

alumni

DEUTSCHES KREBSFORSCHUNGSZENTRUM



Like Yun Niu, Qin Su and Doris Mayer, many participants of the Alumni meeting took the opportunity for a pleasant trip on the solar boat on the Neckar river.

Dear DKFZ Alumni and Friends,

This Newsletter mainly reviews the splendid scientific and social events at the 4th General Alumni Meeting at the DKFZ in the middle of June. For the first time, Alumni of the Heidelberg Life Science Lab were actively involved in this meeting, which was preceded by a Polish-German Workshop. All invited speakers of the Alumni Meeting were Alumni of the DKFZ or the Life-Science Lab. The abstracts of their talks are only a pale reflection of their outstanding presentations which stimulated lively discussions. This also applies to the informative contributions by leading current DKFZ scientists listed under "Meet the Experts" and one of the almost 50 posters that had been selected for a prize. Several comments have confirmed my impression that this Alumni Meeting was a great success, largely fulfilling our motto "Outstanding Alumni meet the scientific community of the DKFZ".

The two Polish-German Workshops briefly described in this issue continued a series of bilateral meetings starting in 2008. Both the text and accompanying figures document that within this short period an almost familiar atmosphere has developed by the scientific and social exchange, alternating between Gliwice and Heidelberg.

A detailed report on a visit of the Nobel Laureate Harald zur Hausen, a founding member of our Association, to India, prepared by another prominent Alumnus, Maqsood Siddiqi from Kolkata, shows that zur Hausen's lectures are scientific highlights all over the world, not to mention the Alumni Meeting in Heidelberg.

An important recent activity of the DKFZ and the Heidelberg University Hospital is reviewed by Christof von Kalle: the establishment of a Heidelberg School of Oncology. The idea of such a school was

actually born in the Board of the Alumni Association some years ago. Initially, two small working groups discussed possible aims and structures, and submitted a short memorandum to the DKFZ Management Board. Fortunately, the basic idea was taken up and Christof von Kalle has meanwhile developed a professional proposal with a much broader scope than the initial considerations.

Also worth reading are two colourful narrations by former guest scientists who apparently always know how to make the best of their lives, two reports on attractive excursions with present guest researchers, and finally information on people who have been honored, reflecting the ongoing scientific excellence of the DKFZ.

As detailed in Konrad Buschbeck's record on the General Assembly 2010, I did not run for election again. In my place Dietrich Keppler has been elected, who will also be responsible for this newsletter in the future. I am grateful to all who supported and complemented my work since the foundation of our Association, particularly the members of the Board, Gerhard van Kaick and Elfriede Mang for running the excellent guest research program, and Dagmar Anders for carefully editing and desktop publishing the Newsletter. It has been a pleasure to cooperate with all of them.

With my best wishes for the future of the new Board and all members and friends of our Association I remain with kind regards,

Bob Gammale

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training

Heidelberg School of Oncology

by Christof von Kalle

The National Center for Tumor Diseases Heidelberg is announcing the first comprehensive fellowship program for oncology in Germany: The Heidelberg School of Oncology. This program is aiming to provide extensive education and training for physicians and physician scientists on all aspects of multidisciplinary cancer treatment as well as the design and conduction of clinical trials and translational cancer research projects. This kind of further training, combining interdisciplinary cancer treatment with translational research, is pioneering education of oncologists in Germany.



In order to improve the quality of patient treatment and care, to set standards for the practice of medical oncology and to promote continued education for professional excellence, the National Center for Tumor Diseases (NCT) Heidelberg has set up the Heidelberg School of Oncology (HSO).

At the HSO, fellows will be educated according to a curriculum considering all aspects of cancer care in combination with the science behind it. The following goals will be covered by the HSO:

- High quality medical education in oncology including all disciplines involved in the diagnosis and treatment of all cancer entities
- Enabling physicians in training to learn from leading medical, surgical and radiation oncologists and to gain hands-on experience in multidisciplinary treatment approaches
- Training in the design, conducting and interpretation of clinical trials
- Training in basic and translational research for physician scientists to establish and promote high quality translational laboratory research projects
- Creation of an international network of excellence in oncology to foster future collaboration in clinical trials and translational cancer research
- A program for continued medical education for physicians, general and private practitioners
- Creation of a bridge for scientists to clinical oncology and vice versa for physicians to cancer research.

The HSO will further provide a program of continued medical education on all clinical and scientific aspects of oncology, based on the regular Grand Rounds in Oncology lecture series, NCT updates and courses for clinical trial management. The Grand Rounds in Oncology is laid out as a three-monthly interdisciplinary lecture series on specific oncology issues covering clinical and basic research topics related to a given cancer entity. NCT updates are regular yearly seminar series for oncologists and oncologists in training providing broad coverage of the newest developments in all relevant fields in oncology.

To provide for the highest quality of candidates for the HSO, a stringent recruitment policy will be followed. The selection procedure aims to identify exceptional candidates with a strong commitment to their oncology education. A total of 10 three-year HSO fellowships will be granted.

The HSO will set new standards for comprehensive training in oncology spanning all aspects of clinical care and science in this rapidly developing field. It aims at the development of physicians who will provide the highest quality of care to cancer patients and aspire to be among the best in science and development of new therapies.



review

4th General Alumni Meeting

The General Alumni Meeting was organized for the first time together with active involvement of Alumni of the Heidelberg Life-Science Lab. The convention again provided an opportunity to update professional knowledge on the understanding of neoplastic development as well as translational approaches in the diagnosis and treatment of cancer. Although it was demonstrated during the meeting in the oral and nearly 50 poster presentations that much progress has been made in the past few years, many open questions remained demanding much more efforts to combat and, hopefully, eventually conquer this dreadful disease. A continued exchange of ideas of mutual interest with colleagues from all over the world will therefore remain an indispensable prerequisite.



Dr Gerda Bruder and Prof. Raymond Nagle



Prof. Dietrich Keppler, new Chairman of the Alumni Board, and Prof. Werner W. Franke

Introduction

Peter Bannasch (Heidelberg, Germany)

It was a great pleasure to welcome many Alumni at the 4th General Alumni Meeting, particularly those from abroad, coming from almost all continents. We are very grateful for the generous support of some of these participants by a grant from the German Academic Exchange Service (DAAD) and a donation by Merck-Serono. Fortunately, it has always been an easy task for the Board of our Association to prepare the scientific sessions of this meeting due to the large number of prominent Alumni, most of whom immediately accepted our invitations. In this year, we focused the program on three topics to which Alumni of the DKFZ have made internationally outstanding scientific contributions. It goes without saying that we were particularly pleased that our founding member and Nobel Laureate Harald zur Hausen agreed to give the key note lecture on infectious diseases and cancer during this meeting. As is evident from the following abstracts and complementary information, the list of speakers included many additional Alumni who have made eminent contributions to our understanding of the biology of cancer cells, the role of infectious diseases in cancer development, diagnosis and treatment, and the promotion of public relations and patient information in cancer. Especially, I would like to mention Werner Franke: With far more than 600 excellent original publications he has probably been the most productive scientist hitherto working at the DKFZ.

Biology of Cancer Cells

Ray B. Nagle (Tucson, Arizona, USA)

The Application of Biomarkers in the Diagnosis and Management of Cancer

The use of tissue based markers in the diagnosis and management of cancer were discussed. Assays applied to tissue sections have the great advantage of enabling one to visualize a given marker directly in the contexts of the tissue architecture. The detection of cell lineage specific and organ specific proteins in tumor samples has become routine practice in the diagnosis of poorly differenti-

ated neoplasms as well as in the determination of the origin of metastatic lesions. More recently there has been a significant development of companion diagnostic tests able to detect specific protein targets for predicting therapeutic responses. These predictive tests not only have been applied to protein detection but have been extended to include DNA probes capable of detecting gene amplification, deletions, and gene rearrangements. Unfortunately the use of new anticancer drugs which target single proteins has met with only modest success due to tumor heterogeneity, genetic instability, and the existence of multiple alternative survival signaling pathways. This has led to the current belief that multiplex assays capable of simultaneous detection of multiple cell components will provide better information regarding dominant pathways for targeted therapy. One attractive technique for multiplex assay development is the use of Qdot labeled detection reagents coupled with spectral imaging. Examples of multiplex assays development were presented.

