



Alumni Monthly Issue 16 February | 2018

Welcome to the February edition of Alumni Monthly

The highlight in February was definitely the Alumni New Year's Reception "Alaturka" on February 20th. Our Turkish colleagues organized an amazing cultural program with music, dance and ebru art followed by a buffet dinner. Please view our photo gallery here

It is with great pride that we announce that Prof. Michael Baumann, Chairman and Scientific Director of the DKFZ has received the prestigious German Cancer Award for "Translational Research".

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

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News from the Press Office

German Cancer Award for Michael Baumann



Michael Baumann © P. Benjamin, NCT Dresden

Michael Baumann, Chairman and Scientific Director of the German Cancer Research Center, receives the 2017 German Cancer Award in the category "Translational Research". The science award, which is sponsored by the German Cancer Society and the German Cancer Foundation, is one of the most prestigious distinctions in cancer medicine in Germany. read more

European excellence grant for DKFZ researcher

The ERC Consolidator Grants by the European Research Council (ERC) support excellent researchers to help them consolidate their independent career. Ana Martin-Villalba from the DKFZ has now received this prestigious ERC grant. Martin-Villalba will use the €2 million grant to investigate how repair processes can be stimulated in the adult brain following injury or disease. Martin-Villalba plans to specifically activate the development potential of stem cells in the brain to replace lost brain cells. read more



Ana Martin-Villalba © Tobias Schwerdt/DKFZ

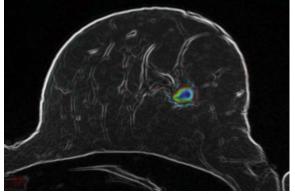
Marieke Essers receives Chica and Heinz Schaller Award



The Chica and Heinz Schaller Foundation is honouring two excellent young researchers in the research city of Heidelberg with a highly endowed award for their work in the field of basic biomedical research. Marieke Essers of the Heidelberg Institute for Stem Cell Technology and Experimental Medicine (HI-STEM) and of the DKFZ and Theodore Alexandrov from the European Molecular Biology Laboratory (EMBL) will each receive 100,000 euros. read more

Breast cancer: How advanced imaging technologies will help avoid unnecessary biopsies

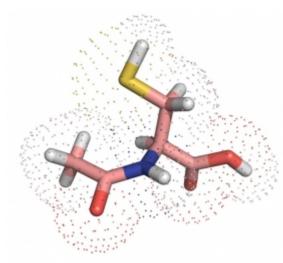
Enhancing the diagnosis of breast cancer is the stated goal of a research team at the DKFZ in Heidelberg. The scientists have combined an advanced method of diffusion-weighted MR imaging with intelligent image analysis methods to detect malignant changes in tissues. This method may help avoid many control biopsies following suspicious findings from mammography screening, the scientists have now demonstrated in a study that was supported by the Dietmar Hopp Foundation. This



Optimized diffusion-weighted MR imaging (MRI) of a suspicious lesion in a female breast © Bickelhaupt//DKFZ

advancement holds promise for substantial improvements in the diagnosis of breast cancer. read more

"Lightning protectors" protect cells from oxidative damage



Scientists from the DKFZ have been able to unravel how acetylcysteine, a well-known agent used as a cough medication, can protect cells from oxidative stress. In the cell, the substance is rapidly transformed into so-called persulfides. These sulfur compounds unfold their protective effect on the cell by diverting oxidation very efficiently towards themselves, similar to a lightning protector. read more

© Tobias Dick/DKFZ

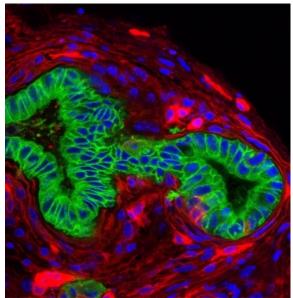
A clonal crayfish from nature as a model for tumors

A genome study has proven that all specimen of Marmorkrebs, or marbled crayfish, originate from a single female. About 30 years ago, the original clone evolved in an aquarium. Ever since, the female animals have been able to spread successfully and massively without any help from males, scientists from the DKFZ report in a current publication. The clonal genome evolution of the crayfish may also help explain processes in tumors. read more



Marbled Crayfish © Frank Lyko, DKFZ

Pancreatic cancer: Gene duplication explains tumor aggressiveness

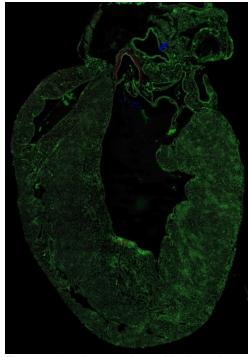


Pancreatic Carcinoma (green) in a mouse line with mutated Kras gene. Cells of tumor microenvironment are shown in red. © Dieter Saur/ TUM

