

Crossing Borders 2013

The Volkswagen Foundation and Its International Focus



VolkswagenStiftung



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Our Purpose

The purpose of the Foundation is to support and advance the humanities and social sciences as well as science and technology in higher education and research.

(Statutes of the Volkswagen Foundation, § 2)

Our Mission

The Foundation is committed to encouraging ambitious research across disciplinary, institutional, and national borders and to supporting creative researchers in breaking new ground.

The Foundation in Brief

A Foundation of Knowledge

Established as an independent research funding institution by the Government of the Federal Republic of Germany and the State of Lower Saxony in 1961, the Volkswagen Foundation has a strong tradition in providing support for all branches of science. Its slogan “A Foundation of Knowledge” reflects both a commitment to reliability as well as proficiency in generating impulses for the advancement of innovation and knowledge.

To date, the Volkswagen Foundation has allocated about 4 billion euros to more than 30,000 projects in Germany and all over the world. Average annual funding in an amount of more than 100 million euros over recent years makes the Hanover-based Foundation the most potent private research funding foundation in Germany. The Foundation Statutes ensure its independent existence as a legal entity and its character as a non-profit organization.

Concept

Being completely autonomous and economically self-sufficient, the Foundation is free to determine and develop its funding instruments and the topics it decides to support. As its funding concept is not rigid, the Foundation is able to take the initiative and provide sustainable impulses for science and research to meet the challenges facing modern society.

The Volkswagen Foundation constantly reviews its funding portfolio. The overriding objectives include a preference for transdisciplinary issues and approaches, reinforcement of international cooperation, and support for the upcoming generation of researchers. Priority is given to persons and ideas that dare to cross borders in more than one meaning of the phrase – borders between countries or continents, between disciplines or concepts of mind, as well as between generations or societies. Presented with an opportunity to develop their own vision, researchers who fit this profile contribute towards broadening the horizons of their respective disciplines and sharpening the profile of their university.

The Foundation also attaches great importance to opening up new pathways for research in and on foreign countries, focusing on cooperation in symmetric partnerships.

International guests at a symposium held to mark the occasion of the Foundation's 50th anniversary: Prof. Dr. Homi K. Bhabha, Harvard University, U.S., and Dr. Ndidi Nnoli-Edozien, Growing Business Foundation, Nigeria, (second and fourth from left) discussing with the Berlin researchers, Prof. Dr. Katja Niethammer, Prof. Dr. Ulrike Freitag and Prof. Dr. Dieter Gosewinkel (from left).



History

Following the end of World War II the ownership of the Volkswagen Corporation was unclear and claims were asserted from several sides. This situation was finally regulated by a treaty between the Federal Republic of Germany and the State of Lower Saxony, which turned the automobile manufacturer into a joint stock company and fixed the establishment of an independent private research funding foundation. The proceeds from the privatization (at that time 1,074 million German marks) provided the endowment capital of the newly founded Foundation.

Capital

Today the Foundation's assets amount to 2.6 billion euros. The Foundation's funding activities are financed from earnings on investments, capital assets being invested so as to obtain the optimum long-term yield. Earnings also accrue from returns on the VW shares held by the State of Lower Saxony.

Organization

The Foundation is governed by the Board of Trustees. The Board comprises 14 eminent persons drawn from the domains of academia, politics, and industry, of whom seven are appointed by the Federal Government and seven by the State of Lower Saxony. The Trustees are completely independent and governed solely by the Foundation's Statutes. The Board usually convenes about three times a year to discuss and formulate strategy and to decide on applications. The Trustees are responsible for the annual budget and accounts, as well as publication of the Foundation's annual report and appointment of the Secretary General. Dr. Wilhelm Krull has been General Secretary of the Foundation since 1996, and as such responsible for its management.

Currently the Volkswagen Foundation has a staff of about 95, spread over three main divisions. Division I is responsible for the research funding, the other two divisions manage the Foundation's assets and take care of finance and administration. There are also four smaller units that directly report to the

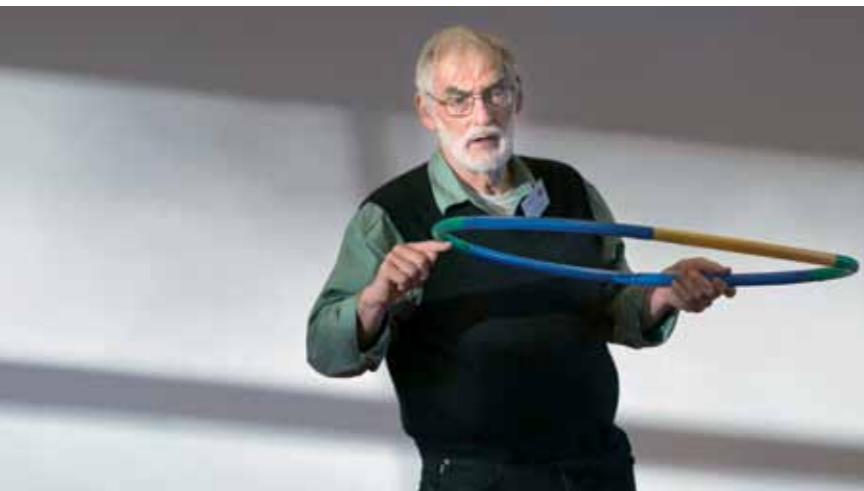
More than 400 guests accepted the Foundation's invitation to attend the ceremonial occasion held in the German Historical Museum in Berlin. In the baroque atmosphere of the Schlüterhof, their attention was fixed on what the future is likely to bring for research funding.



Secretary General, covering, among others, the areas legal affairs, evaluation/internal audit, events, and communication. The Foundation staff prepares the funding decisions on the research proposals for the Board of Trustees and executes the Board's strategic decisions. This involves the conceptualization and implementation of funding initiatives, processing applications, informing and advising the applicants, and monitoring the funded projects from start to finish.

Investment

The "Investment Management Division" takes care of the Foundation's capital assets, currently 2.6 billion euros. Their task pursues two main



objectives: One is to ensure the sustained funding of research projects; the other is to maintain the real value of the Foundation's capital in the face of inflationary pressure. This calls for investment not only in interest-bearing securities, but also in stocks and real estate. The investment strategy in these three main areas is based on the portfolio theory of risk diversification: the greater the spread and trade off between risks and opportunities, the greater the yield.

Finance and Administration

Administering the Foundation's finances and budgeting is a task for professional management. This is provided by the "Finance and Administration Division" which among other things takes care of the Foundation's accounting and financial controlling. In accordance with requirements laid down in the Foundation's Statutes, this group also prepares the annual financial statements for the Foundation's auditors and ensures the ongoing internal control of assets. The unit "Human Resources and Corporate Services" is involved in the planning and implementation of everything necessary for efficient staffing and supports the management in all matters regarding recruitment and the Foundation's employees. It also maintains the infrastructure necessary to ensure the smooth running of the Office. The "IT-Department" is responsible for the coordination and development of the Foundation's information and communication systems.

"Limits to Growth" revisited: As a junior researcher, Dennis Meadows from MIT played a leading role in compiling the influential study. Forty years later, he gave lectures at a winter school organized by the Foundation and debated current issues surrounding sustainable development with 60 young researchers from all over the world – among them, Andreas Havemann, Cologne, and Dr. Lydia Olaka, Nairobi.

Funding

Core Principles

The Foundation's support is available to the whole spectrum of academic disciplines, ranging from the humanities and social sciences, through the engineering and natural sciences, up to the bio-sciences and medicine. Funding is allocated to cover personnel costs for both academic as well as non-academic staff, for equipment and running costs, for travel expenses and for buildings. The Foundation is completely free to decide how its funds are to be allocated, which projects it considers worthy of funding, and whom it deems appropriate to grant funds to. The sole restriction is that this be in accordance with the Foundation's Statutes which require all funding to be made to academic institutions rather than to individual persons. All funding must be designated for a specific purpose, and the Foundation must ensure that such purposes are extra-budgetary, i.e. that they in no way substitute or compensate for the core budget of the recipient institution.

Funding Concept

Overriding features of the Foundation's funding concept include the preference given to new and promising fields of research, interdisciplinary approaches, support for outstanding and especially young researchers, boosts for international cooperation, a close interrelation between research, education and training, as well as enhancement of communication among researchers and between the scientific community and the public. The Foundation strives to be an active partner and to generate targeted impulses for the benefit of the national and international research communities.

In pursuit of this goal it concentrates its support on specific, carefully selected funding initiatives. However, the scope of funding is not oriented solely to the needs articulated by the scientific community. The Foundation's focus of attention is also on current developments and issues where the economy, politics and society look to science to provide adequate solutions.

Funding Profile

The Foundation's funding profile is reflected in the structure of its portfolio which comprises three main categories: Persons and Structures, International Focus, and Challenges for Academia and Society. In addition, grants are also available for extraordinary projects (Off the Beaten Track), for communicating science and research, and in the regionally oriented area Priority for Lower Saxony (Niedersächsisches Vorab).

