



# PROGRAMME BIOME

GRADUATE SCHOOL OF BIOMEDICAL SCIENCE  
UNIVERSITY OF DUISBURG-ESSEN

ANNUAL RETREAT 2012  
CELLULAR & MOLECULAR IMMUNOLOGY  
AND TUMOUR & SIGNALLING

12-13 November 2012

Akademie Klausenhof, Klausenhofstraße 100, 46499  
Hamminkeln, Germany



**ANNUAL RETREAT 2012: BIOME CORES IMMUNOLOGY AND TUMOUR**

**Monday 12 November 2012**

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08.00 Bus Transfer from Universitätsklinikum Essen to Hamminkeln  
Meeting Point: Robert-Koch-Haus, Virchowstr. 179

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10.00-10.15 *Welcoming Address*  
Prof. Dr. Sven Brandau  
Vice-Chairman, Graduate School of Biomedical Science, University of Duisburg-Essen

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**FIRST SESSION**

Chaired by Britta Unruhe and Nico Ullrich

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10.15-11.00 Prof. Dr. Sebastian Wesselborg: **Identification of a novel apoptosis signalling pathway for the elimination of anticancer drug resistant tumour cells**  
Institute for Molecular Medicine, University of Düsseldorf

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11.00-11.30 B R E A K

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Graduate Presentations

11.30-11.45 Stefanie Rost: **Abundance of a NOTCH1 mutated clone affects clinical outcome of patients with chronic lymphocytic leukemia**

11.45-12.00 Kathrin Fielitz: **The JARID1C histone demethylase is upregulated in aggressive neuroblastomas independent of MYCN amplification**

12.00-12.15 Jolanthe Baingo: **The influence of senescence on the immunogenicity of malignant melanoma cells**

12.15-12.30 Lina Spaan: **Transfection of melanoma cells by viral RNA mimetics enhances their T-cell sensitivity**

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12.30-14.00 L U N C H

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**SECOND SESSION**

Chaired by Stefan Radtke and Ilseyar Akhmetzyanova

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14.00-14.45 Prof. Dr. Matthias Gunzer: **Intravital 2-photon microscopy to investigate immune cell function**  
Institute for Experimental Immunology and Imaging, University of Duisburg-Essen

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Graduate Presentations

14.45-15.00 Eloho Etemire: **Functional role for defective PI3K signaling and differing co-stimulatory activity of APCs in T-cell plasticity**

15.00-15.15 Munisch Wadwa: **Induction of intestinal tolerance by antigen-targeting of DEC-205 on gut dendritic cells**

15.15-15.30 Britta Kraczyk: **Regulatory T cells in humans: improvement of T cell suppression by highly purified Treg and Teff cells**

15.30-15.45 Anita Hollenbeck: **Mice with thymic epithelial Vhl deletion are lacking a functional thymus**

(End of Second Session)

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15.45-16.15 B R E A K (in cafeteria)

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16.15-17.45 Graduate Poster Walk with Keynote Speakers and Scientific Coordinators  
(1<sup>st</sup> Session)

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17.45 B U F F E T W I T H D R I N K S A N D S N A C K S

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17.45-19.15 Graduate Poster Walk with Keynote Speakers and Scientific Coordinators  
(2<sup>nd</sup> Session)

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19.30 D I N N E R

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21.00 C O N V I V I A L M E E T - T H E - E X P E R T R O U N D

Division into structured groups for relaxed discussion with keynote speakers in cellar pub

Later: Billiards, bowling and table soccer

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**Tuesday 13 November 2012**

**THIRD SESSION**

Chaired by Stefanie Rost and Kathrin Hänschke

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09.30-10.15 Prof. Dr. Christoph Plass: **Epigenetic alterations of miRNAs in chronic lymphocytic leukemia**  
German Cancer Research Center, Heidelberg

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Graduate Presentations

10.15-10.30 Stefan Radtke: **Establishment of an extended *in vitro* assay to analyse the developmental potential of the most primitive human hematopoietic cells at a clonal level**

10.30-10.45 Lena Kunst: **Assessing the role of the protease Taspase1 for the molecular function of Myosin1f**

10.45-11.00 Melanie Zuk: **Reprogramming cells of the nonhuman primate common marmoset towards pluripotency**

11.00-11.15 Federica Cappuccini: **Immunomodulation during DNA damage-induced pneumopathy**

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11.15-11.45 B R E A K

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## FOURTH SESSION

Chaired by Christine Thöns and Tim Wehrs

### Graduate Presentations

11.45-12.00 Susanne Ziegler: **Presence of primary human hepatocytes inhibits expansion of virus-specific CD8+ T cells *in vitro***

12.00-12.15 Katrin Moses: **Expansion and function of granulocytic cells during development and progression of head and neck cancer**

12.15-12.30 Ilseyar Akhmetzyanova: **Tumor-specific CD4<sup>+</sup> T cells develop cytotoxic activity and eliminate virus-induced tumor cells in the absence of regulatory T cells**

12.30-13.30 L U N C H

13.30-14.15 Dr. Gerty Schreibelt: **Dendritic cell-based immunotherapy of cancer**  
Nijmegen Centre for Molecular Life Sciences, Radboud University Nijmegen

### Forum of Ideas

14.15-15.00 B R E A K (in cafeteria)

Graduate – Coordinator Resonance and Brainstorming Session  
This is everybody's chance to share impulses, exchange views and discuss issues in the graduate school

