

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

PROGRAM

MAY 31st - JUNE 3rd, 2023

Wednesday, May 31	Thursday, June 1	Friday, June 2	Saturday, June 3
	9:00-10:30 Translation and therapy I	9:00-10:30 Immunotherapy II	9:00-10:15 Malignant cell biology
	11:00-12:30 Signal transduction	11:00-12:30 Translation and therapy II	10:45-11:45 Molecular mechanisms of disease II
	12:30-14:00 Lunch at Heidemuseum	12:30-14:00 Lunch at Heidemuseum	11:45-12:00 Wilsede Award
	14:00-15:30 Immunotherapy I	14:00-15:30 X-omics	12:00-13:00 Lunch at Heidemuseum
14:00-19:00 Shuttles from Handeloh			13:00 Departure
16:00-17:30 Registration Horse carriages from Undeloh	16:00-18:00 Molecular mechanisms of disease I	16:00-18:00 Biomarkers and diagnostics	
17:30-18:45 Welcome & Appetizers	18:30-19:00 Hartmut Kabisch Memorial Lecture, K. Welte	18:30-19:15 Invited Lecture II C. Braun	
18:45-19:30 Invited Lecture I A. Roy			
19:30 Dinner	19:00 Barbecue	19:15 Dinner	

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

WEDNESDAY, MAY 31st

17.30 – 17.45 **Welcome by Rolf Marschalek**

17.45 – 18.45 **Appetizers**

Chair: Olaf Heidenreich

An innovative tailored CAR T cell-redirecting immunotherapy for the treatment of metastatic and refractory Ewing Sarcoma

Panisello C, Bueno C, Castilla C, Aschero R, Carcaboso AM, de Álava E, Menéndez P

Exploring the novel function of mutant NPM1 on chromatin

Uckelmann HJ, Haarer EL, Takeda R, Hatton C, Chen CW, Armstrong SA

Minimal invasive detection of circulating biomarkers in pediatric brain tumor patients using liquid biopsy

Simon N, Maaß KK, Fischer TT, Puranachot P, Giraud G, Fritzberg A, Öber A, Brors B, Pfister SM, Pajtler KW

Oncogenic mechanisms of fusion proteins in pediatric acute myeloid leukemia

Tröster S, Terlecki-Zaniewicz S, Fernandez-Pernas P, Eder T, Humer T, Schmöllerl J, Manhart G, Zuber J, Tomazou E, Grebien F

18.45 – 19.30 **Invited lecture I**

Chair: Rolf Marschalek

Fetal-Specific Gene Expression Programs in Leukemia

Anindita Roy

19.30 **Dinner**

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

THURSDAY, JUNE 1st

09.00 – 10.30 Translation and therapy I

Chair: Conny Eckert

A novel combinatorial therapy improves the outcome of t(4;11) infant pro-B-ALL through the precise induction of HDAC7 biomarker

de Barrios O, Gusi-Vives M, Collazo O, Meler A, Romecin PA, Marschalek R, Bueno C, Stam RW, Menéndez P, Parra M

CRISPR/Cas9 gene therapy approaches for congenital neutropenia

Ritter MU, Nasri M, Zeidler C, Welte K, Skokowa J

Restoration of miRNA-193b-3p function is a potent therapeutic option in acute myeloid leukemias

Issa H, Bhaydia R, Winkler R, Swart LE, Heckl D, Klusmann JH

Menin Inhibition in Hox/Meis1 Dysregulated AMs

Rasouli M, Mohnani R, Ashtiani M, Krippner-Heidenreich A, Zwaan CM, Heidenreich O

Identifying Gene Targets for Drug repurposing to prevent Cancer in children with a premalignant state

Schmell AL, Meier K, Alejo O, Heckl D, Bhayadia R, Klusmann JH1

Characterizing the role of BCL-2 family members as targets for anti-cancer therapy in T-ALL

Fortner C, Niedermayer A, Debatin KM, Meyer LH, Seyfried F

11.00 – 12.30 Signal transduction

Chair: Pablo Menendez

Exopolyphosphatase Activity of PRUNE Regulates Adaptive Starvation Responses in Cancer Cells

Cinar B, von Pappenheim FR, Schreek S, Khalida Ibrahim N, Loxha L, Niessen J, Stasche AS, Stanulla M, Tittmann K, Hinze L

Leukaemia in the CNS niche regulates PI3K/ Akt signalling via upregulation of miR-93 in MLL- AF4 + infant leukaemia