• Persons and Structures

Here, the Volkswagen Foundation seeks to combine the explicit funding of individuals with targeted structural change. Support is offered to outstanding scholars and scientists pursuing interdisciplinary approaches to groundbreaking topics that may also entail a certain element of risk. The aim is not solely to generate new knowledge, but also to develop alternatives to entrenched processes and structures. In this category, the Foundation currently supports the following funding initiatives (status summer 2013):

- Lichtenberg Professorships
- "Freigeist" Fellowships
- University of the Future

- Research in Museums
- Opus magnum

- **International Focus**

The Volkswagen Foundation has a strong tradition in supporting the internationalization of research in many regions of the world. Its current activities in this respect encompass support for young researchers and peer networking, stimulating capacity development in countries with emergent research structures, and, in particular, strengthening cooperation based on equitable partnership between scholars and scientists in Germany with their colleagues around the world. Funding initiatives currently include:

- Between Europe and the Orient – A Focus on Research and Higher Education in/on Central Asia and the Caucasus
- Knowledge for Tomorrow – Cooperative Research Projects in Sub-Saharan Africa
- Europe and Global Challenges
- Postdoctoral Fellowships in the Humanities at Universities and Research Institutes in Germany and the U.S.

Also within the scope of most other funding initiatives, the Foundation will accept proposals from applicants resident abroad. It is a fundamental condition that the responsibility for a substantial part of the cooperation rests with a German partner institution. A general rule for all international projects is that they involve cooperation on an equal footing.

- **Challenges for Academia and Society**

In this funding category, the Foundation aims to provide incentives for research into new fields – including areas which may well harbor potential risk – and to stimulate investigations which transcend the existing borders – either those between science and the practice, between different disciplinary cultures, or between the conventions of research in Germany and other countries. Topics and issues are developed in close collaboration with academia. In so doing, the Foundation



endeavors to stimulate research on issues for which policy makers, the economy, and the public at large look to science to provide orientation and scientifically founded concepts for the future of society and for coping with societal problems. This category currently includes the following funding initiatives:

- Experiment! – In Search of Bold Research Ideas
- Key Issues for Research and Society – Integrative Projects in the Area of the Humanities, Cultural Studies, and Social Sciences
- Integration of Molecular Components into Functional Macroscopic Systems
- Free-electron Laser Science: Peter Paul Ewald Fellowships at LCLS in Stanford
- European Platform for Life Sciences, Mind Sciences, and the Humanities
- Symposia and Summer Schools

Off the Beaten Track

The Foundation also provides support for exceptionally worthy projects which lie outside the scope of its current funding portfolio. This offer is open only to truly exceptional projects. Applicants are advised in every case to first submit a draft proposal.

Communicating Science and Research

There is a pressing need to inform the public at large about the working conditions of science and the findings of basic and strategic research. The Volkswagen Foundation conceived this wide-ranging offer to provide support for grantees' interaction with the public and to encourage new approaches to the task at hand.

Priority for Lower Saxony

The Foundation's Statutes prescribe that a certain part of the funds distributed by the Volkswagen Foundation must be made available to research institutions located in the State of Lower Saxony. The Board of Trustees decides on the allocation of these grants (called Niedersächsisches Vorab) acting on recommendations made by the Lower Saxony State Government.

Review and Decision

The Volkswagen Foundation is committed to the principles of peer review. Depending on the respective funding initiative and the accordant review procedure, the Foundation may request

a number of experts to submit their written assessments of individual applications. Another procedure involves peer review by a panel of experts. In this case, all the applications submitted within the scope of a funding initiative are subjected to a comparative review process.

There is no permanent body of experts; rather they are selected from various disciplines, universities and institutes – also from the non-university sector and from abroad – in accordance with the requirements of the individual applications and funding initiatives. 740 German consultants and 340 from abroad contributed their expertise to the peer review process in 2012.

Once an application has been approved by the Board of Trustees or the Secretary General, the allocated funds are transferred to the recipient institution to be administered. One of the conditions attached to funding is that the Volkswagen Foundation receives an annual report on the development of the project, in addition to proper accounts recording how the allocated funds have been expended.

Tectonics, climate and evolution were the central themes of an interdisciplinary summer school held in Kenya that gave an introduction into the East African Rift system to junior researchers from eight different nations. The three-week summer course was filled with intensive field training and lectures on issues from palaeontology to hydrogeology – coordinated by Prof. Dr. Martin Trauth, University of Potsdam.

International Focus

Global Challenges – Mutual Benefits

The worldwide support for international cooperation and exchange provided by the Foundation stems from an awareness of the enormous mutual benefits to be gained from encountering different approaches and views. The will to foster communication and understanding across cultures is a second cornerstone of the Foundation's international commitment. From its very beginnings – while post-war Germany was still in the process of reconstruction – the Volkswagen Foundation made use of the freedom guaranteed by its statutes to provide funding for academic institutions and research projects in other countries.

Today, facing the challenges of a rapidly evolving global political and economic architecture, the ability to see beyond one's own horizon and to collaborate effectively beyond borders is even more important. The Foundation therefore strives to support promising research collaborations among researchers from different countries and continents. The objective is to enable foreign researchers, in particular those from developing regions of the world, to participate on an equal

footing in internationally competitive research projects, and to facilitate a stronger international orientation of German research. This requires a vital contribution to sustainable capacity development by offering training programs, fellowships, and cooperative projects as well as securing attractive career prospects for young researchers in their home countries. Over recent years, the Foundation spent one third of its general allocations for projects under the International Focus.

A Focus on Africa and Central Asia

For more than ten years now, the regional focus of the Foundation's international funding has been on sub-Saharan Africa and Central Asia and the Caucasus. Whilst there was considerable expertise on Africa available at German universities, for Central Asia and the Caucasus it was almost non-existent. Therefore, this initiative was designed both to stimulate interest within the German academic community to conduct research into Central Asia and the Caucasus, and to provide active support for research and higher education in

the region. Having provided widespread support for cooperative projects in and around Central Asia (cf. page 20), the funding initiative has been realigned towards problem-orientated thematic areas. Now, focused calls address specific issues and researchers of the respective disciplines. Following the successful model developed in the Africa initiative, the calls are prepared in thematic workshops realized by the Foundation in close cooperation with scientists and scholars of the region. These meetings constitute a bottom-up approach to identify current research issues and facilitate the design of appropriate calls. The first call in the Central Asia/Caucasus initiative entitled "Environment, Natural Resources and Renewable Energies – Interdisciplinary Transboundary Research on Human-environmental Interactions" was launched in early 2013; a second call on "State, Economy, Law" (working title) is in preparation for 2014.

The funding initiative "Knowledge for Tomorrow – Cooperative Research Projects in Sub-Saharan Africa" is aimed above all at providing opportunities for young African researchers in their home countries. With this in mind, the Foundation pursues a sustainable three-stage career model that enables young scholars and scientists in the region to work at African institutions in the longer term, also as postdocs.

During the first funding phase, which has since been terminated, doctoral candidates and postdocs were integrated in collaborative African - German projects. During the current second phase, these young researchers participate in postdoc programs which offer them the opportunity to apply for the funding of their own independent research projects embedded in African institutions. More recent calls have concentrated on the social sciences, the humanities, and livelihood management, following previous allocations of funding in the engineering sciences and for the topics "Natural Resources" and "Neglected Tropical Diseases and Related Public Health Research". Provided that the junior postdocs can render



their projects to be successful, they can then continue as senior postdocs in the subsequent third phase of the program. There are already examples of this within the program on "Neglected Tropical Diseases" (cf. page 18). The Foundation convened all African postdoctoral fellows supported within the initiative – that is more than 60 – to reflect their research with other grantees and experts in fall 2013.

Complementary, the Foundation has expanded its long-term regional engagement: In view of recent events in North Africa and Arab countries, it has initiated a call for research projects to accompany the ongoing political developments in the region. In 2012 this led to five pilot projects being started. In addition to this, the conclusions of an international conference funded by the Foundation entitled "Re-Aligning Power Geometries in the Arab World" were augmented in expert meetings. The subsequent call "State, Society, and Economy in Change – Multilateral-Cooperative Research Projects on the Arab World" was announced at the beginning of 2013, inviting applications for multilateral projects on issues surrounding the current transformation processes.

Young scientists from Germany and five different African countries honing their methodological skills in the Mbuna research station; the program was developed by the University of Malawi and the Center for Interdisciplinary Research on Africa, Frankfurt/Main.

Teamwork on the banks of Lake Malawi: Participants of a field school on evolutionary biology, capturing and dissecting the objects of their research.



Europe, the U.S. and the World

Quite another perspective is provided within the context of the funding initiative “Europe and Global Challenges”, which was developed in cooperation with the partner foundations Riksbankens Jubileumsfond, Stockholm/Sweden, and Compagnia di San Paolo, Turin/Italy. This initiative is aimed mainly at social scientists researching complex issues surrounding globalization: in large-scale collaborative projects and involving colleagues around Europe and the whole world. It is expected that the growing international interconnectedness of science will lead to new insights into the current and future role to be played by Europe, and will in turn produce additional stimuli. The projects

Historian Sita Steckel spent a year at Harvard carrying out research on the Middle Ages. The Houghton and Widener libraries provide excellent working conditions for humanities fellows from Germany.



funded so far were invited to present their results and develop new research ideas at an international conference in Hanover in the fall of 2013.

