



1st BIOME Virtual Retreat - Cellular and Molecular Immunology/Infectious Diseases/Tumour and Signalling


18-20.11.2020

Time: 08:00-12:30 daily

PROGRAMME

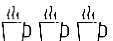

BIOME Retreat 2020 - 4 minutes for each doctoral talk, 2 minutes for discussion, 2 minutes to change ZOOM presentations

WEDNESDAY, 18.11.2020 **SC Hosts: Wiebke Hansen, Kathrin Sutter, Alexandra Gellhaus**

08:00 – 08:10	Delia Cosgrove	Opening words
<hr/>		
SESSION 1a	<u>Infectious Diseases</u>	Chair: Fabienne Maaßen (Discussion: Schefczyk, Baumann, van de Sand, Span)
08:10 – 08:18	Gwenllian Appeltrath	Comparative analysis of the SARS-CoV-2-specific antibody response in healthy and HIV-infected individuals
08:18 – 08:26	Maren Bormann	Neutralisation of SARS-CoV-2 in cell culture
08:26 – 08:34	Zehra Karaköse	Regulation of the induction of IFN α subtypes during HIV infection
08:34 – 08:42	Daniela Mittermüller	<i>In vivo</i> imaging of CTL-Treg interaction in Friend virus infection
08:42 – 08:50	Antonia Luise Beyerlein	Mucosal-associated T cells in patients with acquired immunodeficiency
<hr/>		
SESSION 1b	<u>Infectious Diseases</u>	Chair: Jaana Westmeier (Discussion: Podschwadt, Schuhenn, Karutz, Bormann)
08:50 – 08:58	Charleen Baumann	Determination of an immune response against the VZV antigen in immunodeficient patients
08:58 – 09:06	Yaojie Liang	Molecular mechanisms of HBsAg-induced hepatocarcinogenesis
09:06 – 09:14	Michael Span	Comparison of the immune responses to various Corona viruses in human sera and their evaluation in the mouse model
09:14 – 09:22	Lukas van de Sand	Characterisation of the human immune reaction to a herpes simplex virus-2 infection
09:22 – 09:30	Jil Karutz	Hypoxia-inducible gene expression in human leukocytes
<hr/>		
09:30 – 09:45		BREAK
<hr/>		
SESSION 2a	<u>Tumour & Signalling</u>	Chair: Oliver Dräger (Discussion: Miroshnikov, Tüns, Yang, Egetemaier)
09:45 – 09:53	Karim Al-Ghazzawi	Identification of new biomarkers for rare isolated orbital inflammation for therapeutical advance
09:53 – 10:01	Lars Mohren	Development of a nanoparticle-based therapy approach for chemoresistant retinoblastoma

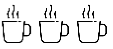
WEDNESDAY, 18.11.2020

PROGRAMME

10:01 – 10:09	Lina Marie Hoffmeister	Functional significance of molecular mutations in pediatric acute myeloid leukemia
10:09 – 10:17	Yu-An Lin	The role of angiogenesis and macrophages in acute myeloid leukemia
10:17 – 10:25	Michael Schmeling	Mechanisms and prognostic value of the osteoblast inhibition by acute myeloid leukemia
10:25 – 10:33	Redouan Akabbal	Patient-derived preclinical models for early stage lung cancer
SESSION 2b	<u>Tumour & Signalling</u>	Chair: Alicia Tüns (Discussion: Hoffmeister, Ho, Peiffer, Schmeling, Wossidlo)
10:33 – 10:41	Nina Buß	The impact of CLK inhibitors on splicing and RNA autophagy in uveal melanoma cells and pancreatic ductal adenocarcinoma cells
10:41 – 10:49	Julian Heidenreich	Evaluation of the regulation of a miRNA cluster involved in metastasis of BAP1 in renal cell carcinoma
10:49 – 10:57	Aichatou Kondo Ados	Establishing a platform for the identification of effective drugs in <i>ex-vivo</i> models in pancreatic cancer
10:57 – 11:05	Carolin Salmon	Liquid biopsy investigations to clarify the tumour evolution of ovarian carcinoma and to develop personalised therapy concepts
11:05 – 11:13	Mathias Manzel	<i>De novo</i> formation of multipotent hematopoietic stem and progenitor cells, directed by HOX transcription factors
11:15 – 11:30		BREAK
SESSION 3	<u>Immunology</u>	Chair: Beatrice Their (Discussion: Stupia, Wilk, Slachetko, Gockeln, Tertel)
11:30 – 11:38	Dan-Tiberiu Furnica	Antifungal activity of novel anti-infective compounds
11:38 – 11:46	Claudia Mittendorff	Cardioprotective properties of Mesna <i>in vitro</i>
11:46 – 11:54	Anna Lena Lütticke	Expansion of multipotent hematopoietic stem and progenitor cells, directed by HOX transcription factors
11:54 – 12:02	Marian Stöcker	Investigation of the function of regulatory B cells in the pathogenesis of giant cell arteritis
12:02 – 12:10	Irene Adelaide Bocci	Targeting pathologic macrophages for widening the therapeutic window
12:10 – 12:18	Xi Wang	Role of the tumour microenvironment in the response to cancer immunotherapy
12:30		END OF 1st DAY