Pancreatic cancer is a form of cancer associated with the highest mortality rates in the world. However, until now genetic changes that could explain the aggressiveness and early metastasis of this form of cancer had not been found. A team of researchers at the German Cancer Consortium (DKTK) and the Technical University of Munich (TUM) has now shown that those characteristics can be explained by specific gene amplifications which occur along various evolutionary pathways of the cancer. Based on this discovery, they have derived basic principles underlying the biology of this cancer type. read more

A weak heart due to metabolic change

The heart derives its energy primarily from fatty acids. However, if a metabolic shift to other energy sources takes place, this can result in congestive heart failure, scientists from the DKFZ and Heidelberg University Hospital have now discovered. This underscores the role of metabolism in heart failure. In addition, these findings are relevant for the use of certain anticancer drugs. read more



Tissue section of a mouse heart: Blood vessels are stained green. © Iris Moll, DKFZ

New offer from krebsinformationsdienst.med: The Resource Center supports experts in researching oncological topics

Neues Angebot von krebsinformationsdienst.med: Das Ressourcen-Center unterstützt Fachleute bei Recherchen zu onkologischen Themen



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Known as the point of contact for cancer patients and relatives, the Cancer Information Service (KID) of the German Cancer Research Center since 2014 also provides experts with competent answers to their questions. Above all, doctors, nurses, psychologists and pharmacists use krebsinformationsdienst.med. The service is now being further developed with an online resource center: It provides useful links for researching numbers, facts and background information from oncology, thus supporting

all those who are professionally involved in caring for cancer patients. read more in German

Annual reception of the DKFZ

Jahresempfang des DKFZ

Around 400 guests followed the invitation of the Management Board of the DKFZ to the annual reception on 8 February 2018. Friends and supporters from politics, business and science as well as employees listened with interest to the onehour lecture by the journalist and moderator Claus Kleber, who answered the question: "What can we learn from Silicon Valley?" read more in German



Josef Puchta (links) und Michael Baumann (rechts) hießen den Gastredner den ZDF-Journalisten Claus Kleber willkommen.© Uwe Anspach/DKFZ

Highlight publications

Selected by the Research Program Coordinators

Clonal selection drives protective memory B cell responses in controlled human malaria infection.

Sci Immunol. 2018 Feb 16; 3(20). pii: eaap8029. doi: 10.1126/sciimmunol.aap8029. Murugan R1, Buchauer L2,3,4, Triller G1, Kreschel C5, Costa G5, Pidelaserra Martí G1,4, Imkeller K1,4, Busse CE1, Chakravarty S6, Sim BKL6, Hoffman SL6, Levashina EA5, Kremsner PG7, Mordmüller B7, Höfer T8,3, Wardemann H9.

link to article

Targeted BiTE expression by an oncolytic vector augments therapeutic efficacy against solid tumors.

Clin Cancer Res. 2018 Feb 6. pii: clincanres.2651.2017. doi: 10.1158/1078-0432.CCR-17-2651. [Epub ahead of print]

Speck T1, Heidbuechel JP1, Veinalde R1, Jaeger D2, von Kalle C3, Ball CR4, Ungerechts G5, Engeland CE6.

link to article

Widespread Rewiring of Genetic Networks upon Cancer Signaling Pathway Activation.

Cell Syst. 2018 Jan 24;6(1):52-64.e4. doi: 10.1016/j.cels.2017.10.015. Epub 2017 Nov 30. Billmann M, Chaudhary V, ElMaghraby MF, Fischer B, Boutros M. link to article

Minor Capsid Protein L2 Polytope Induces Broad Protection against Oncogenic and Mucosal Human Papillomaviruses.

J Virol. 2018 Jan 30;92(4). pii: e01930-17. doi: 10.1128/JVI.01930-17. Print 2018 Feb 15. Pouyanfard S1, Spagnoli G2, Bulli L1, Balz K1, Yang F1, Odenwald C1, Seitz H1, Mariz FC1, Bolchi A2, Ottonello S3, Müller M4.

link to article

Prospective evaluation of antibody response to Streptococcus gallolyticus and risk of colorectal cancer.