The program “Postdoctoral Fellowships in the Humanities at Universities and Research Institutes in the U.S. and Germany” aims at strengthening transatlantic research relations in the humanities. The model “Harvard Fellowships”, which has been running since 2007, has been extended to include a number of other renowned institutions of top-level research in the United States. In 2012, a reciprocal dimension was added via support from the Andrew W. Mellon Foundation. While the first American postdocs were able to embark on a one-year research stay in Germany



(cf. page 16), a fifth group of German fellows – funded by the Volkswagen Foundation – took off in the other direction to the United States.

Cooperation in Symmetric Partnership

The Foundation regards cooperation in symmetric partnership as the guiding principle of all projects involving an international collaboration. Especially research conducted in transboundary and intercultural schemes with partners from developing countries requires equitable cooperation. By defining the issues and designing the instrumental framework of its international grantmaking in an interactive process with the respective communi-

ties, the Foundation pursues this goal right from the start. Generally, the Foundation recommends the acceptance of the KFPE Principles for Research in Partnership (www.kfpe.ch/11-Principles).

Objectives and Requirements

There are varying requirements attached to the participation of researchers from outside Germany in the Foundation’s funding initiatives. Whereas for the initiatives under its “International Focus” teamwork involving researchers from different countries is mandatory, applications within the other categories must explain the necessity for collaboration between German partners and researchers from outside Germany.

Information and Contact

Applicants should first obtain updates on the Foundation’s funding portfolio before submitting their proposals. For each funding initiative, the “Information for Applicants” provides detailed information on the respective scheme, its objectives, and the pertinent requirements.

Please visit our website under www.volkswagenstiftung.de. Should you still have any questions after reading the “Information for Applicants”, the program director responsible for the respective funding initiative will be glad to assist.

The newly formed “Uzbek-German Center for Architecture and Building Construction” with dual locations in Tashkent and Potsdam aims at training up experts who will preserve the Uzbek cultural heritage. During a stay at the FH Potsdam, Prof. Dr. Tulaganov Abdukabil Abdunabievich, together with Dr. Tolib Akhadovich Nizamov from the Tashkent Architectural and Building Institute and Dr. Sultan I. Akhmedov, Samarkand State Architectural and Civil Engineering Institute, pay a visit to the restoration center.

Berlin – An Inspiring Environment for Linguistics Research

The Transatlantic Fellowship Program has enabled Dr. Seunghun Lee to swap his desk in Connecticut for a year of research at the Berlin Center for General Linguistics.

To the visitor, Dr. Seunghun Lee's office leaves a rather austere impression – it is devoid of all adornment: simple desk, bare white walls. A closer look, though, reveals that the dark blue outdoor shoes beside the desk have been changed for more comfortable slippers, an indication that the Korean-born scholar might be staying for some time. On the desktop a "Duden" dictionary, numerous other reference works, and text books on linguistics lay around in profusion.

Lee often works quite long hours at the Berlin Center for General Linguistics (Zentrum für Allgemeine Sprachwissenschaft, ZAS). The 38-year-old linguist has resided in the German capital since summer 2012, on a research stay funded by the Volkswagen Foundation's transatlantic fellowship program for humanities scholars and the American Andrew W. Mellon Foundation. "I draw inspiration from being able to look out of my window over the heart of Berlin", says Lee. And, indeed, the ZAS is located right in the middle of the historically important district around Checkpoint Charlie and Friedrichstraße. During his stay in Berlin, though, Lee is living in the more colorful student quarter of Neukölln, a neighborhood where he has come to feel quite at home.

His work, on the other hand, has to do with a totally different region. He is investigating Tsonga, a South African language spoken by some four million people. Lee takes this language to investigate the phonology-syntax interface – the relation between sentence and tone structures, and the means of expression they give rise to. For example, the contrast between a simple statement and a question, which differ not only in sentence structure but also in the tone they are spoken in. "Tson-

ga lends itself particularly well to my research because it is a written language and its sentence structure is well documented", Lee explains.

When asked about why he became so interested in finding out what distinguishes one language from another, he answers: "I grew up bilingual: German and Korean. Later, at school and during my studies I went on to learn English, Japanese and Chinese. That left a lasting impression on me and shaped my thinking." Lee was born in Krefeld as the son of Korean parents. The first eight years of his life were spent in Germany, before the family then moved back to Korea, where he graduated from school and later from university. One of the subjects he studied at the university in Seoul was "German as a Foreign Language". "One reason I find the German language so attractive and expressive is because the sentence structure is so variable, with its combinations of principal and subordinate clauses", explains the linguist with a smile.

In the meantime, Seunghun Lee has spent eleven years working as a researcher in the U.S., where he is Assistant Professor for Linguistics and Teaching English to Speakers of Other Languages (TESOL) at the Central Connecticut State University. He is one of the first four U.S. postdoc fellows who have benefited from the Foundation's program, which at first aimed at supporting young German researchers who wanted to spend time researching at American institutions. Then, in 2012, the program was extended "in the other direction" by grants of the Mellon Foundation.

This proved to be a stroke of luck for Lee: "The ZAS is one of the top research addresses for linguistics worldwide. It not only attracts experts from



Facets of a one-year research sojourn: Linguist Seunghun Lee takes advantage of the library services at the Jacob and Wilhelm Grimm Center (right); preparing for a presentation at the Center for General Linguistics/ZAS (top); discussing problems of language acquisition with a guest of the Center, Professor Peter Jordens from the Max Planck Institute for Psycholinguistics, Nimwegen (bottom). The weekly "prosody lunch" (center) is an informal meeting for "talking shop" among colleagues Prof. Dr. Hubert Truckenbrodt and Dr. Fatima Hamlaoui from ZAS (front left and right), and Dr. Satoshi Tomioka, Associate Professor of Linguistics and Cognitive Science, University of Delaware, (background right).

around the globe, it also combines different areas of linguistics under one roof – including my specialty of prosody"; behind his spectacles you can see his eyes light up with enthusiasm. Prosody is the study of speech characteristics like intonation, word and sentence emphasis, as well as patterns of speech tempo, rhythm and pauses.

"When I asked the institute management back home whether I could take leave to spend a whole year in Berlin the response was overwhelmingly positive." Seunghun Lee stresses: "My supervisors were all in favor. They know that my work at ZAS would lead to networking with scholars from all over the world." Indeed, this is one of the aims of the program. Soon after his arrival Lee organized a workshop with the title: "Syntax-Phonology

Interface from a Cross-linguistic Perspective". A dozen colleagues from different countries came to participate in a discussion on the possibilities for archiving their copious amounts of data and on the syntax and prosody of various languages.

This is not Lee's first time at ZAS: In 2009 he visited the Berlin institute as a DAAD scholarship holder. During his renewed stay he has been able to refresh some of the contacts he made on that occasion. "On Thursdays we get together for a 'prosody lunch', and Tuesdays I meet up with my reading group to discuss the latest journals." He then adds: "That's most enjoyable, and at the same time it helps to catch up on new developments".

Mareike Knoke

Compiling Geodata to Fight Tropical Disease

Parasitology and epidemiology expert Dr. Uwemedimo Ekpo is researching how to improve prevention and medical care in his home country of Nigeria, where he has been granted an EFINTD Senior Fellowship.

Skin rashes, edema, intestinal worms: Uwemedimo Ekpo certainly didn't choose the most pleasant subject for his research. For Africa, though, these are topics of utmost importance – especially in the sub-Saharan region, where very little is known about such tropical diseases simply because until now they have been neglected. In particular, parasitic diseases like schistosomiasis (Bilharzia) are the cause of enormous human suffering. Symptoms include blood in the urine, chronic tiredness, and lethargy. "I'll never forget it", Ekpo cannot rid his mind of the scenes he witnessed while on a field trip to the rural areas of Nigeria. "It's awful to see how many people are afflicted by parasites and the dreadful impact this has on their lives." On that day he made up his mind to dedicate his future work to the fight against parasitic disease.

His doctoral dissertation on schistosomiasis disease in Ogun State, Southwestern Nigeria, triggered by his experiences with the Guinea worm disease was submitted to the Department of Biological Sciences of the University of Agriculture in Abeokuta, Nigeria. It was his mentor Professor C.F. Mafiana, who drew his attention to a call for proposals that exactly fitted his research field: The European Foundation Initiative for African Research into Neglected Tropical Diseases (EFINTD), a collaborative effort supported by the five European foundations Fondazione Cariplo, Fundação Calouste Gulbenkian, Fondation Mérieux, Nuffield Foundation and the Volkswagen Foundation, had become aware of the significance of hitherto unresearched tropical diseases and begun funding projects run by young African researchers at their home institutes. Ekpo sent in his application – and in 2009 was among one of

the first postdocs to receive a three-year Junior Fellowship.

