



Alumni Monthly Issue 3 / December 2016

The Alumni Association wishes you happy holidays and all the best for 2017

Dear DKFZ Alumni and Colleagues,

The Alumni Association looks back at a year full of memorable events. The highlights have been portrayed in the new Alumni Magazine which will be sent before Christmas.

We wish you a very Happy Holiday season and a peaceful and prosperous New Year.

Best wishes,

The Alumni Board

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Press Releases

Using sound and light for navigating inside the body - Lena Maier-Hein has been awarded the Emil Salzer Prize



Priv.-Doz. Dr. Lena Maier-Hein was awarded the 2016 Dr. Emil Salzer Prize © Uwe Anspach, DKFZ

When performing minimally invasive surgery, clinicians need to have imaging information from inside the body for spatial orientation and in order to differentiate malignant tissue from healthy tissue. Novel imaging methods based on sound and light provide additional imaging information that goes far beyond the images that a normal endoscopic camera can provide. Lena Maier-Hein (newly appointed W3 Professor at DKFZ) now receives the 2016 Emil Salzer Prize for enhancing these methods. [read more](#)

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DKTK Essen/Düsseldorf: Physicians Receive Prize for Best Studies on Carcinogenesis and Cancer Treatment



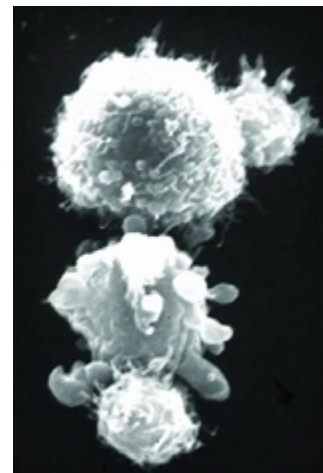
Prof. Helmut Oettle, Prof. Volker Heinemann, Prof. Jens Siveke and Prof. Florian Lordick | © AIO

Two scientists of the German Cancer Consortium (DKTK) have received the highest award by the Oncology in Internal Medicine Working Group (AIO) of the German Cancer Society. The physicians Wilfried Eberhardt and Jens Siveke of the medical faculty of the University of Duisburg-Essen (UDE) at the West German Tumor Center (WTZ) of the University Hospital of Essen (UK Essen) are receiving the award for “best scientific publication” and “best clinical study” for their

research on lung and pancreatic cancer. [read more](#)

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DKTK Tübingen: €2.5 million for developing a novel cancer immunotherapy



Tumor cells coated with bispecific antibodies are attacked and killed by

Scientists from the German Cancer Consortium (DKTK) at Tübingen University Hospital have developed a promising bispecific antibody for use in immunotherapy of prostate cancer and so-called squamous cell carcinoma, which can occur, for example, in the lungs, skin or uterus. The antibody binds to cancer cells as well as immune cells, thus provoking an immune response against the tumor. The Helmholtz Association now provides €2.5 million from its validation fund for the purpose of executing the next steps in the pharmaceutical development of the bispecific antibody. In the German Cancer Consortium (DKTK), the German Cancer Research Center (DKFZ) in Heidelberg joins up as a core center in long-term collaborations with university institutes and hospitals all over Germany that are specialized in research and treatment with a focus on oncology. [read more](#)

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30 Years of the Cancer Information Service: More important than ever before!



What patients ask: Breast and prostate cancer are the most asked about. © dkfz.de

Every year, more and more people are afflicted by cancer. In 2015 there were about 490,000 new cases in Germany alone. So, it is not surprising that the need for reliable information continues to grow: Last year, the German Cancer Information Service (KID) of the German Cancer Research Center (DKFZ) responded to 34,000 individual enquiries from all across Germany – more than ever before. Every month between 450,000 and 635,000 users accessed information on the website

www.krebsinformationsdienst.de. Since 2014, doctors, caregivers, therapists and psychological counselors have utilized and valued the professional service [krebisinformationsdienst.med](mailto:krebsinformationsdienst.med@dkfz.de) [read more](#)

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Highlight Publications

Dimethyl fumarate restores apoptosis sensitivity and inhibits tumor growth and metastasis in CTCL by targeting NF- κ B

Despite intensive efforts in recent years, a curative therapy for cutaneous T-cell lymphoma (CTCL) has not yet been developed. Therefore, the establishment of new therapeutic approaches with higher efficacy rates and milder side effects is strongly desired. A characteristic feature of the malignant T-cell population in CTCL is resistance toward cell death resulting from constitutive NF- κ B activation. Therefore, NF- κ B-dependent cell death resistance represents an interesting therapeutic target in CTCL because an NF- κ B-directed therapy would leave bystander T cells widely unaffected.

