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dkfz

Alumni International

Dear DKFZ Alumni,

It is my great pleasure to provide an introduction to this first Newsletter resulting from the DKFZ Alumni International Program, started about one year ago. Let me first of all express my gratitude to the large number of colleagues who encouraged us to pursue this initiative by responding very positively to our invitation to participate in the Alumni Program. The short statements from four colleagues who spent research periods at the DKFZ are hopefully representative of the opinions of the many others who have also experienced a stay at the DKFZ. We have managed to establish contact with more than 800 scientists across the globe, the majority in Europe (658), but also with appreciable numbers in the Americas (80), Asia (62), Africa (6), and Australia (5). These include guest research scientists, former DKFZ scientists, and doctoral fellows. We realize, however, that many addresses have changed in the meantime or were incomplete in our files, and therefore ask all of you to spread the word about the Newsletter to all DKFZ Alumni you may know but who might have escaped our initial drafting efforts. The Newsletter itself is freely accessible at the homepage of the DKFZ under www.dkfz.de/alumni.

As you will appreciate from the following pages, there have been several fundamental changes in the DKFZ over the past few years. Prof. Harald zur Hausen, the Scientific Member and Chairman of our Management Board for 20 years, stepped down from the position at the end of April 2003. He has kindly agreed to communicate some of his experiences dur-

ing this long and fruitful period of leadership, and to explain his vision for the future of the DKFZ and his own activities in an interview given for this Newsletter. For the time being, Prof. Peter Lichter, Head of the Division of Molecular Genetics, has taken over the responsibilities of the Scientific Member and Chairman of the Management Board; he also presents his views on perspectives of cancer research at the DKFZ in a special article. Furthermore, a new way of funding research has recently been introduced, as detailed by the Administrative-Commercial Member of our Management Board, Dr. Josef Puchta. Due to retirement and new appointments of Heads of Divisions, Speakers of Research Programs, Members and Chairpersons of the Scientific Council, a number of other changes in the scientific leadership have reshaped the research program of the DKFZ, allowing focuses on new challenges. In this first Alumni Newsletter only those changes will be considered which occurred in 2002 and 2003, but in the forthcoming issues we hope to regularly report on such matters. Similarly, only a few, outstanding awards conferred on members of the DKFZ between 2001 and 2003 are mentioned. In the future, we would very much like to include information on important events in the scientific careers of our Alumni, particularly those from abroad, and kindly ask you to provide relevant data to the Alumni Secretariat (e-mail: e.mang@dkfz.de).

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Call for e-mail addresses

You are now holding the printed edition of the first issue of the DKFZ Alumni International Newsletter. Starting with the next issue, the newsletter will also be published online. To ensure you don't miss upcoming issues please forward your e-mail address to the DKFZ Alumni Secretariat (address on the back page). Printed versions will be available for those without access to the internet. Please notify us if you wish to receive further printed issues.

Looking back ...

The Alumni Program is essential for creating a communication network especially for those of us who no longer work in Heidelberg. I established my scientific identity and commitment to cancer research during five fruitful years at the DKFZ, and would like to keep sharing my progress.

Dr. Eiman Aleem, Egypt, presently in USA



The DKFZ Alumni Program deserves support and co-operation from all former research visitors. A number of my friends at the DKFZ contributed

enormously to the development of cancer research here in Gliwice. They all will remain in our good memory as those who helped us in various ways on many occasions and created a friendly atmosphere.

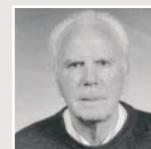
Prof. Dr. M.R. Chorazy, Poland

Although well over twenty years have passed since my stay as a guest research scientist at the DKFZ, I still hold many warm memories - and photographs of a memorable "Betriebsausflug" to remind me!

Prof. Dr. Nobuyuki Ito, Japan



The Alumni Newsletter will revive a perfect combination of science, culture and "Gemütlichkeit", represented by



the DKFZ and the city of Heidelberg. It will bring about memories for those who worked at the DKFZ and now wish to share

their experiences to contribute to the success of the emerging family's activities.

Prof. Dr. Constantine E. Sekeris, Greece

Peter Lichter assigned Scientific Chairman



With effect of May 1st 2003, Prof. Peter Lichter has been appointed Scientific Chairman of the Management Board of the Deutsches Krebsforschungszentrum, taking over the management duties on an

interim basis after the former Chairman, Prof. Harald zur Hausen, retired at the end of April.