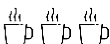

PROGRAMME

THURSDAY, 19.11.2020 **SC Hosts: Annette Paschen, Mirko Trilling, Hannes Klump**

SESSION 1a	<u>Tumour & Signalling</u>	Chair: Jetsy Montero Vergara (Discussion: Buß, Rao, Dräger, Heidenreich, Al-Ghazzawi)
08:00 – 08:08	Lilian Beeck	Molecular pathogenesis of Hodgkin's lymphoma
08:08 – 08:16	Zülal Cibir	Unravelling the phenotypic coevolution on melanoma cells and neutrophils fostering metastasis and therapy resistance
08:16 – 08:24	Cassandra Ho	Identifying modulators of response to immunotherapy in gastric cancer
08:24 – 08:32	Venkatesh K. Murugasan	Efficient EV isolation from cell conditioned media with optimum yield and purity suitable for downstream analysis and functional studies
08:32 – 08:40	Alicia Tüns	Molecular determinants of relapse in lung cancer
SESSION 1b	<u>Tumour & Signalling</u>	Chair: Lilian Beeck (Discussion: Mohren, Cibir, Xiao, Kondo)
08:40 – 08:48	Vivien Ullrich	Targeting clonally expanding drug-resistant tumour cells in recurrent glioblastoma
08:48 – 08:56	Jiajin Yang	Novel treatment of GI cancers
08:56 – 09:04	Jetsy Montero Vergara	Characterisation of the molecular mechanism of autophagy inhibition by HER2
09:04 – 09:12	Stefanie Egetemaier	Epigenetic-metabolic reprogramming as a universal strategy in therapy-resistant tumour cell phenotypes
09:15 – 09:30		BREAK
SESSION 2a	<u>Immunology</u>	Chair: Jagoda Szalachetko (Discussion: Xi Wang, Mittendorf, Langer, Siakaeva, Stambouli)
09:30 - 09:38	Simone Stupia	Defining the role of CIITA in tumour cell-intrinsic and CD4+ T-cell induced phenotype switching and therapy resistance
09:38 – 09:46	Baoxiao Wang	Functional immune interactions in the human tumour microenvironment
09:46 – 09:54	Antonio Hrvat	Improving the anti-tumour activity of natural killer cells by novel nanoparticle-antibody-conjugates
09:54 – 10:02	Benedict Antuamwine	Immunoregulatory activity of tumour associated neutrophils in murine tumour models
10:02 – 10:10	Maksim Domnich	The composition and role of HNC exosomes in the tumorigenic activation of neutrophils

THURSDAY, 19.11.2020


PROGRAMME

SESSION 2b	<u>Immunology</u>	Chair: Tobias Tertel (Discussion: Stöcker, Sichelschmidt, Lange, Pientrek)
10:10 – 10:18	Kevin Bronischewski	Molecular and functional characterization of single human B-1 lymphocytes
10:18 – 10:26	Ann-Kathrin Schnormeier	B cell differentiation in the germinal centre reaction and the resulting memory B cell compartment in humans
10:26 – 10:34	Keven Hörster	Genetic modifications in hematopoietic progenitor cells and NK cells for the development of models and therapies for AML and MDS
10:34 – 10:42	Yanis Mouloud	Immortalized mesenchymal stromal cells for the large scale production of extracellular vesicles
10:45 – 11:00		BREAK
SESSION 3	<u>Infectious Diseases</u>	Chair: Stefan Schefczyk (Discussion: Westmeier, Maaßen, Liang, Mittermüller)
11:00 – 11:08	Denise Mennerich	Identification and characterisation of interferon-gamma-stimulated effector proteins and interferon-gamma-repressed dependency factors effecting cytomegalovirus replication
11:08 – 11:16	Jonas Schuhenn	IFN α subtype-specific susceptibility of HBV in the course of infection
11:16 – 11:24	Corinna Schuler	Cellular and viral determinants of HCMV-induced impairment of leukemic cell proliferation
11:24 – 11:32	Luisa Betke	Heterologous immunity by HCMV-specific CD4+ TCR cross-recognizing HLA-DPB1 alloantigens
SESSION 4	<u>Keynote Speaker</u>	Chair: Hannes Klump
11:45 – 12:30	Prof. Dr. Toni Cathomen <i>Institute for Transfusion Medicine and Gene Therapy University of Freiburg</i>	What is needed for the clinical translation of genome editing?
12:30		END OF 2nd DAY

