

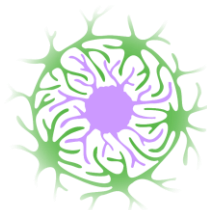
1st Heidelberg Conference on Cancer Neuroscience
July 18-19, 2023

Venue: German Cancer Research Center (DKFZ), Communication Center,
Im Neuenheimer Feld 280, 69120 Heidelberg, Germany

July 18, 2023

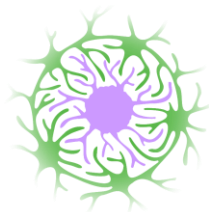
09:00 – 09:30	<p>Welcome and Introduction</p> <p>Frank Winkler, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))</p> <p>Wolfgang Wick, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))</p>
09:30 – 10:30	<p>Instructions from neurodevelopment and the normal nervous system</p> <p>Chairs: Stefan Pfister, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ)), Ana Martin-Villalba, MD, PhD (German Cancer Research Center (DKFZ), Heidelberg)</p>
09:30 – 09:45	<p>Neuron-glia interactions regulating brain development, plasticity and cancer</p> <p>Michelle Monje, MD, PhD (Stanford University, California)</p>
09:45 – 10:00	<p>How the Peripheral Nervous System governs tissue development, homeostasis, and plasticity: lessons for Cancer Neuroscience</p> <p>Frank Winkler, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))</p>
10:00 – 10:20	<p>Cellular development and evolution of the mammalian brain</p> <p>Mari Sepp, PhD (Heidelberg University, Medical Faculty)</p>
10:20 – 10:30	<p>Neuroblastoma arises in early fetal development and its evolutionary duration predicts outcome</p> <p>Verena Körber, PhD (German Cancer Research Center (DKFZ)) – Abstract No 52</p>
10:30 – 10:45	Coffee Break





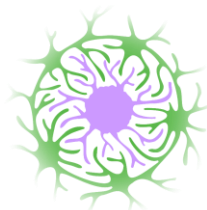
10:45 – 12:55	Brain Cancer Neuroscience Chairs: Thomas Kuner, MD (Heidelberg University, Medical Faculty), Felix Sahm, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))
10:45 – 11:05	Paracrine neural influences in gliomagenesis Michelle Monje, MD, PhD (Stanford University, California)
11:05 – 11:15	Synaptic interactions between neurons and glioma cells Varun Venkataramani, MD, PhD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))
11:15 – 11:35	Glioblastoma remodeling of neural circuits in the human brain decreases survival Shawn Hervey-Jumper, MD (University of California, San Francisco)
11:35 – 11:55	Decoding neuron-glioma crosstalk Benjamin Deneen, PhD (Baylor College of Medicine, Houston, Texas)
11:55 – 12:05	Targeting Tumor Microtubule-mediated glioblastoma networks Sophie Weil, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))
12:05 – 12:15	Pacemaker-like hub cells in glioblastoma David Hausmann, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))
12:15 – 12:25	Conditional expression and activation of designer receptors exclusively activated by designer drugs (DREADD) reveals novel impact of neuron- tumor communications on brain tumor progression Daisuke Kawauchi, PhD (National Center of Neurology and Psychiatry) – Abstract No 10
12:25 – 12:35	Rewiring of the promoter-enhancer interactome and regulatory landscape in glioblastoma orchestrates gene expression underlying neurogliomal synaptic communication Silvia Remeseiro, PhD (Umeå Centre for Molecular Medicine (UCMM), Wallenberg Centre for Molecular Medicine (WCMM), Umeå University, Sweden) – Abstract No 23
12:35 – 12:45	Cancer-neuronal cross talk in Glioblastoma: how neurons sustain tumor progression Chiara Saulle (Laboratory of Pharmacology and Brain Pathology, IRCCS Humanitas Research Center Rozzano, Milan, Italy) – Abstract No 70