Nicolay JP, Müller-Decker K, Schroeder A, Brechmann M, Möbs M, Géraud C, Assaf C, Goerdts S,

Krammer PH, Gülow K. Blood. 2016 Aug 11;128(6):805-15. doi: 10.1182/blood-2016-01-694117. Epub 2016 Jun 6. [link to article](#)

Pan-cancer analysis of somatic copy-number alterations implicates IRS4 and IGF2 in enhancer hijacking. Nat Genet.

Extensive prior research focused on somatic copy-number alterations (SCNAs) affecting cancer genes, yet the extent to which recurrent SCNAs exert their influence through rearrangement of cis-regulatory elements (CREs) remains unclear. Here we present a framework for inferring cancer-related gene overexpression resulting from CRE reorganization (e.g., enhancer hijacking) by integrating SCNAs, gene expression data and information on topologically associating domains (TADs). Analysis of 7,416 cancer genomes uncovered several pan-cancer candidate genes, including IRS4, SMARCA1 and TERT.

Weischenfeldt J, Dubash T, Drainas AP, Mardin BR, Chen Y, Stütz AM, Waszak SM, Bosco G, Halvorsen AR, Raeder B, Efthymiopoulos T, Erkek S, Siegl C, Brenner H, Brustugun OT, Dieter SM, Northcott PA, Petersen I, Pfister SM, Schneider M, Solberg SK, Thunissen E, Weichert W, Zichner T, Thomas R, Peifer M, Helland A, Ball CR, Jechlinger M, Sotillo R, Glimm H*, Korbel JO*. Nat Genet. 2016 Nov 21. doi: 10.1038/ng.3722. [Epub ahead of print] [link to article](#)

CYP3A5 mediates basal and acquired therapy resistance in different subtypes of pancreatic ductal adenocarcinoma.

Although subtypes of pancreatic ductal adenocarcinoma (PDAC) have been described, this malignancy is clinically still treated as a single disease. Here we present patient-derived models representing the full spectrum of previously identified quasi-mesenchymal (QM-PDA), classical and exocrine-like PDAC subtypes, and identify two markers--HNF1A and KRT81--that enable stratification of tumors into different subtypes by using immunohistochemistry. Individuals with tumors of these subtypes showed substantial differences in overall survival, and their tumors differed in drug sensitivity, with the exocrine-like subtype being resistant to tyrosine kinase inhibitors and paclitaxel.

Noll EM, Eisen C, Stenzinger A, Espinet E, Muckenhuber A, Klein C, Vogel V, Klaus B, Nadler W, Rösli C, Lutz C, Kulke M, Engelhardt J, Zickgraf FM, Espinosa O, Schlesner M, Jiang X, Kopp-Schneider A, Neuhaus P, Bahra M, Sinn BV, Eils R, Giese NA, Hackert T, Strobel O, Werner J, Büchler MW, Weichert W, Trumpp A, Sprick MR. Nat Med. 2016 Mar;22(3):278-87. doi: 10.1038/nm.4038. [link to article](#)

Adiabatically prepared spin-lock approach for T1ρ-based dynamic glucose enhanced MRI at ultrahigh fields.

PURPOSE: Chemical exchange sensitive spin-lock and related techniques allow to observe the uptake of administered D-glucose in vivo. The exchange-weighting increases with the magnetic field strength, but inhomogeneities in the radiofrequency (RF) field at ultrahigh field whole-body scanners lead to artifacts in conventional spin-lock experiments. Thus, our aim was the development of an adiabatically prepared T1ρ -based imaging sequence applicable to studies of glucose metabolism in tumor patients at ultrahigh field strengths.