Working between 2009 and 2011 in cooperation with his partner institution in Europe, the Tropical and Public Health Institute in Switzerland (Swiss TPH), Ekpo developed a geostatistical model encompassing all the data available on schistosomiasis that had been gathered in Nigeria since the 1930s. Based on this information – and Bayes' probability theory – he began the task of compiling geostatistical maps showing the incidence of diseases in specific areas and geographical gaps in Nigeria. The information contained in these maps is now recognized as an important tool for the work of many NGOs in the region. "The research findings are also of great interest to the Nigerian Ministry of Health", adds Ekpo. Notwithstanding, there is hardly any money available to fund the research still needed to be able to successfully combat parasitic diseases. "My own university can only make around 24,000 euros a year available for research", says Ekpo. "Moreover, the unreliable Internet access makes it extremely difficult to always be updated on international calls in respect of research funding." Under such conditions it is hardly surprising that African researchers come off rather badly in international comparison, and that little research on neglected tropical diseases takes place within the region itself.

The EFINTD Program aims to change this sad state of affairs by providing sustainable support for the research infrastructure in Africa. In common with other sectors of the Volkswagen Foundation's Africa initiative, researchers can take advantage of a three step process to pave their career pathways and become established at their host institu-



In the laboratory of the biological department of the University of Agriculture, Abeokuta, Nigeria, Uwemedimo Ekpo and his team analyze urine samples from patients in areas where parasitic worms cause schistosomiasis (top, bottom center and right). The results of their research enrich data bases on tropical diseases and are the basis of geostatistical maps. Dr. Ekpo explains these valuable electronic tools for medical control and prevention to a group of student researchers (bottom left).

tes. For example, students are able to apply for scholarships to fund their PhD – and subsequently as young postgraduates first for a Junior and then for a Senior Fellowship. The cooperation with partner institutes in Europe ensures that international networks are built up, helping to anchor not only the fellows but also their institutes in the international scientific community. "EFINTD is one of the first support programs to provide incentives for African researchers to stay in Africa", says Ekpo approvingly. "I very much hope that the situation at our universities will be influenced for the better so that scientists like myself will be able to keep up with colleagues in other parts of the world."

Uwemedimo Ekpo gladly seized the opportunity to advance his career: In 2012 he was granted a three-year Senior Fellowship to deepen his studies on schistosomiasis as well as the soil transmitted helminthiasis, a debilitating worm infection. His dream: A professorship at his home institute in Abeokuta, the wherewithal to set up a research center run by African scientists to combat neglected tropical diseases, and – to free the world from parasitic disease. Research funding could hardly be more sustainable...

Melanie Gärtner

Anchoring a Scientific Approach to the Sustainable Use of Resources

At the National University in Bishkek students can now obtain a Master's in "Integrated Watershed Management". Joint German-Kyrgyz efforts create an effective bridge between practice-oriented research and capacity development.

The groundwork was laid five years ago when Professor of Geography, Brigitta Schütt from Berlin, told her colleague, Tilman Rost, about her idea. Together with a group of Kyrgyz colleagues, she wanted to implement a joint project on the topic "Integrated Watershed Management". Tilman Rost gladly joined in. However, the two geography professors from the Free University of Berlin were not to be content with "only" initiating a joint research project. Tilman Rost recalls: "Apart from realizing a program of collaborative research, we wanted to set up a new program of studies with the purpose of anchoring a scientific approach to the sustainable use of resources at a university in Central Asia." This is always at the back of his mind when he speaks of integrated watershed management: "We are not only talking about the sustainable use of natural resources like water, soil, pastureland and forests. The concept must also embrace the deployment of human resources such as labor and capital," he explains. "Moreover, I see it as my job as a university professor to train up young researchers. It was therefore clear that we should not only create a research project, but at the same time combine it with an offer of academic training in order to build up competence in the region."

From the outset, the two professors from Berlin also had no doubt that the idea was to be conceived as an interdisciplinary project. A course of studies based solely on the natural scientific aspects of geography would have been quite inadequate. Their concept of integrated watershed management encompasses a pronounced socio-scientific dimension. Jörg Stadelbauer shared their enthusiasm, became the third member of the team and is now responsible for

the sociological aspects of the project. In addition, the human geography professor from the Institute of Cultural Geography at the University of Freiburg brought in his expertise on the conditions in the republics of the former Soviet Union.

The uncontrolled exploitation of agricultural resources is a problem all over Central Asia, not only in Kyrgyzstan. There, the project initiators found the perfect project partner in the person of Dr. Tolkunbek Asykulov, a lecturer in ecology at the National University of Kyrgyzstan (KNU) in Bishkek. Asykulov obtained his doctorate in 2003 from the University of Greifswald with a thesis on the socio-economic and environmental conditions in Eastern Kyrgyzstan and issues impacting development in the Issyk-Kul biosphere reserve there. An expert in the field of "use of resources and sustainability", he has often worked together with researchers from Germany. His presence in Bishkek greatly influenced the decision to set up the program of studies there. "A very important aspect of the research project – which had started first – was to provide an opportunity to train young academics from the region, enabling them to become teachers on the jointly designed Master's Program at the KNU," explains Tilman Rost.

Setting up a completely new degree program in Kyrgyzstan is no easy matter. Neither the research approach nor the curriculum were recognized in Central Asia. On top of this, the education authority also had to be convinced of the importance of the planned program adopting an interdisciplinary approach. The country's universities are part of a strictly traditional education system stemming from the times when Kyrgyzstan was just one among the 15 Soviet Republics under the aegis



Dry run in preparation of field work in Kyrgyzstan: Doctoral students Oktiabr Topbaev (right) and Mukhtar Kasymov (center) together with their colleague Jeannette Müller are practicing infiltration measurements for soil analysis on the campus of the Free University in Berlin.

of Moscow. As Rost was often to find out during his time in Bishkek, "Each discipline has its own clearly defined borders, and the different faculties still experience great difficulty working together." The opportunity to introduce the new Master's Program at the KNU first arrived with the gradual transformation of study programs in Kyrgyzstan in accordance with the European Bologna Process.

The new academic program was to be embedded in the Faculty of Geography, Ecology and Tourism at the KNU. It took some time for its initiators to convince the university's management that the Master's is conceived as an autonomous course that should not be assigned to a professorial chair. "We had to frequently point this out," says Rost. "We explained which modules with which

contents the Master's should encompass. And above all, we had to explain that the different chairs all had to make their own particular contributions. Ideally, it was to be a transdisciplinary course of studies."

In the meantime, the accompanying collaborative research and the training of Kyrgyz doctoral students was progressing well. First practical field work was undertaken in the drainage area of the upper Chui, a river that has its source in Central Kyrgyzstan near the town of Kochkor, 200 kilometers south-east of Bishkek. The German-Kyrgyz research team then chose the 170-square-kilometer drainage basin of the River Ükök as their proper test area. The Ükök is a tributary of the Chui, branching off near the small



village of Kara-Suu south-east of Kochkor. In front of a backdrop of 4,000-meter peaks of the Kyrgyz Tianshan mountain range, Kyrgyz doctoral students, supported by Bachelor and Master students from Germany and their supervisors, focused on how the pastureland and the water are used in the test region.

The inhabitants of Kara-Suu live from animal husbandry, mainly sheep breeding. In summer the flocks are driven into the high pastures 3,000 meters up, and in winter they return to graze lower down, on the dry winter pastures of the Kochkor basin under the 2,200-meter line and close to human settlements. Since Soviet times, the local farmers have grown feed crops to see the

large number of animals through the winter. Due to the low level of rainfall in the summer months, they have to irrigate the land with water supplied by melting glaciers in the mountains above. The infrastructure needed to irrigate the agricultural land stems from Soviet times, when water distribution and maintenance of the irrigation canals was centrally organized. The collective farm, or kolkhoz, responsible for Kara-Suu was in charge of the water supply to the irrigation canals as well as the villagers' drinking water. Since the farm was broken up in 1994, and in the wake of the privatization of agricultural land, the local communities and the inhabitants themselves are now responsible for the water distribution, including canal maintenance and the village water pumps. How-

ever, neither the communities nor the inhabitants have the money to do the job: The dilapidated infrastructure is falling into further decline.

The young project researchers were confronted with the task of determining whether the use of the summer and winter pastures in the Ükök basin is sustainable. They also examined to what extent the irrigation infrastructure is threatened by glacial lake outburst floods or landslides and how the post-Soviet organization of irrigation management affects the village of Kara-Suu and its surroundings.

Brigitta Schütt, Jörg Stadelbauer and Tilman Rost promoted the advancement of the Kyrgyz junior



A sustainable water supply is of vital importance for cattle breeders in the Kochkor region. Doctoral student Mukhtar Kasymov and project coordinator Dr. Tolkunbek Asykulov (left, from the left) surveying the condition of the irrigation system and a reservoir (top).