Werner W. Franke (Heidelberg, Germany)

Cumulative Changes of Differentiation and the Formation of Novel Structures in Cancer Cells

In general tumors are diagnostically identified and classified according to morphological criteria and molecular marker patterns that are characteristic of a certain cell type, level of differentiation and proliferation activity. One of the major diagnostic aims is therefore the determination of the cell type of origin, which usually is also a basis for prognosis and therapy. We found out that the progeny of a given tumor cell clone even under fully defined cell culture conditions is often not homogenous. Instead spontaneous, not genetically fixed, rather rare but stable changes of gene expression can occur, albeit mostly at rather low frequencies. In more than two decades of follow-up of these observations (A. Knapp and W. W. Franke: "Spontaneous losses of control of ... gene expression ..." Cell 59, 67-79, 1989) we have isolated and characterized cells with cumulative syntheses of proteins and glycoproteins, followed by self-assembly to functional structures. Using for the sake of simplicity samples of unicellular haematopoietic tumor cells, including some of the worldwide most intensely studied ones, we show changes to carcinomatoid dysplasia forms grow-



from left: Dr. Konrad Buschbeck, Prof. Simone Fulda and Siegfried Herz

ing in tissue-like histological structures which often are not easily distinguished from genuine carcinoma structures. Such cells are rich in stoichiometrically correct keratin (8:18+19) filament bundles and interconnected by adhering junctions (AJs) containing desmosomal glycoproteins and plaque proteins, often together with additional non-desmosomal armadillo proteins. These cells are mostly also connected to each other by a second category of junctions based on clusters of the non-cadherin transmembrane glycoprotein named “epithelial membrane cell adhesion molecule” (EpCAM) anchored in a subplasmamembranous dense layer containing actin filament-binding proteins, including afadin, α -actinin and vinculin. The occurrence of certain cell type heterogeneities within tumors in situ that might reflect similar changes as well as the diagnostic, prognostic and therapeutic problems that could emerge from such “lateral” tumor cell type conversions were discussed.

Simone Fulda (Frankfurt, Germany)

Targeting Apoptosis Pathways in Cancer Therapy

Evasion of apoptosis is a hallmark of human cancers and contributes to tumor formation and progression as well as resistance to current cancer therapies, which largely rely on intact cell death pathways in cancer cells. Apoptosis resistance can be caused by aberrant expression of antiapoptotic proteins, for example „Inhibitor of Apoptosis“ (IAP) proteins, which are expressed at high levels in many human cancers. Since IAP proteins block apoptosis at the core of the apoptotic machinery by inhibiting effector caspases, they present promising therapeutic targets. Targeting IAP proteins, e. g. by RNA interference approaches or small molecule inhibitors, presents a novel approach to either directly trigger apoptosis or to potentiate the efficacy of cytotoxic therapies including death receptor ligands, chemotherapeutics or irradiation in cancer cells. Thus, inhibition of IAP proteins such as XIAP may prove to be a successful strategy to overcome apoptosis resistance of human cancers that warrants further exploitation.

Melanie Weisser (Zürich, Switzerland)

Introduction to the Life-Science Lab and the Alumni Association of the Life-Science Lab – Why Should and How Can High School Students Work in a Science Lab?

How to effectively promote young researchers and engineers continues to be a widely discussed topic among Germany’s academia and education budgets, as well as syllabuses of secondary and even primary schools, are constantly under debate.

Throughout the last 10 years, the Life-Science Lab Heidelberg has put forward a new but very successful approach to offer pupils from grades 8 to 13 a unique possibility to gain insight into academic research during their free time. Talented and interested students can participate in weekend seminars as well as national and international academies where they get in touch with researchers and academic institutions and are able to deal with current research issues. Throughout one year or even longer they also have the chance to attend weekly lectures on interdisciplinary topics and to get involved into so called “student workgroups” of various disciplines (e. g. physics, biochemistry, medicine, philosophy etc.) where they are being coached by students, teachers and professional scientists and are able to approach a scientific topic of their choice, both, theoretically and practically. Apart from communicating scientific knowledge, the program aims to assist students’ soft skills, especially team work, communication skills, project and time management.

Five years ago, former Life-Science Lab members founded the “Alumni Association of the Heidelberger Life-Science Lab e.V.” to keep networking amongst each other alive and provide also university students with similarly attractive interdisciplinary activities. The steadily growing numbers of participants, feedback of students, as well as teachers and parents, but also the great output of prizes and interesting projects from Life-Science Lab participants indicate that the central concept of “self organized learning” practised by the Life-Science Lab and its Alumni is proving to be successful.

Oliver Hantschel (Vienna, Austria)

Structural, Mechanistic and Functional Analysis of c-Abl/Bcr-Abl and its Tyrosine Kinase Inhibitors

The Abl family of cytoplasmic tyrosine kinases is involved in a number of chromosomal translocation events that lead to their aberrant activation and ultimately to oncogenic transformation of hematopoietic cells resulting in different forms of leukemia in humans. Most prominently the Bcr-Abl fusion protein is the cause of chronic myelogenous leukemia (CML). Bcr-Abl has acquired paradigmatic status as the first successful case of targeted cancer therapy using the small-molecule inhibitor imatinib (Gleevec). The occurrence of imatinib resistance resulting in patient relapse is still a major clinical challenge and has boosted the development and approval of second generation (dasatinib/Sprycel and nilotinib/Tasigna) and several third generation drugs that are active against imatinib-resistant Bcr-Abl variants.

In my talk, the following questions were discussed:

1. What are the biochemical mechanisms and the structural basis that keep Abl autoinhibited and why is Bcr-Abl constitutively active?
2. Can we target additional sites on Bcr-Abl to inhibit its activity and cellular functions and can this be therapeutically exploited?



Dr Seyed Mohsen Mousavi and Prof. Dariush Fahimi

3. Can we map the signal transduction and transcriptional network of Bcr-Abl?
4. How specific are the different Bcr-Abl tyrosine kinase inhibitors and what is their mechanism-of-action?

Clemens Buß (Rehovot, Israel)

The Effect of DNA Copy Number on Transcription

This research was carried out at the Weizmann Institute of Science as a Master Thesis for the Masters programme in Complex Adaptive Systems at the University of Gothenburg.

In this talk a model was proposed to explain and reproduce the effect of DNA copy number on transcription. DNA transcription is the first and most important of the regulatory mechanisms controlling the expression of genes. It is of highest interest with change in DNA copy number, which appears under many medical conditions.

Naively, we might expect a linear relation: doubling the chromosome goes along with doubled expression. However, in experiments this is not what is observed. We analyzed data from different cancer conditions and Down's syndrome and it was found that on an average the higher the transcription rate in disomy the higher the change in transcription rate in trisomy.

In our theoretical model we consider the cell nucleus as a lattice gas comprising boxes which are off the DNA, boxes which are on the DNA and boxes which are binding sites on the DNA. Furthermore there is a certain number of transcription factors inside the volume of the cell. They bind to each type of a box with a certain probability. It is assumed that transcription happens, if a box is occupied by a transcription factor. We make use of statistical physics to calculate quantities of interest out of this very simple, yet powerful, model. We compare the model to experimental data in order to see if the quantities derived can explain the data and give further insights into the experimental result and the operational regime in which a cell operates.



Nobel Laureate Prof. Harald zur Hausen (middle) presented the keynote lecture on "Infectious Agents Causing Human Cancers: State and Perspectives". His talk was greatly appreciated by the audience including Dr Konrad Buschbeck (left) and Prof. Dietrich Keppler from the Alumni Board

Infection and Cancer

Massimo Tommassino (Lyon, France)

Can We Learn More from HPV Research?

Infectious agents represent a major group of risk factors for cancer development and contribute to about 20 percent of human cancers worldwide. Six viruses and one bacterium, i. e. human papillomavirus (HPV), hepatitis C virus (HCV), hepatitis B virus, Human T-lymphotropic virus type I (HTLV-1), Epstein-Barr virus (EBV), Kaposi sarcoma-associated virus (KSHV) and *Helicobacter pylori*, have been clearly associated with human carcinogenesis.

The mucosal high-risk (HR) HPV types are the etiological factors of cervical cancers and a subset of oropharyngeal cancers. In addition, ongoing studies concerning a sub-group of HPV types that infect the skin suggest their involvement, together with ultraviolet radiation (or solar exposure), in the development of non-melanoma skin cancer (NMSC).

Biological studies have demonstrated that the products of two early genes from the HR HPV types, E6 and E7, play a key role in cancer development. Both viral oncoproteins are able to target several cellular pathways leading to evasion from immune surveillance and cellular transformation. These studies also substantially contributed to our understanding of key mechanisms involved in the normal life of the cell.

In the last few years, we have performed additional studies on cutaneous and mucosal HPV types and have characterized novel oncogenic viral mechanisms involved in the evasion of the immune responses and/or in cellular transformation. A few examples were presented.