Lichter, who was one of zur Hausen's deputies previously, studied biology at the University of Heidelberg before obtaining his Ph.D. at the Max-Planck-Institut für Medizinische Forschung in Heidelberg in 1986. From 1986 to 1990 he was a postdoctoral scientist in Prof. David C. Ward's group in the Department of Human Genetics at Yale University, USA. After his return to Heidelberg in 1990, Peter Lichter became Project Group Leader and two years later Head of the Division of Molecular Genetics at the Krebsforschungszentrum. He obtained his *venia legendi* (Habilitation) in Molecular Human Genetics at the Faculty of Theoretical Medicine at the University of Heidelberg in 1995. In November 2000 Peter Lichter was appointed Full Professor at the University's Faculty of Medicine. He received the German Cancer Award in 2002 for pioneering and applying novel methods in molecular cytogenetics and genetics, which could be summarized under the heading "FISH and Chips".

Fluorescence in situ hybridization (FISH) allows the detection of genomic alterations in the nuclei of tumor cells and is being applied in cancer research worldwide. In addition, it has provided insights into the organization of the genetic material in cell nuclei. The development of a novel DNA chip approach termed matrix comparative genomic hybridization by Lichter and his colleagues at the DKFZ allows genomic profiling with unprecedented sensitivity in an automated fashion. These methods are being successfully applied to elucidate the pathomechanisms of tumorigenesis, to identify new prognostic markers and to develop novel diagnostic tools in oncology.

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Research Funding

Dr. Josef Puchta explains how financing procedures have changed in the Helmholtz Association of National Research Centers

On September 12th 2001 the fifteen National Research Centers of the Helmholtz Association (Helmholtz-Gemeinschaft Deutscher Forschungszentren, HGF) took on the legal status of a registered association. At the same time the legal independence of the associations' individual centers such as the DKFZ has been maintained. The formal act of founding this association represents a far-reaching reform of the organization of German research facilities. Until now the research centers received 90 percent of their basic funding from the federal government, while the remaining 10 percent was provided by the respective state government. The amounts of funding were allocated in annual budget negotiations held between the centers and the government funding sources.

Starting this year, this annual funding system has been replaced by financing for long-term research programs, conceived jointly through

the interaction of several centers. The research programs are evaluated in a competitive process by the Senate of the Helmholtz Association with the help of a committee of outstanding experts in their fields. The results of the evaluation form the basis for the financing of the programs by the funding sources. The DKFZ participates in the Research Program of Cancer on a large scale and, on a smaller scale has a role within the Program of Cardiovascular Diseases. Both research programs were evaluated last summer. As a result, the DKFZ was assigned to undertake leading research in these areas. Thus, the new funding system, which was originally viewed rather skeptically in particular by scientists, appears now to be a successful change for the funding of the DKFZ.

Dr. Josef Puchta is Administrative-Commercial Member of the Management Board

Research Programs and their Speakers

Cell and Tumor Biology:

Prof. Dr. Christof Niehrs

- Molecular organization, cell differentiation, and growth regulation
- of normal and neoplastic cells

Functional and Structural Genomics:

Prof. Dr. Annemarie Poustka

- Identification and analysis of cancer-relevant genes and pathomechanisms
- Development and application of high-throughput technologies for the functional analysis of human genes and proteins
- Bioinformatics: data mining, image analysis, modeling and simulation of pathways

Cancer Risk Factors and Prevention:

Prof. Dr. Kari Hemminki

- Environmental and nutritional cancer risk factors and possible preventive measures
- Inhibition of neoplastic development by compounds of plant and environmental origin
- Epidemiology: cancer cases in defined population groups
- Heritable causes of cancer

Tumor Immunology:

Prof. Dr. Peter Krammer

- Approaches to cancer therapy based on immunological mechanisms
- Studies on immune tolerance of tumors
- Regulation of apoptosis in the development of cancer and other chronic diseases

Innovative Cancer Diagnostics and Therapy:

Prof. Dr. Dr. Wolfhard Semmler

- Radiologic tumor diagnosis and therapy
- Histopathological tumor diagnosis
- Development of experimental therapy
- Clinical co-operation in various fields

Infection and Cancer:

Prof. Dr. Jean Rommelaere

- Analyses of cancer-causing viruses
- Development of anti-tumor vaccines
- Utilization of viruses as vectors for cancer gene therapy
- Virus therapy of cancers using oncolytic parvoviruses

New Scientific Council constituted

In addition to the Speakers listed above, one scientist of each of the six Research Programs has recently been elected for a three year period:

PD Dr. Bernd Arnold, Dr. Barbara Bertram, PD Dr. Petra Boukamp, Prof. Dr. Hans-Ulrich

Kauczor, Prof. Dr. Elisabeth Schwarz, and Prof. Dr. Sándor Suhai. In its constituent assembly on October 15th Prof. Dr. Dr. Wolfhard Semmler and Prof. Dr. Elisabeth Schwarz were elected as Chairperson and Vice-Chairperson, respectively.