During their work they sometimes come across rare species, here a marsh frog (center). – The different threads of the research project and study program come together at the University of Bishkek (bottom).



researchers through improvisation and good ideas. “We resorted to the so-called tandem solution,” Rost recalls. Each of the local students was accompanied by one or two Bachelor or Master students from the FU Berlin and they jointly collected local data for subsequent evaluation in Germany. “The cooperation with German students and their supervisors was a very useful experience for us,” says one of the local doctoral candidates, Mukhtar Kasymov. “Academic training in Kyrgyzstan tends to be more theoretical. We also have little experience working with modern computer programs and geographical information systems (GIS). It was interesting to be able to learn the new programs and methods and to put them into practice.” Both sides benefited from that

solution. “I was working together with a colleague who had local knowledge because he was raised there. He knew much more about the special types of soil common to the region,” says Fabian Becker, who visited Kyrgyzstan in 2011 and has since completed his Bachelor thesis. “For my part, I was able to familiarize him with some working methods he wasn’t acquainted with. And through him it was naturally much easier to make contact with the local inhabitants.”

Following a mutual evaluation of the project work, the participants arranged a special presentation of the project findings for the benefit of the villagers of Kara-Suu. “We drew up a map of the village, showing all the buildings, the course of the canal system, and the water-supply infrastructure,” recalls Jeanette Müller, who also took part in the project as one of the tandem partners. “The map showed that half of the street pumps supplying drinking water were out of action, how far the people had to go to reach the next water point, and how much they had to pay for the water they received,” adds Berlin student Gesine Ratfelder. “This was important for the villagers to see, so they could appreciate that their problems were finally being addressed and that it was possible to improve the water supply situation.”

In Bishkek, progress introducing the new course of studies at the National University was initially slow. The fact that events following the political demonstrations in April 2010 led to a restructuring of the university’s personnel didn’t exactly make things better. Besides, the Master’s program designed in cooperation between the German and Kyrgyz teachers didn’t quite fit into the relatively inflexible Kyrgyz system of university education. Every new program must be accredited by the university management as well as the Kyrgyz Ministry of Education. The persons responsible had grave initial doubts about introducing a cross-disciplinary program of studies whose modules were not to be delivered under the auspices of a particular department. Furthermore, the English-language title of the new program, “Integrated Watershed Management” was unknown, and the program could not be simply integrated within the state-prescribed curriculum. There was clearly a need for compromise, and it was eventually agreed to incorporate four of the standard modules common to other programs approved by the Ministry of Education, such as a foreign language and economic theory, in order for the other module contents to be accepted.



The method training in preparation for field research is comprehensive, ranging from drilling soil samples to the use of an aerial camera installed in an octocopter: Prof. Dr. Tilman Rost (top, center) from the Department of Physical Geography at the FU offers support to the young Kyrgyz and German researcher team (bottom left: Katja Ebermann, Mukhtar Kasymov, Oktiabr Topbaev, Fabian Becker and Jeannette Müller, from left). Some teamwork is also called for concerning the theory of watershed management: Fabian Becker, Mukhtar Kasymov, Jeannette Müller, Oktiabr Topbaev and Katja Ebermann discuss things in the library of the Institute of Geographical Sciences (right).



Camels in front of a yurt: The felted gifts from Central Asia now adorn the desks of the Berlin hosts.

Then it was necessary to recruit the required number of students. This was achieved by making presentations at education fairs, for students in Kyrgyzstan, as in other countries of the region, have to pay for their studies. “In the short time left before the program was due to start at the beginning of the 2012/2013 academic year, we eventually managed to fill seven of the ten places available,” says Tilman Rost. “That wasn’t such a bad result starting from scratch, and the chances are pretty good that we will fill all ten places for the second cohort.” As result of this project, the German students and professors have introduced a specific scientific approach to the university in Bishkek that will in future hopefully continue to

be pursued by the Kyrgyz doctoral candidates. In summer 2013 they helped Tilman Rost and Tolkunbek Asykulov in Kara-Suu to organize field studies for the Kyrgyz Master students – and for Kazakh and Tajik students from the German-Kazakh University in Almaty. Their new Master course entitled “Cross-border Water Management in Central Asia” – funded by the German Academic Exchange Service and also supported by researchers from the FU Berlin – is yet another endeavor contributing to the overall objective of capacity building in the region.

Sven Ullrich

The Privilege of Working Independently

Katrin Kinzelbach views her Schumpeter Fellowship as a milestone along her impressive career pathway, and also as an obligation to place her knowledge of how political prisoners are treated in the service of society.

Does political activism make sense? What is the point of demonstrations – and of art? Where does responsibility of the individual begin? These are some of the questions posed by French-Canadian Carole Fréchette in her stage play “I’m thinking of Yu”. Yu Dongyue is the Chinese journalist who in 1989 threw an egg at a portrait of Mao on Tiananmen Square. He was subsequently thrown into jail for the next 17 years, and today lives in exile in the U.S. – now a broken man, both mentally and physically. “His release wasn’t secured until far too late”, concludes the political scientist and human rights expert Dr. Katrin Kinzelbach in an accusing tone. Yu’s fate touches on the central thrust of her research, namely: “How to negotiate the swift release of political prisoners, and how this impacts on processes of democratization”. On the occasion of the German première of the play at the Deutsches Theater in Berlin in January 2013, Kinzelbach spoke with the director and actors – and later participated in a public panel discussion.

Kinzelbach seeks proactive involvement in such issues. She does so without emotive gesture, firmly believing that research in the area of human rights and political prisoners should be incorporated into the public debate. She writes newspaper articles, for instance, in which she points out that the EU-China dialogue on human rights initiated in 1995 has failed to chalk up any notable success, and that the release of political prisoners in China can only be brought about by means of massive pressure inside as well as outside China.

Her research necessitates a high degree of freedom. “Funding from the Volkswagen Foundation makes this possible”, she says happily. “It has enabled me to engage in completely independent research for

a period of five years – I am very privileged.” As a Schumpeter Fellow, she has been granted about 600,000 euros for a project entitled “Political Prisoners and Human Rights Compliance: Why do oppressive states release dissidents from jail – and does it matter?” She chose to base her research at the non-university Global Public Policy Institute (GPPi) in Berlin: “The very strong emphasis on integrating research, public debate, and policy advice at GPPi makes for an exceptionally stimulating environment”.

Freedom is a responsibility – this principle guides her and takes her approach beyond the borders of traditional human rights research, which tends to be dominated by lawyers. “There is a lack of research on the conditions under which external actors can work towards the release of political prisoners. There is simply no systematic data available”, says the self-confident and rather sensitive young scholar. In order to fill this gap, together with her partially international team she is in the process of systematically collecting data on political prisoners from more than 20 different countries. The team also conducts a smaller number of in-depth qualitative case studies. Katrin Kinzelbach plans to augment her research findings by drawing up guidelines for decision-makers like EU politicians, for example, which may help them develop effective negotiation strategies.

Her research would not be possible without the network that developed in the course of her somewhat unusual lifetime. At the age of just sixteen she began working in a refugee camp in the Balkans. “There I saw children without a past and without a future.” Human rights have been her focus ever since, taking her to many different



When it comes to human rights issues, polity and society stand in need of scientifically sound research findings: This is Katrin Kinzelbach’s firm conviction (right, in front of the German Foreign Office) and that is why she also cooperates with the Deutsches Theater Berlin (top left with dramatist Christa Müller). The research project is anchored in the Global Public Policy Institute, where the political scientist frequently meets with team members and other colleagues (bottom, from left: Tumelo Ngwako, Dr. Jahel Queralto Lange, Julian Lehmann, Allison West and Lucas Hack).

countries. She gained her Master’s in London and went on to work for the United Nations for six years. She then obtained a doctorate – with distinction – in Vienna and subsequently lived in China with her husband and their two children. She maintains close contacts with the Office of the UN High Commissioner for Human Rights, the EU Parliament, and NGOs which attend to the interests of political prisoners.

How does she manage to combine all this with family life? “That’s not so easy”, as the political scientist readily admits. She shares family duties with her husband and “we both have to make sacrifices sometimes.” Kinzelbach regrets “that there are far too few support programs that provide opportunities for independent research and therefore

possibilities for advancement beyond traditional academic career pathways.” She is convinced that close contact to the practice contributes to theoretical knowledge. “Besides, young researchers should be allowed to engage in more risk-taking research where one has to face the possibility of failure.”

The Foundation’s “Freigeist” program that follows on the terminated Schumpeter Fellowship scheme also endeavors to promote independent minds. It aims at supporting postdocs who are prepared to embark on risk-taking research, take advantage of independent research opportunities, and overcome obstacles – in other words: Young researchers of the same caliber as Katrin Kinzelbach.

Ruth Kuntz-Brunner

Galactic Secrets

Planet interiors are still a mystery. Using the world's first X-ray free-electron laser at Stanford University, U.S., Dr. Ulf Zastrau researches the properties of matter in extreme conditions.

