

# alumni

## DEUTSCHES KREBSFORSCHUNGSZENTRUM



*A lively spirit  
stimulating  
the excellence  
recently  
awarded to  
the University  
of Heidelberg*

*Dear DKFZ Alumni and Friends,*

At the beginning of 2008, I send you the best wishes of the Board of the Alumni Association for a peaceful and prosperous New Year!

The modification of the address of my letter takes into account the rapidly growing number of inscribed members – presently more than 250 – including friends with close personal and scientific relationships to researchers of the DKFZ. We sincerely welcome all new members.

The DKFZ is closely linked with the University of Heidelberg, most of the leading scientists of the Cancer Center being at the same time members of faculties of this University. It was, thus, good news for the DKFZ when the University of Heidelberg announced great success in a competition of the Federal and State Governments for the most outstanding German universities. The Rector mag-

nificus of the University, Professor Bernhard Eitel, describes in this Newsletter the joint efforts of many faculty members to make the University a winner on this "Excellence Initiative", and appreciates the contribution of the DKFZ. He also explains how this new drive will help the oldest German university to develop its international reputation, not only in certain excellence clusters but in the interdependent disciplines of a comprehensive university, dedicated "DEM LEBENDIGEN GEIST".

Several of the joint innovative efforts of the DKFZ and the University of Heidelberg are reported in some detail. This applies to the formation of a new center of excellence by an alliance between the University Center for Molecular Biology (ZMBH) and the Cell and Tumor Biology Program of the DKFZ, to the development of a Heidelberg Neurooncology Network,

to the establishment of a huge magnet to improve magnetic resonance tomography and spectroscopy in an alliance with Siemens, and to the construction of a new building for the National Center of Tumor Diseases Heidelberg sponsored by the "Deutsche Krebshilfe".

In addition, the strengthening of international scientific exchange and networking has been a focus of several recent events, which were in many respects promoted by the Alumni Association. This holds particularly true for an initiative to strengthen our traditionally good relationship to Japanese cancer researchers, for the foundation of the first Helmholtz Sino-German Laboratory in Xi'an, China, and for a number of social events in Heidelberg improving the relationship to our current guest scientists from abroad. A lively report on an Israeli-German research project investigating the role of insulin in skin cancer complements this international point of view.

The highlight of our forthcoming activities is the Third General Alumni Meeting in June, directly preceded by a Polish-German Cancer Workshop. This Newsletter contains a detailed program of these meetings, to which all Alumni and current DKFZ scientists are cordially invited. We look forward to welcoming many of you in Heidelberg at this promising event.

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# translation

## Heidelberg Neurooncology Network

*In 2007 the Department of Neurooncology was established at the University Hospital of Heidelberg and the DKFZ with support of the Hertie-Foundation. It is the first independent academic unit dedicated to both research and treatment of brain tumor patients in Germany.*



### Organization of the Department

The Department of Neurooncology consists of an inpatient facility, a brain tumor ward with 16 beds as well as an outpatient facility with a specialized brain tumor day-clinic within the National Center of Tumor Disease (NCT) Heidelberg housed in the Head Clinic. Furthermore, most chemotherapies can be provided on an outpatient basis in the day-clinic. It focuses on primary tumors of the central nervous system (CNS), such as gliomas and primary CNS lymphomas, as well as metastases spread to the brain. This includes malignant tumors outside the CNS, in particular lung and breast tumors. In addition neurooncology deals with diseases of the nervous system that are induced by systemic cancer therapy.

### Patient Care

Preoperative diagnostics and information as well as therapy and postoperative care represent the focus of neurooncology.

- Primary brain tumors (astrocytomas, oligodendrogliomas, glioblastomas)
- Primary CNS lymphomas
- Brain metastases (e. g. derived from lung or breast tumors)
- Neurological complications of tumor therapy
- Paraneoplastic syndromes
- Immunological diseases (together with the Department of General Neurology)

The Department aims at integrating inpatient and outpatient treatment concepts and palliative care in close collaboration with the Departments of Neurology, Neurosurgery, Radiation Oncology, Neuroradiology and Neuropathology. Treatment follows current therapy standards. Alternatively, patients might be included in studies designed for the evaluation of novel treatments or the optimization of current approaches. Most notably, patient care is carried out by an interdisciplinary team of physicians within the same department. Key issues are thorough neurological, oncological, neuropsychological/psychoon-

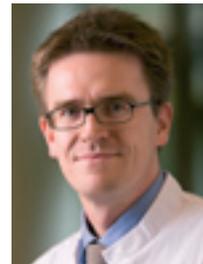
colological counseling, the application of standard and experimental anti-neoplastic drugs as well as the treatment of epileptic fits (seizures) and tumor-related pain.

### Research focus

Since the Department of Neurooncology has a strong focus in both basic and translational research, novel strategies are being developed in the Clinical Cooperation Unit Neurooncology at the German Cancer Research Center (DKFZ) and will subsequently be evaluated in the clinical setting. The latter is the hallmark of the implementation of this structure in Heidelberg.

The Cooperation Unit focuses in particular on the biology of malignant gliomas. One project includes the use of adult hematopoietic or mesenchymal stem cells as vehicles for the treatment of experimental gliomas. Other topics include the development of new therapeutics and vaccination strategies for brain tumor patients. Within the National Genome Network, the group participates in two projects, i. e. on the glioma cell motility and autophagy and, secondly, on the regulation of the hypoxic niche in gliomas. The latter project may gain importance with regard to the ongoing discussions and projects on (possible) stem cells in glioblastomas.

*Wolfgang Wick*



*Heading the Clinical Cooperation Unit for Neurooncology of the University Hospital and the DKFZ: Professor Wolfgang Wick*

# translation

## A Hit Parade of Modern Radiotherapy

In Europe the „Heidelberger Ionenstrahl Therapiezentrum“ (HIT) is becoming a most attractive center for carbon ion or proton radiotherapy. The possibility to applying high local doses while sparing normal surrounding tissue makes this expensive type of radiotherapy best suited for the treatment of localized malignant tumors, especially those in close vicinity to organs at risk like brain tumors or prostate cancers.

Prof. Jürgen Debus, Director of the Department of Radiooncology and Radiotherapy at the University Hospital of Heidelberg, was invited speaker of the 5<sup>th</sup> Meeting of the Alumni Club Heidelberg. On this occasion he explained in a fascinating manner the tremendous progress of modern radiooncology from its beginnings until now.

The Intensity-modulated radiotherapy (IMRT), the most modern type of photon therapy, was developed in the Division of Medical Physics of the DKFZ and subsequently applied for clinical use in close cooperation with the the Department of Radiooncology and Radiotherapy at the University Hospital. Yet, IMRT is the gold standard, which means that HIT must prove to be superior in the treatment of particular tumors.

In 18 percent of cases, tumor therapy fails to achieve local tumor control, resulting in 280,000 tumor deaths per year in the countries of the European Union. It has been calculated that about 30,000 patients of the EU might be cured per year, by charged particle therapy.

This unique facility of ion therapy in Heidelberg has been completed, and will be used clinically starting from the beginning of 2008 (*for more details also see articles in previous Alumni Newsletter, issue 1/2007, p. 2 and 3*). The technical fundamentals were developed by the “Gesellschaft für Schwerionenforschung” (GSI) in Darmstadt. Prof. Debus who was working very successfully over many years as a clinical scientist at DKFZ was a pioneer introducing ion therapy in the facilities of the GSI in Darmstadt. He is a cooperative personality bridging physics and medicine as well as basic research at DKFZ and clinical application at University Hospitals. It was therefore not surprising that the room of our meeting at this evening was almost overcrowded. This Alumni Club meeting indeed was a “hit”.

*Gerhard van Kaick*

## Steering Wheel in New Hands

**Professor Rüdiger Siewert** (left) is the first full-time Chairman of the Board of Medical Directors of Heidelberg's University Hospitals. On July 1, 2007, the internationally re-



nowned surgeon followed **Professor Eike Martin** (right) who has held this office part-time since 1993, being at the same time Chairmen of the Department of Anaesthesiology.

