

Tumor Cell Biology meeting 2013

Wednesday November 6, 2013

Hotel 'de Werelt' Lunteren

9.00 hr: Registration and coffee

10.00 Welcome by Frank van Leeuwen, RadboudUMC, Nijmegen

Session I: Gene regulation and Genome organization

*Chairs: Wouter de Laat, Hubrecht Instituut, Utrecht
Boudewijn Burgering, UMC Utrecht, Utrecht*

10.15 The adhesion protein CCM1 acts as a transcriptional co-regulator for FOXO
Maaike van den Berg, UMC Utrecht, Utrecht

10.30 Genomic rearrangements and promoter demethylation drive therapy resistance in patient-derived xenograft models of BRCA1-deficient breast cancer
Petra ter Brugge, NKI-AvL, Amsterdam

10.45 Germline mutations in the spindle assembly checkpoint genes BUB1 and BUB3 are risk factors for colorectal cancer
Richarda de Voer, RadboudUMC, Nijmegen

11.00 Novel strategies to map the linear and spatial genome in health and disease
Wouter de Laat, Hubrecht Instituut, Utrecht

11.15 **Coffee Break**

Session II: Tumor-immunology and microenvironment

*Chairs: Karin de Visser, NKI-AvL, Amsterdam
Richard Groen, UMC Utrecht, Utrecht*

- 11.45 Reconstructing the human hematopoietic niche: opportunities for studying normal and malignant hematopoiesis
Richard Groen, UMC Utrecht, Utrecht
- 12.00 Disregulated osteogenesis by mesenchymal stromal cells (MSC) after in vivo exposure to multiple myeloma: studies in a novel humanized mouse model for bone remodeling in myeloma
Jessica Sigmans, UMC Utrecht, Utrecht
- 12.15 The clinically active inhibitors of BTK (Ibrutinib) and PI3K.. (Idelalisib) inhibit B cell antigen receptor-controlled adhesion of mantle cell lymphoma cells in a synergistic manner
Martin de Rooij, AMC, Amsterdam
- 12.30 Macrophages in the microenvironment of chronic lymphocytic leukemia confer a survival effect by changing the apoptotic balance
Martijn van Attekum, AMC, Amsterdam
- 12.45 Effect of tumor derived proteins on macrophage effector functions
R. Braster, VUMC, Amsterdam
- 13.00 **LUNCH**
- 14.00 Meeting of the project leaders
- 14.30 **KWF presentation**
Research policy of KWF Kankerbestrijding
Miranda Kleijn, KWF
- 14.45 **Invited Lecture:**
“The unfolded protein response regulates intestinal epithelial stem cell differentiation”
Gijs van den Brink, AMC, Amsterdam

Session III: Invasion and metastasis

*Chairs: Frank Kruyt, UMCG, Groningen
Jeroen Middelbeek, RadboudUMC, Nijmegen*

- 15.30 CCL2 promotes breast cancer metastasis to the lung by local suppression of T cell activity
Kelly Kersten, NKI-AvL, Amsterdam
- 15.45 Targeting cytoskeletal dynamics to stabilize neuroblastoma progression
Jeroen Middelbeek, RadboudUMC, Nijmegen
- 16.00 **Coffee/Tea**
- 16.30 Loss of p120-catenin induces metastatic progression of breast cancer by inducing anoikis resistance and augmenting growth factor receptor signalling
Ron Schackmann, UMC Utrecht, Utrecht
- 16.45 Anchorage independence of E-cadherin deficient breast cancer is controlled by inhibition of FOXO3-dependent BMF expression
M. Tenhagen, Erasmus MC, Rotterdam
- 17.00 Galectin-4 reduces migration and metastasis formation of pancreatic cancer cells
Ana Belo, VUMC, Amsterdam
- 17.15 TGF beta enhances mesenchymal shift and infiltration in glioblastoma in a ZEB1 dependent manner
Justin Joseph, UMCG, Groningen
- 17.30 The unwanted side effects of TRAIL signaling: How can a death signal trigger metastasis in NSCLC?
Birgit Weyhenmeyer, UMCG, Groningen
- 17.45 **BIOKÉ presentation**
Edward Verwayen: no title
- 18.00 **DINNER**

20.00 **KEYNOTE LECTURE:**

"Cancer and metastasis stem cells".