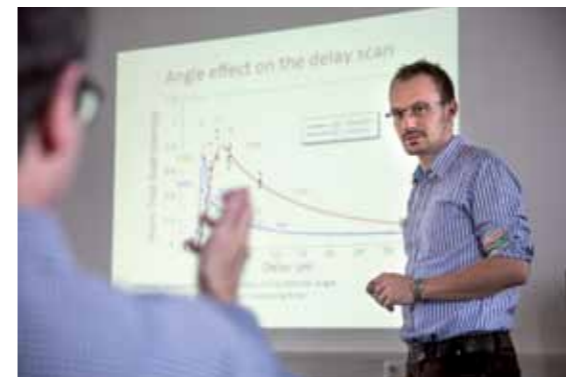
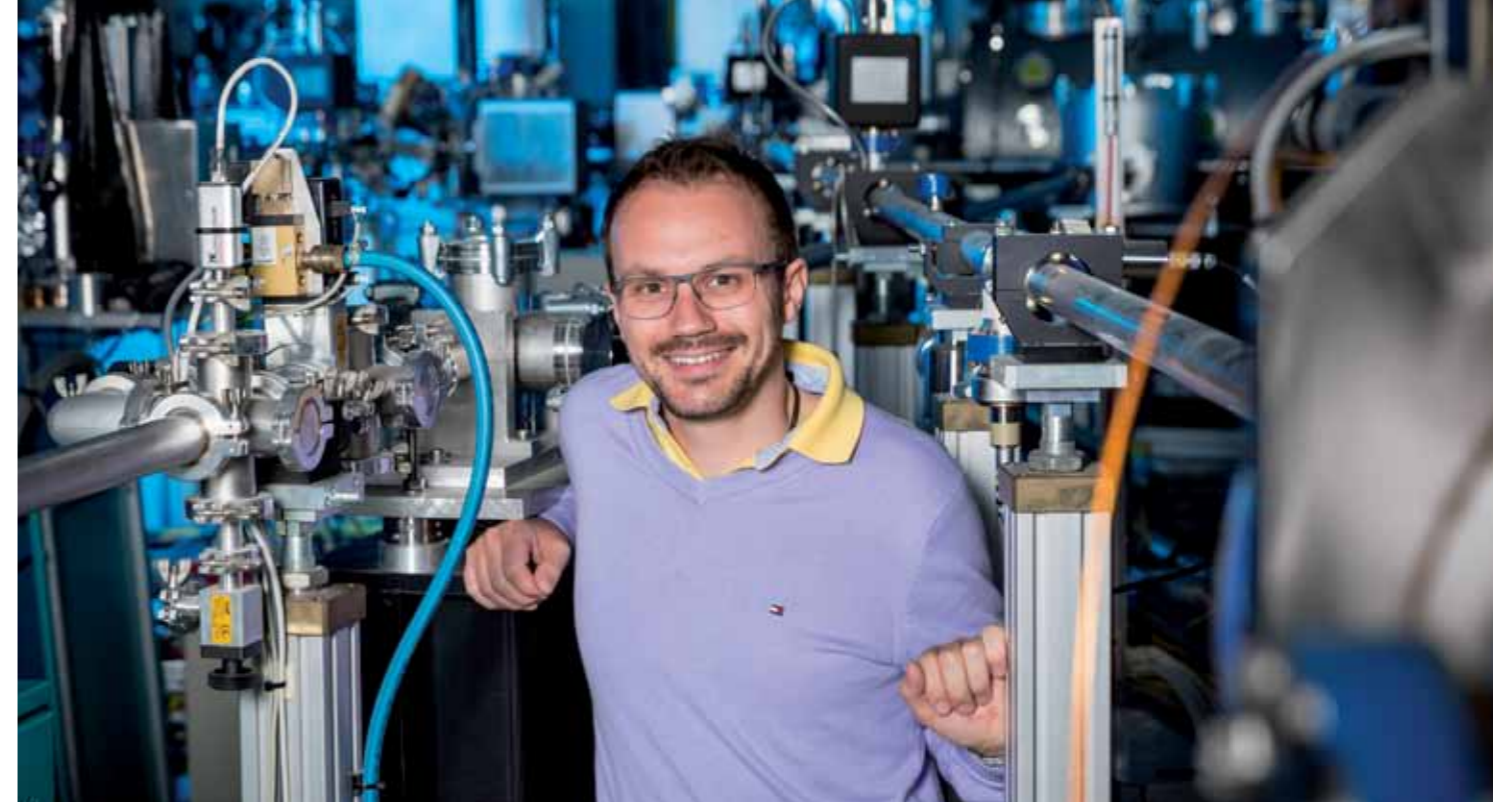
When Ulf Zastrau sets out to visit California from where he lives in Thuringia, he not only packs his T-shirts, jeans and toiletries bag. His baggage includes a high-precision measuring device: The X-ray spectrometers he is developing at the University of Jena. He needs these for working with the world's first free-electron laser for hard X-rays, the Linac Coherent Light Source (LCLS) at Stanford University's SLAC National Accelerator Laboratory. Zastrau explains: "The X-ray laser is used to produce so-called warm solid matter similar to that found in stellar and planetary interiors so we can then investigate its properties". This is important in order to learn more about the magnetism of the Earth, for instance, how nuclear fusion functions, or how water – the elixir of life – behaves when subjected to extremes of temperature or pressure, such as the interior conditions of the planet Uranus. The physicist's research, which is divided between the two continents, is being funded by the Volkswagen Foundation for three years – via a Peter-Paul-Ewald Fellowship.

This shuttling between Jena and Stanford is made necessary for two main reasons: Up to now there were only two X-ray free-electron lasers in the whole world, one at SLAC and another in Tokyo. A third, even more powerful X-ray laser, the European X-Ray Free-Electron Laser (XFEL) is currently being constructed in a 3.4-kilometer-long tunnel starting at the DESY research center in Hamburg, Germany. It will become operational in 2015. Then Zastrau, who wishes to carry on his scientific career in this country, will be back to stay as an acknowledged expert acting as a know-how multiplier. The physicist is already member of the team coordinating an international consortium of more than 200 scientists

planning the experimental stations and future research at XFEL.

For Zastrau the support from the Volkswagen Foundation couldn't be more appropriate. He turned down several international offers of "regular" postdoc positions in favor of Stanford because, he says, "Stanford attracts the crème de la crème, providing me with an exceptional opportunity for intensive collaboration with experts in my field." Of course, the experience he is gathering over there also contributes to the development of improved measuring instruments at the University of Jena. This way he doesn't have to completely part company with his home university or the town of Jena he is so attached to, which is also an important personal aspect.

Zastrau spends days at a time pottering around and taking measurements at an experimental station in Stanford, often burning the midnight oil – even on weekends. "The measuring technique involves shooting with the laser onto thin foils made of iron, aluminum or carbon", he explains. The foil is heated up to temperatures of around 1,000,000°C – without vaporizing. However, this is only possible using ultra-short laser pulses for extremely short periods. "We have less than a billionth of a second before everything vaporizes", says the physicist. Within this mini-moment, his cleverly thought-through spectrometer has to detect the irradiation coming from the sample. "This can take the form of either scattered radiation or X-ray fluorescence", he explains. The data gained allows conclusions to be drawn about the properties of the sample – often with quite surprising results. Zastrau recalls, "For example, when experimenting with aluminum three years ago,



In the course of his Ewald Fellowship, Ulf Zastrau travels back and forth between Stanford University in the United States, Jena University, his alma mater, and the future location of the European XFEL (X-Ray Free-Electron Laser) at DESY in Hamburg. He makes use of a conference at the DESY research center to exchange views and ideas with colleagues (left), but also takes the opportunity to do some work in the experiment station on the pilot facility, Flash, a small XFEL version (top and center). Construction work on the European XFEL (right) is expected to be completed in 2015.

we came to realize that a standard model used in plasma physics is incapable of exactly describing matter under such extreme conditions". These experiments were subsequently published in the research journal "Nature", among others.

Working as a physicist is definitively Zastrau's dream job. As a small boy he enjoyed nothing more than tinkering around in the basement of his home, repairing old tube radios and working with early computers. And he still enjoys bringing his craftsmanship skills to bear in the course of his work. As he puts it: "I'm not really happy unless soldering a cable or tightening a screw from time to time". His favorite hobby, though, is music. Visitors to his home in Jena will find a piano, harpsichord, and an organ –

self-made, naturally – as part of the inventory. "Making music creates a good balance, partly because the results are immediate, unlike research work, where you often have to wait ages before seeing the results", Zastrau muses. He is also very fond of church music. "I have great respect for religious persons. For myself, though, I prefer to grasp the universe as interaction between a vast number of complex mechanisms", says the physicist. Notwithstanding, his research often causes him to marvel at such complexity. "Every single component of the puzzle of knowledge is fascinating. The more you come to understand, the more you realize just how immense the whole 'puzzle' must be."

Andrea Hoferichter

Europe and the Emerging Powers' Hunger for Energy

Darmstadt is the nodal point where the threads of a large-scale project involving researchers from nine countries converge. The aim of the project is to investigate the various energy policies pursued in the global marketplace – a multicultural challenge.

Sitting around the negotiating table are a bull, a lion, a tiger, a jaguar, and a dragon – a potentially awkward situation for the hoofed species. Indeed, the bull, which here stands for the European Union, feels increasingly uneasy in the company of such table companions. They symbolize the rising economies of South Africa, India, Brazil, and China; the so-called “emerging powers” that are currently exerting such an impact on global politics. One of the global challenges arising from this global shift of power is the approach towards the global management of energy resources. The Volkswagen Foundation is supporting an international and interdisciplinary collaborative research group working on a project dedicated to this theme entitled “Challenges of European External Energy Governance with Emerging Powers”. The bizarre group of symbolic table companions has been adopted as logo for the project.