Qin Su (Beijing, China)

HBV Infection and Liver Cancer in China

There are 662 000 deaths per year from liver cancer most of which are due to hepatocellular carcinoma (HCC). China alone accounts for 55 percent of cases of HCC worldwide. About 85 percent of the cases occur in livers with cirrhosis and over 80 percent are etiologically related to chronic hepatitis B virus (HBV) infection. The



Dr Mohammed Abba (far left) together with Drs Troitze and Ilia Toshkov and Dr Laura Nelson

During the Friday afternoon poster session a jury consisting of Petra Boukamp, Adelheid Cerwenka, Norbert Fusenig, Kari Hemminki, Gerhard van Kaick, Annette Kopp-Schneider and Jean Rommelaere evaluated the presentations of almost 50 posters. This year's award acknowledges the outstanding research findings of:

Mohammed Abba, Stephanie Laufs, Bernhard Korn, Axel Benner and Heike Allgayer, Heidelberg, Germany
Look Who's Talking: Two Perspectives of Expression Profiling in Colorectal Cancer

The accurate interpretation and extrapolation of data arising from the expression profile of any given tissue type hinges upon the procurement and analysis of pure cell populations from the tissue. To appreciate how cell type and purity can impact upon tissue expression, we compared whole tissue dissection and laser capture microdissection (LCM) using genome wide based oligonucleotide arrays on patients with different UICC stages of colorectal cancer and analysed the differentially regulated genes in the context of compartmental expression and active canonical pathways. We observed subtle as well as major differences in the deregulated pathways with the stroma emerging as the major determinant of the cancer phenotype.

The poster prize was presented by Petra Boukamp during the Reception of the Management Board on Friday evening.

overall prevalence of HCC in China is 26 to 32 per 100 000 persons. However, in the eastern coastal areas the annual incidence can be as high as to 70 to 80 per 100 000. Prognosis of advanced HCC is very poor, with the 5-year survival rate of the patients below 5 percent. Due to progress in early detection and improved treatment over the last 20 years, the prognosis of HCC patients has been improved in China. For the small cancers (≤ 5 cm in diameter), successful resection resulted in a 5-year survival rate of 62 percent. Identification of early HCCs smaller than 2.5 cm in diameter will further improve the clinical outcomes.

Prevalence of hepatitis B surface antigen (HBsAg) was estimated to be 9.8 percent in the general population of China. The nationwide vaccination programs provide protection for at least 75 percent of children from HBV infection. This has resulted in a decrease of HBsAg-carriage rates to less than 2 percent in most regions and a drop of HCC incidence in children in some areas. Currently, the total number of HBsAg carriers in this country is estimated to be 130 millions. The carriage status is almost life long, exposing the individuals to a markedly increased risk for HCC. Monitoring the HBV carriers and early detection of HCC and its precursors will be a long-term strategy in highly prevalent areas. For this reason, identification of HCC precursors is of great clinical significance.

Large-cell change was considered a premalignant lesion in the eighties, but later proven to be not directly related to HCC. Pre-neoplastic nature of foci of altered hepatocytes was established by Bannasch and colleagues using various animal models. These foci have been proven to be the most frequent early precursor lesions in HBV-infected liver with the potential to progress to HCC through nodular transformation and/or small-cell change. Recent approaches have revealed that most of the nodular lesions are already neoplastic, harboring characteristic genetic alterations and representing hepatic intraepithelial neoplasia (HIN). Further studies may lead to a more detailed description of genetic alterations associated with human hepatocarcinogenesis.

Hans-Georg Kräusslich (Heidelberg, Germany)
HIV and AIDS today

First recognized in 1981, the acquired immune deficiency syndrome (AIDS) has developed into one of the major pandemics of all times with more than 30 million people infected and 2 million AIDS-related deaths per year. The human immunodeficiency virus (HIV) was discovered in 1983 and later classified into two types with several subgroups and numerous clades and interclade recombinants. It is now clear that the various types and subgroups are derived from independent zoonotic transmissions with HIV-2 being derived from a sooty mangabey virus and the HIV-1 subgroups derived from chimpanzee viruses. These transmissions probably took place in the first quarter of the 20th century.

Life cycle, replication and pathogenesis of HIV have been the subjects of intense research efforts leading to about 25 antiviral drugs belonging to 5 different classes. Triple combination therapy was introduced as a standard therapy in the mid nineties and has been shown to successfully reduce viral load in more than 80 percent of all patients. However, approximately 30 percent of patients need to change therapy during the first year under treatment due to side effects or resistance development. Resistance will arise against any antiviral compound if insufficient control of viral replication occurs. With these developments, HIV/AIDS has been transformed



Prof. Hans-Georg Kräusslich

into a manageable chronic disease, at least in those situations where drugs can be afforded and if patients show good compliance and tolerance of the drugs.

Since prophylactic or therapeutic vaccines are not on the horizon, continuous efforts towards improved prevention and tight management of HIV therapy seem to be the best options at the moment. Future research is directed against eradicating silently infected cells in order to eventually achieve a cure, but this is currently not feasible.

Public Relations and Patient Information in Cancer and Cardiovascular Disease

Julia Rautenstrauch (Stuttgart, Germany)

Journalist Meets Scientist – Public Relations in Science

The management of press relations in science has to take into account the different perspectives of journalists and scientists. Both groups live in different communities and work under very different circumstances. Usually, scientists are not familiar with the specific requirements and challenges of journalism. On the other hand, most journalists are not able to form a correct opinion of a scientist's working conditions. Therefore, any contact between scientists and journalists bears some risk of conflict, which could lead to a hoax. To minimize this risk, it is important for both groups to develop a mutual understanding. Any professional media training can be recommended. More and more institutions offer workshops in media relationship management for their scientists. These workshops provide training formats for specific situations, e. g. to give an interview or to reply to a critical question. They also enable scientists to gain a deeper insight into the purpose and function of the media in general and to understand the latest changes in the media, which have a dramatic impact on the working conditions of journalists. Before contacting a journalist or answering a journalist's questions, a scientist should refer to the press office of his or her institution. The press office will clarify the journalist's intention in advance and provide a short briefing for the scientist. To avoid further pitfalls, the scientist should consider some general rules for contacts with journalists, e. g. to react fast, to use a clearly understandable language and to make short and precise comments. The scientist should be aware of typical mistakes and how to handle them. All these skills are amenable to training.



Daniel Stolte, Prof. Yun Niu and Dr. Lore Florin

Daniel Stolte (Tucson, Arizona, USA)

Cacti, Coyotes, Cardiovascular Research – Promoting Science in the American Southwest

A dusty, hostile desert land, dotted with cacti and ranches that turns into a blast furnace in the summer. Few know that Arizona, traditionally a state of miners, ranchers and cowboys, is a hotbed of scientific innovation.

Having worked in science communications and public outreach in various capacities for the University of Arizona (UA) in Tucson, I took a personal – and necessarily subjective – perspective in sharing my experience promoting research at our university for the public, the news media and stakeholders.

Compared to public universities in Germany and, presumably, most European countries, even a state-funded institution of higher education like the UA resembles a private business venture in many ways. Accordingly, communication efforts, marketing and fund-raising activities are heavily intertwined. Alumni relations specifically, play a critical role in the university's public relations effort and require a highly strategic approach.

Currently, the media landscape in the United States is experiencing the most dramatic change in its history. For us public information officers, some of these changes pose steep challenges; others present unforeseen opportunities to get our message across. Promoting scientific research in a state not commonly known for academic excellence, scientific discoveries and technological innovation poses a challenging experience in and by itself.

Most recently, the state of Arizona has found itself in a dramatic economic downturn, and lack of funds has put a traditionally weak education system in great peril. The repercussions have begun to threaten the UA's standing as the Southwest's premier research university. Unprecedented budget cuts have called for dramatic changes to our organization and modus operandi. In these dire times, a critical role falls to the university's communications office, and we have to quickly adapt to radically different approaches to the way we work.

My presentation tried to shed some light on these issues and discuss the challenges scientists and science communicators are facing in times of rapidly changing ways of how information is generated, distributed and consumed.



Prof. Andrea Mastro and Dr Karsten Böhnke

Regine Hagmann (Heidelberg, Germany)

The Future of Cancer Information for the Public: Personal Communication or World Wide Web

Worldwide, the need for accurate and relevant cancer information continues to grow. Healthcare professionals are the preferred source of cancer information but their time is limited and patients often do not know what and how to ask.

Cancer information is now readily available and in much bigger quantity than ever before to patients and the general public. The internet has been changing the way how people learn about health and illness. It is an ever expanding source of knowledge and support for cancer patients and their families. Surveys show that cancer survivors are actively seeking information throughout the course of their disease and follow-up. Nearly two-thirds of cancer survivors reported seeking information from any source.

Both men and women from all ages are increasingly using the internet. Second generation internet users not only consume information, they are seeking direct communication with health care professionals, information services, as well as with peers, particularly using services pertaining to the so-called Web 2.0.