Dr. Andreas Trumpp, Institute for stem cell technology and experimental medicine, German Cancer Research Center (DKFZ), Heidelberg, Germany

21.00 **DISCO (SPONSORED BY BIOKE) AND BAR**

Thursday November 7, 2013

Session IV: Stress, DNA damage and Apoptosis

*Chairs: Aart Jochemsen, LUMC, Leiden
Frank de Gruijl, LUMC, Leiden*

- 9.00 The autophagy associated gene, ULK1, promotes tolerance to chronic and acute hypoxia
Marco Schaaf, UMC Maastricht, Maastricht
- 9.15 Loss of tumor suppressor BTG1 enhances ATF4 function and promotes cell survival
Laurens van der Meer, RadboudUMC, Nijmegen
- 9.30 The role of the gerontogene FOXO in regulating genomic stability
B. Burgering, UMC Utrecht, Utrecht
- 9.45 PARP inhibitor resistance in BRCA1 deficient cells caused by Rev7 depletion
Inger Brandsma, Erasmus MC, Rotterdam
- 10.00 CLL development is accelerated in mice deficient for pro-apoptotic regulator noxa
E. Slinger, AMC, Amsterdam
- 10.15 Granzyme M targets topoisomerase II alpha to trigger cell cycle arrest and caspasedependent apoptosis in cancer cells
Stefanie de Poot, UMC Utrecht, Utrecht
- 10.30 **Coffee/Tea**

Session V: Stem cells

*Chairs: Annemarie Cleton-Jansen, LUMC, Leiden
Ricardo Fodde, Erasmus MC, Rotterdam*

- 10.30 Wnt/ β -catenin signaling is active in osteosarcoma stem cells
Sara Martins-Neves, LUMC, Leiden
- 10.45 Quiescent stem cells in skin accumulate cyclobutane pyrimidine dimers under low level UV exposure, giving rise to carcinomas upon TPA tumor promotion
G. van de Glind, LUMC, Leiden
- 11.00 Multi-tasking Paneth(-like) cells: quiescent cancer stem cells, niche factors, and colon cancer susceptibility modifiers
Matthias Schewe, Erasmus MC, Rotterdam
- 11.15 CD44v is part of the intestinal stem cells signature and has an instrumental role in tumorigenesis
Sander Joosten, AMC, Amsterdam
- 11.30 R-spondin-3 is a potent oncogene driving the development of invasive mammary tumors and hyperplasias in the skin and intestine
Elvira Bakker, NKI-AvL, Amsterdam
- 12.15 **LUNCH**
- 13.15 **Invited lecture**
- “When two is better than one: functional genomics to guide effective combination therapy”
Dr. Roderick Beijersbergen, NKI-AVL, Amsterdam

Session VI: Therapy(-resistance) + Tetraspanin

*Chairs: Annemiek van Spriel, RadboudUMC, Nijmegen
Pieter van der Velden, LUMC, Leiden*

- 14.00 IDH1 mutations in glioblastoma decrease NADPH production capacity, which is associated with cellular sensitization for irradiation
R. Molenaar, AMC, Amsterdam

- 14.15 Use of xenografts for preclinical drug testing
Mark de Lange, Erasmus MC, Rotterdam
- 14.30 Neuroblastoma contains a dedifferentiated subpopulation with mesenchymal identity that can be induced by notch signaling and is inherently resistant to therapy
Johan van Nes, AMC, Amsterdam
- 14.45 **COFFEE**
- 15.15 In vivo insertional mutagenesis to discover novel tumor promoting genes of invasive lobular carcinoma
Sjors Kas, NKI-AvL, Amsterdam
- 15.30 Deficiency of the tetraspanin CD37 promotes spontaneous development of IgA+ B cell lymphoma by the IL-6 pathway
A. van Spriel, RadboudUMC, Nijmegen
- 15.45 Best presentation award and closure