



Welcome to the March edition of Alumni Monthly

Due to the Easter Holidays, Alumni Monthly is arriving in your inbox a little later than usual.

Check out the invitations to the DKFZ events in Chicago and The Netherlands and spread the word that the new application round for the PhD Program is now open!

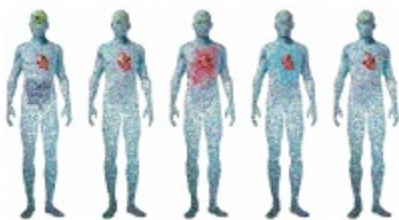
Enjoy reading the newsletter and send an e-mail to Susanne.Schunk@dkfz.de if you have any suggestions.

Content

- » **News from the Press Office**
- » **Highlight publications**
- » **New research group**
- » **Upcoming events**
- » **Job openings**
- » **Alumni matters**
- » **Scientific news from our Alumni**
- » **Stay connected**

News from the Press Office

LifeTime - a visionary proposal for an EU Flagship



© Spencer Phillips, EMBL-EBI

Reliably predicting the onset and trajectory of a disease might seem like a distant dream. But a European consortium is aiming to achieve exactly this using a set of emerging technologies with the analysis of single cells at their core. Researchers from leading European science institutions have now submitted a proposal for a so-called "Future and Emerging Technologies Flagships". The large-scale project, which also involves scientists from the German Cancer Research Center, is called LifeTime. [read more](#)

Ten years of successful research on cancer stem cells – Start of the third funding period

HI-STEM, the Heidelberg Institute for Stem Cell Technology and Experimental Medicine at the DKFZ, is looking back on ten successful years. In numerous types of cancer, HI-STEM researchers have been able to show the role of stem cells in the development, spread and therapy resistance of malignant tumors. The results show new approaches towards treating the threatening diseases more specifically and more effectively in the future. HI-STEM, a nonprofit institute, will now receive support amounting to €7.5 million from the Dietmar Hopp Foundation for the third consecutive five-year funding period. In addition, the Dietmar Hopp Foundation has agreed to support another two research projects at HI-STEM with funds amounting to €2.25 million. [read more](#)



Dietmar Hopp (right) visiting the HI-STEM labs. Hopp is accompanied by DKFZ Director Michael Baumann (left) and by HI-STEM-Director Andreas Trumpp (center) © Jutta Jung/DKFZ

Diabetes: Are high blood glucose levels an effect rather than the cause of the disease?



Flies are an established model to study energy metabolism. The body fat of this fly is labelled with GFP ("green fluorescent protein"). © Teleman/DKFZ

Insulin resistance and elevated blood glucose levels are considered to be the cause of type 2 diabetes. However, scientists from the DKFZ and Heidelberg University Hospital have now provided evidence that things might be completely different. They showed in flies that elevated levels of the metabolite MG (methylglyoxal) cause the typical diabetic disturbances of the metabolism and lead to insulin resistance, obesity and elevated blood sugar levels. [read more](#)

Combination therapy in neuroblastoma: It's all about the mix

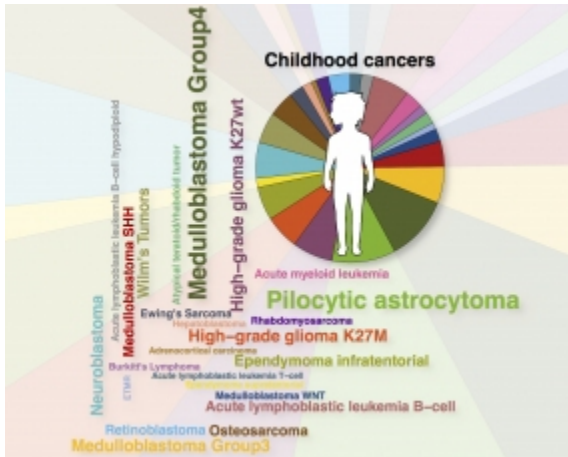
The combination of two cell division inhibitors causes malignant nervous system tumors to die off, as scientists from the "Hopp Children's Cancer Center at the NCT Heidelberg" (KiTZ) have shown in experimental studies. The combination strategy could be the key to new targeted therapies against this aggressive type of tumor.