PROGRAMME

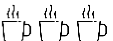

FRIDAY, 20.11.2020

SC Hosts: **Sven Brandau, Daniel Engel/ Ruth Bröring, Marc Seifert**

SESSION 1a	<u>Immunology</u>	Chair: Keven Hörster (Discussion: Lütticke, Schnormeier, Antuamwine, Mouloud, Thier)
08:00 – 08:08	Leonie Weber	Chimera antigen receptors for diabetes type 1
08:08 – 08:16	Julia Pietrek	Immunological investigation of pathogenesis and pathophysiology of autoimmune hepatitis
08:16 – 08:24	Stefanie Sichelschmidt	Impact of combined cytokine stimulation on liver cells and murine liver damage models
08:24 – 08:32	Mona-May Langer	The importance of extracellular vesicles in patients with liver cirrhosis and acute-on-chronic liver failure
08:32 – 08:40	Tobias Tertel	Heterogeneity of MSV-EVs
SESSION 1b	<u>Immunology</u>	Chair: Kevin Bronischewski (Discussion: Bocci, Hrvat, Baoxiao Wang, Schnormeier)
08:40 – 08:48	Oumaima Stambuli	Impact of leukemia- and lymphoma-derived extracellular vesicles on human hematopoietic stem and progenitor cells
08:48 – 08:56	Camilla Wilk	Differentiation of regulatory T cells by CRISPR/Cas-mediated epigenetic DNA modification
08:56 – 09:04	Lena Gockeln	Neuropilin-1 and regulatory T cells as therapeutic target for radiation-induced pulmonary fibrosis
09:04 – 09:12	Erik Lange	Effect of Amitriptyline on the host-microbiome interaction
09:15 – 09:30		BREAK
SESSION 2a	<u>Immunology</u>	Chair: Simone Stupia (Discussion: Beyerlein, Domnich, Pientrak, Weber)
09:30 - 09:38	Elena Siakaeva	Emergency tumour-mediated granulopoiesis and its modulation by type I interferons
09:38 – 09:46	Jagoda Szlachetko	Communication of tumour cells and stromal cells within the head and neck cancer microenvironment
09:46 – 09:54	Luiza Martins Nascentes Melo	Impact of HSD11B1-mediated activation of glucocorticoids in the pathogenesis of and resistance to immunotherapy in malignant melanoma
09:54 – 10:02	Beatrice Thier	Determining the interferon-induced gene expression network in melanoma cells and its role in response to immunotherapy

FRIDAY, 20.11.2020

PROGRAMME

SESSION 2b	<u>Infectious Diseases</u>	Chair: Jonas Schuhenn (Discussion: Betke, Mennerich, Schuler, Karaköse, Appelrath)
10:02 – 10:10	Jaana Westmeier	Effects of macrophage migration factor on virus-induced regulatory T cells in retroviral infection
10:10 – 10:18	Fabienne Maaßen	Mutual interplay between human cytomegalovirus and donor T cell alloreactivity in hematopoietic stem cell transplantation
10:18 – 10:26	Stefan Schefczyk	Impact of parenchymal and non-parenchymal liver cells on hepatitis B virus infection – virus host interactions determine immunopathology and chronicity
10:26 – 10:34	Philip Podschwadt	Identification of immunosuppressive sequences in retroviral envelope proteins and analysis of their influence on tumorigenesis and tumour control
10:35 – 10:50		BREAK
SESSION 3a	<u>Tumour & Signalling</u>	Chair: Natalie Wossidlo (Discussion: Murugasan, Montero Vergara, Akabbal, Lin, Manzel)
10:50 – 10:58	Oliver Dräger	The role of L1CAM in the progression of human retinoblastoma
10:58 – 11:06	Natalia Miroshnikov	Chemotherapy resistances in human retinoblastoma: investigations on the molecular mechanisms and the development of new therapeutic approaches
11:06 – 11:14	Yi-Yang Chen	Regulation of angiogenesis in the pathogenic niche of acute myeloid leukemia
11:14 – 11:22	Lukas Peiffer	Characterisation of the tumour cell – immune cell interactions in cutaneous T-cell lymphoma
SESSION 3b	<u>Tumour & Signalling</u>	Chair: Natalia Miroshnikov (Discussion: Chen, Salmon, Ullrich, Beeck)
11:22 – 11:30	Natalie Wossidlo	Identification of tumour suppressor pathways associated with chromosome 20q deletions in myelodysplastic syndromes
11:30 – 11:38	Shoaib Rao	Extracellular vesicles as new informative biomarkers in pediatric acute myeloid leukemia
11:38 – 11:46	Huaping Xiao	AraA sensitizes cancer G0-cells to irradiation by switching DNA damage repair pathway
11:46 – 12:00	<u>Supervising Committee</u>	Conclave (in break-out room)
12:00 – 12:30		The “BIOME 2020 Virtual Masters” Award Ceremony – Retreat prizes for the best Zoom talks Sven Brandau: Closing Remarks

PROGRAMME NOTES