Born in 1940, Siewert studied medicine in Basel and Berlin where he received a doctor's degree. He continued his career at the Universities of Berlin and Göttingen, and qualified in 1972 as a Professor of Surgery. After a stay at the University of Illinois, Chicago, he became Head of the Surgical Department of the Technical University “rechts der Isar” of Munich in 1982. From 1987 till last summer he was Chairman of the Board of Medical Directors of the Hospitals of the Technical University.

Siewert's predecessor Eike Martin has been instrumental in the establishment of many cooperative activities between the University Hospitals and the DKFZ, such as a number of Clinical Cooperation Units, the National Center of Tumor Diseases (NCT) Heidelberg and the 7 Tesla MR facility.

## Crosspoint for the Cancer Patient



*Waiting to become reality: model of the new home of the National Center for Tumor Diseases (NCT) Heidelberg. The ground breaking ceremony for the building sponsored by the Deutsche Krebshilfe finally took place on October 26, 2007. The sponsoring organization was represented by its President, Professor Dagmar Schipanski.*

# innovation

## A Large Magnet for Small Details by Michael Bock

*A new building with a 7 Tesla whole body magnetic resonance (MR) tomograph will open new exciting possibilities for high resolution MR imaging and spectroscopy in cancer patients.*

At present it is hard to overlook: the DKFZ is a major construction site, and in many places – such as the main building – you will find construction workers rather than cancer researchers. Amidst this controlled chaos another construction site was opened on August 3<sup>rd</sup>, 2007, when a ground breaking ceremony was held for a new building close to the ATV building and the helicopter landing site: the 7 Tesla building.

With a field strength of 7 Tesla the tomograph utilizes a more than twofold higher magnetic field than current high-field clinical MR units operating at 3 Tesla. The higher field strength allows for the generation of images with a significantly increased spatial resolution, which, for example, will be used to visualize the internal structure of tumors. In addition, information about the metabolism of tumors can be gained that is very difficult to acquire at lower field strengths. Worldwide, more than 20 high field whole body MR units are installed or are under construction; however, the DKFZ installation is unique in that research will be focused primarily on cancer imaging.

The possibility of exploring high field MR imaging and spectroscopy in patients became possible by a strategic alliance between the DKFZ and Siemens Medical Solutions. The alliance was forged to improve the diagnosis and treatment of cancer through the development of advanced radiological imaging methods. Professor Wiestler, Chairman and Scientific Member of the DKFZ Management Board, says: “We want to ensure a leading position for the DKFZ in the diagnosis, early detection and treatment of malignant tumors. The possibilities that are opened by the strategic alliance with



*Joint forces for the establishment of a building housing the high field clinical MR unit (from left): Prof. Eike Martin, former Chairman of the Board of Medical Directors of the University Hospitals, Dr. Josef Puchta, Administrative-commercial Member of the DKFZ Management Board, Franz Schmitt, Siemens Medical Solutions; Prof. Wolhard Semmler, Head of the Department of Medical Physics in Radiology, Prof. Otmar Wiestler, Chairman and Scientific Member of the DKFZ Management Board, Dr. Eckart Würzner, Lord Mayor of Heidelberg, Dr. Peter Lange, Chairman of the Board of Trustees of DKFZ, and Ralf Stroux, Director of the University Building Authority.*

Siemens contribute significantly to this aim, and we feel excellently prepared for the ambitious tasks in radiooncology.” Franz Schmitt, project leader of the high-field MR imaging team at Siemens, adds: “The steady exchange of know-how with the researchers at DKFZ helps Siemens to rapidly convert results from basic research into modern medical technology. Patients will directly profit from this.”

The strong magnetic field of the tomograph required a new building, which houses the superconducting magnet together with a 240 ton iron shielding for screening of the magnetic stray fields. The magnet has a weight of 35 tons, and contains 400 kilometers of niob-titanium wire which are cooled to liquid helium temperatures. These huge technical efforts already show that the new MR system is not a simple up-scaled version of existing MR units at lower field

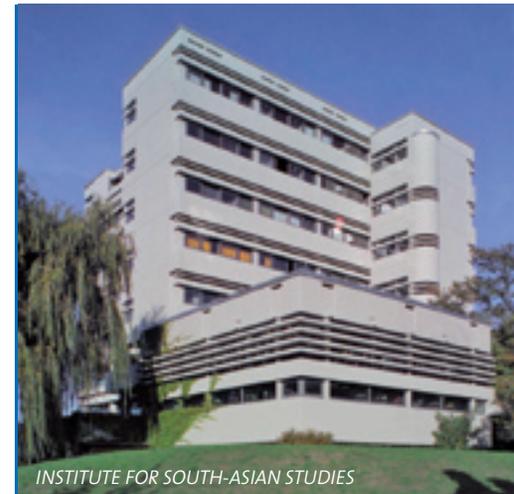
strengths, and that a significant amount of research will be required to adapt existing imaging methods to the specific requirements of the higher field. To fulfill these tasks the project leaders at the Divisions of Radiology and Medical Physics in Radiology at the DKFZ have joined forces with leading MR research groups at the Universities of Heidelberg, Freiburg, and Würzburg. Thus, after the installation of the MR tomograph by the middle of 2008, first of all extensive testing and basic technical research are required before the MR system will be applied for patient imaging.

# perspectives

## Excellence of A Comprehensive University by Bernhard Eitel

*Enthusiasm was immense at Heidelberg University after the announcement of the results of the Excellence Initiative organised by the Federal and State Governments: Proposals for all three lines of funding had succeeded in convincing the prestigious international review panels involved in the selection process. For Heidelberg University this is an invaluable opportunity to aim at goals that otherwise would have been unattainable. The Ruperto Carola started with the concept of a comprehensive university that comprises a wide range of disciplines – from humanities and social sciences to natural sciences and life sciences. This concept was approved by the international review panels in more than one way.*

*At the entrance to new challenges: Heidelberg University successfully convinced the review panel of its excellence.*



Heidelberg University is successful with three graduate schools, the “Hartmut Hoffmann-Berling International Graduate School of Molecular and Cellular Biology”, the “Heidelberg Graduate School of Mathematical and Computational Methods for the Sciences” and the “Heidelberg Graduate School on Fundamental Physics”. The Cluster of Excellence “Cellular Networks: From Molecular Mechanisms to Quantitative Understanding of Com-

plex Functions” is further evidence that research groups in Heidelberg are stressing interdisciplinary links. Furthermore the Ruperto Carola outshined by having obtained one of the few Clusters of Excellence in the humanities and the social sciences, “Asia and Europe in a Global Context: Shifting Asymmetries in Cultural Flows”. This in itself shows that the University builds its research excellence on strong pillars in different disciplines.

With the proposal for the establishment and funding of the institutional strategy to promote top-level research, Heidelberg University draws on this concept of a comprehensive university because it offers the unique chance to generate profound and all-embracing knowledge concerning the great problems of humankind. Heidelberg can build on major research areas of high international impact addressing basic



**Professor Bernhard Eitel** (left) has been appointed Rector magnificus of Germany’s oldest University, the Ruperto Carola in Heidelberg, and took over the official functions on October 1, 2007.

Eitel, born in 1959, studied geography as well as German language and literature at the University of Karlsruhe. After his PhD thesis and the postdoctoral lecture qualification in physical geography at the University of Stuttgart he accepted a chair at the University of Passau in 1995. In 2001, the father of two children was offered a professorship in physical geography at the Ruperto Carola.

Professor Eitel is quite experienced in committee work and shows a keen sense of political matters and a talent for mediating. He is well prepared to meet the challenges and expectations associated with the future concept of the comprehensive University, thereby proving its excellence.

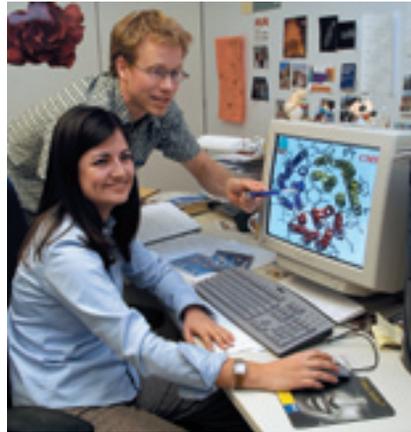
At the inauguration ceremony on October 27, 2007, Eitel’s predecessor **Professor Peter Hommelhoff** (right), holding this position for six years, was decorated with the Officer’s Cross of the Order of Merit of the Federal Republic of Germany for his outstanding commitment in scientific boards and organizations and, last, but not least, for fighting strongly in the competition for the excellence initiative together with his colleagues in the Management Board of the University, Professors Peter Comba, Silke Leopold and Jochen Tröger and the Chancellor Dr. Marina Frost.