The Hopp Children's Cancer Center at the NCT Heidelberg (KiTZ) is a joint institution of Heidelberg University Hospital and the DKFZ. [read more](#)



Can neuroblastomas be treated more effectively using a mixture of two active ingredients? © Philipp Benjamin, KiTZ

A molecular map of childhood cancers



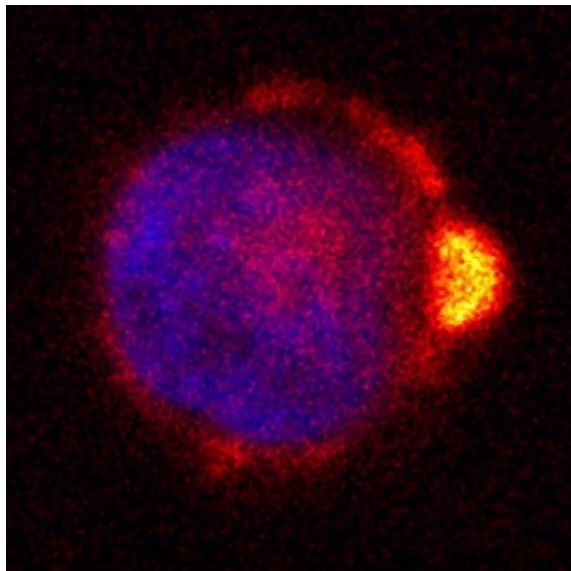
The diversity of childhood cancers © Susanne Gröbner, KITZ

Researchers led by Professor Stefan Pfister from the KITZ have been able to draw an extremely detailed molecular map of childhood cancers. In close collaboration with the German Cancer Consortium (DKTK) and the Society for Pediatric Oncology and Hematology (GPOH), they screened almost 1,000 tumor samples from 24 cancer types for genetic alterations and then classified these alterations. In 50 percent of the samples, they found targets for novel anticancer drugs, thus opening up new therapy approaches.

The findings have now been published in Nature. [read more](#)

Metastasis: Cell polarity matters

Not only the number of migrating cancer cells determines the risk for metastasis but also their characteristics, scientists from the DKFZ have now reported. For circulating cancer cells to be able to invade tissues and settle at other sites in the body, they have to exhibit a specific polarity. This discovery might in future help to better predict individual risk for metastasis and find appropriate therapies that can reduce it. [read more](#)



A human melanoma cell exhibits a specific polarity which helps attaching to the endothelial layer of the blood vessel (ezrin stained in orange) © Heikenwälder/DKFZ

Colorectal cancer: Combined analysis enhances risk prediction



© Yodiyim, Fotolia

If first-degree relatives are affected by colorectal cancer, this indicates a person's own elevated risk of developing bowel cancer. The same holds true for people who have large numbers of genetic risk markers in their genome. Both factors are usually used alternatively, not combined, to predict risk. Scientists from the DKFZ in Heidelberg have now shown that a combination of family history and an analysis of genetic markers

helps determine a person's colorectal cancer risk more precisely. [read more](#)

Clinical study on chemotherapy resistance in colorectal cancer is entering the next phase

Detected in time, colon cancer can be cured in most cases. However, advanced stages are difficult to control and, in many cases, the tumor becomes resistant during chemotherapy. In the clinical study REVEAL scientists of the DKTK search for the genetic causes at the University of Munich and at the Charité - Universitätsmedizin Berlin. Biomarker-based blood tests are designed to help detect treatment success and the risk of relapse during therapy.

[read more in German](#)



© DKFZ

9th German Israeli Cancer Research School - Cancer Stem Cells and Tumor Heterogeneity



© Susanne Schunk, DKFZ

The 9th German Israeli Cancer Research School took place from March 4 to 7, 2018 in Grainau, Germany. Invited were 14 senior speakers, 12 PhD students and junior postdocs from Israel and 12 from the DKFZ, all working in the field of Cancer Stem Cells and Tumor Heterogeneity. All PhD students and junior postdocs presented a flash talk and a poster.

The DKFZ sponsored three poster prizes that were awarded to Ceren

Dunam and Felix Geist from DKFZ and to Waleed Minzel from the Hebrew University of Jerusalem.