Schuenke P, Koehler C, Korzowski A, Windschuh J, Bachert P, Ladd ME, Mundiyanapurath S, Paech D2, Bickelhaupt S, Bonekamp D, Schlemmer HP, Radbruch A, Zaiss M. Magn Reson Med. 2016 Aug 13. doi: 10.1002/mrm.26370. [Epub ahead of print] [link to article](#)

Lymphotoxin β receptor signalling executes Helicobacter pylori-driven gastric inflammation in a T4SS-dependent manner.

DESIGN: We analysed several ligands and receptors of the alternative NF- κ B pathway, RelB, p52 nuclear translocation and target genes in tissue samples of H. pylori-infected patients with different degrees of gastritis or early gastric tumours by in situ hybridisation, immunohistochemistry, Western blot and real-time PCR analyses. Molecular mechanisms involved in LT β R activation by H. pylori were assessed in vitro using human gastric cancer cell lines and distinct H. pylori isolates. The effects of blocking or agonistically activating LT β R on gastric pathology during challenge with a human pathogenic H. pylori strain were studied in a mouse model.

Mejías-Luque R, Zöller J, Anderl F, Loew-Gil E, Vieth M, Adler T, Engler DB, Urban S, Browning JL, Müller A, Gerhard M, Heikenwalder M. Gut. 2016 Apr 13. pii: gutjnl-2015-310783. doi: 10.1136/gutjnl-2015-310783. [Epub ahead of print] PubMed PMID: 27196595. [link to article](#)

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New Research Groups

Division of Proteomics of Stem Cells and Cancer Prof. Dr. Jeroen Krijgsveld



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Proteomes are highly complex, consisting of thousands of proteins that operate in intricate networks in a cell and condition-specific manner. The interest in our division is to understand proteome complexity, and to develop tools to investigate how the proteome is dynamically regulated in time and space. Using state-of-the-art mass spectrometric technologies we aim to understand processes that are fundamental to cancer biology and to pluripotency in stem cells, both using cell lines as well as in vivo model systems.

For instance, this has enabled us to identify novel proteins controlling the identity of mouse hematopoietic stem cells, and proteins that are key in the gain of pluripotency during reprogramming of fibroblasts to induced pluripotent stem cells (iPSCs). Benefiting from novel methodologies for sample preparation developed in our lab, we are now capable of handling very small sample sizes, integrated in a robotic system for automated and standardized sample handling. This technology will be highly beneficial for studying quantity-limited (clinical) samples. [read more](#)

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Division of Medical Informatics for Translational Oncology Prof.

Dr. Frank Ückert

State-of-the-art oncology research and treatment increasingly depend on national and international research consortia. One key to the continuous improvement of research and therapeutic options lies in a shared, future-proof research infrastructure developed cooperatively by science and industry.

DKFZ's Department of Medical Informatics in Translational Oncology (MITRO) has extensive experience in the development of innovative IT tools and concepts that bring

together findings from prevention, diagnostics, therapy, follow-up care, and research. Acting as an IT communication hub for scientists and clinicians within DKFZ as well as external research, industrial, and business partners, the department contributes significantly to the improvement of the research landscape.

MITRO's core areas of research are:

semantics as a prerequisite for data interoperability and integration

management of study participants, identity management, and data protection

databases and registries, especially federated approaches

management of electronic data quality

data warehousing together with data extraction. [read more](#)



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Lectures & Conferences at DKFZ

Opening Symposium for the new Treatment and Research Center for Pediatric Oncology and Hematology Heidelberg



Prof. Dr. Andreas Kulozik, Prof. Dr. Olaf Witt, Dietmar Hopp, Annika, Prof.... © Universitätsklinikum Heidelberg. The Dietmar Hopp Stiftung supports the foundation of the „Hopp-Kindertumorzentrum at the NCT Heidelberg“ (KITZ) with 20 Million Euro.