“We need to internationalize science“

For 20 years Prof. Harald zur Hausen headed the DKFZ as Scientific Member and Chairman of the Management Board. His leadership had a strong impact on the increasing national and international reputation of the DKFZ in the past two decades. Here he talks about his experiences and the current situation of cancer research in Germany

Alumni International: *What motivations and research goals made you want to join the DKFZ?*

Prof. zur Hausen: The DKFZ was of great interest for me, in part due to my personal deep interest in cancer research. I suspected that the diversity of Research Groups and Divisions at this place would provide an excellent basis for future progress. In addition, I believed that certain aspects, like infectious causes of cancer, genome research and clinical activities could be built up within a reasonable time span. I anticipated that these fields would have a substantial impact on the future of cancer research.

Alumni International: *What were the experiences you made here in terms of research, but also as far as research politics are concerned?*

Prof. zur Hausen: In spite of numerous warnings from my former colleagues at the University of Freiburg, my personal experiences at the DKFZ were remarkably positive. The colleagues here were readily responsive to my recommendation to introduce regular international evaluations of each former Institute, later on of each Research Program. In addition, internal evaluations were accepted on a biannual basis. These review processes helped tremendously to reshape some of the Divisions and to restructure the Center into Research Programs. Scientifically I would have wished to find more time for my own interests in viruses and cancer, otherwise I was extremely pleased by a generally co-operative atmosphere and also by the visible progress made by the DKFZ in national and international acceptance. As far as research politics were concerned, there was little direct or even indirect interference with our activities at the DKFZ. Only the past two years, resulting in the reshaping of the Helmholtz-Gemeinschaft and the concomitant establishment of program-oriented research support, led to some

changes. I doubt it whether this will lead to a further “stream-lining” of cancer research, and whether cancer research in general will profit from these intentions.

Alumni International: *How would you describe the current situation of cancer research in Germany?*

Prof. zur Hausen: It is very difficult to provide you with a simple answer to this complex question. There exist a number of research fields where Germany plays an important or even leading role internationally. Tumor immunology, tumor virology, and precision radiotherapy are only three fields, among a number of others, where the international reputation is outstanding. Similarly, there exist others, less well reputed. Clinical cancer research would be one example, despite a number of clinical groups within Germany who perform extremely well.

Alumni International: *How would you judge the situation for the DKFZ in particular?*

Prof. zur Hausen: The DKFZ is presently the leading institution in Germany as far as cancer research is concerned. This has been firmly established by international reviews – one of them initiated by the Ministry for Research and Technology – but also by national analyses. It will be important to maintain this leading position in the future. Internationally the DKFZ is regarded as one of the leading cancer centers in the Western world.

Alumni International: *Officially retired, but still active for the DKFZ – what are your present commitments?*

Prof. zur Hausen: First of all, I feel closely linked to this Institution. At the moment I have two types of commitments at the DKFZ: first, as Editor-in-Chief of the International Journal of Cancer it remains mandatory for me to care

for the Editorial Office on a daily basis. Secondly, I am still pursuing a research project, trying to link infections to the development of human leukemias and lymphomas.

Alumni International: *How would you rate the Guest Scientist Program of the DKFZ?*

Prof. zur Hausen: The Guest Scientist Program is an essential component of an internationally active research institution. For the DKFZ this program was and is an important component, not only for international exchange and scientific interaction, but more so for avoiding isolation in science, keeping an open mind for new developments and developing long-lasting international friendships. I would have difficulties in seeing any disadvantages of this program. It needs to be supported at the highest possible level.

Alumni International: *What were your personal experiences with guest scientists at the DKFZ?*

Prof. zur Hausen: Even prior to my coming to Heidelberg, at my former stations Würzburg, Erlangen and Freiburg, I always had some guest scientists in my laboratory, creating a lively atmosphere. In Heidelberg, of course, I acted at a different level. At least every week I had some contacts with guest scientists. Moreover, I am an ardent supporter of the idea of hiring foreign scientists also for top positions in this Center. We need to internationalize science wherever possible and we need to create an understanding of other cultures and of views that may occasionally differ from ours. The establishment of the French-German INSERM group at the DKFZ, headed by Jean Rommelaere, appears to be an outstanding example for our activities in this direction. Fortunately, it is not the only one.