Duguid A, Malouf C, Halsey C, Ottersbach K

Medulloblastoma EVs influence TGF-beta/ SMAD1 signaling in mesenchymal stem cell1

Lichá K, Ghanam J, Chetty VK, Reetz L, Barthel L, Reinhardt D, Thakur BK

Effective targeting of Wnt Signaling in B Cell Precursor Acute Lymphoblastic Leukemia

Liu S, Sun Q, Debatin KM, Meyer

Wnt/STOP activation drives temporally dynamic ribosomal biogenesis in drug resistant leukemia cells

Loxha L, Ibrahim NK, Stasche AS, Schreek S, Cinar B, Fehlhaber B, Niessen J, Stanulla M, Hinze L

RAS pathway mutations drive oncofetal reprogramming in hematopoietic stem cells

Schönung M, Hartmann M, Lipka DB

Association and interactions of the RIO kinases in the context of Diamond-Blackfan anemia

von Wulffen H-D, Bohler S, Tilman Brummer T, Pierre-Emmanuel Gleizes P-E, Puzik A, Niemeyer C, Erlacher M

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

12.30 – 14.00 **Lunch**

14.00 – 15.30 **Immunotherapy I**

Chair: Lüder Meyer

A novel fratricide-resistant CAR-T cell immunotherapy for T-ALL

Tirado N, Martínez-Moreno A, Fernández-Fuentes N, Díaz VM, Vinyoles M, Bueno C, Menéndez P, Sánchez-Martínez D

Inhibition of the "don't eat me signal" CD47 to prevent relapse in juvenile myelomonocytic leukemia

Wang J, Rajak J, Koleci N, Xiao H, Wehner NA, Orth JF, Niemeyer CM, Bohler S, Erlacher M

Comparison of armored NK cells equipped with soluble and membrane-bound IL-15 variants for improved functionality

Wendel P, Hauck JK, Zinser L, Michael J, Habermann J, Hartmann J, Ullrich E

CD19-Targeted immunotherapies for Treatment of Pediatric t(8;21) Leukemia

Barneh F, Meulendijks T, Wijnen N, Koedijk J, Ashtiani M, Krippner-Heidenreich A, Dunnebach E, Nierkens S, Kaspers G, Heidenreich O

Radiosensitivity in pediatric solid tumors

Gade C, Imle R, ElHarouni D, Oehme I, Banito A, Pajtler KW

Single cell multiomic analysis of clonal and transcriptional programs of CD19 CAR T cells in the immunotherapy response

Guerrero-Murillo M, Rill-Hinarejos A, Trincado JL, Bataller A, Mereu E, Bueno C, Menendez P

Enhancing TRAIL-mediated killing of ErbB2- CAR-NK-92 (NK-92/5.28.z) with bortezomib

Heim C, Hartig L, Weinelt N, Moser LM, Salzmann-Manrique E, Wels WS, van Wijk SJL, Meister MT, Klusmann JH, Rettinger E

16.00 – 18.00 **Molecular mechanisms of disease I**

Chair: Owen Williams

Expression of retinoic acid receptor gamma is modulated by miR-30a

Barrett A, Shi J-Y, Howell L, Sbirkov Y, Brown G, Zelent A, Petrie K

Impact of posttranscriptional regulations of MLL-AF4 and its target Genes in pro B-ALL

Hanewald T, Siemund A, Marschalek R

The role of the DACH family of nuclear proteins in MLL-AF4-associated infant leukemia

Jakobczyk H, Ottersbach K

Deciphering the role of KANSL1 mutations in the development of Myeloid Leukemia in children with Down Syndrome (ML-DS)

Cases i Palau S, Issa H, Heckl D, Klusmann JH

Examination of RNA exosome mediated RNA decay as context-dependent cellular vulnerability

Rassner MG, Braun CJ

Understanding Nfe2l2/Keap1-Mediated Drug Resistance In Hepatoblastoma

Rotari A, Failli M, Cairo S, di Bernardo D, Kappler R

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

TRIP13 AS A POTENTIAL THERAPEUTIC TARGET IN NUP98-JARID1A PEDIATRIC NON-DS-AMKL
Cifarelli LN, Issa H, Schuschel K, Menge K, Gack L, Klusmann JH, Heckl D

Identification and functional characterization of CTCF-bound noncoding RNA loci in acute myeloid leukemia.
Vermunt M, Klusmann JH

