

Dear UNITE Members,

We hope you all had a great summer and are now starting the final phase of the year with renewed energy.

In our 3rd UNITE Newsletter, we take a look back at our previous UNITE Workshops and Seminars. Our 1st **UNITE Specialized Workshop on Biostatistics & Bioinformatics** took place in April, where D02 gave basic insights to our fellows and showed them essential skills for analyzing their research data. Also in our Seminar Series we had another inspiring talk by Pieter Wesseling and our inaugural **GENDER & DIVERSITY LUNCH TALK** has kicked-off.

With this new issue we have also added two new sections: the section **New Fellows** will regularly introduce new UNITE members to our consortium. Additionally, we have added a section **Events @ Campus HD**, that provides information on events organized by other institutions and initiatives on our campus.

We wish you a great time and hope you enjoy reading our latest UNITE Newsletter!

Best wishes,
UNITE Project Management Team

FOCUS D

SAVE THE DATE

UNITE Scientific Retreat & SAB Meeting

When: 05.-06.11.2024

Where: Marsilius Kolleg, INF 130.1

Registration link:

[UNITE Scientific Retreat 2024 | DFN-Terminplaner](#)

UNITE Sokft Skills Workshop

„Project PhD. The Path to a Successful Doctorate“

When: Wednesday, 20.11.2024, 09:00 – 17:00

Where: Marsilius Kolleg, Seminar room 2, INF 130.1

Registration link:

[UNITE Workshop: Project PhD. The Path to a Successful Doctorate | DFN-Terminplaner](#)

FOCUS A

FOCUS B

FOCUS C

FOCUS D

CONGRATULATIONS

David T. W. Jones, Ph.D. for the W3 professorship
>>Transnational Pediatric Glioma Research <<

Dr. Christiane Opitz for the W3 professorship
>>Metabolic crosstalk in cancer <<

Michael Platten has been awarded the prestigious **ERC Advanced Grant** for his groundbreaking **research in immunotherapy**, recognizing his significant contributions to advancing cancer treatment.

Michael Platten has been awarded the **Paul Martini Prize** 2024 for his **development of therapeutic vaccines** against malignant brain tumors.

Lukas Bunse has been honored with the EKFS **Publication Award** 2024 for his outstanding **research in neuro-oncology**, highlighting his innovative work in the field of brain tumor immunology.

UNITE WORKSHOP



Our **1st UNITE Specialized Workshop on Biostatistics & Bioinformatics**, held from April 8th to 10th at the Mathematikon, saw every seat filled as attendees explored the analysis of single cell RNAseq data using the R toolkit Seurat.



Participants engaged in **essential steps of data analysis**, from quality control to visualization techniques. Guided by UNITE experts, the workshop provided a collaborative learning environment, fostering knowledge exchange and skill development.

A **big thank you** to all fellows who participated in the event and to **Ivo Buchhalter, Matthias Schlesner and Christian Heyer** for running such a successful workshop! We look forward to continuing to support researchers with essential skills for biomedical exploration. Stay tuned for updates on future workshops and events.

UNITE SEMINAR SERIES

Our CRC recently hosted **Prof. Pieter Wesseling** as a guest speaker in our UNITE Seminar Series. He delivered an exceptional lecture titled **"IMPROVING (WHO) CLASSIFICATION OF CNS TUMORS - A BALANCING ACT"**, which drew a fantastic turnout, highlighting the strong interest in his insights.



We sincerely appreciate Prof. Wesseling's valuable contributions to our ongoing efforts in understanding and combating glioblastoma resistance and want to **thank everyone who participated!**

GENDER & DIVERSITY LUNCH TALK



We had a fantastic start to our **Gender & Diversity Lunch Talk Series!** Many thanks to Martha Nowosielski for her insightful presentation on the **"DiviNe - Diversity in Neurooncology"** initiative and to everyone who contributed to the engaging discussion that followed.

Interested in learning more about this initiative? Visit [DiviNe - Diversity in Neurooncology](#).

If you're looking to expand your academic network and explore new opportunities, be sure to check out [FEMclub \(Female Excellence in Medicine\)](#).