# perspectives

mechanisms of life, the evolution of the universe, and laws of nature while connected issues are investigated in comparative studies of cultures and civilisation. With the proposal "Heidelberg: Realising the Potential of a Comprehensive University" the Ruperto Carola is developing these strong disciplines while also exploiting interdisciplinary opportunities. Together with our partners, we are committed to advancing our areas of strength to international top rank and to building organised bridges not only between individual disciplines but also between scholarly cultures. For this reason we are establishing the Marsilius-Kolleg as a new platform for the dialogue between scholarly cultures and for interdisciplinary research. This is one of the central pillars of our strategy.

Another central measure is the inter-organisational joint venture in molecular biology between university and non-university institutions within the Alliance ZMBH-DKFZ. This Alliance aims to create a new center of excellence for basic research in molecular and cellular biology in which the Zentrum für Molekulare Biologie Heidelberg (ZMBH) and the research program Cell and Tumor Biology of the DKFZ will join forces in order to increase their international competitiveness. The scientific mission of the ZMBH-DKFZ Alliance is to contribute to the understanding of the molecular processes that determine basic cellular functions, growth and differen-

ferentiation of cells and development; and regeneration, degeneration, aging and cancer. The ZMBH-DKFZ Alliance will not only generate significant added value for its contributing partners, but will also serve as a conceptual model. It will establish a strong central infrastructure that offers better scientific, tech-



tical, and administrative support and relieves scientists from administrative and managerial burdens. It is also one of the first in Germany to fully explore the potential of a strategic cooperation between university and non-university institutions. Furthermore, it will be an important supplement to the already existing Cluster "Cellular Networks" and the "Hartmut-Hoffmann-Berling Graduate School". The time for the development of this strategic alliance is perfect: Due to recent recruitments and retirements, the ZMBH is now in the unique

nity to intertwine these institutions and to add value to the common research. For myself, as rector of a comprehensive university which particularly fosters the dialogue between scholarly cultures, it is a great pleasure to see that the Medical Faculty has joined the alliance as partner for translational research. This mir-



rors our future concept and shows that our goals being lived up to.

I am sure that the outcome will increase the competitiveness and the international visibility of the alliance. Together with the Cluster and the Graduate School, Heidelberg will develop an extremely attractive research environment. We now have to exploit the opportunities given to us by the funding of the Excellence Initiative. It was with the help of our strong partners that we won the competition and I am sure that we



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tiation. This research will be organised in three programs, each coordinating scientists who work at the molecular, cellular and organismic levels, to investigate structure, function and regulation of biomolecules; architecture and dif-

situation of having to replace six of its nine professors within the next years. At the same time the research program Cell and Tumor Biology of the DKFZ needs to replace several senior group leaders in the near future. This is a terrific opportu-

will succeed in the implementation of the measures by our combined efforts. Therefore, I want to wholeheartedly thank our scientists and those of the DKFZ who helped to make this opportunity come to function.

# alliance

## Joint Efforts in Molecular and Cellular Biology by Otmar D. Wiestler

*Heidelberg's Center for Molecular Biology and the German Cancer Research Center are two neighboring research institutes that have a long-standing tradition and first-class international reputation in investigating biological systems. Both the increasing necessity for researchers to cooperate across interdisciplinary lines and the closely related aims, scientific issues and methods prompted the decision to create an alliance between the institutions. The common target is to build up a new center of excellence for the molecular and cellular life sciences that will provide initiatives for international research.*

New technologies and methods of analysis enable studies in cell and molecular biology with a degree of precision previously unknown and at a level of complexity that would have been unthinkable only a few years ago. The era of dominant pipettes and test tubes is a thing of the past: the demands placed

The University of Heidelberg's Center for Molecular Biology (ZMBH) was founded in 1982 with the aim to unravel biological processes at the molecular level. To this end, ZMBH employs a wide array of methods from biophysics and biochemistry, molecular and cell biology, as well as genetics and bioinformatics.

The German Cancer Research Center (DKFZ) is committed to systematically examining the mechanisms of cancer development and recording cancer risk factors. The results of this basic research will hopefully provide new approaches for the prevention, diagnosis, and therapy of human cancers. Research at the DKFZ is organized in seven Programs. Amongst these Research Program A focuses on cell and tumor biology with special regard to cellular signaling pathways that regulate differentiation, growth, and survival of healthy and neoplastic cells.

The two institutions have maintained a good relationship as neighbors; numerous networks now link them at the



*Signing the contract (from left): Dr. Josef Puchta, Administrative-commercial Member of the DKFZ Management Board, Prof. Bernhard Eitel, Rector magnificus of Heidelberg University, Prof. Bernd Bukau, Director of the ZMBH, and Prof. Otmar Wiestler, Chairman and Scientific Member of the DKFZ Management Board*

### A Life Science Center with International Appeal

Moreover, the alliance partners have formed joint management boards: with a scientific advisory committee, a local coordinating board, a directorate, and regular assemblies of the senior scientists – both institutions are assuming responsibility for meeting the goals of the alliance in all included subunits. Research projects will be financed from a joint funding program, to which both institutions will contribute. An important step will also be to establish joint “alliance research groups”.

In fact, the DKFZ-ZMBH alliance provides a novel model for the cooperation between a university facility and a national Helmholtz research center. The collaboration is divided into three Programs:

- Structure, Function and Regulation of Biomolecules
- Organization and Differentiation of Cells and Stem Cells
- Development and Regeneration, Degeneration, Aging and Cancer.

on equipment are constantly increasing, requiring the use of ever faster automated systems and analysis means which are sensitive enough to record even atomic details, and microscopes whose resolution is no longer limited by the wavelength of light.

In order to be internationally successful in the era of globalized science, research programs must have a critical size. With a total of approximately 500 staff in the DKFZ-ZMBH cooperation, the alliance has sufficient personnel to broadly cover the relevant spectrum of scientific issues and provide a powerful research infrastructure. The DKFZ-ZMBH alliance, which is open to working with additional partners, will make Heidelberg even more attractive for top-class experts and will help to develop this traditional campus into one of the world's leading sites for molecular life sciences.



project level. Tightening these bonds and thereby merging their outstanding capacity enables the two institutions to focus on specific topics of research that are unique.

# report

## The Role of Insulin in Skin Cancer by Effy Wertheimer-Hillmann

*The hormone insulin is mainly known as a key player in cellular metabolic regulation. However, in recent years additional roles have emerged connecting insulin to regulation of cellular proliferation, differentiation and growth.*

*Over the past few years my laboratory at the Department of Pathology at the Tel Aviv University Sackler Medical School in Israel, has concentrated on elucidating the role of insulin in skin. In our studies we have found that insulin not only regulates skin cell proliferation but also skin cell differentiation and death.*

Both laboratories studied the effects of insulin receptor inactivation on skin keratinocytes. In general, our Israeli team worked on the murine skin cells while our German collaboration partners performed the complementary studies on human cells. Here, in Tel Aviv, we conducted studies on skin cells isolated from the insulin receptor knockout mice. In addition, we investigated the tissue of the skin specific insulin receptor knockout mouse model generated in our Israeli laboratory.

during the DKFZ report sessions not only provided excellent opportunities for broader discussion, but also helped to further strengthen the social interaction which is an essential part of all good collaborations.