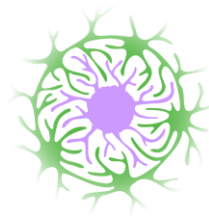
12:45 – 12:55	Mapping the rules of glioblastoma with integrated single cell and spatial genomics Omer Bayraktar, PhD (Wellcome Sanger Institute, Hinxton, United Kingdom) – Abstract No 72
12:55 – 13:45	Lunch
13:45 – 15:45	Extracranial Cancer Neuroscience Chairs: Rohini Kuner, PhD (Heidelberg University, Medical Faculty), Erica Sloan, PhD (Monash University, Melbourne)
13:45 – 14:05	Clinical opportunities of translation in extracranial Cancer Neuroscience Ekin Demir, MD, PhD (TU Munich, Medical Faculty)
14:05 – 14:25	Cancer and Brain: An addictive long distance relationship Claire Magnon, PharmD, PhD (INSERM, Paris)
14:25 – 14:45	Neuro-cancer interactions in head and neck cancer Moran Amit, MD, PhD (MD Anderson, Houston, Texas)
14:45 – 15:05	Molecular targeted therapies for Cancer Neuroscience: learning from general oncology Sonja Loges, MD, PhD (Heidelberg University, Medical Faculty Mannheim, German Cancer Research Center (DKFZ))
15:05 – 15:15	Unraveling the hidden dance: Schwann Cells' role in shaping axonal remodeling during pancreatic cancer progression Sophie Chauvet, MD, PhD, (Aix Marseille Univ, CNRS, IBDM, France) – Abstract No 20
15:15 – 15:25	Nerve guidance in cancer: a new role for Netrin-1 Hiba Haidra (Aix Marseille Univ, CNRS, IBDM, France) – Abstract No 31
15:25 – 15:35	Single cell atlas of PDAC innervating neurons Vera Thiel, PhD candidate (German Cancer Research Center (DKFZ), Heidelberg))
15:35 – 16:00	Coffee Break





16:00 – 17:00	Metastasis Cancer Neuroscience Chairs: Humsa Venkatesh, PhD (Harvard University, Boston, Massachusetts), Moran Amit, MD, PhD (MD Anderson, Houston, Texas)
16:00 – 16:20	Neural-Activity Dependent Growth of Brain Metastases Humsa Venkatesh, PhD (Harvard University, Boston, Massachusetts)
16:20 – 16:30	Neuron-tumor cell synapses drive brain metastases Matthia Karreman, PhD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))
16:30 – 16:40	Machine learning identifies experimental brain metastasis subtypes based on their influence on neural circuits Mariam Al-Masmudi Martín, PhD (Spanish National Cancer Research Center (CNIO), Madrid, Spain) – Abstract No 16
16:40 – 18:15	Neuro-Immuno-Oncology Chairs: Lucas Schirmer, MD (Heidelberg University, Medical Faculty Mannheim), Adelheid Cerwenka, PhD (Heidelberg University, Medical Faculty Mannheim)
16:40 – 17:00	FMRP is a master regulator of the immunosuppressive tumor microenvironment Douglas Hanahan, PhD (EPFL, Lausanne)
17:00 – 17:20	Nociceptor neuron impact cancer immunosurveillance Sebastien Talbot, PhD (Queen's University, Kingston, Ontario)
17:20 – 17:40	Neuron-immune axis support of glioma growth David Gutmann, MD, PhD (Washington University in St. Louis, Missouri)
17:40 – 18:00	T cell therapy of brain tumors Michael Platten, MD (Heidelberg University, Medical Faculty Mannheim, German Cancer Research Center (DKFZ))
18:00 – 18:15	A novel immunotherapeutic strategy for glioblastoma Agnieszka Chryplewicz (Swiss Institute for Experimental Cancer Research (ISREC), Lausanne, Switzerland) – Abstract No 3
From 19:30	Conference Dinner

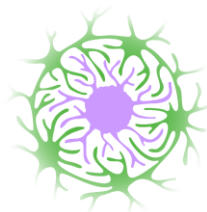




July 19, 2023

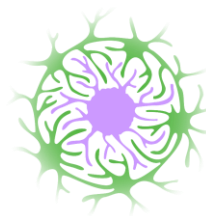
09:00 – 10:35	Effects of Cancer and Cancer Therapies on the Nervous System Chairs: Wolfgang Wick, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ)), Christoph Michalski, MD (Heidelberg University, Medical Faculty)
09:00 – 09:15	Neurobiological underpinnings of cancer therapy-related cognitive impairment Michelle Monje, MD, PhD (Stanford University, California)
09:15 – 09:35	Getting on my nerves: cancer pain Rohini Kuner, PhD (Heidelberg University, Medical Faculty)
09:35 – 09:55	Daily-life and neural network research: Prospects for cancer neuroscience Heike Tost, MD, PhD (Heidelberg University, Medical Faculty Mannheim)
09:55 – 10:15	Cancer therapy induced neurodegeneration and neuroprotective strategies Jorg Dietrich, MD, PhD (Harvard University, Boston, Massachusetts)
10:15 – 10:25	Colon cancer driven systemic sensory neuronal dysfunction in orthotopic mouse models Mihály Balogh, PhD (University of Groningen, Netherlands) – Abstract No 24
10:25 – 10:35	Delayed STING-independent type-I interferon response after cranial irradiation drives microglia into senescence Alejandro Lastra Romero, (Karolinska Institutet, Sweden) – Abstract No 33
10:35 – 10:45	Coffee Break
10:45 – 11:45	Towards Neuroscience-instructed Cancer Therapies Chairs: Frank Winkler, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ)), Sandro Krieg, MD (TU Munich, Heidelberg University, Medical Faculty)
10:45 – 11:05	General considerations & early clinical trials for brain cancer Wolfgang Wick, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))