Interview: Daniel Stolte

Appointments

Prof. Dr. Kari Hemminki:

Head of the Division of Molecular Genetic Epidemiology since June 2002.

Prof. Dr. Frank Rösl:

Head of the Division of Viral Transformation Mechanisms since December 2002.

Prof. Dr. Hans-Peter Meinzer:

Head of the Division of Medical and Biological Informatics since December 2002.

Prof. Dr. Hans-Ulrich Kauczor:

Head of the Division of Radiology since January 2003.

Prof. Dr. Paolo Boffetta:

Head of the Division of Clinical Epidemiology since July 2003.



Boveri Groups

Four Theodor-Boveri Groups for junior scientists have been newly established at the DKFZ. **Dr. Adelheid Cerwenka**, who has been heading the Boveri Group "Innate Immunity" since March, is analyzing structures on tumor cells recognized by cells of the immune system. **Dr. Tobias Dick's** group "Redox Regulation" focuses on the functional analysis of proteins regulated by cellular redox reactions. In July, **PD Dr. Usula Klingmüller** joined the Center, heading the Boveri Group "Systems Biology of Cellular Signal Transduction." The group "Signaling and Functional Genomics", established in July as well, is headed by **Dr. Michael Boutros**.



Retirements

Prof. Dr. Friedrich Marks, Head of the Division of Biochemistry of Tissue-Specific Regulators, retired with effect of April 1st 2002.

Prof. Dr. Rolf Flügel, Head of the Division of Retroviral Gene Expression, retired with effect of March 1st 2003.

Prof. Dr. Volker Kinzel, Head of the Division of Pathochemistry, retired with effect of April 1st 2003.

The Future of Cancer Research

Prof. Peter Lichter, Scientific Member and Chairman of the Management Board, illustrates how cancer research can benefit from genomics

In determining the complete DNA sequence the exploration of the human genome has taken its first important step. This puts us in a position where most of the human genes are known and the remaining ones will be identified more easily.

However, the striving towards understanding



Dedicated to genomic research: The DKFZ's new research building in the Technology Park was completed in December 2002.

how the genetic information is translated in cells and in the organism as a whole will take much more than merely identifying genes. Or, likewise, when it comes to understanding how faults in this translation process bring about diseases. Thus, it is becoming necessary, now, in a second phase of genomic research, to analyze the functions of genes and the interplay between gene products. In this respect, Germany is in a favorable position: The German Human Genome Project (DHGP) and the National Genome Research Network (NGFN) provide technology platforms and networks which can and should be made use of in this second phase of functional genome research. In order to get the most out of these establishments of expertise it is vital to pursue the research efforts on a broad basis. This is the aim put forth in the new program of the National Genome Research Network II (NGFN II). The DKFZ is an important partner of the DHGP as well as the NGFN and it will be important to ensure the Center's integration into NGFN II as well.

Why does genome research play such an important role for the DKFZ?

Cancer is a disease of the genes. However, it is only in rare cases that cancer-causing genetic alterations are inherited, i.e. transmitted by the mother or the father. In the vast majority of instances cancer arises sporadically, in such a

way that genes in certain cells undergo alterations and subsequently cause the cells to grow into a tumor. Eventually all carcinogenic factors lead to genetic alterations in one form or the other.

Understanding the biological mechanisms leading to the origin and spreading of tumors depends greatly on functional genomic research. Having successfully completed the first phase of the genome project, we now have the tools at hand that allow us to assess genetic alterations in tumor cells and their effects for the first time in a comprehensive manner. Therefore the NGFN II, and in particular the activities within its technology platforms and the cancer network, are of central importance for the DKFZ.

From genomics to Comprehensive Cancer Centers

Currently a so-called Comprehensive Cancer Center is being established in Heidelberg, in close co-operation between the University Clinic and the DKFZ. The Center will provide an outpatient clinic for tumor patients to be assigned the best professional care available. In order to rapidly translate preclinical research into clinical practice, many research activities of the DKFZ will become an integral part of the Comprehensive Cancer Center. Important tasks of the DKFZ will include establishing clinical and epidemiological cancer registers as well as a tumor and serum bank and providing quality control for clinical studies. Goals will also include the development of new experimental diagnostic and therapeutical methods as well as research projects in cancer prevention and epidemiology. These contributions of the DKFZ, in connection with clinical studies pursued by the University, promise to produce synergistic effects making Heidelberg a one-of-a-kind for oncology in Germany.