Our common results indicate that insulin and IGF1, via the insulin receptor and IGF1 receptor, respectively, are involved in regulating the balance between skin proliferation and differentiation processes. Moreover, abnormal insulin signaling seems to contribute to



*Effy Wertheimer-Hillmann studied Medicine at the Sackler School of Medicine of Tel Aviv University, Israel. She conducted her doctoral thesis on the "Autoregulation of Glucose Uptake in Skeletal Muscle Cells" at the Haddasah Medical Center of the Hebrew University, Jerusalem. During the following years at the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Bethesda/USA, and at the Department of Pathology at the Sackler School of Medicine, Dr Wertheimer further specialized on diabetes and insulin signaling in skin. In the project period between July 2002 and June 2005, she visited the laboratory of her German collaboration partner Dr Dirk Breitkreutz (left) at the DKFZ several times.*

The German-Israeli collaboration with the laboratory of Dr Dirk Breitkreutz has been initiated in order to further explore the relationship between insulin signaling pathways and skin carcinogenesis using both in-vivo and in-vitro strategies. In particular, we have studied the transforming potential of insulin on both components of skin, i. e. epidermal skin keratinocytes and dermal skin fibroblasts.

For this purpose several approaches were used which included:

- Transgenic knockout mice models
- Skin specific knockout mice models
- A 3-dimensional skin organotypic co-culture for ex-vivo studies
- Primary skin dermal and epidermal cultures
- Overexpression and inhibition of proteins by genetic manipulation

In the meantime, the German team inactivated the insulin receptor in human skin cells by means of genetic manipulation, using siRNA. During the research period, the two groups have developed a productive interaction, involving both students and the principal investigators.

Fortunately, I had the opportunity to visit DKFZ. Later on, a student of our team also stayed in Heidelberg to learn how to set the 3-dimensional skin co-culture model which was developed by the German team at DKFZ. This model was subsequently adapted by our team in Tel Aviv to murine keratinocytes, and finally a murine 3D skin model has successfully been established. Thus, each laboratory has contributed specialized techniques, know-how, and model systems which were transferred to the collaboration partner. Several status meetings held in Heidelberg and Tel Aviv

abnormalities in these processes which might result in neoplastic transformation of skin cells. It should be added that similar results were obtained utilizing murine and human keratinocytes, but there were also certain differences, reflecting the distinct skin physiology. Taken together, these results indicate insulin signaling and insulin receptor activation to be possible participants in mouse skin tumorigenesis. Results have been reported in several joint publications already released or are currently being prepared for publication.

We believe that determining the role of insulin receptors in skin carcinogenesis will provide new insights into the hormonal control of malignant cell growth and assist in designing new approaches for intervention to block tumor progression.

# meetings

## Polish-German Cancer Workshop

Due to the initiative of Professor Mieczyslaw Chorazy from the National Center of Oncology (Warszawa/Gliwice) a Polish-German workshop on cancer research has been organized by the Alumni Association DKFZ right before its Third General Meeting in Heidelberg. The aim of the meeting is to further develop scientific exchange and cooperation between cancer research-

ers of the two countries, and consider future perspectives of this interaction. All interested Alumni and DKFZ scientists are cordially invited to participate in this workshop. Participation is free of registration fees, but registration on the form provided for the General Alumni Meeting on our homepage ([www.dkfz.de/alumni](http://www.dkfz.de/alumni)) would be appreciated.

### Thursday, June 19, 2008, DKFZ Communication Center, Sem. Rooms 1 and 2

#### Welcome and Introduction

8.30 h *Otmar D. Wiestler*, DKFZ Management Board  
*Peter Bannasch*, Alumni DKFZ

*Mieczyslaw Chorazy*, Gliwice  
Short history of cancer research in Poland

#### Morning Session

Chairs: *Piotr Widlak* and *Andreas von Deimling*

9.00 h *Zdzislaw Krawczyk*, Gliwice  
Current studies on experimental oncology at the Dept. of Tumor Biology

9.15 h *Joanna Rzeszowska*, Gliwice  
The inter-cellular and inter-individual differences and similarities of the response to ionizing radiation

9.30 h *Peter Huber*, Heidelberg  
Radiation biology research for radiotherapy with heavy ions

9.45 h *Piotr Widlak*, Gliwice  
Mechanisms of regulation and action of major apoptotic nuclease DFF40/CHD

10.00 h *Marcin Kaminski*, Heidelberg  
Novel role of mitochondria - oxidative signaling organelles in regulation of activation-induced apoptosis of T cells

10.15 h *Wieslawa Widlak*, Gliwice  
Two opposite activities of the heat shock transcription factor 1 (HSF1).

10.30 h *Withold Konopka*, Heidelberg  
Role of Dicer/miRNAs in the neurogenesis of adult mammalian brain

10.45 h **Discussion with coffee**

11.00 h *Marek Rusin*, Gliwice  
Functional relationship between senescence regulating proteins: WRN, PML and SIRT1

11.15 h *Thomas Hofmann*, Heidelberg  
Nuclear bodies in DNA damage response and apoptosis regulation

11.30 h *Jan Konrad Siwicki*, Warszawa  
Spontaneously immortalized human T-cell lines with T-cell lymphoma features – a new model for studies on leukemogenesis

11.45 h *Petra Boukamp*, Heidelberg  
Spontaneously immortalized HACAT keratinocytes – a model for human skin carcinogenesis

12.00 h *Stanislaw Szala*, Gliwice

Current studies on novel antivasular drugs performed in Institute of Oncology, Gliwice

12.15 h *Sergiusz Markowicz*, Warszawa  
Dendritic cell-based anti-tumor vaccination in melanoma and lymphoma patients intended as an adjuvant therapy

12.30 h *Rajiv Kumar*, Heidelberg  
Polymorphisms in DNA repair genes correlate with progression and overall survival in melanoma patients

12.45 h **Discussion with Coffee**

13.00 h **Lunch break**

#### Afternoon Session

Chairs: *Jan Konrad Siwicki* and *Peter Huber*

14.00 h *Janusz Siedlecki*, Warszawa  
Hypermethylation of DNA repair gene promoters as a marker for glioblastoma treatment by alkylating agents

14.15 h *Wolf C. Mueller*, Heidelberg  
Coupling of pharmacological demethylation and expression array to unveil novel epigenetically regulated tumor suppressor genes in glioblastomas

14.30 h *Dorota Butkiewicz*, Gliwice  
DNA repair gene polymorphisms as a predictive actor in non-small-cell lung cancers (NSCLCs)

14.45 h *Asta Försti*, Heidelberg  
Genetic susceptibility to breast cancer

15.00 h *Malgorzata Oczko-Wojciechowska*, Gliwice  
Molecular signature of medullary thyroid carcinoma

15.15 h **Discussion with Coffee**

15.30 h *Nicole Diergardt*, Heidelberg  
Gene expression analysis and systems biology of prostate cancer progression

15.45 h *Katarzyna Lisowska*, Gliwice  
Gene expression profiling in ovarian cancer

16.00 h *Ewa Grzybowska*, Gliwice  
Gene expression profiles in different histotypes of ovarian cancer

16.15 h *Jolanta Kuprianczyk*, Warszawa  
P53 as a predictive factor in ovarian cancer

16.30 h **General Discussion with Coffee**

20.00 h **Get-Together in a Heidelberg Restaurant**

# symposium

## Third General Meeting of the Alumni DKFZ Heidelberg

All Alumni from abroad and from Germany, and all current DKFZ scientists are cordially invited to participate in the Third General Alumni Meeting to be held in the Communication Center of DKFZ on Friday and Saturday, June 20/21, 2008.

The scientific sessions are focused on three timely topics: 1) Hormonal and Energetic Imbalance, (e.g. obesity, diabetes mellitus) and Cancer, 2) Molecular and Functional Imaging in Oncology, and 3) Drug Discovery, Development and Approval. The scientific sessions on Friday will be complemented by a poster presentation and discussion in the afternoon. All Alumni who are still active in research and DKFZ (guest) scientists are invited to present most recent results as posters (90 cm width x 120 cm height), preferentially results related to the three main topics of the meeting. Poster awards (500 Euros each) will be offered to the five most outstanding contributions.

After the General Assembly on Saturday, three Alumni following outstanding careers outside of academic institutions, i. e. either in industry, private enterprise or governmental bodies,

will demonstrate how they are involved in important efforts to develop new cancer drugs, an area poorly represented in academic institutions. These talks should be of particular interest to young researchers who are considering their future.

