuiper and JJ Schuringa

- 09.00 CIP2A-mediated regulation of senescence and immune cell landscape in basal-like breast cancer**
Anni Laine, Oncode Institute, Netherlands Cancer Institute, Amsterdam
- 09.15 SOX4 is required for maintaining stem cell identity in mammary tumors**
Guy Roukens, UMC Utrecht
- 09.30 A germline variant affecting p53 β isoforms predisposes to various familial cancers**
Stephanie Schubert, Leiden UMC
- 09.45 Linear ubiquitin-mediated regulation of Wnt signaling**
Maureen Spit, Leiden UMC and & UCL Cancer Institute, London, UK
- 10.00 Paused transcription, a novel TS-miR-139 silencing mechanism downstream of MLL-AF9 in acute myeloid leukemia**
Christiaan Stavast, Erasmus UMC, Rotterdam
- 10.15 An immature subset of neuroblastoma cells synthesizes retinoic acid and is resistant to treatment with this metabolite**
Johan van Nes, Amsterdam UMC (AMC)
- 10.30 Coffee/Tea**

Session VI: Cancer Immunology

Chairs: Zsolt Sebestyen and Annemiek van Sriel

- 11.00** **Systemic expansion of pro-metastatic neutrophils is enhanced by MET amplification in breast cancer**
Danique Duits, Oncode Institute, Netherlands Cancer Institute, Amsterdam
- 11.15** **Galectin-9 is required for dendritic cell function and directly contributes to DC-mediated anti-tumour immunity**
Laia Querol Cano, -Radboud Institute for Molecular Life Sciences. Nijmegen
- 11.30** **Gamma delta T cell receptors for cancer immune therapy: Identification of a tumor-specific allo-HLA-restricted gamma delta TCR**
Zsolt Sebestyen, UMC Utrecht
- 11.45** **Neoantigen-specific T cell responses in low mutation burden colorectal cancers of the CMS4 subtype**
Jitske van den Bulk, Leiden UMC
- 12.00** **BIOKÉ presentation:**
Sriram Aravamudhan
The link between CST Pathways and the Hallmarks of Cancer
- 12.15** **Lunch**

13.15 **Invited Lecture**
Stem cell dynamics in cancer of the gut
Louis Vermeulen, Amsterdam UMC

Session VII: DNA damage & repair

Chairs: Alain de Bruin and Alfred Vertegaal

14.00 **WAPL-dependent repair of damaged replication forks underlies oncogene-induced loss of sister chromatid cohesion**
Job de Lange, Cancer Center Amsterdam, Amsterdam UMC (VUmc)

14.15 **Uncovering Global Non-Covalent SUMO Binder Networks Reveals that Sumoylation is Essential for Non Homologous End Joining**
Román González-Prieto, Leiden UMC

14.30 **Coffee/Tea**

Session VII: DNA damage & repair (continued)

15.00 **Studying CRISPR/Cas9-mediated chromosomal break repair to reveal the origin of break-induced carcinogenesis**
Joost Schimmel, Leiden UMC

15.15 **Heterogenous DNA damage response allows escape from replication stress-inducing drugs**
Jet Segeren, Utrecht University

15.30 **Inhibition of PARP sensitizes chondrosarcoma cell lines to chemo- and radiotherapy irrespective of the IDH1 or IDH2 mutation status**

Sanne Venneker, Leiden UMC

15.45 **Best presentation awards and closure**