In spite of all this, the internet is still a comparatively young medium, and widespread use is often limited by bandwidth and technical difficulties, particularly in less developed countries. Germany ranks in the upper third internet usage with 69 percent of households reporting internet access in 2008.

Communication via internet, be it a one-way consumption of information, or a two-way question-and-answer exchange, will never be at par with personal interaction, either face to face or by phone. It is not a question of "either-or", but rather one complements the other. What is crucial is to understand the needs of the information seekers and to help them applying the often confusing and contradicting wealth of information to their personal situation. The Cancer Information Service KID of the German Cancer Research Center presents cancer-related information and research findings in a clear and understandable manner via phone, e-mail and internet. The KID's telephone line has been the primary conduit for information seekers and remains the heart of all services offered. A challenge for KID will be to harness and integrate new technologies into the current channels used for dissemination of cancer information.



Prof. Wei Zhang and Prof. Kari Hemminki

Meet the Experts

On both days of the Alumni Meeting there were additional sessions with leading investigators offering scientific topics from the different research programs of the DKFZ:

Michael Boutros (Heidelberg, Germany)

Dissection of Signaling Networks by Large-scale Genomic Analysis

Stefan Herzig (Heidelberg, Germany)

Cancer and Metabolism: Molecular Connections

Ana Martin-Villalba (Heidelberg, Germany)

The Lure of CD95L

Federico Canzian (Heidelberg, Germany)

Molecular Epidemiology of Cancer

Fabian Kiessling (Aachen, Germany)

Molecular Imaging in Oncology

Bruno Kyewski (Heidelberg, Germany)

Self tolerance, Autoimmunity and Cancer

Appealing Impressions to Take Home



Dr Konstanze Lenhard and Prof. Claus Hobe Schröder

Many scientists who had spent years or only months at the DKFZ came to the 4th General Meeting of DKFZ Alumni from all over the world. For Konstanze Lenhard, the Alumni Meeting was the first time to return to the DKFZ after ten years. In the following article, the alumna who used to work in the Division of Virus-Host Interaction, recalls her experiences during the scientific event.

After a warm welcome by the organizers of the meeting, the scientific sessions were characterized by an open and relaxed atmosphere. I myself was delighted not only to see my former laboratory supervisor Prof. Claus Hobe Schröder on this occasion, but also to meet again with a scientist from China, whom I got to know during the time I worked on my diploma thesis.

The topics of the talks were diverse and addressed a variety of research issues. Lectures summarizing a lifetime of successful scientific achievements were followed by presentations giving insight into the motivation for research to be developed in the next few years. One of the highlights of the meeting was the keynote lecture by Nobel Laureate Prof. Harald zur Hausen, who provided an overview of the most prominent questions regarding the relationship between infectious agents and cancer.

But not only strictly scientific issues were covered by the lectures. Interesting aspects regarding the accessibility of scientific results for the public and the patient were also explained. In addition, an overview of the work of the students' Life-Science Lab was presented. The thoughtful selection of topics covered by the lectures was completed by a distinctive presentation by the philosopher Peter McLaughlin, who made the attending scientists think twice about why they work the way they work.

The meeting alternated lectures with "Meet the Experts" sessions, which provided an excellent opportunity to get to know the biographies of a number of young leading scientists and



The Ladies' Vocal Trio (from left): Lara Süß, Ariane Böttinger and Ria Günther

the motivations behind their work. The informal atmosphere in these sessions contributed to productive discussions.

The poster sessions gave attendees a valuable opportunity to get to know a wide variety of recent achievements in a number of areas of cancer research. Lively discussions between the participants of the meeting and the scientists presenting their work developed. For me it was particularly interesting to learn about some aspects of the work done in my former laboratory at the DKFZ after having left.

The first day of the meeting was concluded by the Reception of the Management Board. A musical performance, proffered by two a cappella groups, was incorporated into an elaborate program including an overview of recent developments at the DKFZ and the reconstruction of the main building, not to forget the presentation of the poster prize.

As an event of a more official nature, the General Assembly of the Alumni Association, was added to the schedule of the Meeting. It was interesting to see who is doing all the work needed to achieve the successful establishment of the DKFZ Alumni, and to hear about activities planned for the future.

In summary, the General Meeting of DKFZ Alumni was very engaging and diverse. Not only did it provide an opportunity to meet former co-workers and old friends and to make new acquaintances, but also to get information regarding recent work of scientists who are linked to the DKFZ through their scientific background. I am looking forward to the next meeting in two years.

Konstanze Lenhard

general assembly

Encouraging Signal for Continuity

After this year's General Assembly the Alumni Association Deutsches Krebsforschungszentrum e.V. faces the future with a newly elected Board. Expressing special gratitude to Prof. Peter Bannasch the Association at the same time welcomed the new Chairman of the Board Prof. Dietrich Keppler.

The General Assembly of Alumni Deutsches Krebsforschungszentrum Heidelberg e.V. convened on June 19, 2010 in connection with the 4th General Alumni Meeting upon invitation by the Board (*Newsletter 2/2009*). Under the experienced Chair of Prof. Peter Bannasch, the meeting paved the way for a well organized future of the Alumni Association.

As emphasized by the Chairman in the preceding General Assembly in 2008, it had been an important objective to render possible the Board's timely renewal. Due to intensive searches during the past two years the Board finally was able to present – in agreement with the Association's Advisory Council – Prof. Dietrich Keppler as candidate to replace Prof. Peter Bannasch, who did not run for a new term of office.

Peter Bannasch introduced Prof. Dietrich Keppler as a long-standing member of the Alumni Association. As former Head of the Division of Tumor Biochemistry at the DKFZ and Professor of Tumor Biochemistry at the Medical Faculty of the University of Heidelberg, Keppler is well acquainted with all relevant affairs of our Association, of the DKFZ, and of the University of Heidelberg. Hence, the Chairman considered him to be a highly qualified candidate as his successor. Prof. Dietrich Keppler was elected unanimously by secret ballot, and he accepted to be a member of the Board.

Elfriede Mang (Secretary) and Dr Konrad Buschbeck (Treasurer) continue their membership in the Board for another four years with the full support of the General Assembly. Together with Prof. Otmar Wiestler, Chairman and Scientific Member of the DKFZ Management Board, as ex-officio member, Prof. Dietrich Keppler, Dr Konrad Buschbeck and Elfriede Mang now constitute the Board.

On the basis of his detailed report on activities in 2008/2009 Prof. Peter Bannasch made clear to the assembly that the Board's workload has steadily grown in the past years and will

most probably continue to increase in the future. The Board, therefore, suggested to take advantage of §12 Section 4 of the Association's Constitution and elect supporting members of the Board, namely Prof. Gerhard van Kaick (Co-ordinator of the regional Alumni Club and special social activities of the DKFZ for guest researchers for many years) and Prof. Wolfhard Semmler (particularly experienced in organizing various international affairs of the DKFZ). Both candidates were elected and accepted their office. Right after the General Assembly, the members of the newly constituted Board elected Prof. Dietrich Keppler as Chairman.

At the end of the General Assembly Prof. Otmar Wiestler expressed his gratitude to Prof. Peter Bannasch, the leaving Chairman, for his dedication to building-up and running the Association since its foundation. Wiestler recalled that the Association had met some scepticism in its beginning. However, thanks to the creation of the informative and well illustrated Newsletter,

and the most efficient organization of numerous international and regional events by Peter Bannasch and the other members of the Board, the Association has been broadly accepted and highly appreciated in the meantime, Wiestler said. Last, but not least, Wiestler referred to the enormous efforts Prof. Peter Bannasch has spent to gain new members: During the last two years the number of inscribed members of the Association has grown from about 250 to more than 350. This laudation was unanimously affirmed by the members of the General Assembly with a warm and strong applause.

The detailed minutes of the General Assembly together with the annexed report on the Board's Activities in 2008/2009 by Prof. Peter Bannasch and the report by the Treasurer may be found on the Association's Homepage: www.dkfz.de/alumni



Prof. Peter Bannasch

Konrad Buschbeck

Professor Dietrich Keppler

Dietrich Keppler studied medicine at the Universities of Munich and Freiburg, Germany, before he joined the Biochemistry Department of the Faculty of Medicine in Freiburg. After a research period in the USA and in Freiburg, he became Full Professor of Tumor Biochemistry at the Faculty of Medicine of Heidelberg University and Head of the Division of Tumor Biochemistry of the DKFZ in 1987.