In addition to the scientific sessions, I may draw your attention to several attractive social events: 1) the reception by the DKFZ Management Board on Friday night, 2) the guided tours to the reconstructed laboratories of the main building of the DKFZ or to the newly established treatment facilities for proton and carbon radiotherapy, and 3) the excursion by cable car and walking to the Königstuhl and the Alte Kohlhof. These events will provide excellent opportunities to improve contact with each other across the generations, and exchange ideas of mutual interest. I sincerely hope that as in our previous meetings a large number of Alumni and current DKFZ scientists will follow our invitation to this Third General Meeting of Alumni DKFZ, and look forward to welcoming many of you in Heidelberg.

Peter Bannasch

### Friday, June 20, 2008, DKFZ Communication Center, Lecture Hall

#### Welcome and Introduction

9.00 h *Otmar D. Wiestler*, Chairman and Scientific Member of the DKFZ Management Board

*Peter Bannasch*, Chairman of the Board Alumni  
Deutsches Krebsforschungszentrum

#### Hormonal and Energetic Imbalance in Cancer

Chairs: *Heiner Boeing* and *Rudolf Kaaks*

9.15 h *Heiner Boeing*, Potsdam  
Obesity and risk of cancer

9.45 h *Rudolf Kaaks*, Heidelberg  
Energy balance and cancer: the epidemiology of hormonal and metabolic risk factors

10.15 h **Coffee break**

10.45 h *Frank Dombrowski*, Greifswald  
Experimental hormonal hepatic and renal carcinogenesis

11.15 h *Stephan Herzig*, Heidelberg  
Imbalance in energy metabolism: gene regulation and signaling

11.45 h *Doris Mayer*, Heidelberg  
Interaction between the insulin/IGF axis and estrogen receptor in breast cancer

12.15 h **Lunch break**, DKFZ Cafeteria

#### Molecular and Functional Imaging in Oncology

Chairs: *Michael Knopp* and *Uwe Haberkorn*

14.00 h *Michael Knopp*, Columbus/Ohio  
Evolving imaging as biomarker in oncology and therapy assessment

14.30 h *Heinz-Peter Schlemmer*, Tübingen  
Metabolic imaging by MR and MR/PET\*

15.00 h **Coffee break**

15.30 h *Uwe Haberkorn*, Heidelberg  
Molecular imaging of tumor metabolism

16.00 h *Christian Plathow*, Freiburg  
PET/CT\* in oncology – future aspects

\*MR *magnetic resonance*

\*PET *positron-emission tomography*

\*CT *computer tomography*

#### Poster Discussion with coffee

Chairs: *Petra Boukamp* and *Gerhard van Kaick*

16.30 h Lecture Rooms 1 and 2, Communication Center

# symposium

Saturday, June 21, 2008, DKFZ Communication Center, Lecture Hall

## General Assembly Alumni Deutsches Krebsforschungszentrum Heidelberg

- 9.00 h Agenda
- Approval of the Minutes of the General Assembly of May 13, 2006
  - Approval of the Agenda
  - Report by the Chairman
  - Report by the Treasurer
  - Report by the Auditors
  - Approval of the Board's Actions
  - Election of Board Members
  - Any other business
- 10.00 h **Coffee break**
- Cancer Drug Discovery, Development and Approval**  
Chairs: *Klaus Bosslet* and *Bernd Schneider-Lowitz*
- 10.30 h *Klaus Bosslet*, Berlin  
Efforts to discover and develop targeted cancer drugs: an industrial point of view
- 11.00 h *Gunter H. Rütter*, Washington D. C.  
Interfacing industry and university – challenges and opportunities of contract research when running (global) clinical trials
- 11.30 h *Harald Enzmann*, Bonn  
Market approval: the final challenge
- 12.00 h **Lunch break**

## Social events

Friday, June 20, 2008

20.00 h **Reception by the Management Board**

Heidelberg MD Orchestra  
Conductor: *Michael Steinhausen*

*Otmar D. Wiestler*  
Perspectives of cancer research at the DKFZ

Saturday, June 21, 2008

13.00 h **Guided visit to**

Reconstructed laboratories in the DKFZ main building  
or  
Treatment facilities for proton and carbon radiotherapy

15.00 h **Excursion** via cable car and walking to the Königstuhl and Alte Kohlhof

20.00 h Opportunity to attend a concert at the Heidelberg castle in the frame of the annual Castle Festival (for reservation, please contact [pavlo.stroblja@heidelberg.de](mailto:pavlo.stroblja@heidelberg.de))

## Registration and Call for Abstracts

We ask all Alumni and current DKFZ scientists who plan to participate in the Meeting to register by May 15, 2008, and those Alumni who intend to present a poster to submit the title and a short abstract (about one page) by then as well. Participation in the scientific program is free of registration. Registration forms can be downloaded from [www.dkfz.de/alumni](http://www.dkfz.de/alumni). Formal invitation letters may be provided if desired. Registration will be confirmed by e-mail.



# asian cooperation

## A Forward Looking albeit Nostalgic Week in Japan

by Peter Bannasch

*More than one year ago the board of the Alumni Association discussed possibilities to strengthen the traditional Japanese-German cooperation in cancer research, and considered a visit to Japan by the Scientific Chairman of the DKFZ, Professor Otmar Wiestler, and the Chairman of the DKFZ-Alumni Association, Professor Peter Bannasch. Due to very open-minded Japanese and German colleagues several meetings were realized in Japan between November 29 and December 6, 2007.*

*We were pre-conditioned for this week by a delegation of distinguished Japanese scientists, organized by the DAAD and led by Professor Toshi Ishikawa, a DKFZ-Alumnus, who had taken the initiative to visit the DKFZ in September 2007 with a similar idea (see p. 14). Awarding the Meyenburg price 2007 at the DKFZ to Professor Shinya Yamanaka from Kyoto for his outstanding work on the induction of embryonic stem cells from adult skin cells just before we departed for Japan was another good omen.*



*Prof. Keiji Wakabayashi, Director of the Research Institute, and Prof. Setsuo Hirohashi (right), President of the National Cancer Center, Tokyo*

We initially attended the 11<sup>th</sup> Japanese-German Cancer Workshop in Kyoto, organized by Professors Fuyuki Ishikawa and Kohei Miyazono from Japan, and Wolfgang Deppert and Reinhold Schäfer from Germany. We highly appreciated the opportunity to participate in this stimulating event, sharing the discussion of the excellent presentations, and considering the perspectives of this biannual meeting. There was general agreement that the DKFZ should be involved in the preparation of future meetings, and Professor Petra Boukamp was asked to represent the Center in the organizing committee for the next meeting in Germany in 2009. The Kyoto meeting was not only remarkable for its high scientific level but also for the most generous hospitality, relaxing walks in the beautiful royal gardens, and delicious Japanese meals in traditional restaurants.



*The German Delegation was deeply impressed by the great hospitality of their Japanese hosts and enjoyed the marvellous setting of the royal gardens.*

On our next stopover on the way to Tokyo we visited Hamamatsu Photonics, a globally acting Japanese manufacturer of optical sensors, electric light sources, other optical devices and their applied instruments, cooperating with the DKFZ for more than a decade. An amendment to the cooperation agreement was signed by Hideo Hiruma, General Manager of the Hamamatsu System Division, and Otmar Wiestler for the DKFZ. We also had the chance to look at a number of new developments, such as digital scanning of histological slides for (tele-) diagnosis. In the evening we once again enjoyed delicious Japanese food together with Dr Hiruma, several members of his staff, and two Japanese colleagues, specifically invited to join us from Okazaki, namely Dr. Kiyotaka Okada, Director General of the Institute for Basic Biology (NIBB) and Vice President of the National Institutes of Natural Sciences, and Professor Naoto Ueno from the

NIBB. Thus, the dinner was accompanied by a scientific discussion, showing the interest of both sides to further develop research cooperation from a sporadically existing individual to an institutional level.