19th - 20th January 2017

Print Media Academy, Heidelberg

The innovative new Treatment and Research Center for Pediatric Oncology and Hematology will aim at fostering the translation of basic science discoveries into novel diagnostic approaches and therapies for children with cancer and serious non-malignant blood diseases. We aim to fully develop a synergistic interaction between the different basic, translational and clinical disciplines by uniting them under one roof. The ultimate goal is to turn more of the

laboratory breakthroughs into lifesaving treatments for children. The meeting covers a broad repertoire of pediatric malignancies and hematological disorders represented by a panel of renowned national and international speakers as well as oral presentations from selected abstracts in each session. [read more](#)

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New event series! Research Lounge - Let's talk science!



POSTDOC NETWORK PRESENTS
RESEARCH LOUNGE
Let's talk science!

A relaxed & informal seminar for troubleshooting & networking
Tuesday 24th January 2017, 5:15 pm
DKFZ Main Building, Communication Center, Conference Room K1

TROUBLESHOOTING flash talks
NETWORKING meet & chat with drinks & snacks
WHO Students, PostDocs, PIs, Technicians

Join in & spread the word!

Contact: pdn-committee@dkfz.de
Further information: www.dkfz.de/en/postdoc-network/ResearchLounge.html
Deutsches Krebsforschungszentrum (DKFZ) | Im Neuenheimer Feld 200 | 69120 Heidelberg



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A relaxed & informal seminar series for troubleshooting & networking, organized by the DKFZ PostDoc Network

Tuesday 24th January 2017, 5:15 pm
DKFZ Main Building, Communication Center,
Conference Room K1

Are you trying to troubleshoot a protocol that you've never tried before?

Is the software you absolutely need to use completely incomprehensible?

OR do you have a more general desire to discuss your research with others?

[read more](#)

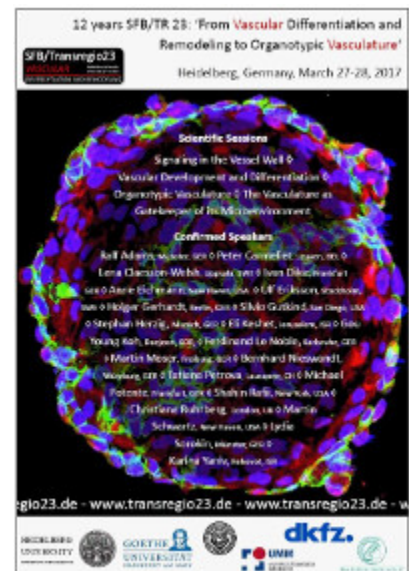
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Conference: 12 years SFB-TR23: From Vascular Differentiation and Remodeling to Organotypic Vasculature

March 27-28, 2017

Confirmed Speakers

Ralf Adams, Münster, GER
Peter Carmeliet, Leuven, BEL
Lena Claesson-Welsh, Uppsala, SWE
Ivan Dikic, Frankfurt GER
Anne Eichmann, New Haven, USA
Ulf Eriksson, Stockholm, SWE
Holger Gerhardt, Berlin, GER
Silvio Gutkind, San Diego, USA
Stephan Herzig, Munich, GER
Eli Keshet, Jerusalem, ISR
Gou Young Koh, Daejeon, KOR
Ferdinand Le Noble, Karlsruhe, GER
Martin Moser, Freiburg, GER
Bernhard Nieswandt, Würzburg, GER



12 years SFB/TR23: 'From Vascular Differentiation and Remodeling to Organotypic Vasculature'
Heidelberg, Germany, March 27-28, 2017

Scientific Sessions
Signaling in the Vessel Wall & Vascular Development and Differentiation & Organotypic Vasculature: The Vasculature as Gatekeeper of Immunity