FELLOW RETREAT: SAVE THE DATE

We are happy to announce a **workshop on science communication** organized by our Fellow Committee exclusively for our Fellows! Mark your calendar for **November 15, 2024** and get ready to improve your skills in communicating scientific ideas effectively.

Registration link: [Doodle](#)



UPCOMING UNITE EVENTS

[Here](#) you can find a detailed overview which includes all meetings until July 2025. Upcoming meetings are:

UNITE WiP Meeting:

21.11.2024, 10:15 – 11:15, Seminar Room 6.1/6.2
Chirurgische Klinik

UNITE Journal Club

14.11.2024, 10:15 – 11:15, Seminar Room 1, Kopfklinik

UNITE Seminar Series

Gaetano Gargiulo

At the Seminar room of the Gästehaus, Im Neuenheimer
Feld 370

23.01.2025, 10:15 – 11:15

SAVE THE DATE:

UNITE CONFERENCE 2025 [↗](#)

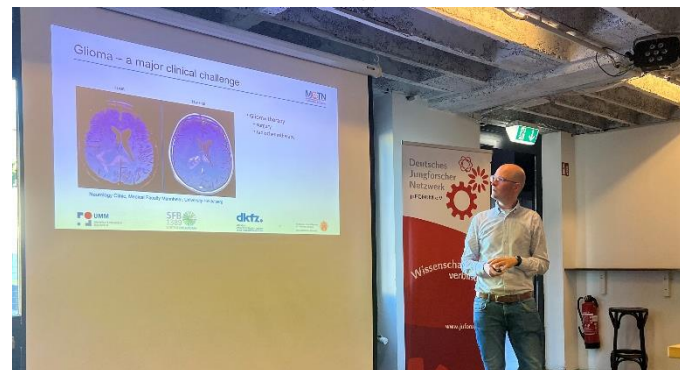
14.-15.05.2025, DKFZ Communication Center



UNITE OUTREACH



On July 9th, 2024, a [SciencePub](#) event titled "[The Future of Biology](#)" took place in Heidelberg, featuring prominent speakers, including [Dr. Lukas Bunse](#). This session offered insightful discussions on the advancements and future directions in the field of biology.



For more details, visit the [SciencePub page](#).
Thank you Lukas for representing our CRC!

NEWS FROM RESEARCH

[New T-FINDER Platform](#) [↗](#) Unveils Immune Response to Cancer Vaccine: Researchers from BioMed X and the University Medical Center Mannheim have developed the T-FINDER platform, offering deep **insights into T-cell responses to a new neoepitope vaccine** for diffuse midline glioma. Published in *Science Advances*, the study reveals how T-FINDER identifies specific T cell interactions, aiding the development of targeted cancer therapies.

[AI](#) [↗](#) Accelerates Development of Cellular Immunotherapies: Researchers from DKFZ and University Medical Center Mannheim have developed an AI-driven method, "predicTCR," **to quickly identify tumor-reactive T cell receptors**, reducing the time required from months to days. This breakthrough aims to advance **personalized cellular immunotherapies for cancer treatment**.

[New Mechanism of T Cell Control](#) [↗](#) May Impact Cancer Immunotherapies: Researchers from DKFZ and University Medical Center Mannheim have discovered that NK cells can inhibit cancer immunotherapies by targeting activated T cells displaying the B7H6 protein. This mechanism **may reduce the effectiveness of therapies** like CAR-T and immune checkpoint inhibitors, but **could be modified to enhance treatment outcomes**.

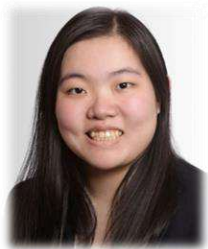
DFG SURVEY ON COORDINATED PROGRAMS

As already announced on our last D04 WiP Meeting, the DFG survey on coordinated programs will start on September 13th. We have already contacted new UNITE members and asked for completing the online survey.

Our existing UNITE staff will also **receive an email with detailed instructions during the next days**. Please make sure to **complete the requested information** and don't hesitate to get in touch with us in case there are any questions.