18.30 – 19.00 **Hartmut Kabisch Memorial Lecture**

Chair: Martin Stanulla

My unique experiences at Wilsede meetings - a personal view
Karl Welte

19.00 **Barbecue and party**

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

FRIDAY, JUNE 2nd

09.00 – 10.30 **Immunotherapy II**

Chair: Irmela Jeremias

Blocking TIM3:Galectin-9 pathway enhances in vivo CAR19T cell function

Falgàs A, Zanetti SR, Martínez Moreno A, Panisello C, Romecin PA, Díez Alonso L, Álvarez Vallina L, Bueno C, Menéndez P

Comparison of CD28- and 4-1BB-based CLEC12A-CAR-natural killer cells against acute myeloid leukemia

Gierschek F, Albinger N, Wendel P, Born A, Bhayadia R, Klusmann JH, Ullrich E

Spatial analysis reveals distinct immune phenotypes and tertiary lymphoid structure-like aggregates in pediatric AML

Koedijk JB, van der Werf I, Vermeulen MA, Perzoli A, Fiocco M, de Groot-Kruseman HA, Nierkens S, Belderbos ME, Zwaan CM, Heidenreich O

Rituximab clearance in pediatric patients with mature aggressive B-cell Non-Hodgkin Lymphoma

Tölle I, Lanvers-Kaminsky C, Bethke M, Randau G, Rolfing M, Tann A, te Vrugt M, Mellgren K, Müller S, Burkhardt B

NK cell immunotherapy against chemotherapy-resistant rhabdomyosarcoma

Reindl LM, Jalili L, Rothweiler F, Cinatl Jr, Michaelis M, Wels WS, Ullrich E

Choosing the right effector cell for ErbB2-CAR-engineered immunotherapy in rhabdomyosarcoma – CAR-T vs CAR-CIK

Moser LM, Heim C, Merker M, Vogler M, Bönig HB, Ullrich E, Klusmann JH, Bader P, Wels WS, Rettinger E

11.00 – 12.30 **Translation and therapy II**

Chair: Dirk Heckl

From bench to bedside – Establishing PRMT5 inhibitors in the treatment of Glioblastoma multiforme

Gahleitner L, Braun C

A screening of donated chemical probes to identify novel therapeutic options for childhood AML

Laszig S, Knapp S, Bhayadia R, Klusmann JH

Synergistic anti-leukemia activity of the dual mTOR/PI3K inhibitor NVP-BE2235 with the BCL-2 inhibitor venetoclax

Niedermayer A, Enzenmüller S, Seyfried F, Debatin KM, Meyer LH

Investigating and modulating leukemia initiating cells to reduce risk of post-transplant relapse in JMML

Xiao H, Koleci N, Wang J, Rajak J, Wehner NA, Bohler S, Orth JF, Kern U, Niemeyer CM, Erlacher M

Tunable control of G-CSFR signaling by de novo designed modulators

Ullrich T, Hernandez-Alvarez B, Welte K, Skokowa J, ElGamacy M

Targeting the fetal transcriptional landscape of pediatric AML

Santosa Hidajat J, Heckl D, Schmell AL, Bhayadia R, Klusmann JH

12.30 – 14.00 **Lunch**

14.00 – 15.30 **X-omics**

Chair: Florian Grebien

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

Acute Myeloid Leukemia initiating cells: identification of new therapeutic targets to avoid relapse
Ximeno-Parpal P, Vinyoles M, Fernández-Fuentes N, Martínez-Moreno A, Łuczak W, Schmid JP, Jeremias I, Menéndez P

Targeting the non-coding and stem cell signature in childhood acute myeloid leukemia
Schüler L, Winkler R, Cetin R, Kaulich M, Heckl D, Bhayadia R, Klusmann JH

Transcription vulnerabilities profiling through combinatorial CRISPR screens for personalized pediatric cancer therapy
Carbonell-Adames A, Rassner M, Gahleitner L, Noll-Puchta H, Braun CJ

Single cell RNAseq uncovering the role of RUNX1/ETO in the leukemic niche signaling
Derevyanko PK, van der Wilt CN, Swart LE, Nelson RN, Krippner-Heidenreich A, Blair HJ, Heidenreich O

Decoding Epigenetic Landscape in Pediatric Leukemia through Multi-Omics Integration
Gonçalves-Dias J, Issa H, Verboon L, Schuschel K, Heckl D, Bhayadia R, Klusmann JH

The transcriptional landscape and the immune microenvironment of the testicular niche in pediatric ALL
*Narayanared*dy CG, Pesic M, Pfau M, Kovacsovics A, Yaspo ML, Eckert C*