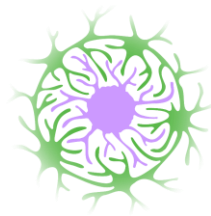
11:05 – 11:25	Can sympathetic neural signalling be targeted to prevent relapse after cancer treatment? Erica Sloan, PhD (Monash University, Melbourne)
11:25 – 11:35	Imaging biomarkers of the CNS and PNS Michael Breckwoldt, MD, PhD (Heidelberg University, Medical Faculty), German Cancer Research Center (DKFZ)
11:35 – 11:45	GLUGLIO - A phase Ib/II randomized drug repurposing trial of glutamate signaling inhibitors in combination with chemoradiotherapy in patients with newly diagnosed glioblastoma Hans-Georg Wirsching, PhD (University Hospital and University of Zurich, Switzerland) – Abstract No 54
11:45 – 12:30	Poster Session 1 (Topics 1-4)
12:30 – 13:15	Lunch
13:15 – 14:45	Technological and Structural Developments for Cancer Neuroscience Chairs: Sinem Saka, PhD (EMBL, Heidelberg), Varun Venkataramani, MD, PhD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ))
13:15 – 13:35	Deciphering the neuron-tumor cell dialogue with single cell RNA-sequencing Mariella Filbin, MD, PhD (Harvard University, Boston, Massachusetts)
13:35 – 13:50	Targeted ultrastructure of neuron-tumor interfaces Thomas Kuner, MD (Heidelberg University, Medical Faculty)
13:50 – 14:05	Recording the physiological history of cells with chemical labeling Kai Johnsson, PhD (MPI for Medical Research, Heidelberg)
14:05 – 14:15	Region-selective spatial transcriptomics for Cancer Neuroscience Sinem Saka, PhD (EMBL, Heidelberg)
14:15 – 14:30	Data science & Mathematical modeling Anna Marciniak-Czochra, PhD (Heidelberg University, Medical Faculty)
14:30 – 14:45	In-vivo imaging approaches for Cancer Neuroscience Robert Prevedel, PhD (EMBL, Heidelberg)





14:45-15:05	Special Lecture Publishing in Nature (in Cancer Neuroscience and beyond): how we work and how decisions are reached Barbara Marte, Senior Editor, Nature (London, UK)
15:05 – 16:15	Interactive session: work shop format How do we advance Cancer Neuroscience?
15:05 – 15:45	Development of technologies, models and data science Moderators: Varun Venkataramani, MD, PhD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ)) Mariella Filbin, MD, PhD (Harvard University, Boston, Massachusetts) Marciniak-Czochra, PhD (Heidelberg University, Medical Faculty) Judith Zaugg, PhD (EMBL, Heidelberg)
15:45 – 16:15	Career development Moderators: Frank Winkler, MD (Heidelberg University, Medical Faculty, German Cancer Research Center (DKFZ)) Wolfgang Wick, MD (Heidelberg University, Medical Faculty), German Cancer Research Center (DKFZ) Humsa Venkatesh, PhD (Harvard University, Boston, Massachusetts) Vera Thiel, PhD candidate (German Cancer Research Center (DKFZ), Heidelberg)
16:15 – 17:00	Poster Session 2 (Topics 5-8) & Coffee Break
17:00 – 18:00	Panel Discussion Where do we stand – what do we need for future development of the field?
17:00 – 18:00	Moderation Varun Venkataramani, MD, PhD (Heidelberg University, Medical Faculty), German Cancer Research Center (DKFZ) With Moran Amit Ekin Demir David Gutmann Douglas Hanahan





Shawn Hervey-Jumper
Sonja Loges
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Humsa Venkatesh
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