The scientific work of Prof. Keppler includes discoveries on transport of endogenous compounds and drugs across cellular membranes, the elucidation of the function of several multidrug resistance proteins of the ABC family, and cloning and characterization of human uptake transporters for organic anions. He has also been a pioneer in the generation of multiple-transfected polarized cells used as model systems for vectorial transport and as tools in drug development. Currently Keppler serves as a member of the International Transporter Consortium providing guidelines for the role of membrane transporters in drug development

Prof. Keppler has received numerous awards including the Heinrich Wieland Prize for research on metabolism and analysis of leukotrienes (1987), the Nagai Foundation Tokyo Award for achievements in medical and pharmaceutical sciences (2002), and the Lucie Bolte Award of the German Association for the Study of the Liver for achievements in research on liver diseases (2004).

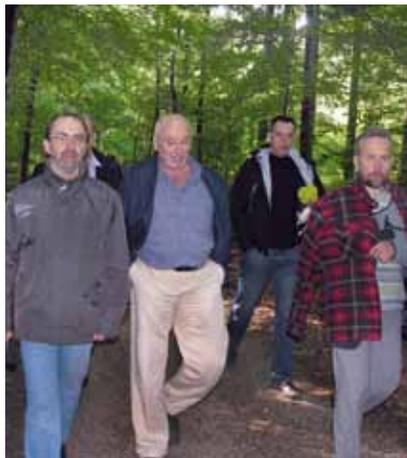
excursion

Of Solar Boats, Funicular Railways and Wild Boar Roast

The excursions to sites of beauty in and around Heidelberg have become an inherent part of the General Meetings of the Alumni Association. Especially for those from abroad it is sort of a “must” to explore the romantic Neckar town and to get a taste of local food and beverages.



Enjoying a pleasant cruise on the Solar Boat (from left): Dr Lukasz Michalecki, Elfriede Mang and Serpil Tanriverdi-Akhisaroglu with her child.



Sharing a good time during the walk from the Königstuhl to the Alter Kohlhof: Members of the Polish group including Prof. Boguslaw Maciejewski (second left) and Prof. Piotr Widlak (left)



After arrival at the “Alter Kohlhof” a delicious meal of wild boar roast awaited the guests of the Alumni Association.

The 2010 General Alumni Meeting came to an end with a traditional highlight of the social activities: The cruise on a solar boat on the Neckar river. A large group of alumni and friends from many countries, among them a strong group from Poland, enjoyed the conversations and the views of the old buildings in the center of Heidelberg and along the river together with the explanations given by our special guide Dr Dietrich Bahls. The boat trip ended near the Old Bridge (originally constructed in the years 1786 to 88

and more precisely named Carl Theodor Bridge).

From there the traditional two-section funicular railway brought the group to the hill-site known as Königstuhl with a fantastic view of Heidelberg and the Neckar valley. Hiking from the Königstuhl to the rural inn “Alter Kohlhof” was a perfect means to promote conversation and interaction among alumni and between alumni and present members of the Cancer Research Center.

For many of the participants, the highlight of the afternoon started when wild boar from the grill was served together with local beer. Good conversations continued and plans were discussed for future collaborations and meetings.

Dietrich Keppler



cooperation

In the Mood for Science and Socializing in Gliwice...

Planning scientific collaboration is frequently a difficult endeavour and not always successful. Rather than to define areas of common interest top-down, an initiative of researchers from institutes in Gliwice, Poland, and from DKFZ merely aimed at bringing scientists in contact, with the intention to find, define and form partnerships that fit their individual scientific interests in a bottom-up approach.

As a follow-up to a first such get-together in Heidelberg in 2008, a group of DKFZ scientists involved in epidemiological and functional aspects of cancer research travelled to Gliwice in November 2009 to participate in a workshop, which was organized as part of a wider meeting on similar scientific issues.

Gliwice – formerly known as Gleiwitz – is located in the south of Poland. As expected, the delegation was welcomed and treated with marvellous hospitality and had a good time both scientifically and personally.

During the day, most of the time was spent with scientific presentations and discussions. There was a lot of interest in the talks and posters, which also included work of local students. In addition, there were scientists who came to the workshop from Warsaw and elsewhere in Poland, highlighting the scientific quality and attractiveness of the program. Apart from the DKFZ and Polish researchers, also scientists from other countries, such as the Ukraine, the UK and the USA, had been invited to present their results and views. Altogether this produced an atmosphere that fostered a fruitful exchange of recent findings as well as new ideas and hypotheses. Areas of common interest were identified during the process, which led to one collaborative effort, with another now under discussion.

Next to workshop presentations, there was also time for contacts beyond purely scientific issues, particularly in the evenings, including some sightsee-

ing and watching the performance of a local dancing chorus, for example. These occasions formed another basis of communication and thus deepened personal relations, which is critical for good scientific collaboration, of course. Incidents such as the repeated short-term disappearance of one member of the DKFZ group, who clearly felt at home in Gliwice, developed into a running gag, first within the DKFZ party and then between all colleagues, improving the overall mood considerably. In short, also the human aspect was well covered during the workshop.

In consequence of all the above, the participants were in full agreement that the bilateral visits should continue in the current alternating format and possibly be widened in terms of geography and the scientific issues covered, for the good of Polish-German friendship and particular scientific exchange and collaboration.

Jörg Hoheisel

...as well as in Heidelberg

On June 17, 2010, right before the 4th General Alumni Meeting, a Polish delegation of 26 participants revisited Heidelberg: Here, at the DKFZ, the 3rd Polish-German Cancer Workshop took place. Experts mostly from the Maria Skłodowska-Curie Memorial Cancer Center and Institute of Oncology in Gliwice, who co-organized the workshop, met with their German partners to discuss current issues in cancer research.

The opening remarks by Prof. Otmar D. Wiestler, Chairman and Scientific Member of the DKFZ Management Board, and Prof. Boguslaw Maciejewski, Director of the Cancer Center in Gliwice, dealt with the power of molecular and cellular biology for translation into cancer medicine.

The scientific program consisted of two sessions prepared and co-chaired by Aurelio Teleman and Wolfgang Schlegel (both from Heidelberg) as well as Piotr Widlak and Rafal Tarnawski (both from Gliwice): The first focused on Cell and Tumor Biology, the second one reviewed Radiobiology, Radiooncology and Radiotherapy Physics. 11 talks were presented by Polish participants, with another 14 presentations given by the German hosts.

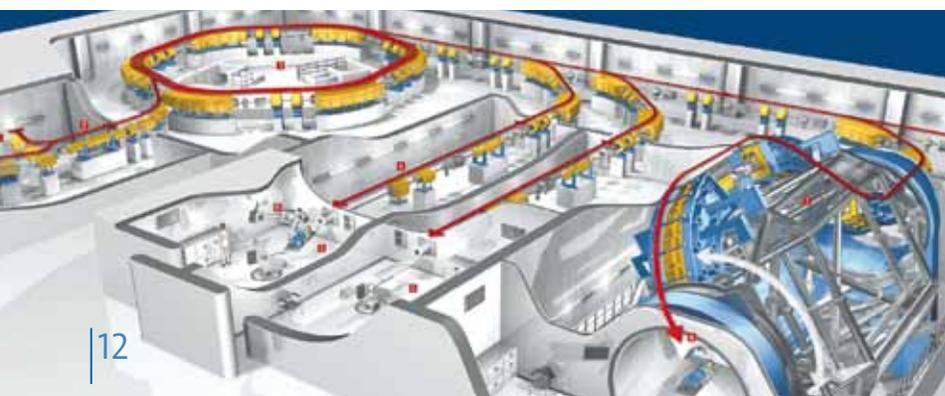
The workshop participants were also invited to visit the Heidelberg Ion Therapy center (HIT). Several possible topics for bilateral projects were discussed in detail, including molecular imaging and radiotherapy of brain tumors as well as

genetics and genomics in the prediction of the outcome the therapy. The workshop participants greatly appreciated support from the DKFZ, and were indebted to Prof. Peter Bannasch, Elfriede Mang and Dr Jana Grünewald for their perfect organization of the meeting.

The next bilateral Workshop, scheduled for November 18, 2011, in Gliwice, will again focus on two topics: "Genomics and Proteomics in Discovery and Validation of Cancer Markers", and, secondly, "Functional Cell Imaging".

Piotr Widlak

In addition to the scientific sessions many Polish researchers took the opportunity to visit the Heavy Ion Therapy center (left), but they also enjoyed an excursion to the hills of Heidelberg.



India's Researchers Welcome Nobel Laureate zur Hausen

by Maqsood Siddiqi

Having received the Nobel Prize in Medicine in 2008, Prof. Harald zur Hausen followed an invitation of the Cancer Foundation of India (CFI), Kolkata. The most awaited visit during December 2-4, 2009, represented a landmark event for the CFI as well as for Indo-German scientific co-operation. At the same time it provided an unprecedented opportunity for his numerous admirers and DKFZ alumni in the country to meet the Nobel Laureate.