Int J Cancer. 2018 Jan 29. doi: 10.1002/ijc.31283. [Epub ahead of print]
Butt J1, Jenab M2, Willhauck-Fleckenstein M1, Michel A1, Pawlita M1, Kyrø C3, Tjønneland A3,
Boutron-Ruault MC4,5, Carbonnel F4,5,6, Severi G4,5, Kaaks R7, Kühn T7, Boeing H8,
Trichopoulou A9,10, la Vecchia C9,11, Karakatsani A9,12, Panico S13, Tumino R14, Agnoli
C15, Palli D16, Sacerdote C17, Bueno-de-Mesquita B18,19,20,21, Weiderpass E22,23,24,25,
Sánchez MJ26,27, Bonet Bonet C28, Huerta JM27,29, Ardanaz E27,30,31, Bradbury K32,
Gunter M2, Murphy N2, Freisling H2, Riboli E20, Tsilidis K20,33, Aune D20, Waterboer T1,
Hughes DJ34.

link to article

Antibodies against human papillomaviruses as diagnostic and prognostic biomarker in patients with neck squamous cell carcinoma from unknown primary tumor.

Int J Cancer. 2018 Apr 1;142(7):1361-1368. doi: 10.1002/ijc.31167. Epub 2017 Dec 4. Schroeder L1, Wichmann G2, Willner M2, Michel A1, Wiesenfarth M3, Flechtenmacher C4, Gradistanac T5, Pawlita M1, Dietz A2, Waterboer T1, Holzinger D1. link to article

New research groups

Four new junior research groups at the NCT Dresden

NCT Junior Research Group Prostate Cancer Biomarkers Dr. Kati Erdmann

Prostate cancer (PCa) is one of the most frequent malignancies in men. However, currently used tumor markers for early diagnosis are lacking specificity and sensitivity. In addition, progression and treatment response are still not sufficiently predictable. Due to its molecular heterogeneity, PCa represents an ideal candidate for exploring and developing a personalized medicine approach. read more



Dr. Kati Erdmann

NCT Junior Research Group Bone Marrow Environment in Myeloid Malignancies

Dr. Ioannis Mitroulis



Dr. Ioannis Mitroulis

hematopoietic niche. read more

The focus of this junior research group is to understand the alterations in the bone marrow microenvironment in myeloid malignancies. Increasing evidence suggests a critical role of cell populations that form the hematopoietic stem cell niche, not only in normal hematopoiesis, but also in the initiation of myelodysplastic syndrome and the progression to leukemia. We focus in changes in cell adhesive interactions between hematopoietic progenitors and cells that form the

NCT Junior Research Group Immune Checkpoint Regulation in Cancer Dr. Mirko Theis

Advances in cancer biology and immunology have paved the way to treating cancer by directing the immune system to target neoplastic cells. This new field of cancer immunotherapy has shown great promise as a treatment strategy in the clinic. As different routes were pursued to direct the immune system to fight malignancies, therapeutic targeting of cancer immune checkpoint molecules proved to be remarkably effective as it diminished cancer immune resistance. read more



Dr. Mirko Theis

New personalized treatment options for pancreatic cancer Neue personalisierte Behandlung von Bauchspeicheldrüsenkrebs Prof. Dr. Jochen Hampe



Prof. Dr. Jochen Hampe

Der wissenschaftliche Schwerpunkt der Juniorgruppe wird die Generierung von primären humanen Organoid-Zelllinien von Patienten mit gastrointestinalen Tumoren sein. Dabei sollen vor allem Wirkungs- und Resistenzmechanismen aufgedeckt werden, die den Erfolg verschiedener Therapiearten prognostizieren können. Zudem können Organoide in immundefiziente Mäuse implantiert werden und damit ein patientennahes in vivo-Modell liefern, um therapeutische Konzepte in die Präklinik zu übersetzen.

read more in German

Upcoming event

59th Heidelberg Grand Rounds (HGR)



March 6th, 2018 16:00-18:00

Precision Oncology

Registration and program

Job openings

Scientific jobs

- 034/2018 Postdoc Clinical Cooperation Unit (CCU) Pediatric Oncology
- 029/2018 Postdoctoral Fellow in Bioinformatics Chromatin Networks
- 025/2018 Postdoc position in clinical bioinformatics improving breast cancer therapies Molecular Genetics
- 021/2018 Wissenschaftliche/r Projektkoordinator/in für das Precision Oncology Program am NCT Heidelberg Nationales Centrum für Tumorerkrankungen
- 018/2018 Postdoc position in computational systems genetics Signaling and Functional Genomics
- 015/2018 Research Software Engineer Medizinische Bildverarbeitung
- 011/2018 Junior Research Group leader positions at the German Cancer Research Center (DKFZ) -
- 009/2018 Wissenschaftliche/r Mitarbeiter/in im Bereich Labormanagement Chronische Entzündung und Krebs
- 006/2018 Postdoc on Wnt Signaling and Aging Signaling and Functional Genomics
- 004/2018 Postdoc in Protein Crystallography Structural Biology of Infection and Immunity