SarcDBase: a tool for detection of genetic alterations in sarcoma
DiFilippo V, Saba KH, Wallander K, Nathrath M, Baumhoer D, Haglund de Flon F, Nord KH

16.00 – 18.00 **Biomarkers and diagnostics**

Chair: Julia Skokowa

PROM1/CD133 expression identifies highly proliferative MLL-AF4 + blasts and correlates with a stem-like gene signature
Cross J, Smith AL, Jackson TR, Harman JR, Ling RE, Crump N, Elliott NE, Wu QQ, Milne TA, Roy A

IKZF1plusplus? Investigating the genetic complexity of IKZF1 deleted B-cell acute lymphoblastic leukemia
Lühmann JL, Hofmann W, Bergmann AK, Mörücke A, Cario G, Schrappe M, Schlegelberger B, Zimmermann M, Stanulla M, Steinemann D

Design of metal-binding proteins for radiotracing and immunoradiotherapy applications
Maksymenko K, Maurer A, Skokowa J, ElGamacy M

Comprehensive molecular and clinical characterization of DUX4-rearranged B-acute lymphoblastic leukemia
Schröder CF, Antić Ž, zur Stadt U, Tang M, Zimmermann M, Eckert C, Fedders B, Stanulla M, Cario G, Bergmann AK

Identification of novel fusion transcripts in Acute Myeloid Leukemia
Schuschel K, Issa H, Verboon L, Goncalves Dias JM, Vermunt MW, Heckl D, Bhayadia R, Klusmann JH

Functional Characterization of potential diagnostic targets in Burkitt-NHL
te Vrugt M, Bartels A, Feldmeyer L, Hollfoth V, Tölle I, Randau G, Michgehl U, Hotfilder M, Lanvers-Kaminsky C, Burkhardt B

Identification of cell-extrinsic pro-survival factors in JMML
Wehner A, Koleci N, Rajak J, Wang J, Xiao H, Erlacher M

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

18.30 – 19.15 **Invited lecture II**

Chair: Jan-Henning Klusmann

In vivo functional screening for systems-level integrative cancer genomics
Christian Braun

19.15 **Dinner**

XXXIV. Annual Meeting in Wilsede, 31st Mai – 3rd June 2023

SATURDAY, JUNE 3rd

09.00 – 10.15 **Malignant cell biology**

Chair: *Eva Rettinger*

Extracellular vesicles transfer chromatin-like structures that induce non-mutational dysfunction of p53 in bone marrow

Ghanam J, Chetty VK, Reinhardt D, Thakur BT

CSF1R as a marker of lineage plasticity in MLL-AF9 infant leukaemia

Camiolo G, Ottersbach K

Early subclinical CNS manifestation in B-cell acute lymphoblastic leukemia modelled in vivo

Muench V, Koehler R, Rasche V, Debatin KM, Meyer LH

AML-derived small EVs containing YBX1 influences mesenchymal stromal cells differentiation in the bone marrow niche

Chetty VK, Ghanam J, Reinhardt D, Thakur BK

NG2 and VLA-4 are involved in the invasion and migration of MLLr B-cell Acute Lymphoblastic Leukemia

Rubio-Gayarre A, Vinyoles M, Caracuel-Peramos R, Fernandez-Fuentes N, Robles-Valero J, Stam RW, Bardini M, Menendez P, Bueno C, Lopez-Millan B

10.45 – 11.45 **Molecular mechanisms of disease II**

Chair: *Basant Thakur*

Optimizing CRISPR/Cas9 technologies to develop disease model systems

Benz T, Larghero P, Marschalek R

Identification of Functional Defects Leading to Bone Marrow Failure in GATA2 Deficiency

Wantzen C, Yigit B, Suo Y, Meisel R, Zhang S, Weiss JM, Fernandez-Orth J, Erlacher M

TP53 separation-of-function mutations through promoter swapping in osteosarcoma

Saba KH, Cornmark L, Magnusson L, Nilsson J, van den Bos H, DJC Spierings, Bidgoli M, Jonson T, Sumathi VP, Brosjö O, Staaf J, Foijer F, Styring E, Nathrath M, Baumhoer D, Nord KH

Genotype-phenotype correlations in patients with severe congenital neutropenia and cyclic neutropenia harboring ELANE mutations

Tesakov I, Klimiankou M, El Chazli Y, Deordieva E, Skokowa J, Shcherbina A, Welte K, Zeidler C

11.45 – 12.00 **Wilsede Award 2023** *Stanulla M, Marschalek R, Klusmann JH, Heidenreich O*

12.00 – 13.00 **Lunch**

13.00 **Departure**