Stuttgart painter donates art for cancer research



The Stuttgart artist Richild von Holtzbrinck donates a series of oil paintings and drawings

Selbstbildnis „So it feels“, Richild Holt, 1990; © Detlef Göckeritz, Fotografie/Medientechnik, Stuttgart

to the DKFZ, which she has made under the name Richild Holt. The moving images have a very personal background: they show the painter before and after her breast cancer surgery. On February 28, 2018, Richild von Holtzbrinck, together with the DKFZ board members Prof. Michael Baumann and Prof. Josef Puchta, inaugurated the permanent exhibition "Metamorphosis" at the German Cancer Research Center.

[read more in German](#)

Highlight publications

Selected by the Research Program Coordinators

The landscape of genomic alterations across childhood cancers.

Nature. 2018 Mar 15;555(7696):321-327. doi: 10.1038/nature25480. Epub 2018 Feb 28. Gröbner SN, Worst BC, Weischenfeldt J, Buchhalter I, Kleinheinz K, Rudneva VA, Johann PD, Balasubramanian GP, Segura-Wang M, Brabetz S, Bender S, Hutter B, Sturm D, Pfaff E, Hübschmann D, Zipprich G, Heinold M, Eils J, Lawerenz C, Erkek S, Lambo S, Waszak S, Blattmann C, Borkhardt A, Kuhlen M, Eggert A, Fulda S, Gessler M, Wegert J, Kappler R, Baumhoer D, Burdach S, Kirschner-Schwabe R, Kontny U, Kulozik AE, Lohmann D, Hettmer S, Eckert C, Bielack S, Nathrath M, Niemeyer C, Richter GH, Schulte J, Siebert R, Westermann F, Molenaar JJ, Vassal G, Witt H; ICGC PedBrain-Seq Project; ICGC MMML-Seq Project, Burkhardt B, Kratz CP, Witt O, van Tilburg CM, Kramm CM, Fleischhack G, Dirksen U, Rutkowski S, Frühwald M, von Hoff K, Wolf S, Klingebiel T, Koscielniak E, Landgraf P, Koster J, Resnick AC, Zhang J, Liu Y, Zhou X, Waanders AJ, Zwijnenburg DA, Raman P, Brors B, Weber UD, Northcott PA, Pajtler KW, Kool M, Piro RM, Korbel JO, Schlesner M, Eils R, Jones DTW, Lichter P, Chavez L, Zapatka M, Pfister SM.

[link to article](#)

Clonal genome evolution and rapid invasive spread of the marbled crayfish.

Nat Ecol Evol. 2018 Mar;2(3):567-573. doi: 10.1038/s41559-018-0467-9. Epub 2018 Feb 5. Gutekunst J, Andriantsoa R, Falckenhayn C, Hanna K, Stein W, Rasamy J, Lyko F.

[link to article](#)

N-Acetyl Cysteine Functions as a Fast-Acting Antioxidant by Triggering Intracellular H₂S and Sulfane Sulfur Production.

Cell Chem Biol. 2018 Jan 29. pii: S2451-9456(18)30033-3. doi: 10.1016/j.chembiol.2018.01.011. [Epub ahead of print] Ezeriņa D, Takano Y, Hanaoka K, Urano Y, Dick TP.

[link to article](#)

DNA methylation-based classification of central nervous system tumours.

Nature. 2018 Mar 22;555(7697):469-474. doi: 10.1038/nature26000. Epub 2018 Mar 14. Capper D, Jones DTW, Sill M, Hovestadt V, Schrimpf D, Sturm D, Koelsche C, Sahm F, Chavez L, Reuss DE, Kratz A, Wefers AK, Huang K, Pajtler KW, Schweizer L, Stichel D, Olar A, Engel NW, Lindenberg K, Harter PN, Braczynski AK, Plate KH, Dohmen H, Garvalov BK, Coras R,