PhD studentships

- PhD Positions in Cancer Research within the International PhD Program
- \bullet 028/2018 PhD Student Partner site Dresden of the National Center for Tumor Diseases (NCT)
- 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

- 035/2018 Technische/r Assistent/in in Teilzeit 19,75 Std./Woche Tumorvirus-spezifische Vakzinierungsstrategien
- 023/2018 MTA / BTA in Teilzeit 50% Deutsches Konsortium für Translationale Krebsforschung (DKTK) Berlin
- 020/2018 Technische/r Assistent/in (BTA/MTA/CTA) Deutsches Konsortium für Translationale Krebsforschung (DKTK) Berlin
- 351/2017 Bioingenieur/in / Technische/r Assistent/in (MTLA/BTA) Signalwege und Funktionelle Genomik
- 350/2017 Technische/r Assistent/in (MTLA/BTA) in Teilzeit 19,75 Std./Woche Signalwege und Funktionelle Genomik

Administration

- 032/2018 Ingenieur/in (TU/FH/DH, Bachelor/Master/Diplom) Fachrichtung Architektur Technische Infrastruktur
- 022/2018 Fremdsprachensekretär/in in der medizinischen Forschung in Voll- oder Teilzeit Deutsches Konsortium für Translationale Krebsforschung (DKTK) Essen/ Düsseldorf

Further job offers

- 033/2018 4 Klinische Dokumentare/innen Translationale Onkologie
- 031/2018 Medizinische/r Fachangestellte/r Deutsches Konsortium für Translationale Krebsforschung (DKTK) Berlin
- 030/2018 IT-Fachkraft Deutsches Konsortium für Translationale Krebsforschung (DKTK) Freiburg
- 026/2018 Systemadministrator/in Linux Omics IT and Data Management
- 024/2018 UI/UX Designer/in in Voll- oder Teilzeit mit mind. 20 Std./Woche Medizinische Informatik in der Translationalen Onkologie
- 019/2018 Studentische Hilfskraft in Teilzeit 40 Std./Monat Medizinische Physik in der Radiologie
- 017/2018 Facility Manager/in Technische Infrastruktur
- 352/2017 Bioinformatiker/in / Systemadministrator/in (FH) Signalwege und Funktionelle Genomik

Alumni matters

Alumni Association New Year's Reception "Alaturka"





Turkish Folk Dancer

Whirling Dervishes

This year's reception was a real social highlight. The Chairman of the Alumni Association, Prof. Manfred Schwab and the DKFZ Chairman and Scientific Director, Prof. Michael Baumann welcomed more than 400 alumni and current employees to plunge into Turkish culture and cuisine.

The amazing program was oragized by our Turkish colleagues, Azer Aylin Acikgöz, Gözde Bekki, Oguzhan Kaya, Aykut Demir, Aset Ceren Duman, Umut Kilik, Tolga Lokumcu and Fatma Cigdem Selcuk.

You are invited to have a look at our <u>photo gallery and at the video on Turkish Stereotypes</u>

© Lasker Foundation

Lasker Essay Contest 2018 open now!

The Lasker Foundation has launched its 2018 Essay Contest! This exciting challenge engages young scientists and clinicians in discussions about the big questions in biology and medicine today, and the role of biomedical research in our society. The contest aims to build skills in communicating important medical and scientific issues to broader audiences.

First-place award is USD 10,000 and an expense-paid trip (economy class travel and one-night hotel stay) to New York City to meet the 2018 Lasker Award winners (on September 21, 2018). Second- and third-place prizes are \$5000 and

\$2500, respectively. All monetary prizes are to be used towards educational expenses. For more information visit the website

one-year LinkedIn Premium for free

Members of the DKFZ Alumni Association who want to join the Career Network on LinkedIn can get one-year LinkedIn Premium for free, so 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.

www.dkfz.de/en/alumni/mitarbeiter/kontakt/65851.php

Invitation: 4th Network Conference Research Alumni Kyoto, Japan 14 and 15 April 2018



Heidelberg University President Professor Dr Dr h.c. Bernhard Eitel cordially invites you to attend the fourth Network Conference for Research Alumni taking place at Kyoto University on 14 and 15 April 2018.

At the conference he will introduce Heidelberg University's "Research Alumni Network", set up in 2011, to all former visiting scientists and PhD candidates from East Asia at the Ruperto Carola and the DKFZ. Program

Please pass this invitation to other DKFZ Alumni, as they may not yet be members of the DKFZ Alumni Association and therefore not in our mailing list.

For membership application please <u>click here</u>

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

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



Join DKFZ Connect

Join more than 2318 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