In Tokyo, the first regional Japanese Alumni Meeting was held in the Mitsui Garden Hotel Ginza on December 2. In addition to the meeting with many DKFZ-Alumni, we had the pleasure to welcome a number of colleagues with longstanding contacts to scientists of the DKFZ, and several guests, like Professor Keiji Wakabayashi, Director of the Research Institute of the National Cancer Center, and Dr Tomoyuki Kitagawa, Director Emeritus of the Tokoyo Cancer Institute. A brief introduction into the present structure and activities of the DKFZ by Otmar Wiestler paved the way for a very lively exchange of scientific and personal matters. Professor Hiroyuki

# asian cooperation

Tsuda, for many years Division Head at the National Cancer Institute and now Professor at Nagoya City University, was unanimously asked to coordinate the newly established regional Japanese Alumni Club.

The most important destination of our trip was the National Cancer Center in Tokyo, visited on the following day. Professor Setsuo Hirohashi, President of the Center, introduced us to this huge institution, comprising two Cancer

Strategies for a formal cooperation between the National Cancer Center and the DKFZ were eventually considered in a small group, dining with Setsuo Hirohashi, Keiji Wakabayashi, Hitoshi Nakagama and Malcolm Moore (a cosmopolitan DKFZ-Alumnus living in Japan for decades) in the International House of Tokyo, and will be investigated in more detail in a Japanese-German meeting scheduled for July 10/11, 2008, in Heidelberg.

and hotel lobbies of the cities of Tokyo and Nagoya, my last stop in Japan.

I followed an invitation by Professors Shirai and Tsuda from Nagoya City University (NCU) to give a seminar on "Pre-neoplasia", a topic on which we have shared scientific interest since the early sixties. It was indeed a great pleasure to meet these two and several other colleagues in Nagoya, to discuss the essential, but almost forgotten role of pre-neoplasia in the process of neoplastic



*Prof. Fuyuki Ishikawa (left) and Prof. Kohei Miyazono (right) were the organizers of the bilateral workshop on the Japanese side*



*Prof. Hiroyuki Tsuda (with Prof. Otmar Wiestler) agreed to coordinate the newly established Japanese Alumni Club.*



*End of a busy day, enjoying delicious meals in a traditional Japanese restaurant*

Hospitals, a Research Center for Cancer Prevention and Screening, a Center for Cancer Control and Information Services, and the Cancer Research Institute which was the main aim of our short visit. Here we were warmly welcomed by Keiji Wakabayashi, whom we had previously met at the Alumni Meeting, and who directed us to Dr Yamada and Dr Yoshida who presented very interesting results on pancreatic cancer as well as genome research. Potential cooperation partners at the DKFZ were easily identified in both research areas as well as many other fields. Otmar Wiestler gave a very informative talk on "Translational cancer research: a big challenge for DKFZ", which was followed by an intense discussion in the large audience. Several additional areas for a possible cooperation, such as epidemiology and preventive oncology (Dr Tsugane) and tobacco control (Dr Mochizuki-Kobayashi) were identified on this occasion.

On the following day Otmar Wiestler had to return to Germany but we started the day together at 5 a.m. for a tour to the famous Tokyo fish market, kindly organized by young colleagues from the National Cancer Center. Thanks to our guides we eventually escaped this fascinating, though extremely busy, tight, and noisy mix of fish, people, and motor scooters moving rapidly in the crowd, without any damage to our health. This unforgettable experience was an obvious contrast to the colourful Christmas decorations and familiar Christmas songs encountered to our big surprise almost everywhere in the streets, shops,

development with these experienced researchers, and to spend an evening (together with their spouses) chatting about personal matters.

The somewhat nostalgic mood of this visit was, unfortunately, overshadowed by the serious illness of my old Japanese friend, Professor Nobuyuki Ito, teacher and mentor of a large school of renowned Japanese pathologists and President of NCU after his "retirement", who had spent almost a year in my laboratory at the DKFZ in the eighties. He was unable to participate in any of the events mentioned, but I am grateful to his dear wife Yukiko who was kind enough to accept a short bedside visit in his home, permitting the personal conveyance of my best wishes.



*Professor Nobuyuki Ito and his wife Yukiko during a visit in Heidelberg years ago.*

# asian cooperation

## Invigorating Japan-DKFZ Cooperation

Collaborations between Japan and Germany in cancer research have a long and fruitful tradition, and well into recent times regular meetings between Japanese and German cancer researchers have provided a productive platform for information transfer in newly emerging fields. As an expression of these excellent contacts, few years ago the brother of the Japanese Emperor, His Imperial Highness Prince Hitachi, himself an established scientist in cancer in marine animals, had been bestowed with honorary membership of the German Cancer Society during a memorable ceremony at the DKFZ.

To invigorate future collaborations, a high ranking Japanese Committee, lead by the energetic Professor Toshihisha Ishikawa and sponsored by the DAAD, visited the DKFZ during September 27, 2007 (see picture below on the right). The lively discussions uncovered a range of common interests that served as a basis for Professor Ishikawa to submit a more formal application to the Japanese Society for the Promotion of Science, embedded into a broader perspective under the topic "The Asia-Europe International Training Program for Young Investigators in Eco-Bio Technology". The Japanese partner will be the Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, the German partner a strategic alliance between DKFZ and Heidelberg University. The program aims at developing exchange structures for graduate students and young investigators (post-doctoral fellows) as well as research collaboration in areas of common interest, which will be identified in future discussions during exchange visits.

*Manfred Schwab*

## Helmholtz Sino-German Lab in Xi'an

The German Cancer Research Center (DKFZ) and the Fourth Military Medical University (FMMU) agreed to establish the "Helmholtz Sino-German Research Laboratory for Cancer". This decision was confirmed by an official signing ceremony on September 4, 2007. On this occasion, the joint laboratory was unveiled at Tangdu Hospital, Xi'an, the famous ancient Chinese capital city. Prof. Otnar D. Wiestler, Chairman and Scientific Member of the DKFZ Management Board and concurrently Helmholtz Vice President for the Research Program Health, represented the German partner, whereas Prof. Daiming Fan, President of FMMU and Fellow of the Chinese Academy of Engineering, and his colleague Prof. Zhang Yongsheng, President of the Tangdu Hospital, signed the cooperation agreement on behalf of the University and the Hospital, respectively. FMMU belongs to the top medical universities in China, while Tangdu Hospital is one of the three prominent hospitals affiliated to FMMU and the largest dedicated hospital for cancer diagnosis and treatment in West China.

In the agreement, FMMU and DKFZ expressed their endeavor to establish an official link to advance the development of cooperation in cancer research with respect to teaching and training students and young scientist. Both the research groups working at the DKFZ and at Tangdu Hospital will receive support

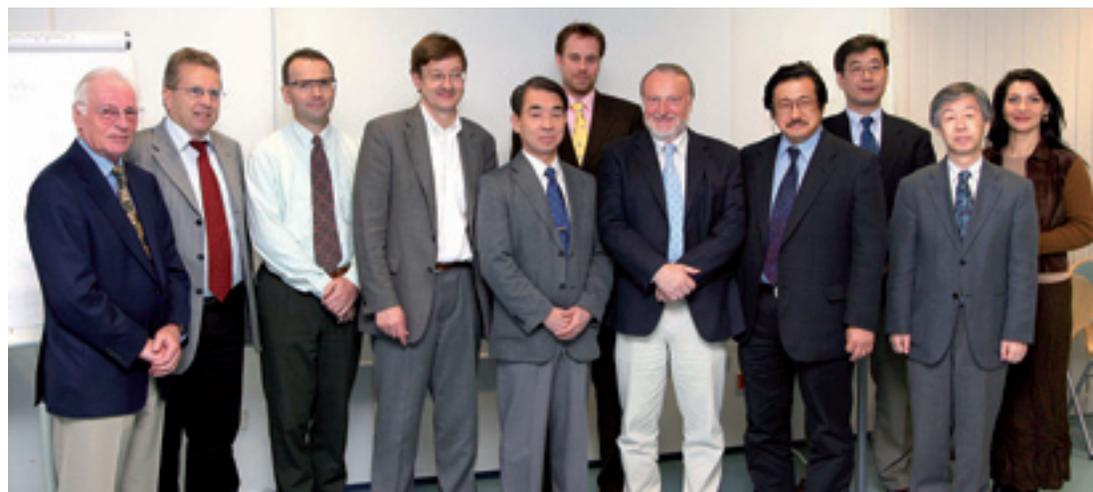
from Helmholtz President's "Impulse and Networking Fund".