A Comprehensive Cancer Center as described above is also an important institution in terms of the clinical application of the complex data gained from genome research. It is becoming ever more important to analyze the molecular profiles of tumor cells in terms of their significance for diagnostic and therapeutic purposes. New procedures resulting hereof are to be brought into clinical practice as soon as possible.

The Couple who came to Dinner

Alumni Ada and Donald Olins have paid numerous visits to the DKFZ

by Ada L. Olins and Donald E. Olins

In the famous 1930's Broadway comedy "The Man Who Came to Dinner", a distinguished and arrogant guest comes to an evening dinner party and stays for six weeks, producing considerable disruption and dismay to his host's home. Our story as guests of the DKFZ has several important differences from this Broadway play. First, there are two of us. Second, we frequently return home to the USA. Third, hopefully our frequent visits to the DKFZ have had beneficial, not disruptive, consequences to our hosts. Fourth, unlike "The Man Who Came to Dinner", we experience warm and welcome hospitality with every return visit to the DKFZ. Our first extended visit was in the academic year 1979/80, hosted by Prof. Werner Franke. Prior contacts with Mr. Franke at scientific meetings had convinced us that he possesses a great breadth and depth of knowledge in cell biology. We became part of his nuclear structure group, which included U. Scheer, H. Zentgraf, J. Kartenbeck, H. Spring and M. Trendelenburg. We also became good friends with N. Paweletz, who generously allowed us to use his electron microscope. Donald had a Humboldt Senior Scientist Award; Ada, a Visiting Professor fellowship from the DKFZ. Following upon our earlier studies of the fundamental chromatin subunit (the nucleosome), we used this visit to initiate investigations of higher-order chromatin structures involved in transcription (the Balbiani Ring of polytene chromosomes in the midge *Chironomus tentans*) and replication (the macronuclear replication band in the ciliate *Euplotes eurystomus*). This visit started a long series of publications from our laboratory involving the development of electron microscopic tomography and analysis of 3-D chromosomal structures. The next extended visit occurred in 1997 in the laboratory of Prof. Peter Lichter. We did not personally know Mr. Lichter. But we had read his 1993 Cold Spring Harbor Symposium review article describing a chromosome territory model for the interphase nucleus (co-authored with T. Cremer, C. Cremer and others). It was clear to us that this conception represented a profound contribution to our understanding of nuclear structure. This time Ada had a Humboldt Senior Scientist Award, and Donald had a DKFZ guest scientist fellowship. We used this visit as an opportunity to inquire into the question of the

mechanism of nuclear shape changes during formation of the blood polymorphonuclear (neutrophil) granulocyte, which remains our present research direction. We devoted much effort to characterizing the *in vitro* granulocytic differentiation of a leukemic tissue culture system, HL-60 cells. During that year, we developed a friendship and collaboration with H. Herrmann, which has strengthened over the ensuing years. Besides these two extended stays at the DKFZ, we have paid numerous recent short visits (varying from six weeks to six months), which became possible through DKFZ guest scientist fellowships. These brief

and an overwhelming series of scientific lectures, our visits have served to replenish and recharge our scientific motivations. Furthermore, we have employed these frequent visits to establish scientific collaborations around Europe, including examples in Berlin, Göttingen, Würzburg, Dresden, Zürich, Vienna and Grenoble. Some of these collaborations have directly yielded breakthroughs in our understanding of nuclear shape. With H. Herrmann's laboratory and groups in Berlin and the Jackson Laboratory (Bar Harbor, Maine), we have demonstrated that the nuclear envelope (NE) protein lamin B receptor is necessary for granulocytic nuclear lobulation and proper heterochromatin distribution. This has generated a model for NE shape that postulates a balance of forces between lamina rigidity and NE interactions with underlying heterochromatin. Much of our future studies in the USA (and hopefully, again at the DKFZ) will be focused on testing and improving this structural model. Of great benefit to us has been the opportunity to reside in DKFZ housing. The proximity of our various apartments to the laboratory has permitted us to conduct experiments at all hours, to walk to markets, concerts, cinemas and to take frequent hikes into the Odenwald. We delight in the public transportation system that has allowed us to live comfortably without an automobile on many of our visits to Heidelberg. Indeed, Heidelberg has become a second home for us and the DKFZ has become a source of scientific stimulation and long-lasting friendships.