### Head-Clearing Excursion

15.15-16.15 E X H I B I T I O N O F C O N T E M P O R A R Y A R T

Derik-Baegert-Gesellschaft e.V., Schloss Ringenberg, Schloss Strasse 8, Hamminkeln 46499

Guided tour of the Derik Baegert Society's current scholarship holders' exhibition of contemporary German/Dutch art and the studios of artists in residence at Ringenberg Castle, Hamminkeln

Scholarship Holders: **Felix Burger, Frauke Dannert, Eva Olthof, Jessica Twitchell, Jonathan van Doornum and Sebastian Walther**

16.15-17.15 R E C E P T I O N

Lounge J, Schloss Ringenberg, Schloss Strasse 8, Hamminkeln 46499

*Award Ceremony*  
Best Graduate Poster and Presentation Prize Awards

*Closing Address*  
Prof. Dr. Elke Winterhager  
Scientific Coordinator of Tumour and Signalling

17.15-18.30 Bus transfer back to Essen

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## GRADUATE POSTER PRESENTATIONS WITH KEYNOTE SPEAKERS

Monday Evening, 12 November 2012

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Three-minute, individual oral poster presentations per participant per session to be heard by a selection panel for the poster prize

### FIRST POSTER WALK

Gabriele Büchel: **Impact of neuroblastoma TrkB target Galectin-1 on immune effector cells**

Chiranjeevi Chebrolu: **Cold storage and heat shock induced hepatocyte damage *in vitro*: analysis of macrophage stimulatory capacity**

Corinna Göbel: **Identification and molecular characterization of resistance mechanisms against cellular immune effectors to optimize cancer immunotherapies**

Kathrin Hänschke: **Hematopoiesis-specific deletion of the *von Hippel Lindau* gene alters B-lymphopoiesis *in vivo***

Judith Hönes: **Role of Gfi1 level in leukemia**

Stephanie Kaiser: **TFAP2c dependent trophoblast lineage differentiation during placental development**

Hadi Karimzadeh: **Immune evasion of hepatitis delta from CD8<sup>+</sup> T cell immune response**

Johanna Klein: **Differential effects of synthetic toll-like-receptor (TLR) 3 versus TLR7 ligands on the induction of cell death in head and neck squamous cell carcinoma**

Susanne Mertins: **Contribution of vascular wall-resident progenitor cells (VW-EPCs) to tumor vascularization**

Lars Michel: **A variant allele of Growth Factor Independence 1 (Gfi1) predisposes to myelodysplastic syndromes and promotes its progression to acute myeloid leukemia**

Dominik Schöne: **Identification of CD8<sup>+</sup> T cell epitopes in adenovirus capsid proteins and analysis of immunodominance hierarchies of adenovirus versus transgene epitopes in adenoviral vector-based immunization**

### SECOND POSTER WALK

Schweigle, Stefanie: **Molecular analysis of human memory B cell subsets**

Melanie Schwermer: **Targeting Cyclin B1 causes p53 mediated cell death in neuroblastoma cell lines**

Pegah Seddigh: **The human pathogenic fungus *A. fumigatus***

Kristin Stolp: **Reprogramming human somatic cells towards pluripotency and their differentiation to hematopoietic stem and progenitor cells**

Roman Tatura: **Potential induction of regulatory T cells by 5-Aza-2'-deoxycytidine and EGCG from non-regulatory T cells**

Christine Thöns: **HCV seronegative injection drug users are characterized by higher frequencies of KIR2DL3<sup>+</sup> and NKG2A<sup>-</sup> NK cells**

Nico Ullrich: **Functional analysis of CEACAM1 isoforms in malignant melanoma**

Britta Unruhe: **Regulation of the function and localization of surviving by acetylation**

Tim Wehrs: **Prevalence and functionality of virus-specific T cells after enrichment and expansion: A comparison between CMV- and HPV-specific cells for adoptive transfer**

Amos Zeller: **Gfi1b – A key player in the genesis and maintenance of AML and MDS**

Meike Kaulfuß: **Influence of anti-adenovirus immunity on adenovirus-based immunization**

## ACKNOWLEDGEMENTS



*Dingdener Heath, Hamminkeln. (Photo source: www.fotocommunity.de)*

We are deeply indebted to the Kulturstiftung Essen for their kind and generous support grant towards this particular annual scientific retreat. The event simply would not have been able to take place without this foundation's approval and unhesitant financial backing.



Our gratitude is also to be extended to our highly esteemed keynote speakers, Sebastian Wesselborg, Matthias Gunzer, Christoph Plass and Gerty Schreibelt, for finding the time to join us to share their expert knowledge and ideas with us during this retreat.

We greatly appreciate Gudrun Bott's willing agreement to allow us to visit and to guide us through the art exhibition and studios of the Derik-Baegert-Gesellschaft e.V. at Schloss Ringenberg, Hamminkeln.

We would like to thank the scientific coordinators for their consistent dedication and commitment in organising the core lecture series, graduate seminars and annual events. These efforts are deeply appreciated. Special thanks go to Jan Buer, Sven Brandau, Hannes Klump and Joachim Göthert for their munificent donations towards the two graduate prizes, and to Elke Winterhager for her exceptional engagement in developing numerous aspects of the school's educational programme.

To our BIOME graduates:

It has been a great pleasure to create this network with you and to accompany your development into well-trained, highly competent young researchers. Keep the good work up!