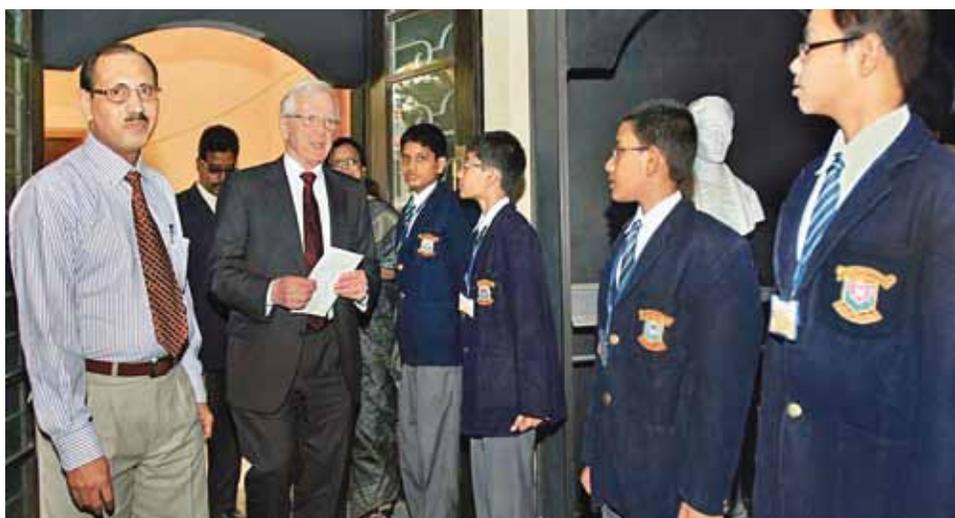
The official program of Prof. zur Hausen's visit began with an interactive session with school children at the Birla Institute of Science & Technology Museum. The purpose of this meeting was to promote science education among young students and to provide them with the unique opportunity to meet a Nobel Laureate face to face.

Afterwards, zur Hausen visited the late Mother Teresa's House where he was welcomed by the Senior Nuns of the Missionaries of Charity. As a mark of respect he lit a candle at the Mother's Memorial. "A moving experience", as he remarked soon afterwards.

At the famous Press Club of Kolkata, Prof. zur Hausen faced questions on the efficacy of the HPV vaccine in the prevention of cervical cancer and affordability of the drug in developing or low to medium resource countries. More than hundred journalists from national and international press and television attended the press conference.

The tight program also took the virologist to the Educational Multimedia Research Center. There, a TV interview was recorded for a national broadcast for students in India. Later, at the Bose Institute, a premier scientific research institute of India, students and scientific staff got

Maqsood Siddiqi (left) and the Health Minister of West Bengal at the Cervical Cancer Symposium



Meeting school children at the Birla Institute of Science & Technology Museum

the opportunity for scientific exchange with the Nobel laureate.

During his visit, Prof. zur Hausen delivered the 1st Foundation Lecture of the Cancer Foundation of India on "The search for infectious agents in human cancers: a continuous challenge" to an audience of nearly 500 invited guests, among them a number of DKFZ alumni and cancer researchers from all over India. Beside different forms of infections crucial to the formation of human cancers, zur Hausen forecast that many more infectious agents need to be investigated for their role in human cancers.

A one-day National Symposium with speakers from science and industry focused on Cervical Cancer Control in India. Prof. zur Hausen delivered the keynote address on "Papilloma viruses in human cancers: from basic research to preventive vaccines". Two sessions on screening, epidemiology and management of cervical cancer and on HPV infection and preventive vaccines were followed by a panel discussion in which

Lighting a candle at the Mother Teresa's House was "A moving experience"

the participants expressed their views on the plans and strategies to control cervical cancer in the country. A poster competition by young scientists on recent research on cervical cancer in India concluded the symposium. Zur Hausen took an active part in the scientific discussions and presented his viewpoint on cervical cancer control in India.

On the last day Prof. zur Hausen met the Chief Minister of the state of West Bengal, Buddhadeb Bhattacharjee. Dr Heinz Wirth, Counselor Science & Technology of the German Embassy in New Delhi, Prof. Maqsood Siddiqi, CFI, and Dr Surjya Kanta Mishra, Health Minister of West Bengal, also participated in the discussions on initiating cervical cancer screening in the state. A dinner in honor of Prof. zur Hausen hosted by Klaus Tesch, Deputy Consul General of Germany in Kolkata, concluded the Nobel Laureate's visit.

Prof. Maqsood Siddiqi is Chairman of the Cancer Foundation of India and an alumnus of the DKFZ

The virologist visiting the Bose institute, a premier scientific research institute of India



report

Science and Soccer along the Neckar River Banks

by Jean Grisouard

When you are a student, you might wish to finish your studies as fast as possible. Later on, you will probably think that this time was too short and should have lasted longer. This is exactly what I experienced in terms of my PhD thesis in a most stimulating research environment at lovely Heidelberg.

Life always runs forward inexorably. Almost three years have passed since I have left Heidelberg after having successfully achieved my PhD degree. Thus, it is a great pleasure to write down some thoughts about my exciting time at the Research Group Hormones and Signal Transduction of the German Cancer Research Center. First, I would like to express my gratitude to all the former group members for the nice and inspiring atmosphere in the lab and the unforgettable years we spent together. With their help, I could demonstrate that glycogen synthase kinase-3 is required for estradiol-induced estrogen receptor-alpha (ER α) transcriptional activity and that this newly described signalling pathway plays an important role in the proliferation of ER α positive breast cancer cell lines.

To a scientist, Heidelberg offers quite a stimulating environment: The old town with the historical University constitutes the cornerstone for the new home of biomedical research “Im Neuenheimer Feld” and the DKFZ. Along with other prestigious institutes nearby, it provides with new perspectives, keeping both the traditions alive and the future bright for this unique location.

In addition, the location of Heidelberg City itself is already quite attractive: a very pleasant place to spend holidays and a historical venue that piqued my curiosity. The guided tour through Heidelberg organized by the DKFZ Alumni Association stays a privileged moment, enabling me to further guide my relatives and friends and to share with them my feelings of well-being. This town has been a source of inspiration for many poets, and so it was for me – yet, I am

not blessed with their writing skills... Its surrounding landscape of renowned beauty is worth visits, too: the Odenwald hills following the River Neckar upstream passing the picturesque villages of Neckarsteinach, Dilsberg, Hirschhorn; turning to the opposite direction you will come across the cities Schwetzingen and Speyer. If you don't want to cycle so far, have a look up the hills of Heidelberg like Heiligenberg, Königsstuhl, and Bierhelderhof. Moreover, all the gardens in the districts of Handschuhsheim and Rohrbach show a peaceful rural ambience amidst the town.

I really enjoyed Heidelberg life among all the students and postdocs from the cancer center and happily spent my leisure time together with the players of the TSG Rohrbach soccer club. The combination of both represented a very entertaining melting pot and the optimal environment to exchange ideas, to discuss different points of view, to learn about other cultures and thereby enrich my life and personality. Thanks to

this “patchwork family” from so many nationalities, I felt at home and was able to overcome the inevitable doubts and frustration, finally reaching my aim.

Receiving the PhD degree in Heidelberg represents the ultimate step of my student life. Equipped with a sound background, I am now well-prepared to build up my professional career. Even if these three PhD years were over much too fast, I will never forget this marvellous student life and party time along the Neckar river banks.



Dr Jean Grisouard is a former member of the Research Group Hormones and Signal Transduction. The Frenchman studied Applied Biology at the University Institute of Technology in Dijon, France. Gathering work experience took him to the Institut National de la Santé et de la Recherche Médicale (INSERM), Dijon, and later on to the Oncology-Pharmacology unit of the Swiss company Novartis in Basel. After finishing The Nottingham Trent University (TNTU) in England with a B.Sc. in Physiology and Pharmacology, Jean Grisouard came to Heidelberg for his PhD thesis, conducted under supervision of Prof. Doris Mayer. The “summa cum laude” degree in 2007 was a decisive step which gave him the opportunity to take the position of a Research Project Leader of the Metabolism group at the Department of Biomedicine of the University Hospital Basel. In his current work in Switzerland the 28-year old biologist investigates the role of metformin and AMPK in inflammation, glucose and lipid metabolism in human adipocytes.

far east

After the DKFZ the World is Your Oyster

by Malcolm Moore

This report offers not only a history of the origins of the Asian Pacific Organization for Cancer Prevention and the Asian Regional Office of the UICC, but also can be regarded as the Asian tale of a guy from North-East England who committed himself deeply to promotion of cancer prevention in the Far East.

One of the Alumni members who greatly enjoyed a number of years working with Peter Bannasch in the Division Cell Pathology, I met a Japanese professor during our stay in Heidelberg and glibly accepted an invitation to spend my next post-doc period in Japan. A life-changing decision indeed, and what was meant to be a two year visit to the land of the rising sun soon stretched into a very much longer-term commitment.