Hölsken A, Hewer E, Bewerunge-Hudler M, Schick M, Fischer R, Beschorner R, Schittenhelm J, Staszewski O, Wani K, Varlet P, Pages M, Temming P, Lohmann D, Selt F, Witt H, Milde T, Witt O, Aronica E, Giangaspero F, Rushing E, Scheurlen W, Geisenberger C, Rodriguez FJ, Becker A, Preusser M, Haberler C, Bjerkvig R, Cryan J, Farrell M, Deckert M, Hench J, Frank S, Serrano J, Kannan K, Tsirigos A, Brück W, Hofer S, Brehmer S, Seiz-Rosenhagen M, Hänggi D, Hans V, Rozsnoki S, Hansford JR, Kohlhof P, Kristensen BW, Lechner M, Lopes B, Mawrin C, Ketter R, Kulozik A, Khatib Z, Heppner F, Koch A, Jouvét A, Keohane C, Mühleisen H, Mueller W, Pohl U, Prinz M, Benner A, Zapatka M, Gottardo NG, Driever PH, Kramm CM, Müller HL, Rutkowski S, von Hoff K, Frühwald MC, Gnekow A, Fleischhack G, Tippelt S, Calaminus G, Monoranu CM, Perry A, Jones C, Jacques TS, Radlwimmer B, Gessi M, Pietsch T, Schramm J, Schackert G, Westphal M, Reifenberger G, Wesseling P, Weller M, Collins VP, Blümcke I, Bendzus M, Debus J, Huang A, Jabado N, Northcott PA, Paulus W, Gajjar A, Robinson GW, Taylor MD, Jaunmuktane Z, Ryzhova M, Platten M, Unterberg A, Wick W, Karajannis MA, Mittelbronn M, Acker T, Hartmann C, Aldape K, Schüller U, Buslei R, Lichter P, Kool M, Herold-Mende C, Ellison DW, Hasselblatt M, Snuderl M, Brandner S, Korshunov A, von Deimling A, Pfister SM.

[link to article](#)

New research group

Hanno Glimm: New Professor at the NCT Dresden



© André Wirsig/NCT Dresden

Since 1 March 2018, Hanno Glimm is Professor of Translational Medical Oncology at the NCT Dresden. The hematologist and internist oncologist researches the molecular and cellular mechanisms behind the growth and metastasis of tumors. The results of his analyzes should provide new starting points for tailor-made treatments. These personalized treatments are especially beneficial for those who do not respond to traditional therapies. [read more in German](#)

Upcoming events

Seminar Series: Progress in Cancer Research Summer Semester 2018

12/04: Epigenetics; Frank Lyko

19/04: Cancer bioinformatics: fighting malignant cells with myriads of bytes; Matthias Schlesner

26/04: Molecular mechanism of epigenetic drugs; Christoph Plass

03/05: Challenges of linking big (or small?) data from complex system environments with already existing knowledge; Frank Ückert

*17/05: How single cell technologies have revolutionized our understanding of stem cells; Ana Martin-Villalba

*24/05: From apoptotic cell death to translation; Peter Kramm

07/06: Using viruses to fight tumors; Jean Rommelaere

14/06: Next-generation diagnosis and treatment of childhood malignancies; Stefan Pfister

21/06: Novel function of the clathrin coat: Regulation of cell migration by the plasma membrane-associated flat clathrin arrays; Steeve Boulant

28/06: MR guided radiotherapy: See what you treat-treat what you see; Jürgen Debus

05/07: Biology of plasma cell neoplasia; Marc-Steffen Raab

12/07: Imaging of prostata cancer; Heinz-Peter Schlemmer

19/07: Role and potential of prevention in progress against cancer; Hermann Brenner

*These lectures will take place in the Pathology Lecture hall, INF 220, not at the DKFZ.

DKFZ at the AACR Meeting 2018 in Chicago



© AACR

From 15th to 18th April the DKFZ will be participate in the 2018 AACR Meeting in Chicago, the world's largest cancer congress. As well as the scientific talks and posters from DKFZ scientists, the DKFZ will be part of the "Research in Germany" booth in the exhibition hall, a governmental initiative aimed at attracting international research talents to Germany. Visitors to the booth will have the opportunity to meet DKFZ researchers in person and find out more about the DKFZ and our career opportunities (Master-, PhD-, Postdoc- und Junior Research Group

Leader-programs).

There will also be a reception for friends, current and former DKFZ members, taking place on the evening of Sunday, 15th April – please see below for further information and how to register. [Link to reception registration](#)

Helmholtz Drug Discovery Conference (HDDC)



April 26-27, 2018

at Helmholtz Zentrum München

Attracting a high-level audience of researchers, the conference will provide a stimulating platform to discuss with academic experts and scientists from biotech and pharmaceutical industries. Topics include innovative screens on novel targets and target validation, structure-based drug discovery, computational approaches and more. The conference will provide a valuable platform to discuss the challenges and opportunities of modern drug discovery in academia and industry.

