



14th BMFZ RETREAT Kardinal-Schulte-Haus Bergisch-Gladbach September 22./23, 2022

Program Thursday, September 22, 2022

14.00 h	Welcome	Andreas Reichert
14.15 h – 16.00 h	Session 1	Chair: Ute Fischer
	Integration of high-throughput drug screening and molecular profiling as a precision medicine paradigm for high risk brain cancer	Nan Qin, Mark Remke; Pediatric Oncology, Hematology, Clinical Immunology
	To overcome glucocorticoid resistance in pediatric T-cell acute lymphoblastic leukemia	<u>Sanil Bhatia</u> , Arndt Borkhardt; Pediatric Oncology, Haematology, Clinical Immunology
	Metabolic adaptation to glucose starvation: a role for the mTOR substrates 4EBPs	<u>Gabriel Leprivier</u> , Guido Reifenberger; Neuropathology
	The mycotoxin viriditoxin induces leukemia- and lymphoma-specific apoptosis by targeting mitochondrial metabolism	Sebastian Wesselborg; Molecular Medicine I
	Challenges and opportunities of CTC-analysis to track the molecular evolution of systemic disease during therapy	Rui Neves, Nikolas Stoecklein; General, Visceral, and Pediatric Surgery
	a. Differential ion mobility spectrometryb. Functional redox-proteomics: identification of molecular switches controlling tumor cell behavior	a. <u>Anja Stefanski</u> , b. <u>Gereon</u> <u>Poschmann</u> , Kai Stühler; Molecular Proteomics Laboratory (MPL), BMFZ
16.00 h – 16.30 h	Coffee Break	
16.30 h – 18.30 h	Session 2	Chair: Hans Neubauer
	PGRMC1: a multifunctional co-regulator of breast cancer	Nadja Stamm, Hans Neubauer,
	progression	Tanja Fehm; Gynecology
	Molecular characterization of circulating tumor cells to select targeted therapies	Tanja Fehm; Gynecology André Franken, Hans Neubauer, Tanja Fehm; Gynecology
	Molecular characterization of circulating tumor cells to	André Franken, Hans Neubauer,
	Molecular characterization of circulating tumor cells to select targeted therapies Long-Read transcriptomics in diabetes and myocardial	André Franken, Hans Neubauer, Tanja Fehm; Gynecology Daniel Oehler, Malte Kelm;
	Molecular characterization of circulating tumor cells to select targeted therapies Long-Read transcriptomics in diabetes and myocardial Infarction Advantages of Cite-Seq-based experiments on	André Franken, Hans Neubauer, Tanja Fehm; Gynecology Daniel Oehler, Malte Kelm; Cardiology Alexander Lang, Norbert Gerdes;
	Molecular characterization of circulating tumor cells to select targeted therapies Long-Read transcriptomics in diabetes and myocardial Infarction Advantages of Cite-Seq-based experiments on cardiovascular disease Finding miRNA biomarkers to grade dysplasia of	André Franken, Hans Neubauer, Tanja Fehm; Gynecology Daniel Oehler, Malte Kelm; Cardiology Alexander Lang, Norbert Gerdes; Cardiology Sarah Schweier, Gunnar Klau;
	Molecular characterization of circulating tumor cells to select targeted therapies Long-Read transcriptomics in diabetes and myocardial Infarction Advantages of Cite-Seq-based experiments on cardiovascular disease Finding miRNA biomarkers to grade dysplasia of pancreatic lesions	André Franken, Hans Neubauer, Tanja Fehm; Gynecology Daniel Oehler, Malte Kelm; Cardiology Alexander Lang, Norbert Gerdes; Cardiology Sarah Schweier, Gunnar Klau; Algorithmic Bioinformatics Tobias Marschall;
19.00 h	Molecular characterization of circulating tumor cells to select targeted therapies Long-Read transcriptomics in diabetes and myocardial Infarction Advantages of Cite-Seq-based experiments on cardiovascular disease Finding miRNA biomarkers to grade dysplasia of pancreatic lesions Structural variation and the need for a human pangenome a. Single Cell transcriptome analyses	André Franken, Hans Neubauer, Tanja Fehm; Gynecology Daniel Oehler, Malte Kelm; Cardiology Alexander Lang, Norbert Gerdes; Cardiology Sarah Schweier, Gunnar Klau; Algorithmic Bioinformatics Tobias Marschall; Medical Biometry and Bioinformatics a. Tobias Lautwein, b. Tassilo Wollenweber, Karl Köhrer; Genomics & Transcriptomics