Years of active research rolled by until again fate took a hand and I happened to come across the European Journal of Cancer Prevention during one of my visits to the DKFZ. Impressed by its pan European commitment and foolhardy as always, I began to wonder whether I should try to establish the same in Asia. Epidemiology, education, toxicological pathology and screening all rolled into one – a fit challenge for the 21st century. To cut a very long story short, my career abruptly changed direction and after publication of an “Introduction to Cancer Prevention in Tables and Figures” in 1999, the Asian Pacific Organization for Cancer Prevention (APOCP) was born at the beginning of 2000, together with the first issue of the Asian Pacific Journal of Cancer Prevention (APJCP).

From the very beginning the idea was for an ever-expanding group of scientists to work together and at the same time enjoy exploring Asia. With the founding Conference in Pattaya, Thailand, bi-yearly APOCP General Assembly Conferences in Nagoya, Seoul, Bangkok, Beijing and Istanbul, and the next planned for Kuching, in Sarawak, in 2012, this part of the world certainly gives abundant opportunity to get around! Not to mention the numerous smaller get-togethers in less well known centers outside the capitals.

The original idea was that I, as the only native English-speaker involved, should

act as coordinator and managing editor only until it got off the ground. That proved a little optimistic and it is only now starting to take wings. However, helping to produce meeting programs I have had the pleasure of very many enjoyable close face-to-face contacts. As “publisher of the APJCP”, there have been a number of daunting challenges, but with a lot of help from many friends we are still afloat. With no-one else quite foolhardy enough to offer to take over from Kazuo Tajima, our first Chief Editor, the job landed on my desk. The moral of the story – if you are going to realize a dream, get ready for a long haul.

However, the APOCP and APJCP have indeed been blessed with good fortune in support received. The group of Dr Nobuyuki Ito, who is also an alumnus of Peter Bannasch’s Division at DKFZ, deserves especial mention, as does Dr Tomoyuki Kitagawa of the JFCR Cancer Institute, a close personal pathologist friend of Peter. I have also been lucky in having an essential epidemiology comrade-in-arms in Kazuo Tajima of the Aichi Cancer Center, always ready for a well lubricated discussion. At least, the gods must have been moved, because they then again smiled down on our endeavours in the guise of a change in the policy of the International Union Against Cancer (UICC): The reorganization stimulated Tomoyuki Kitagawa, Chair of the Japanese National UICC Committee, to persuade the “powers that be” to establish an Asian Regional Office (ARO) for the UICC. His tireless efforts mean that I am now gainfully employed as its so-called head (or should I say general dogsbody?). Its main focus has been regular publication of the APJCP as a service to the Asian scientific community, while also financially supporting participation by delegates from across the “region” in meetings. Published bimonthly as an all electronic journal, saving on trees with around 50 papers per issue, the APJCP is cited on PubMed/Medline and Science Citation Index (Expanded), with an Impact Factor of just over 1.1. Low you might say, but after all with Asia you need a very positive editorial policy – hopefully a base to build on in the future.

The UICC-ARO has offices in Bangkok and Tokyo and wherever I happen to be at the time. While trying to contribute to the worldwide efforts of the UICC in awareness and advocacy, I have stressed provision of training courses in “Use of Scientific English” and building networks. One for cancer registration and epidemiological assessment is evidenced by the recently published Asian Cancer Epidemiology APJCP Supplement, freely downloadable, with all the other publications in the journal, from the www.apocp.org website.

It has been a long road since those first three years as a post-doc with Peter Bannasch in the DKFZ and I can only say that I am very thankful that fortune pointed me in his direction at the very beginning of my research career. His



friendship and collegial guidance, which put me in such good stead for the tasks that fate had lined up for me in Asia, continue to be very greatly appreciated.

I also wish to express my thanks for all of the fruitful efforts that he has invested for the sake of the Alumni Association of the DKFZ. I hope that his continued involvement will mean that we will still be able to regularly meet, far into the future.

Beside his many activities at the APJCP and the UICC-ARO, Malcolm Moore has also supported the Alumni Association in the language editing of this newsletter since the very first issue.

Appointments

Prof. Heinz Schlemmer, alumnus of the DKFZ, returned to Heidelberg from Tübingen to become Head of the Division of Radiology.

After 17 Years at the Fred Hutchinson Cancer Research Center in Seattle, USA, **Prof. Cornelia Ulrich** returned to Germany to become Head of the new Division of Preventive Oncology at DKFZ, where she holds an Excellence Professorship. Together with Prof. Christof von Kalle, Prof. Dirk Jäger, Prof. Jürgen Debus, Prof. Peter Krammer and Prof. Wolfgang Wick she belongs to the Board of Directors of the National Center for Tumor Diseases Heidelberg (NCT).

Prof. Magnus von Knebel-Doeberitz's Research Group "Gene Therapy of Tumors" has been promoted to a clinical cooperation unit titled "Applied Tumor Biology".

Prof. Bruce Edgar was appointed Head of the joint Division of Cell Growth and Proliferation of the DKFZ and the Center of Molecular Biology Heidelberg (ZMBH).

Prof. Christof Niehrs, Head of the Division Molecular Embryology of the DKFZ, was appointed founding director of a new Institute on Molecular Biology in Mainz. The Institute is funded for the next ten years by the Boehringer Ingelheim Foundation. Niehrs will continue his research at DKFZ.

Retirements

Prof. Lutz Edler, Head of the Division of Biostatistics, retired on February 28, 2010.

Prof. Bernard Mechler, Head of the Division of Developmental Genetics, also retired at the end of February 2010.

Awards to DKFZ Scientists



Once again, the Heidelberg team led by **Prof. Roland Eils**, Head of the Division of Theoretical Bioinformatics, was successful in iGEM (International Competition of Genetically Engineered Machines) held at the Massachusetts Institute of Technology in Boston. Out of 110 applications, Heidelberg won the second

prize with their project "spybricks" and was also awarded for the best internet presentation and the best technical standards in the competition 2009. The team's work focused on the development of synthetic mammalian promoters along with bioinformatical prediction models.



Prof. Hermann Brenner, Head of the Division of Clinical Epidemiology and Aging Research, and two of his group members, **Dr Ulrike Haug** and **Sabrina Hundt**, are the winners of the Felix Burda Award in the field of Medical Prevention. With the prize of 10,000 Euros

the Burda Foundation acknowledges a project on early detection of colon cancer during which the prognostic value of different excrement assays was assessed.

people

Awards to DKFZ Scientists



Prof. Stefan Hell was awarded the Otto-Hahn-Prize of 50,000 Euros for the development of STED microscopy which allows the visualization of nano structures with light microscopy. His Research Group at the DKFZ “High Resolution Optical Microscopy” has been promoted to a Division, titled “Optical Nanoscopy”. Hell is also Director of the Department of NanoBiophotonics at the Max Planck Institute for Biophysical Chemistry in Göttingen.



Philipp Kulozik, Division of Molecular Metabolic Control, is this year’s winner of the Novartis Prize for young researchers in endocrinology. The junior scientist unravelled a mechanism leading to fatty liver in patients with diabetes or obesity. He received the award endowed with 10,000 Euros together with another outstanding research team during the annual symposium of the German Association for Endocrinology.



Dr Kerstin Schmidt, Clinical Cooperation Unit Nuclear Medicine, was honored with the Ruprecht-Karls-Prize 2009 for her outstanding medical PhD thesis on “Functional and molecular effects of the transfer of anti-angiogenesis genes in rat hepatoma”. The University of Heidelberg annually dedicates the prize to PhD students of five different research fields. Each award is endowed with 5,000 Euros.



Dr Sven Diederichs, Head of the Helmholtz University Young Investigator’s Group Molecular RNA Biology and Cancer, was honored with the Karl-Freudenberg Prize 2010 for his work on the influence of non-coding RNA on tumor biology. The company Freudenberg in Weinheim supports his excellent research with 6,000 Euros.



Dr Stefan Herzig, Head of the Division Molecular Metabolic Control, received a research award of the German Society of Adiposity for his investigations on molecular triggers causing diabetes or adipohepatic syndrome. The prize is endowed with 5,000 Euros.



Dr Hendrik Witt, Division of Molecular Genetics, received the AACR-Glaxo-SmithKline Outstanding Scholar Award. With this prize of 4,000 US-Dollars the American Association for Cancer Research acknowledges Witt’s work on biomarkers enabling targeted therapy of certain childhood brain tumors.



Nico Zinn, Core Facility Molecular Structure Analysis, was honored with the Applied Biosystems-SCIEX LC/MS Prize of the German Association for Mass Spectrometry. The award of 3,000 Euros acknowledges developments in the combination of liquid chromatography (LC) with mass spectrometry (MS).