Registration deadline: 06. Apr 2018

[read more](#)

Job openings

Application is now open for the International PhD Program at the DKFZ – Deadline 31st May 2018



We are very happy to share with you the **new movie** in which Robin, Sri, Felix and Calvin introduce the PhD Program and share their experiences of what it is like to be part of the PhD community at the DKFZ. We'd greatly appreciate if you could share the links with students and scientists who you think would be interested in the program:

<https://www.youtube.com/watch?v=dG0tn>

[Xw-XqQ](#)

<https://www.facebook.com/DKFZde/videos/1775819639151705/>

More information about the program can be found at www.dkfz.de/phd.

Next application deadline is 31st May 2018.

Scientific jobs

- 066/2018 Postdoc - German Cancer Consortium (DKTK) München
- 063/2018 Postdoc - Radiooncology / Radiobiology
- 059/2018 Postdoctoral Scientist / Doctoral Student - Applied Functional Genomics
- 054/2018 Postdoc - Partner site Dresden of the National Center for Tumor Diseases (NCT)
- 050/2018 Postdoc - German Cancer Consortium (DKTK) München
- 038/2018 Medizininformatiker/in / Bioinformatiker/in - NCT Studienzentrale
- 018/2018 Postdoc position in computational systems genetics - Signaling and Functional Genomics
- 015/2018 Research Software Engineer - Medizinische Bildverarbeitung

PhD studentships

- PhD Positions in Cancer Research within the International PhD Program
- 059/2018 Postdoctoral Scientist / Doctoral Student - Applied Functional Genomics
- 049/2018 PhD Student - German Cancer Consortium (DKTK) München
- 012/2018 Naturwissenschaftler/in / Ingenieur/in der/die an einer Promotion auf dem Gebiet der Computertomographie (CT) interessiert ist - Röntgenbildgebung und Computertomographie (CT)

Laboratory / Engineering department

- 065/2018 Technische/r Assistent/in - Angewandte Funktionelle Genomik
- 061/2018 Technische/r Assistent/in - Molekulare Neurobiologie
- 053/2018 MTA / BTA / Biologielaborant/in - Partnerstandort Dresden des Nationalen Centrums für Tumorerkrankungen (NCT)

Administration

- 060/2018 Lizenzmanager/in - Stabsstelle Technologietransfer
- 056/2018 Wissenschaftliche/r Manager/in in Teilzeit 50% - e:Med Geschäftsstelle
- 048/2018 2 Pädagogen/innen mit naturwissenschaftlichem Schwerpunkt - 1 Vollzeitstelle und 1 Teilzeitstelle mit 19,75 Std./Woche - Krebsinformationsdienst / Life-Science Lab

- 043/2018 Volljurist/in - 1 Vollzeitstelle oder 2 Teilzeitstellen mit 19,75 Std./Woche - Stiftungsvorstand
- 032/2018 Ingenieur/in (TU/FH/DH, Bachelor/Master/Diplom) Fachrichtung Architektur - Technische Infrastruktur

Further job offers

- 067/2018 Studienassistent in Teilzeit 19,75 Std./Woche - Präventive Onkologie
- 064/2018 Studentische Hilfskraft in Teilzeit 83 Std./Monat - Radiologie
- 057/2018 Studentische Hilfskraft in Teilzeit 40 Std./Monat - Presse- und Öffentlichkeitsarbeit
- 047/2018 Studentische Hilfskraft in Teilzeit 40 Std./Monat - Biologische Sicherheit
- 046/2018 Study Nurses - Nationales Centrum für Tumorerkrankungen
- 045/2018 Medizinische Dokumentare - Nationales Centrum für Tumorerkrankungen
- 039/2018 2 Datenmanager/innen -eine Vollzeitstelle und eine 50%-Stelle- - NCT Studienzentrale
- 033/2018 4 Klinische Dokumentare/innen - Translationale Onkologie
- 031/2018 Medizinische/r Fachangestellte/r - Deutsches Konsortium für Translationale Krebsforschung (DKTK) Berlin

[link to DKFZ website](#)

Alumni matters

Invitation to the DKFZ AACR Reception on April 15, 2018



The Management Board and the Alumni Association of the DKFZ cordially invite alumni, friends and current co-workers of the DKFZ to a reception on [Sunday, April 15, 2018 at 6:30 pm](#). There will be a Welcome Address by Michael Baumann and Josef Puchta [at the Sheraton Grand Chicago, 301 East North Water Street, Chicago, IL 60611 \(Room: Columbus A+B\)](#).