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Program Friday, September 23, 2022

9.00 h – 10.45 h	Session 3	Chair: Heiner Schaal
	The role of polysaccharides in arenavirus infections	Michal Gorzkiewicz, Philipp Lang; Molecular Medicine II
	Modeling splicing outcome by combining 5'ss strength and splicing regulatory elements	<u>Johannes Ptok</u> , Heiner Schaal; Virology
	Development and application of Cytokimeras	<u>Puyan Rafii,</u> Jürgen Scheller; Biochemistry and Molecular Biology II
	IL-31-producing T cells represents a unique population of CLA+ CRTH2+ CCR4+ TH2 memory cells	<u>Cristina Gomezcasado</u> , Bernhard Homey; Dermatology
	Structural dynamics of intrinsically disordered proteins at the membrane interface	Nils-Alexander Lakomek, Dieter Willbold; Biophysics
	Translational cardiology	Amin Polzin; Cardiology
	Inter-kingdom communication: signalling between bacteria and its host	Sebastian Fraune; Zoology and Organismic Interactions (Applicant)
10.45 h – 11.15 h	Coffee Break	
11.15 h – 12.30 h	Session 4	Chair: Andreas Reichert
	Glycomimetic drugs targeting infection, inflammation, and cancer	Jonathan Cramer; Pharmaceutical and Medical Chemistry (Applicant)
	cancer	and Medical Chemistry (Applicant) Michael Hacker; Pharmaceutical Technology and Biopharmacy
	cancer Two-component hydrogels for biomedical applications	and Medical Chemistry (Applicant) Michael Hacker; Pharmaceutical Technology and Biopharmacy (Applicant) Shada Elhayek, Norbert Goebels;
	cancer Two-component hydrogels for biomedical applications Targeting the CNS with CAR T cells Human pluripotent stem cells for modeling mitochondrial	and Medical Chemistry (Applicant) Michael Hacker; Pharmaceutical Technology and Biopharmacy (Applicant) Shada Elhayek, Norbert Goebels; Neurology Alessandro Prigione; General
	Two-component hydrogels for biomedical applications Targeting the CNS with CAR T cells Human pluripotent stem cells for modeling mitochondrial neurological disorders (AP)	and Medical Chemistry (Applicant) Michael Hacker; Pharmaceutical Technology and Biopharmacy (Applicant) Shada Elhayek, Norbert Goebels; Neurology Alessandro Prigione; General Pediatrics Mona Hendlinger, Michael Roden; German Diabetes Center -
	Two-component hydrogels for biomedical applications Targeting the CNS with CAR T cells Human pluripotent stem cells for modeling mitochondrial neurological disorders (AP) Energy metabolism	and Medical Chemistry (Applicant) Michael Hacker; Pharmaceutical Technology and Biopharmacy (Applicant) Shada Elhayek, Norbert Goebels; Neurology Alessandro Prigione; General Pediatrics Mona Hendlinger, Michael Roden; German Diabetes Center - Endocrinology and Diabetology Stephan Majda, Hadi Al-Hasani; German Diabetes Center - Clinical
13.00 h – 14.00 h	Two-component hydrogels for biomedical applications Targeting the CNS with CAR T cells Human pluripotent stem cells for modeling mitochondrial neurological disorders (AP) Energy metabolism Mouse genomics and the effect of insulin on splicing Autophagy: a cellular recycling machinery and a target for	and Medical Chemistry (Applicant) Michael Hacker; Pharmaceutical Technology and Biopharmacy (Applicant) Shada Elhayek, Norbert Goebels; Neurology Alessandro Prigione; General Pediatrics Mona Hendlinger, Michael Roden; German Diabetes Center - Endocrinology and Diabetology Stephan Majda, Hadi Al-Hasani; German Diabetes Center - Clinical Biochemistry and Pathobiochemistry