Dr Lena Maier-Hein, Division of Medical and Biological Informatics, is one of the awardees of a prize dedicated biannually to outstanding young female researchers in natural sciences. With the distinction of 3,000 Euros the Ingrid-zu-Solms-Foundation honors the development of a computer-based device for the treatment of metastases in the liver.



Dominik Sturm, Division of Molecular Genetics, received the Award for “Excellence in Pediatric Translational Research” of the American Society of Neurooncology. The prize of 2,000 US-Dollars acknowledges the PhD student’s investigations on molecular mechanisms leading to the development of childhood brain tumors.

people

Awards to Alumni Special Honors



PD Dr Marc-André Weber, former member of the Division of Radiology at DKFZ and now senior physician at the University Hospital Heidelberg, was awarded the Eva Luise Köhler Research Prize on Rare Diseases. The distinction which he shares with Karin Jurkat-Rott, University Hospital Ulm, is endowed with 50,000 Euros. It acknowledges improvement of therapy for a hereditary muscle disease.



Bärbel Brumme-Bothe, Head of the Directorate-General Life Sciences – Research for Health at the Federal Ministry for Education and Research, has become chairwoman of the Board of Trustees of the DKFZ.



A special distinction was dedicated to **Prof. Ingrid Grummt**, Head of the Division of Molecular Biology of the Cell II, by the European Molecular Biology Organization (EMBO) and the Federation of European Biochemical Sciences (FEBS): Representing a new generation of successful female researchers the expert on gene regulation received the “Women in Science Award 2010” endowed with 10,000 Euros.



Dr Jutta Groos, former Member of the Division of Biostatistics and currently working for the company Merck, was awarded the Gustav-Adolf-Lienert-Prize 2010 of 1,500 Euros by the German Division of the International Society on Biostatistics. She examined mechanisms of development and progression of pre-neoplastic liver lesions.

Jutta Groos has been appointed Professor of Mathematics for Engineers in the Department of Basic Sciences at the University of Applied Sciences in Esslingen. She will start teaching on September 1, 2010.



Prof. Harald Herrmann-Lerdon, Division of Molecular Genetics, has been elected new president of the German Society for Cell Biology.



Prof. Peter Krammer, Head of the Division of Immunogenetics, has been elected member of the Heidelberg Academy of Sciences.

excursion

Space Agency, Automobile History and Ancient Settlements

by Serpil Tanriverdi-Akhisaroglu

A promising day, highlighting technological developments as well as evidence of ancient architecture, awaited our group of about 35 scientists from different countries like Turkey, China, Russia, Romania, Iran and India, when we started for a trip to Darmstadt and Ladenburg.

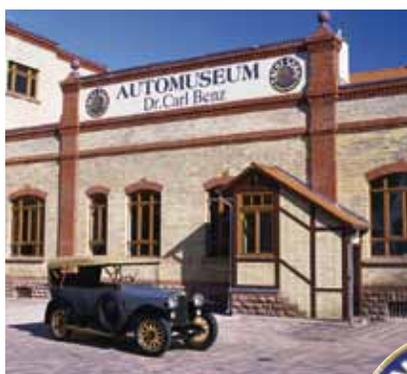
Leaving the DKFZ main building in the morning, our first destination was the European Space Operations Center (ESOC), which is part of the the European Space Agency (ESA). During work we are all interested in questions that take



place on earth, therefore we were very excited about the opportunity to have a look at what was going on in space. When we arrived at the ESOC we had to be registered with our passports at the entrance and received visitor cards. Then the guided tour was ready to start. "A tous, de DDO – attention pour le décompte final!" These words are to the European Space Operations Center what "Lights! Camera! Action!" means to a filmmaker, we learned from our guide. Seconds after separation from the launcher – the most exciting moment of the whole mission – the spacecraft is passed into the responsibility of the staff and contractors at the ESOC. Our guide told us a lot more things about the ESOC and its missions. The center was inaugurated in Darmstadt in 1967 to provide satellite control for the ESA, that means placing satellites into orbit for scientific research and applications such as weather forecasting, telecommunications, TV and resource management. The past decades have proven that many activities in space can only be achieved through international cooperation. The ESA represents 18 nationalities from Europe and comprises specialists

from a wide variety of scientific disciplines. The ESA operates 11 missions in the field of interplanetary and earth observation, astronomy and physics. Space crafts for eight further missions are currently in preparation. The core activities of ESOC are operating and controlling space craft including actual flight control, flight dynamics, telecommanding and data receipt via ground stations.

After our visit we were happy to hear that our lunch had been planned in advance: Our trip took us to a more than



150 years old brewery and restaurant, the Braustübl – mother of all restaurants in Darmstadt. There, we had a very delicious, traditional lunch with some different beers in a relaxing atmosphere.

Later on we had a bus ride to Ladenburg, a town on the right bank of the Neckar, 10 km east of Mannheim, and 10 km northwest of Heidelberg. Its old town is dominated by architecture from the late middle ages, but the city's history dates back to Celtic and Roman ages. The Celts were the first to settle here about 3000 years BC. In the south-west of the town the remnants of a Celtic fortification (hill fort) were found. It was a sanctuary as well as a military and civil place. The settlers called it "Lokwodunom", which means "castle on the water". From 200 BC the Celts left the region chased by the Suebs, who had migrated from the north of Germany. When the Romans invaded the country, they accepted the Suebs as settlers and made them their auxiliaries (milices). From 70 AD the Romans began the construction of a "castellum" and established a military base. In 98 AD the town was proclaimed center of the

"civitas ulipa sueborum nicrensium" and finally developed into a capital of the Roman Province.

Also situated in Ladenburg is the "Automuseum Dr. Carl Benz", where our guides were already waiting for us. Here, we were taken back to the time when the construction engineer Benz invented the motor car, in 1885. We were surrounded by the flair that Carl Benz probably experienced during these days. He built the car in Mannheim but for its trials he often drove to Ladenburg. Here,



he had acquired property – today Dr Carl Benz-Platz. He founded the family company "C. Benz and sons" right at the square where the museum now has found its home.

To discover Ladenburg we first walked along most of the length of the wall ruins of the old roman town and then made our way through the heart of the old city. Especially on the market place we got an impression of how the merchandisers traded their goods and how the local people used to live. It was easy to see that Ladenburg's residents were proud of their beautiful and well kept houses. In the photos we took, we tried to capture how picturesque this area is. Ladenburg turned out to be a stunning and beautiful place.

We enjoyed the end of the tour at a café at the market place, a place perfect for recreation while watching the daily hustle and bustle in Ladenburg. At the end we had a very special day and therefore are very grateful to Prof. Peter Bannasch, Prof. Gerhard van Kaick and Elfriede Mang for their great organizational job.



Everyone tried to catch a view of the “end of the world”, a special wall painting at the rear of an arcade.

Travelling back to Baroque Times

For those who have been living in Heidelberg for more than six months a visit to Schwetzingen castle and gardens is a „must“. Therefore, forty guest scientists of the DKFZ joined the English guided tour and got an excellent introduction into history and culture of baroque times.

The palace, once a “hunting castle” of the Electors of Palatinate, later became the principal summer residence and a real cultural center. When the French king Louis XIV invaded the Palatinate, Schwetzingen and the castle were burned to the ground. The Elector Johann Wilhelm rebuilt the castle from 1699 to 1715, making use of older walls in order to reduce the costs. Therefore, the castle is not pure baroque. In 1743 the Elector Carl Theodor took over the reigns of government starting the “golden age” of Schwetzingen. After his death in 1799, the riots due to the French Revolution destroyed the way of life of the ancient regime. In 1803 the Palatinate with its residences of Heidelberg, Mannheim and Schwetzingen fell to the State of Baden. 1924 the castle garden was opened to the public.

The palace garden is unique in the history of European landscape gardening. There are two parts: the French baroque gar-

den with its geometrical style and the English garden in natural design. Among the many attractions in the garden with its avenues, lakes and fountains the temple of the Apollo, the mosque and the bathhouse are especially worth being mentioned. One of the finest works of art in the garden is a sculpture of the great



Pan: Sitting on a small rocky ledge the god of shepherds plays on his pipe made of reed. Looking at this sculpture you get the feeling that you

can really hear his tempting melody. But beware! According to legend Pan raped the nymphs...

After a rest in a typical local restaurant the trip to Schwetzingen came to an end with all participants being highly satisfied. Especially a Chinese couple, parents of a guest scientist, appreciated the Schwetzingen tour as they had visited a German Castle for the first time. On the way back the participants were still impressed by the baroque way of life – but also happy to return to the present.

Gerhard van Kaick

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