Confirmed Speakers
Ralf Adams, Münster, GER; Peter Carmeliet, Leuven, BEL; Lena Claesson-Welsh, Uppsala, SWE; Ivan Dikic, Frankfurt, GER; Anne Eichmann, New Haven, USA; Ulf Eriksson, Stockholm, SWE; Holger Gerhardt, Berlin, GER; Silvio Gutkind, San Diego, USA; Stephan Herzig, Munich, GER; Eli Keshet, Jerusalem, ISR; Gou Young Koh, Daejeon, KOR; Ferdinand Le Noble, Karlsruhe, GER; Martin Moser, Freiburg, GER; Bernhard Nieswandt, Würzburg, GER; Iuliana Petrova, San Diego, USA; Christiane Raulf, Berlin, GER; Martin Schaeuble, Basel, Switzerland; Karl-Heinz Weis, Würzburg, GER

sfbtr23.de - www.transregio23.de - www.transregio23.de

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Michael Potente, Frankfurt, GER
Shahin Rafii, New York, USA
Christiana Ruhrberg, London, UK
Martin Schwartz, New Haven, USA
Lydia Sorokin, Münster, GER
Karina Yaniv, Rehovot, ISR
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2nd European Cancer Epigenetics Conference 2017

11 – 13 May 2017

Cancer epigenetics is developing into one of the most promising and rapidly developing fields in oncology. It reveals mechanisms by which cancer genes are deregulated, provides novel tumor biomarkers to identify and target the cell of origin of a given tumor, and can be exploited to predict cancer risk. Notably, current large-scale cancer genome sequencing efforts have discovered a surprisingly large number of cancer-specific mutations in regulators of the epigenome. The high relevance of epigenetics for cancer goes hand in hand with the development of an increasing number of epigenetic drugs used in cancer therapy. Inspired by the success of the '1st European Cancer Epigenetics Conference' in Maastricht in 2015, we are inviting researchers to the 2nd symposium to continue exploring this exciting field. The 2017 meeting will be organized into 5 sessions covering the following fields:

- Mechanisms of Epigenetic Deregulation
- Epigenetics of Single Cells and Molecules
- Epigenetic Programming & Epigenetic Plasticity
- Translational Epigenetics
- Epigenetic Therapy

Keynote Speakers

Stephen B. Baylin, Institute of Genetic Medicine, Johns Hopkins, USA
Manel Esteller, IDIBELL Bellvitge Biomedical Research Institute, Barcelona, Spain

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Job Openings at DKFZ

Scientific jobs

- 315/2016 PhD/ Postdoc/ Research assistant positions in tumor immunotherapy - German

Cancer Consortium (DKTK) Freiburg

- 314/2016 PhD Student or Postdoctoral Fellow to work in the area of cancer proteomics - German Cancer Consortium (DKTK) Freiburg
- 311/2016 Postdoctoral Scientist - Molecular Genetic Epidemiology
- 304/2016 PhD Student / Postdoc - Translational Oncology/ Applied Stem Cell Biology
- 303/2016 Postdoc position molecular and cell biology - Translational Oncology/ Applied Stem Cell Biology
- 302/2016 Postdoc with focus on pre-clinical in vivo studies and immunology - Virus-associated Carcinogenesis
- 293/2016 Head of the Proteomics Core Facility - Genomics & Proteomics Core Facility
- 279/2016 Postdoc - Medical Physics in Radiology
- 277/2016 Wissenschaftliche/r Mitarbeiter/in, Epidemiologe/in - Projekte: "Effekte der Darmkrebsvorsorge auf die Darmkrebsinzidenz und die Darmkrebsmortalität in Deutschland" und "Regionale Unterschiede in der Krebsprognose in Deutschland" - Klinische Epidemiologie und Altersforschung
- 276/2016 Wissenschaftliche/r Mitarbeiter/in, Epidemiologe/in - Projekt: "Zukünftige Krebslast - Prädiktionen und Präventionspotential" - Klinische Epidemiologie und Altersforschung