Please register with the following [link](#)

DKFZ at the BCF Career Fair in Utrecht & DKFZ Alumni Get-Together in the Netherlands

Thursday, 24th May, 2018

Utrecht or Amsterdam

The DKFZ will be present with a stand at the BCF Career Fair in Utrecht on Thursday, 24th May 2018. For those of you in the area, Franziska Schmidt from the DKFZ International PhD Program would be delighted to meet you for an Alumni Get-Together on the evening of 24th May. If

you're interested in joining other DKFZ alumni for an informal dinner, [please let us know by 15th May](#) by email to meet-alumni@dkfz.de. Please also let us know where you are situated and we'll find a location that is easy to reach for everyone, e.g. in Utrecht or Amsterdam.



You might also be interested in attending the BCF Career Event which is the largest career fair for Life Sciences, Chemistry, Food and Pharma in the Netherlands. For more info, please visit www.bfcareerevent.nl.

Re-connecting with Alumni in Boston



Lindsay and Philipp with 5 of the 12 alumni who attended the Boston get-together in February 2018

On 25th February, 2018 twelve DKFZ alumni joined Lindsay Murrells (DKFZ PhD Program) and Philipp Gebhardt (DKFZ Postdoc Program) at a get-together for DKFZ alumni in the Boston area. Over dinner, participants were able to hear about each other's career paths and find out more about the DKFZ's current activities.

During that weekend, Philipp and Lindsay were also able to talk to potential new DKFZ recruits at the annual European Career Fair and during the German

Academic International Network (GAIN) meeting and informed them about career opportunities at the Center.

The Alumni Association organizes get-togethers in Boston, London, Zürich, Berlin, ... If you would like to set up a DKFZ alumni get-together in your area, we'd be happy to support you. Please contact us at meet-alumni@dkfz.de for more information.

There are also regional alumni groups within the DKFZ Connect platform, so this is another great way to keep in touch with other DKFZ alumni in your area: www.dkfz-connect.de.

One-year LinkedIn Premium for free

DKFZ Alumni who are also members of the Career Network on LinkedIn can apply for a one-year LinkedIn Premium account for free, which allows you to view profiles and message people you are



not connected with yet. On LinkedIn you can now list DKFZ under Education as well as Experience to view Alumni statistics reserved for academia and higher education. To request the free LinkedIn Premium Voucher (which automatically expires after 1 year) fill out the contact form below: your LinkedIn profile has to contain DKFZ under Education, and should be synced with www.dkfz-connect.de.

[sign up here](#)

Scientific news from our Alumni

Publication by DKFZ Alumni

Dr. Andrea E. Murmann and Dr. Marcus E. Peter



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Huntington's disease provides new cancer weapon
Scientists harness a super assassin gene for new cancer treatment

[read Press release](#)

[read Deutsches Ärzteblatt](#)

EMBO Rep. 2018 Mar; 19(3). pii: e45336. doi: 10.15252/embr.201745336. Epub 2018 Feb 12.

Small interfering RNAs based on huntingtin trinucleotide repeats are highly toxic to cancer cells.

Murmann AE1, Gao QQ2, Putzbach WE2, Patel M2, Bartom ET3, Law CY2, Bridgeman B2, Chen S4, McMahon KM5,6, Thaxton CS5,6,7,8, Peter ME1,3,7.

[link to publication](#)

Dr. Marcus E. Peter (senior author) worked as a postdoc with Prof. Peter Krammer (1993 - 1997) and habilitated, and published very successfully in the time before he went to the USA. He is now the leader of Translational Research's Solid Tumors Program at Northwestern University's Robert H. Lurie Comprehensive Cancer Center and has received one of the rare R35 (Outstanding Investigator Awards) from the National Institute of Health (NIH).

Dr. Andrea E. Murmann (first author) studied at the University of Heidelberg, was a PhD student with Prof. Peter Lichter and submitted her thesis at the DKFZ in 2004. She is now working as Research Assistant Professor and Northwestern University's Feinberg School of Medicine (Division of Hematology / Oncology).

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
- Invitations to social events and excursions
- one-year LinkedIn Premium for free

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



Join DKFZ Connect

Join more than 2469 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