Funded in an amount of 800,000 euros, the project is also unusual because the main focus is not so much on the European bull. Rather, it entails the unlikely table companions meeting to exchange views from their multilevel perspectives. Eleven partner institutions from nine different countries are each researching into how communication on energy policy takes place between Europe and the emerging powers. The threads of this major project converge on the Institute of Political Science at the Darmstadt University of Technology.

This is where Prof. Dr. Michèle Knodt gathers the threads and knits them together. By way of background, she says: “During my lectures on energy policy I like to contrast two photos. One shows the representatives of the emerging powers

smiling and pointing to a common agenda. The other shows representatives of the EU and the U.S. frowning and seemingly helpless in face of the self-confident new powers.” It is pictures like these that prompted Michèle Knodt to carry out a closer investigation of external energy policy at the global level. On the one hand there are the former developing and emerging economies that are hungry for energy and rapidly turning into powers to be reckoned with. On the other hand, there is the “old Europe” that, although having brought about the transition of these new powers, now neither seems to dispose of a strategy nor the arguments necessary to be able to negotiate the global issue of energy. The negotiation channels established between the western industrial nations do not apply to the emerging powers. Moreover, the former emerging economies have grown to become serious competitors on the energy market, and the trend is towards their energy consumption rising constantly further.

Seen from the perspective of the European Union, the challenge is ultimately to secure supplies of energy for its member states in face of the growing global hunger for energy, and at the same time to uphold the values and norms of European energy policy: competition, security, and sustainability. How, though, will it be possible to reach agreement on such high standards when the negotiating parties don't speak the same language? This is not a reference to the different national tongues involved, but rather the meaning of the matter at hand interpreted from different cultural standpoints. “This is the reason why our team has to be so big and interdisciplinary”, says Michèle Knodt. “We wanted to ensure that we have a partner in each of the emerging powers, someone who



The map of the world behind the desk at TU Darmstadt is there for more than mere decoration purposes: Professor Michèle Knodt's research network encompasses the whole world, and issues of energy supply are of global significance.

is familiar with the actors there and the national specifics.” The result is a globally networked large-scale project in which the investigators first had to become acclimatized and which is full of potential cultural obstacles. The vocabulary of energy policy may be the same, but the modus operandi is quite different. For example: Whereas European colleagues are perfectly content that Michèle Knodt coordinates project components by email – speeding up events in so doing – her counterparts on other continents tend to find a personal meeting much more motivating. Relationship building is the social adhesive that glues such a large project together. Especially important are the annual meetings attended by

the whole team. They provide an opportunity for working, dining, and laughing together and bringing the continents closer. Nevertheless, the project relies to a great extent on the use of modern digital communication media which makes it possible. Via Darmstadt, the project partners hold video conferences and use a common drop-box to exchange emails and documents.

Layer by layer, the researchers are illuminating the communication levels between the EU and the emerging powers. In their respective countries and areas of expertise, the political scientists and energy experts engaged in the project analyze who speaks with whom on matters of energy.

The lion, bull, tiger, jaguar and dragon of the project logo sitting together peacefully at one table. But how harmonious is it likely to be in reality when the emerging powers assert their individual energy needs?



Thanks to the global spread of media technology, communication no longer presents a problem – even between partners who are geographically far apart: Prof. Dr. Michèle Knodt and her co-researchers Franziska Müller (left) and Nadine Piefer (right) like using Skype for this.

They seek answers to questions like: Who are the most suitable dialogue partners? What are their views on energy? What are the concepts that lay behind the statements they make? And who are the ultimate decision makers? These questions require a sound knowledge of the respective institutions in the countries concerned. Individual strategic partnerships form an umbrella for the China-, India-, South Africa- and Brazil dialogue with the “Institution European Union”. The energy dialogue, though, is just one among several different dialogues taking place within these partner-

ships. Energy issues also impact on many other politically relevant areas, such as climate change, trade, and the environment. It is in this jumble of interrelations and areas of responsibility that the strength of “Challenges of European External Energy Governance with Emerging Powers” comes to light: its international and interdisciplinary multiplicity. By the same token, an analysis of the structures and lines of communication would simply not have been possible from within Europe – even less so from within Germany. Whereby Brazil and South Africa turn out to be relatively

transparent from a European perspective, the structures in India are immensely complex, and in China they are extremely personalized. In India, the researchers found themselves communicating with people in eleven different ministries – an impenetrable bureaucratic jungle for Europeans. “On the other end of the scale, in China our cooperation partner is the central expert on energy issues whose opinion is respected in the highest echelons. There is nothing like a decision-making body or committee”, Michèle Knodt explains. “It takes some getting used to these profound differences in political and cultural structures.”

As a consequence of this learning process, the project itself had to be adapted, too: The original research approach – understandable for a project initiated in Europe – was too Eurocentric to have been successful. It took the expertise of the project partners in the different countries to open the doors to dialogue partners, key political actors and decision makers. This, though, led to the project design undergoing continual improvement. “The research process has been very interactive, with consortium members involved at all stages, e.g. providing input into the development of the questionnaire and identifying relevant country-

specific energy actors”, says Dr. Judy Smith-Höhn, program manager at the South African Institute of International Affairs, a South-African think tank. “The project’s comparative approach provides a unique opportunity to identifying the challenges faced by these countries in navigating their interests in an increasingly multipolar world.”

The diversity of its partners and the freedom to redesign the project during its course illustrates the high added value of this international and interdisciplinary research approach. For its partners, the added value lies in the broadening of their research horizon. Professor Roberto Schaeffer, expert from the Federal University of Rio de Janeiro and advisor on energy and climate issues to various Brazilian bodies says: “I am an electrical engineer, with a Master’s in nuclear engineering and energy planning, and a doctorate in energy policy and management. Working with social scientists provides me with a completely different perspective of the relevant energy problems.” He appreciates how the members of the team complement each other, both in respect of their research disciplines and nationalities as well as with regard to their views on Europe and the emerging powers. In short: “This is quite unique.”

When all the international project partners come together for a meeting, it’s quite a crowd:
first row: Prof. Dr. Susanne Grätius (FRIDE, Spain), Prof. Dr. Michèle Knodt (TU Darmstadt), Dr. Judy Smith-Höhn (SAIIA, South Africa), Dan Kim (Cambridge, UK)

second row: Prof. Dr. Roberto Schaeffer (UFRI, Brazil), Dr. Kirsten Westphal (SWP, Berlin), Deepti Mahajan (TERI, India), Franziska Müller (TU Darmstadt), Nadine Piefer (TU Darmstadt), Mark-Daniel Jäger (ETH Zürich, Switzerland), Prof. Dr. Zha Daojiong (Peking University, China), Marina Schmid (TU Darmstadt)

third row: Prof. Dr. Jens Steffek, Yonatan Schwartzman (Aarhus University, Denmark)





Michèle Knodt's desk in Darmstadt is the central node of the research network "Challenges of European External Energy Governance with Emerging Powers". Coordinating the intercultural communication among all her colleagues around the world is a task not to be underestimated.

So much for the external conditions: Implementing the project was no easy task, either. The detailed analysis of networks and interviews proved to be anything but straightforward. The first year of research, for instance, revealed that the idea of shedding light on the external dialogue between the EU and the emerging powers may have been a good one – but that it unfortunately bore no relation to reality: The really crucial dialogue on energy proved not to be conducted by representatives of the EU, but rather by the individual member states. Moreover, the project revealed that officials in Brussels were largely without knowledge of the policies pursued by their own countries. Michèle Knodt recalls: "That sometimes led to quite paradox interview situations. When conducting interviews at the European level we were frequently asked: 'So you're from Germany? Do you happen to know what the Germans are currently doing ...?'" Especially situations like these draw attention to what the project is all about; namely providing impetus to political

efforts and facilitating dialogue. An initial success is the planning of coordination mechanisms in Europe designed to link up the activities of member states and the EU.

Data collection, interviews, and the network analyses have all been completed. The remaining part of the project will be dedicated to evaluation, the publication of research results, and feedback for decision makers. The latter constitutes the added value for the project's interview partners: They can – if they wish – learn from the findings. The pathways towards the decision makers at the political level are embedded in the project. Whether the advice concerning a new level of dialogue between the EU and the emerging powers is heeded, and whether this will lead to a better understanding among the parties concerned, remains to be seen. This might just possibly be apparent from the new photos Michèle Knodt will bring back from future conferences.

Jo Schilling

Establishing Islands of Success across the Globe

Wilhelm Krull and Almut Steinbach elucidate the Foundation's efforts and strategies in view of globalization

From the Foundation's point of view what are the main challenges regarding globalization in science and research?

Krull: Probably the biggest challenge for higher education and research is that despite the trends the term globalization incorporates, most of the funding is still provided by national sources. So it's basically still a national research system we think in and work in. Yet we know that more and more problems can only be tackled in a transnational and transdisciplinary mode, and that of course provides a lot of challenges for the research community itself but also for foundations. So it's not just a matter of offering opportunities for researchers to link up across the globe. In our own funding portfolio more and more programs are set up in a collaborative manner between various foundations from different countries.