PhD studentships

- 319/2016 PhD Student - Molecular and Cellular Oncology - Translational Oncology
- 315/2016 PhD/ Postdoc/ Research assistant positions in tumor immunotherapy - German Cancer Consortium (DKTK) Freiburg
- 314/2016 PhD Student or Postdoctoral Fellow to work in the area of cancer proteomics - German Cancer Consortium (DKTK) Freiburg
- 304/2016 PhD Student / Postdoc - Translational Oncology/ Applied Stem Cell Biology
- 301/2016 PhD Student - Preventive Oncology
- 300/2016 PhD Fellowship - Molecular Genetic Epidemiology
- 275/2016 Doktorand/in - Projekt: "Zukünftige Krebslast - Prädiktionen und Präventionspotential" - Klinische Epidemiologie und Altersforschung
- 274/2016 Doktorand/in - Projekt: "Effekte der Darmkrebsvorsorge auf die Darmkrebsinzidenz und die Darmkrebsmortalität in Deutschland" - Klinische Epidemiologie und Altersforschung
- 273/2016 Doktorand/in - Projekt: "Regionale Unterschiede in der Krebsprognose in Deutschland - eine Analyse im Hinblick auf sozio-ökonomische Unterschiede und Krebsversorgung" - Klinische Epidemiologie und Altersforschung
- 272/2016 Doktorand/in - Projekt: "Langzeit-Lebensqualität (10 und mehr Jahre) nach Brust-, Kolorektal- und Prostatakrebs" - Klinische Epidemiologie und Altersforschung
- 267/2016 PhD Student - Dissection of oxytocin-mediated suppression of stress response: The role of transcription factor Otp - Neuropeptides

Laboratory / Engineering department

- 313/2016 FACS-Operator - Core Facility (Flow) Cytometry (CFFC)
- 307/2016 Dipl.-Ingenieur/in (FH / DH oder Bachelor) Fachrichtung Architektur - Technische Infrastruktur
- 306/2016 Bautechniker/in Fachrichtung Hochbau - Technische Infrastruktur

Administration

- 316/2016 Technologiemanager/in - Stabsstelle Technologietransfer
- 310/2016 Wissenschaftsadministrator/in - Deutsches Konsortium für Translationale Krebsforschung (DKTK) Berlin
- 309/2016 Sachbearbeiter/in Patente in Teilzeit 50% - Stabsstelle Technologietransfer
- 287/2016 Sachbearbeiter/in wiss./med. Umfeld in Teilzeit 19,75 Std./Woche - Deutsches Konsortium für Translationale Krebsforschung (DKTK) Essen/ Düsseldorf

Further job offers

- 317/2016 Bioinformatiker/in - Hochdurchsatzsequenzierung der Zentralen Einheit für Genom- und Proteomforschung
- 299/2016 Informatiker/in / Bioinformatiker/in - Theoretische Bioinformatik
- 278/2016 Fachinformatiker/in First-Level-Support des NCT - Translationale Onkologie

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Alumni Matters

Alumni "newcomer" event at the Heidelberg University Library



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On December 6th, more than 30 new DKFZ colleagues and alumni joined for a tour of the new library reading rooms followed by a dinner at a historic restaurant. This was a great opportunity to meet colleagues from all over the world.

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Alumni New Years Reception 2017 "La Dolce Vita"

SAVE THE DATE!

Thursday, 16th February 2017

The Alumni New Years Reception, in collaboration with the PhD Council und the PostDoc Network, will be held on 16th February 2017.

Our Italian colleagues and DKFZ Alumni are organizing a spectacular evening.



New Alumni Magazine out now!

The latest issue of our DKFZ Alumni Magazine has just been printed. To receive a copy, indicate this in your membership application for the DKFZ Alumni Association at www.dkfz.de/en/alumni. Highlights in this magazine are reports about the General Alumni Meeting, an interview with Professor Baumann, prizes and much more.



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Stay connected

Join the Alumni Association

Alumni members benefit from an attractive range of activities:

- *Alumni Monthly* electronic newsletter reporting on recent developments at the DKFZ
- Publication of *Alumni Magazine* reporting on Alumni activities
- Eligibility for a DKFZ Alumni email address your.name@alumni.dkfz.de
- Biennial General Alumni Meeting and Scientific Symposium, including travel grants

All current and former DKFZ colleagues are welcome to join. Please register at www.dkfz.de/en/alumni

Join more than 1600 colleagues on **DKFZ Connect**, the online platform for networking and mentoring between former and current employees, including events and job postings. You can register per email or easily sync your profile with social media on www.dkfz-connect.de

Imprint

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Research for a Life without Cancer