Turning visits into collaboration: Ada and Donald Olins in Heidelberg

visits have strengthened our recent collaborations with P. Lichter and H. Herrmann, as well as permitting us to be involved in various research projects of graduate students at the DKFZ. In our experience, there are very few places in the world of science that rival the DKFZ. The concentration of talent and expertise, including scientists at the University of Heidelberg and at the EMBL, is staggering. Combined with a truly fantastic library

the laboratory has permitted us to conduct experiments at all hours, to walk to markets, concerts, cinemas and to take frequent hikes into the Odenwald. We delight in the public transportation system that has allowed us to live comfortably without an automobile on many of our visits to Heidelberg. Indeed, Heidelberg has become a second home for us and the DKFZ has become a source of scientific stimulation and long-lasting friendships.

Donald E. Olins obtained his Ph.D. in Biochemistry from The Rockefeller University in 1964. Ada L. Olins obtained an M.A. from Harvard in 1961, and a Ph.D. in Biochemistry from New York University in 1965. From 1964 to 1967, both were Postdoctorals in Molecular Biology at Dartmouth Medical School in Hanover, New Hampshire. They joined the faculty of The University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences (Oak Ridge National Laboratory, Oak Ridge,

Tennessee), where they remained for over 30 years advancing through the ranks to Full Professors. In 2002 they were both appointed Visiting Scholars in the Biology Department and Program in Biochemistry at Bowdoin College in Brunswick, Maine. Donald and Ada Olins have co-authored some 90 articles, and co-directed the Chromatin Gordon Conferences in 1984 and 1986. They continue to conduct research and mentor students at Bowdoin College.

Where Scientists from all Continents meet

Each year scientists from all over the world visit the DKFZ to expand their research experience and share their skills

“It is becoming increasingly apparent that the success of scientific research greatly depends on well-functioning networks at the international level.” This is how Siegfried Herz, Secretary of the Scientific Council, described the motivation for establishing a visiting scholar program at the DKFZ. In 1986 the program was founded with the goal of providing skilled and well-trained scientists with an opportunity to expand their research experience while at the same time sharing it with their DKFZ colleagues.

Asia on the rise

Over the last ten years guest scientists from research institutions all over the world have taken advantage of the opportunity to pursue research projects at the DKFZ. From 1993 until 2002, between 116 and 168 guest scientists were working at the Center each year, representing a highly diverse cross section of ethnical and national backgrounds. At any given time, the DKFZ is home to some 45 visiting scholars from all five continents: Europe, Asia, Africa, Australasia, and the Americas. While visitors from European countries accounted for the majority of visiting scholars during the early nineties, their portion has gradually declined over the last few years. Meanwhile, the program has been attracting more and more scientists from more distant countries overseas, especially from Asia.

How to apply

Sometimes, collaborations between scientists at the DKFZ and researchers abroad turn out to be the starting point for a participation in the visiting scholar program. Scientists who do not have this experience but are interested in spending some time conducting research at the DKFZ should propose a project to a Senior Scientist or the Head of the Division they are interested in working in, who will then file an application to the Management Board of the DKFZ. Usually an initial duration of one year is envisaged for a stay with the program, including an option to be extended for another year. The applicant should hold a doctoral degree as a prerequisite for successful participation. Applications are considered on a quarterly basis.

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Scientific Awards

Outstanding prizes for DKFZ scientists - a three years' selection

2001

Prof. Dr. Christof Niehrs, Head of the Division of Molecular Embryology, was awarded the Forschungspreis 2001 (Research Award) of the state of Baden-Württemberg, in honor of his discovery of the *dickkopf* gene, whose product is an essential inducer of anterior structures in vertebrate embryos.



2003

Dr. Frank Lyko was awarded the Karl Freudenberg-Preis by the Heidelberg Academy of Sciences. Lyko, who heads the Epigenetics Division, received the prize for discovering that a DNA methylation system is also present in the fruitfly *Drosophila melanogaster*. This model organism was previously thought to lack such an epigenetic control mechanism.

2002



Prof. P. Lichter

The Head of the Molecular Genetics Division **Prof. Dr. Peter Lichter** and **Prof. Dr. Klaus-Michael Debatin**, the former Head of the Clinical Co-operation Unit Molecular

Oncology/Pediatrics, received the Deutscher Krebspreis (German Cancer Award) for their achievements in experimental and clinical research, respectively. The prizes are awarded annually in acknowledgment of outstanding contributions to cancer research.