NEW FELLOWS



Erinne Ong (A01)

Erinne Ong hails from the Philippines, where she earned her **bachelor's degree in Biology** at De La Salle University. Her thesis focused on the cytotoxicity of a native plant extract against three cancer cell lines. After taking a gap year as a science writer for a Singapore-based STEM media agency, she pursued a **master's in Neuroscience** at the University of Göttingen. Here, she **investigated the role of dysfunctional myelin in exacerbating Alzheimer's disease pathologies** in the lab of Prof. Klaus-Armin Nave at the Max Planck Institute for Multidisciplinary Sciences.

Now merging these interests in her PhD project, Erinne aims to deepen and apply her neuroscience background to the study of brain tumor biology. Under UNITE's Work Package **A01** supervised by **Prof. Frank Winkler** and **Dr. Sophie Heuer**, she seeks to understand the communication networks that drive glioma progression and resistance, and more broadly map how neural interactions influence cancer plasticity.



Atefeh Pourkhalili-Langeroudi (A07)

Atefeh Pourkhalili-Langeroudi joined the Venkataramani Lab in April 2024. Her research focuses on **neuron-tumor interactions in glioblastoma**, aiming to understand therapeutic resistance and develop effective interventions. By combining in vitro and in vivo methodologies, her work seeks to provide new insights into glioblastoma biology and contribute to the development of more effective therapies. Atefeh holds a **Master's degree in Bio-Medical Engineering** from the University of Bordeaux, with prior experience at the Interdisciplinary Institute for Neuroscience and the Curie Institute.

As a fellow of the UNITE School of Neurooncology, she is working under the supervision of **Dr. Dr. Varun Venkataramani** within Work Package **A07**, focusing on mapping and targeting neuron-tumor networks to tackle therapy resistance in glioblastoma.



Antonia Grogro (B03)

Antonia Grogro pursued her studies in the field of **biochemistry and molecular biology** at Kiel University. Since May 2024, she has been working as a doctoral candidate in the Clinical Cooperation Unit Neuropathology. She is part of the UNITE Work Package **B03**, under the supervision of **Dr. Stefan Pusch**. In her previous studies, she focused on the function of membrane proteins in tumorigenesis and chemoresistance, as well as in the context of the proteolytic network. Her doctoral research project is aimed at further **illuminating the function of the epithelial membrane protein 3 (EMP3) in IDH wild-type glioblastoma**. A specific emphasis will be placed on the interaction of EMP3 with the CD44-MET complex, the elucidation of the domain-specific functions of EMP3, and the subcellular localization of MET and EMP3.

Therefore, **further collaboration** with the UNITE Work Package **C06**, focusing on intracellular protein localization and trafficking, would be beneficial.

Welcome to our UNITE-Team!



SELECTED PUBLICATIONS

Gellert J, [Agardy, D](#), Kumar S, [Kourtesakis A](#), Boschert, T, Jähne, K, [Breckwoltdt, M](#), [Bunse, L](#), [Wick, W](#), Davies, M, [Platten, M](#), [Bunse, T](#). Tumoral Interferon Beta Induces an Immune-Stimulatory Phenotype in Tumor-Associated Macrophages in Melanoma Brain Metastases. *Cancer Res Commun.* [10.1158/2767-9764.CRC-24-0024](https://doi.org/10.1158/2767-9764.CRC-24-0024)

[Schubert M](#), Soyka S, Tamimi A, Maus E, Denninger R, Wissmann N, [Reyhan E](#), [Tetzlaff S](#), Beretta C, Drumm M, Schroers J, Steffens A, Walshon J, McCortney K, Heiland S, Golebiewska A, Kurz F, [Wick W](#), [Winkler E](#), Kreshuk A, Kuner T, Horbinski C, Prevedel R, [Venkataramani V](#). Deep intravital brain tumor imaging enabled by tailored three-photon microscopy and analysis. *bioRxiv.* [10.1101/2023.06.17.545350](https://doi.org/10.1101/2023.06.17.545350)