The major focus of this Helmholtz Sino-German Research Laboratory for Cancer will be HBV infection in adults and children with regard to chronic liver diseases, including cancer. It will also be dedicated to the evaluation of the role of HPV in esophageal and lung cancer. Efforts will be made to unravel new diagnostic markers in Helicobacter pylori serology. Last, not least, the work will be committed to the development of vaccines against persistent HPV infections.



The cooperation between the partners from both countries was originally initiated in 1996 by several Alumni, namely Professors Peter Bannasch, Claus-Hobe Schroeder and Lutz Gissmann on the DKFZ side and Qin Su and Wei Zhang on the FMMU side.

*Identified common interests during a visit to the DKFZ (from left to right): Professors Peter Bannasch, Dieter Keppler, Christof Niehrs, Otnar Wiestler, Akira Nakagawara, Michael Puderbach, Manfred Schwab, Toshihisha Ishikawa, Hidehiro Iida, Takeo Kishimoto and the DAAD representative Ayla Öztürk-Banha.*



# people

## Appointments – Awards

### APPOINTMENTS

**Prof. Christoph Plass** has been assigned Head of the Division of Toxicology and Cancer Risk Factors. He took over the position of Prof. Helmut Bartsch, who has recently retired.

**Prof. Peter Lichter**, Head of the Division of Molecular Genetics, was appointed speaker of the DKFZ Research Program Functional and Structural Genomics for the next three years. The position of the deputy speaker was accepted by Prof. Roland Eils, Head of the Division of Theoretical Bioinformatics.

**Prof. Werner Franke**, Head of the Division of Cell Biology, and **Prof. Günther Schütz**, Head of the Division of Molecular Biology of the Cell I, have been offered Helmholtz-Professorships. This new instrument of the Helmholtz Association for senior researchers has been established for outstanding investigators who have reached the retirement age. It gives them the opportunity to continue their studies heading a research group at a Helmholtz Center for a period of three years. The aim is to exploit the invaluable experience and knowledge of outstanding researchers beyond their official retirement.

### AWARDS TO DKFZ SCIENTISTS

**Dr. Nitin Agarwal**, Division of Molecular Immunology, and two collaborators share a grant of 7,000 Euros dedicated to them for their basic research on pain mechanisms. The German Society for the investigation of pain acknowledges the elucidation of the very point of action of cannabinoids which allows for the development of new therapeutics without psychogenic side effects.



**Prof. Hans-Ulrich Kauczor**, Head of the Division of Radiology, received two distinctions of the Sloan Kettering Memorial Cancer Center: the

“Henry M. Selb Young Investigator” for his work on computer tomography and magnetic resonance imaging in the planning of radiation therapy of lung cancer, and, secondly, the “Kuhrt Robb Distinguished Scholarship” for his contributions in thoracic radiology.

**Dr. Michael Boutros**, Head of the Boveri Group Signaling and Functional Genomics, and his group members **Thomas Horn** and **Zeynep Arziman** came in second in the “do.it software-competition”. A prize of 10,000 Euros was awarded to them for the development of a database called Genome RNAi containing descriptions on all presently known RNAi molecules and their respective target genes. It also holds information on the newly arisen phenotype of cells when treated with certain RNAi molecules.



### Time to register for the DKFZ Reception at AACR Meeting 2008 in San Diego, California

During the forthcoming 98<sup>th</sup> Annual Meeting of the American Association for Cancer Research (AACR) in San Diego, CA, attending Alumni and current Scientists of the DKFZ are cordially invited to a reception, taking place in Gallery 3 venue of the Omni San Diego Hotel, 675 L Street, San Diego, on Monday, April 14, between 6:30 pm and 8:30 pm.

The Chairman and Scientific Member of the DKFZ Management Board, Professor Otmar D. Wiestler, will give an overview

on the present research programs of the DKFZ on this occasion. The Chairman of the Board of Alumni DKFZ, Professor Peter Bannasch, will review the present state of the Association. The establishment of a DKFZ Alumni Club in the USA is envisaged.

### Get-together of Alumni and current Scientists of the DKFZ at EACR 2008 in Lyon

There will also be a reception for attending Alumni and current Scientists of the DKFZ during EACR 2008. This get-together has been scheduled for Sunday,

July 6, from 4:00 pm to 5:30 pm at the Congress Center in room Rhone 2. We would like to extend a warm welcome to all attending Alumni and current Scientists at this reception. Professor Otmar D. Wiestler will give an overview of the present research programs of the DKFZ on this occasion and Professor Peter Bannasch, will review the present state of the Association.

# people

## Awards



**Prof. Lutz Gissmann**, Head of the Division of Genome Modifications and Carcinogenesis, was awarded the Anita- and Cuno-Wieland Prize 2007 endowed with 50,000 Euros. The prize acknowledges his outstanding contributions to the prevention of tumors. His research paved the way for the development of a vaccine against human papilloma viruses causing cervical cancer.



**Dr. Volker Arndt**, Division of Clinical Epidemiology and Aging Research, came in second in the competition for the Lilly Quality for Life Award 2007 and received a prize of 3,500 Euros for his finding that breast cancer patients often suffer from reduced quality of life due to fatigue. The impact of this side effect of the tumor disease has hitherto been underestimated.

### AWARDS TO ALUMNI



**Dr. Christina Voss** received the Klaus-Tschira-Prize endowed with 5,000 Euros. The award was dedicated to the young scientist for her excellent article on the anti-carcinogenic effects of the African powder Riproximin based on her former research in the Research Group Toxicology and Chemotherapy.



**Prof. Werner Franke**, Head of the Division of Cell Biology, was appointed Professor of the Year by the German Association of University Professors. The prize of 5,000 Euros was dedicated to him for his outstanding efforts to uncover the inhuman and criminal practices concerning doping in competitive sports.



The work of **Prof. Ingrid Herr**, Head of the Research Group Molecular Oncosurgery, **Prof. Helmut Friess**, University Hospital "rechts der Isar", Munich, and **Prof. Peter Büchler**, Surgical University Hospital Heidelberg, was selected for the first prize of the European Pancreatic Club. The researchers showed that stem cells from the bone marrow migrate to the pancreas where they stimulate the growth of tumors.



**Prof. Harald zur Hausen** was honoured with the German Cancer Aid Award 2006 for his outstanding findings in tumor virology having led to the development of a vaccine against human papilloma viruses. The prize is endowed with 10,000 Euros. Zur Hausen also received the Daniel Nathans' Memorial Award of 4,000 Euros of the Van Andels Institute, USA, which recognizes his contributions in biomedicine and especially oncology.



**Dr. Wiebke Ludwig-Peitsch**, Division of Cell Biology, was awarded a prize of 1,000 Euros for her scientific work on malignant melanoma, presented during the Autumn Symposium of the Onkologische Arbeitskreis Mannheim.



**Prof. Peter Gruss**, who graduated from 1974 to 1978 at the former Institute of Virus Research at DKFZ, has been re-elected President of the Max-Planck-Gesellschaft for a second term lasting from 2008 until 2014.