Prof. K.-M. Debatin

Germany's most sought after scientific award, the Gottfried-Wilhelm-Leibniz-Preis, was granted to **Prof. Dr. Christof Niehrs**, who heads the Molecular Embryology Division. Niehrs received 1.55 million Euros for his contributions towards understanding mesoderm formation and differential expression of developmental control genes in amphibians.

Prof. Dr. Wolfgang Schlegel, Head of the Division of Medical Physics, received this year's German Cancer Award for his achievements in precision radiotherapy. Schlegel's research has contributed to improved radiological treatment, allowing ever-more precise targeting of tumors.



The 16,000-Euro-prize honors Lyko's research in the field of DNA methylation.

Dr. Frank Lyko, Head of the Division of Epigenetics at the DKFZ, was awarded the Heinz Maier Leibnitz-Award of the German Research Association (DFG).



Prof. Dr. Peter Kramer, Head of the Division of Immunogenetics, was awarded the Lautenschläger Research Prize, including a gratuity of 250,000 Euros and acknowledging his contributions in the field of apoptosis. Research in Kramer's Division is concentrated on cell growth regulation and aims at specifically intervening with the mechanisms underlying programmed cell death.

Research in Kramer's Division is concentrated on cell growth regulation and aims at specifically intervening with the mechanisms underlying programmed cell death.

A German Year: Politics in a Nutshell

by Daniel Stolte

September 2002: The “Great Flood“ of August leaves thousands of homes and businesses in eastern parts of Germany devastated. The damage is assessed to be almost 10 billion Euros. Campaigning for the imminent parliament elections brings about a novum in Germany’s political history: for the first time, the candidates for the Chancellor’s office have the opportunity to rival each other on a TV show. In a neck-and-neck-race against their opponents the Social Democratic Party (SPD) and the Green Party win the elections and form a government coalition.

November 2002: Due to its debt load the country is at risk of violating the financial stability pact agreed upon by the EU ministers. The government kicks off a series of reforms aiming at cutting costs, primarily in the areas of public health and pensions.

December 2002: With more than four million people without a job, the unemployment level in Germany rises to a five-year-record. The government points to the economic depression while opposition parties blame the administration for its economic politics. Germany’s Supreme Court stops a long-awaited law regulating migration into the country, based upon its recognition of a flawed voting process in the Federal Council earlier in the year.

January 2003: The National Ethics Council approves genetic testing on fertilized oocytes under strict regulations. EU ministers of finance initiate a formal sanctions procedure against Germany for failing to comply with the financial stability agreement.

February 2003: At the height of anti-war demonstrations half a million protesters take to the streets in Berlin. Chancellor Schröder confirms his opposition to any military action in Iraq.

March 2003: Chancellor Gerhard Schröder proclaims his “Agenda 2010”, a bundle of reforms designed to deregulate the job market and revive the nation’s economy. The German Supreme Court closes the proceedings against the German Nationalist Party (NPD). Investigations were called off when it turned out that high NPD officials served as undercover agents for the Federal Office for the Protection of the Constitution.

April 2003: Unemployment rates continue to rise so that 4.6 million people are now without a job. In the eastern part of Germany every fifth adult is unemployed.

May 2003: On May 1st, the traditional “Workers’ Holiday” in Germany, worker unions harshly criticize Schröder’s reform plans under Agenda 2010 and announce strikes. Secretary of Finance Hans Eichel admits it will not be possible to achieve a balanced financial budget even in 2006. In addition, Germany will not be able to comply with the financial stability criteria set by the EU.

June 2003: Shops are now allowed to open from 6 am to 8 pm, except on Sundays. In an effort to stimulate the stagnant national economy, the government decides to cut taxes earlier than originally intended. The migration-regulating law is put to the vote one more



Fully flagged: The Reichstag in Berlin

time in the Federal Council and is now definitely rejected by the majority of the members from the opposition parties (Christian Democrats and Liberals).

July 2003: The government coalition’s tax cut plans run into major difficulties with the opposition parties. The metal industry workers’ union faces a crisis after strikes during previous weeks failed. In a joint effort, administration and opposition pave the road for the reform of the health system: Patients will have to pay a fee upon visiting a doctor and their own contributions to medication costs will go up.