[Gellert J](#), [Agardy DA](#), Kumar S, [Kourtesakis A](#), Boschert T, [Jaehne K](#), [Breckwoltdt MO](#), [Bunse L](#), [Wick W](#), Davies MA, [Platten M](#), [Bunse T](#). Tumoral Interferon Beta Induces an Immune-Stimulatory Phenotype in Tumor-Associated Macrophages in Melanoma Brain Metastases. *Cancer Res Commun.* [10.1158/2767-9764.CRC-24-0024](https://doi.org/10.1158/2767-9764.CRC-24-0024)

[Layer N](#), [Bunse L](#), [Venkataramani V](#). Neural deception: Breast cancer co-opts neuronal mechanisms to evade the immune system. *Cancer Cell.* [10.1016/j.ccell.2024.05.007](https://doi.org/10.1016/j.ccell.2024.05.007)

[Kilian M](#), Friedrich MJ, [Lu KH](#), [Vonhören D](#), Jansky S, [Michel J](#), Keib A, [Stange S](#), Hackert N, [Kehl N](#), [Hahn M](#), Habel A, [Jung S](#), [Jähne K](#), Sahn F, Betge J, Cerwenka A, Westermann F, Dreger P, Raab MS, Meindl-Beinker NM, Ebert M, [Bunse L](#), Müller-Tidow C, Schmitt M, [Platten M](#). The immunoglobulin superfamily ligand B7H6 subjects T cell responses to NK cell surveillance. *Sci Immunol.* [10.1126/sciimmunol.adj7970](https://doi.org/10.1126/sciimmunol.adj7970)

Streibel Y, [Breckwoltdt MO](#), [Hunger J](#), Pan C, Fischer M, Turco V, [Boztepe B](#), Fels-Palesandro H, [Scheck JG](#), Sturm V, Karimian-Jazi K, [Agardy DA](#), Annio G, Mustapha R, Soni SS, Alasa A, [Weidenfeld I](#), Rodell CB, [Wick W](#), Heiland S, [Winkler F](#), [Platten M](#), [Bendszus M](#), Sinkus R, Schregel K. Tumor biomechanics as a novel imaging biomarker to assess response to immunotherapy in a murine glioma model. *Sci Rep.* [10.1038/s41598-024-66519-7](https://doi.org/10.1038/s41598-024-66519-7)

Dobersalske C, Rauschenbach L, Hua Y, Berliner C, Steinbach A, Grüneboom A, Kokkaliaris KD, Heiland DH, Berger P, Langer S, Tan CL, Stenzel M, Landolsi S, Weber F, Darkwah Oppong M, Werner RA, Gull H, Schröder T, Linsenmann T, Buck AK, Gunzer M, Stuschke M, Keyvani K, Forsting M, Glas M, Kipnis J, Steindler DA, Reinhardt HC, Green EW, [Platten M](#), Tasdogan A, Herrmann K, Rambow F, Cima I, Sure U, Scheffler B. Cranioencephalic functional lymphoid units in glioblastoma. *Nat Med.* [10.1038/s41591-024-03152-x](https://doi.org/10.1038/s41591-024-03152-x)



EVENTS @ CAMPUS HD: CALENDAR

Here you will find further „non UNITE“ events on our campus. Please note the requirements for participation. We welcome your information on upcoming events for our future newsletters (sfb1389@med.uni-heidelberg.de)!

Date	Title	Open for members of	Intended for	Language	Description
ongoing	Nature Masterclasses	UHD	PhDs	EN	Professional development training for researchers — via online courses and workshops
ongoing	Seminarprogram 2024-II Graduate Academy	UHD	PhDs	DE, EN	Transferable Skills for Doctoral Candidates (Registration is open for members of Heidelberg University (Uni-ID is mandatory))
30.10.24	START UPERITIVO: SCIENCE SLAM	UHD / heiINNOVATION	Post Docs, PhDs	EN	TBA
04.12.24	START UPERITIVO: CHRISTMAS MARKET EDITION	UHD / heiINNOVATION	PhDs	EN	TBA
14.01.25	Cancer Neuroscience Seminar Series	OPEN IP & TRANSFER CONSULTATION HOUR @ SVH	Post docs, PhDs	EN	External Speaker Dr. Itay Tirosh, Weizmann Institute of Science, Rehovot, Israel