# local news

## Federal Capital of Nature Conservation 2007

*Taking part in the competition of the Deutsche Umwelthilfe (German Environment Aid) Heidelberg finally convinced the jury of its outstanding activities and contributions in the preservation of nature, especially when it comes to the protection of species and habitats. Together with the efforts in environmental education and public relations the city claims the title "Federal Capital for Nature Conservation".*

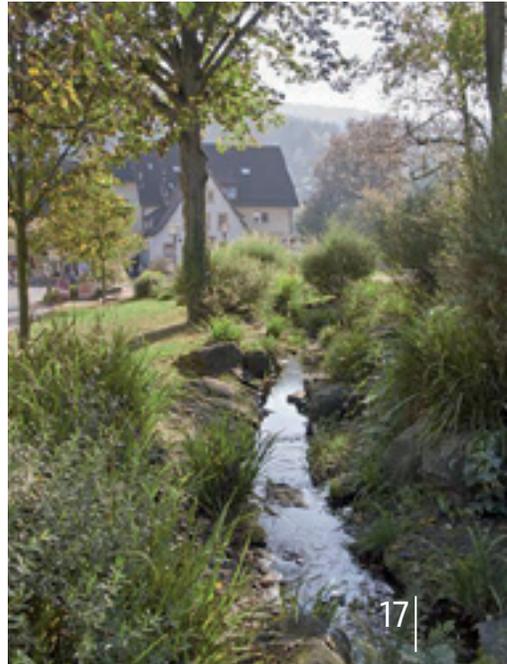
The romantic town on the Neckar River prevailed among 114 cities and communities who had applied in the contest. "Heidelberg was above average in all relevant topics", said Axel Welge, representative of the Deutscher Städtetag in his laudation. "This is a great honour for us that fills us with joy and pride", declared Dr. Eckart Würzner, Lord Mayor of Heidelberg. "It also encourages us to continue our consequent and effective policy in nature protection", he added.

A major driving force was Beate Weber, the former Lord Mayor of Heidelberg. During the period of 16 years in this position, she systematically enforced measures for the improvement and protection of environment, climate and nature. Her ideas have been copied by many other towns. Beate Weber proved to be a woman of vision when she successfully integrated both economic and ecological concepts in a masterplan for urban development. In October she was assigned the Deutscher Umweltpreis by the Deutsche Bundesstiftung Umwelt (German Federal Foundation for Environment). Federal President Horst Köhler conferred the award of 166,000 Euros on the former Lord Mayor.

The success in this year's competition of nature conservation is also a result of the long standing work and commitment of organizations and many individuals actively engaged in the protection of amphibians, the establishment

of nesting sites for peregrine falcons and wintering grounds for bats and, furthermore, many other projects like the opening of previously canalized water courses for the exchange with its environment or the use of flocks of sheep as natural mowing machines, give evidence of Heidelberg's willingness to conserve nature. It reflects the understanding that all inhabitants and future generations depend on this resource.

*Dagmar Anders*



# excursion

## Changeful History of A Famous Castle...

by Laura Nelson

*Hambach castle is not only well known because of the political events in the early 19<sup>th</sup> century with great impact for German history, but also impresses by its beautiful location amongst vineyards and small villages.*



It was a perfect sunny morning in late September, when we loaded up on the buses. I got a window seat and soaked up the view of the German countryside, thick forests, farm lands, even an old cottage with a water wheel. Our destination was the Hambach castle on the side of a mountain in the heart of wine country close to France. Ever since I was a little kid I have regarded castles as magic places with noble knights and fair maidens of days gone by. The first thing I noticed about the castle was the bronze sculpture of partridges serving as handles of the main entrance. The view from the castle perimeter was vast, we could see various hamlets separated by vineyards and tree-lined roads, the major landmarks being the churches whose steeples rose up like needles from the surrounding red-roofed houses.

It is not a large castle, but our tour guide, very fluent in English, pointed out that over the centuries the construction changed as technology of stonecutting and bow and arrow weaponry developed over about 1500 years. The stones in the lowest layers of construction were uncut and natural-shaped filled in with mortar, then layer by layer the stones became more uniform in shape and fitted closer together. During Medieval times they used big stones with a rounded surface, which would just chip off when hit by a cannon instead

of being shattered like flat-surfaced stones. There were three outer walls of fortification and different shaped loopholes for shooting arrows. A courtyard allowed for maximum sun exposure, though during winter the castle was hard to keep warm. The construction of the existing castle dates from the 11<sup>th</sup> century with continual additions and restorations through recent times. The original name was Kästenburg, meaning "Chestnut castle" because of the extensive chestnut forest surrounding it.

The first known settlers in the area were the Celts in around 600 BC, then the Romans came in until around 500 AD. Around this time Germanic tribes drove the Romans out, while around 850 the Vikings sailed their ships down the Rhine River. Then came the Hungarians, more Germans, and in the 17<sup>th</sup> century the French, who did their best to destroy and conquer this entire region of Germany including Heidelberg. With the defeat of Napoleon I, the castle and control of the region were handed over to the Bavarian kings – at a time when Germany still consisted of independent regional states .

Hambach castle is now famous in German history as the location of a public rally and key political event in 1832 when nearly 30,000 people, gathered to "demonstrate the common desire for



# excursion

## ...in A Wine Area

unification of the individual German states and for a confederated republican Europe". The Bavarian king condemned the attendants as rebels, but this was considered the beginning of German democracy where the common people



publicly envisioned a government that would represent their interests, freedom, and human rights. It was also the first raising of the black, red, and gold colored German flag, replacing the Bavarian flag of blue and white on the castle.

We then went on a chair lift up to the top of another mountain. It was pretty steep, but so quiet and peaceful as we slowly were pulled up to the top. There we had lunch at a traditional German restaurant. Irfan, my friend from India, and I tried our first "Schnitzel". But neither of us was too crazy about this kind of food and so we looked forward to our next stop, an old wine village, Rhodt unter Rietburg.

At the town entrance, I noticed a sign saying "Willkommen... 772 Anno". This



town with its narrow streets was truly a step back in time. Our first stop was a family-owned shop selling honey and fruit preserves. I bought some dark Tannenhonig (Tannenbaum being a Christmas tree) and fig marmalade, but

what I really wished I had bought was the fig liqueur which was so delicious. Afterwards we went in one of the little wine gardens all along the streets and tried, for the first time, New Wine which – to be honest – rather had the taste and buzz of grape juice. Now I can see why they let wine "age"...

I loved this little town, the very definition of charming. I was quite grateful to the Alumni Association DKFZ for taking us to these hidden treasures of history which I would otherwise never have known.

## Stimulating insights at Roche

On June 14, 2007, our group of guest scientists and foreign co-workers of the DKFZ left their pipettes and flow hoods behind. Instead of their usual day full of lab work, the researchers took part in a tour generously organized by the Alumni Association Heidelberg.

It started with the unique and privileged opportunity to visit Roche Diagnostics Mannheim. More specifically, the group of guest scientists was invited to get a closer look at the company's structure of the Oncology Research Division. Furthermore we received a deeper insight into the range of the products provided by Roche Diagnostics. Several speakers presented very interesting talks. The many questions stimulated thereby were replied by thorough and well considered responses. Seeing is believing – therefore the introductory theoretical part ended with a detailed and impressive visit to the production facilities.

This first highlight of our tour was continued by a travel back in time, i. e. through the history of the industrialisation of the south-west of Germany at the "Landesmuseum für Technik und Arbeit" in Mannheim. On this occasion, the participants were introduced to the ancient skills of paper making.

With a lot of positive impressions this informative day ended in an enjoyable atmosphere with beer and food at the "Arbeiterkneipe" of the Landesmuseum für Technik und Arbeit.

*Markus Thomas*



*Pond at the Alte Kohlhof – final destination of the excursion during the forthcoming Alumni Meeting*

## Don't miss the promising Alumni Meeting on June, 20/21, 2008

\*

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### Obituary

The DKFZ grieves for two internationally renowned Senior Scientists who both suddenly passed away much too early. They will be commemorated as highly competent colleagues and co-workers with considerate personalities.

**Dr. Claus-Wilhelm van der Lieth** reached only 58 years of age. He was a member of the DKFZ since 1980, and became Head of the Research Group "Molecular Modeling" in the Division of Central Spectroscopy in 1987. As a pioneer in the promising area of glycomics, he served on several international boards related to this field.

**Dr. Jagadeesan Nair** deceased at the age of 53. He was a leading scientist in the Division of Toxicology and Cancer Risk Factors, coming from the International Agency for Research on Cancer in Lyon to the DKFZ in 1994. Jagadeesan Nair was particularly interested in cancer prevention, working on betel nut chewing, a main risk factor of oral cancer in South East Asia, and studying specific biomarkers for early detection. He strongly supported all activities of the Alumni Association from its very beginning, and was a most helpful co-organiser of the Indo-German Cancer Workshop in 2007, only a few weeks before he left us for ever.

### Imprint

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Dagmar Anders

Images:  
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