August 2003: The Government coalition struggles with poor poll results. In a regular poll asking citizens for their vote “if elections were to be held this Sunday”, only 31 percent state they would vote for the SPD. The Christian Democrats would clearly win with 45 percent. Although the majority of the respondents consider the administration’s efforts “rather unsatisfactory”, only 25 percent think that opposition parties would do a better job.

October 2003: The bill for social reforms under Agenda 2010 passes after being put to vote in the parliament. Opposition parties declare their intention to stop the bill in the Federal Council. Federal Secretary of Justice Brigitte Zypries stirs a debate in bio-ethics by questioning the current notion that the protection of human dignity starts as early as with the fusion of sperm and egg.

(continued from page 1)

The main article of the present issue is based on a very successful, long-standing co-operation between two guest research scientists, namely Profs. Ada and Donald Olins, and different research groups in the DKFZ. We intend to publish similar articles in each forthcoming Newsletter, and would appreciate topic proposals from colleagues inside or outside the Center (e-mail: p.bannasch@dkfz.de). I would like to close by bringing to your at-

tention the first meeting of the DKFZ Alumni International in Heidelberg, which has been scheduled for Friday, June 25th, and Saturday, June 26th, 2004. A detailed program is now being drawn up and should be published in the next Newsletter. I sincerely hope that many of you will be able to attend this event so we can meet in an atmosphere of shared past achievements and contribute to future international communication and co-operation in cancer

research and control. Best wishes from all of us at the DKFZ.

Sincerely,

Prof. Peter Bannasch
Co-ordinator dkfz Alumni International

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Impressions of Old Heidelberg

A stay at the DKFZ offers insights into the daily lab work of fellow German scientists. However, there is more to be discovered in Heidelberg. Young guest scientist Justo Lorenzo Bermejo tells about his tour through the hidden backstreets of historic Heidelberg

Our tour started at the Lion Fountain in the University Square of the old City of Heidelberg. Friendly, lucidly and professionally our guide, Mrs. Charlotte Frey, introduced us to Heidelberg's past and present. We, the participants from various countries, reflected the international diversity of the DKFZ. The history of the University was brought to life in the Old University building, especially in the Alte Aula, a room with an almost magical atmosphere. It was a moving moment hearing about one of the oldest German universities. Considering the association of the University and DKFZ enriched this experience even more. Afterwards, in the famous Students' Prison, the blackened portraits left us with an unforgettable image of students incarcerated here long ago. Although time did not permit a visit to the old Library, the mere description of the Codex Manesse greatly stimulated the curiosity of those with a love for poems and miniature painting. The visit

to the New University Building, the Schurman-Bau, permitted us a glimpse of the spirit of education continuing to run through the city and its people. The building was erected in the 1930s with the help of funds raised in the United States by the help of funds raised in the United States by Jacob Gould Schurman, a former student at



the Uni-
of Heidelberg, who
later became
U.S. ambassador in Berlin. The image of a
medieval street buzzing with market activity,
and horse carriages carrying clothes and
other goods came alive in our imagination as
we stood in front of the Heiliggeist-Kirche,

and the nearby Hotel Ritter, a building dating from the late Renaissance. In the Church's windows a confluence of traditional and modern art can be seen, again showing the respect of Heidelberg citizens for an ever-changing society. Standing at the old bridge, which has witnessed ages of city history, and looking at the Monkey Statue, the feeling was strong that history repeats itself and that forced changes never last long. After saluting the statue of Madonna at the Kornmarkt we went up to Heidelberg Castle by cable car, where we had a stroll through the garden and saw the destruction inflicted by French soldiers at the end of the 17th century. Inside, we visited the pharmacy museum, where we had a comprehensive one-hour tour through the history of pharmacy in Germany. Afterwards we ignored our tired legs and hastened towards the big barrels of wine and came back to the Castle's terrace to enjoy the panoramic view over the city.

It was a very nice gesture of *dkfz Alumni International* to organize this tour through old Heidelberg. It helped the international community of DKFZ to understand the history and people of Heidelberg, and made us proud of being residents of the city. We are very thankful for the organization and hope activities like this will be offered frequently in the future.

Alumni Meeting 2004



We are glad to announce the first DKFZ Alumni Meeting in Heidelberg, which has been scheduled for the 25th (Friday) and the 26th (Saturday) of June, 2004. On the Friday, Alumni will present their recent results in selected topics of cancer research. On the Saturday, the present research programs of the DKFZ will be introduced and recent results from each program will be highlighted. In the afternoon, Alumni and DKFZ scientists will have a chance to meet at an informal get-together. A detailed program will be communicated in due time.