What does internationalization mean to the Foundation and what is the impact on the Foundation's activities?

Steinbach: I would like to start from a different angle. I don't think by any means that nationally orientated research will completely disappear. We will always have national histories that need to be written, we will also have countries which are in the process of nation building, and of course they will concentrate on national research topics. However, the global dimension has become more and more important. The research teams we are looking for to tackle the relevant problems and who we think are capable of doing this, are international teams: They include researchers from European countries, from BRICS countries, and from developing countries. We facilitate project designs and processes that make academics hap-



Secretary General Dr. Wilhelm Krull and Dr. Almut Steinbach, Head of the International Team, being interviewed on the international activities of the Volkswagen Foundation.

py and lay the foundations for them to be able to conduct research that matters. Recent studies for example have shown that international publishing – that means people from different countries working and being responsible jointly – is much more widely read and also cited more often.

So you see more opportunities than problems connected with globalization?

Krull: Well, as a foundation we always take a positive attitude towards problems and issues. However, there are needs to analyze first of all what the situation is. And if you look at the current funding schemes, particularly those from national sources, they are usually restricted to foreigners coming to a certain country, or to natives of a certain country being funded when they go abroad. But global cooperation and networking take of course also other funding modes. This is where the increasing international cooperation of foundations comes into play, because we are not restricted to the same extent as publicly supported institutions. In the initiative “Europe and Global Challenges”, for example, we collaborate with the Compagnia di San Paolo Foundation from Turin and the Bank of Sweden Tercentenary Foundation from Stockholm, opening a wider opportunity for research

ers to cooperate, and there is also clearly higher quality. At least, that’s what we hope for through our joint activities.

Steinbach: Let me add another example from our funding portfolio. If you take the scheme on sub-Saharan Africa and its neglected tropical diseases, you will find that four other European foundations joined us in that program. That, of course, makes international funding much easier for us, but it also developed into an example of best practice on how to finance African institutions through research projects. The budget schemes have to include considerable parts of the grants going to the African research partners. We have seen that afterwards other funders followed this path and now focus not only on the same thematic field but also look at African institutions as direct recipients of grants.

Krull: Throughout the past ten to fifteen years there has been an enormous learning process and progress achieved by what I like to call “working our way towards symmetric partnerships”. When the Foundation first explored opportunities in sub-Saharan Africa it was almost overdue to take a new approach towards capacity building in and for the region. I think that is one of the features of this new world that you no longer just think in terms of what this or that scheme offers us but also what does it offer for the wider research community across the globe.

You touched on the issue of equitable partnerships. How can this be realized?

Krull: I think one of the prerequisites clearly is that you build trust in trying to set up a kind of symmetric partnership, and that for us is only feasible by ensuring that researchers from the region can actually participate in defining the research agenda – and thus develop a sense of ownership. Explorative thematic workshops organized in close cooperation with academics in sub-Saharan Africa were the basis for the subsequent calls in

our Africa initiative. We are now transferring that approach to Central Asia and the Caucasus region.

Steinbach: The “traditional” model of partnerships was to bring junior researchers from developing countries to Germany, guided and mentored by German senior researchers. So there was no symmetry. What we do now is to give the foreign scientists the chance to hand in their own research proposals so that it is their own agenda they are pursuing. We also seek to link them with German postdocs, initiating symmetry also on the hierarchical level. There is a lot of symmetric partnership and also friendship resulting from this type of projects.

Regarding the difficult conditions in developing research structures, what can academics in those regions do and what can be achieved?

Steinbach: Compared to big public funders or enterprises we are an institution with limited means, but we can set best practice examples. We see that many of the researchers we are funding are keen and able to create synergies beyond their projects through the instruments we are giving them. And as they are also responsible for educating students and junior colleagues they form their own little networks – and I am convinced that this will spread out.

Krull: That’s right, but it’s not just these networks. It’s also what I would like to call a co-evolution of the researchers, their capacity development with institutional changes and reforms. And that again is something where international cooperation, or at least coordination between the various funders, is becoming ever more important for actually making a difference. In that respect it didn’t come as a surprise to us when we learned at a meeting in New York in February 2013 that the American foundations are investing in institutional reform in more or less the same institutions where the young researchers we are supporting are finding the adequate environment to pursue top notch research in Africa.



This aspect of coordinative efforts and additional impacts from various sources is quite important in the long run.

In a long-term perspective: Do you think that the intended capacity development will persist and brain gain will prevail over brain drain?

Krull: Given the volatility of public institutions and governments in most developing countries, you cannot guarantee that this will really turn into a lasting effect. But I am quite optimistic that we can establish a number of “islands of success” which hopefully will spread. We can also build hubs for future activities. Through these kinds of approaches we initiate long-term relationships between European researchers and their partners abroad that will last way beyond our funding activities. This is what we would like to see. That it’s not just a project or not just a fellowship, but it’s establishing relationships. It’s





also opening up opportunities for other – public – funders. When they want to support collaborative research units there is a basis on which they can build on: the doctoral students, the postdocs, and hopefully in the long run also the leadership of institutions that previously have been involved in our programs.

You mentioned the long term commitment for Africa and Central Asia and the Caucasus. What about the younger international initiatives “Europe and Global Challenges” and the transatlantic fellowships in the humanities? What are you aiming at with these?

Krull: In an increasingly globalized world Europe is forced to think about its own role. There are the BRICS countries and others coming up, not only economically. So it's quite important for us, as we by the way will do it in October 2013, to offer opportunities for rethinking and reconfiguring “The Role of Europe in a Non-European World” – that is the title of an international conference. And at the same time to see to it that we support the creation of global networks and cooperations, as in our initiative on Europe and the global challenges – thus generating additional value for the European research community.

... and concerning the transatlantic scheme?

Steinbach: I think that it is very important for a foundation like us to have a diverse funding

portfolio. Besides supporting developing science structures we also want to take into account that there is top notch research in the U.S. We want to offer the possibility to postdoc fellows in the humanities to really participate in this research, and to benefit from the perspectives the U.S. might have on subjects they are dealing with. Moreover, this program is a wonderful example of how a cooperation with a foundation from abroad can enrich our own funding portfolio. It is very difficult for the German research community as well as foundations to actually open up the U.S. market and to encourage Americans to come to Germany. So it's not just financially interesting to work together with the Mellon Foundation. It's also that we need their knowledge: They know the target groups and how to communicate the calls. And it is important to strengthen the links with the U.S. because, as Dr. Krull just said, Europe is no longer the center of gravity, and Germany isn't either.

Is there a difference regarding internationalization for science and technology and for the humanities on the other hand?

Krull: I think it's fair to say that science and engineering, but particularly the life sciences, are simply practicing international collaboration. They have a long tradition, for example in areas like high-energy physics where the facilities demand transnational collaborations and the investments cannot be covered by any country alone. In large parts of the sciences there are collaborations established without any hesitation, whilst in the humanities and social sciences, despite all the discourses about intercultural communication and transgressing borders, the reflection about the cultural and historic dimension of this new phenomenon called globalization has just started. But I am convinced that the particular integrative capacity of the humanities will be of great use for transdisciplinary and also transnational activities. It needs to be elaborated on much further, and we will do so by organizing

a conference in June 2014 on exactly this topic: the global humanities and the “Humanities World Report”.

A new task for the humanities?

Krull: Well, when we started with our activities it had already become clear that for the humanities themselves it would be necessary to leave the largely language-bound national orientation, to rethink their own role in higher education and research and to reconfigure themselves as catalysts for adequately tackling transnational issues. Developing new concepts showing why it is useful to bring to the table the knowledge base from the humanities – also concerning collaborations in science and engineering and other areas – is deemed appropriate. This kind of interconnectedness between the disciplines is definitely crucial for the future development of international cooperation.

Does the Foundation envisage a reorientation of its international funding schemes?

Steinbach: What I think is really important, and we discussed that with our Board, is to add a broader perspective to our two big regional initiatives. With “Europe and Global Challenges” we have taken a first step in the right direction. However, we need to strengthen research with a global approach and we need the possibility to address topics that come up ad hoc like the Arab spring, possibly under a roof which could be called “research in a global perspective”.

Which strategy does the Foundation want to pursue in the years to come?

Krull: Whenever you embark on international collaborations you have to take a long-term perspective. So it not only takes commitment but also continuity. And that's why we have been

running these activities in sub-Saharan Africa and in Central Asia and the Caucasus for some fifteen years now, and we'll probably do so for another six to eight years, so all in all more than two decades. I think it's necessary to have this kind of stamina, because otherwise you will have no lasting effect. That is part of what we have considered as our strategy for 2022 when the Foundation will turn 60. But at the same time it's of course necessary to monitor our portfolio in view of this transgressing of boundaries and borders which becomes the new hallmark of research funding in many organizations. Looking at the more than 50 years of the Foundation's activities, it was always important that we were living up to our own aspirations as a learning organization.

Interview: Beate Reinhold



Our Partners' Perspectives

breeding ground for new ideas

generating fascinating dialogues

beneficial learning processes

« The Calouste Gulbenkian Foundation has collaborated with the Volkswagen Foundation on several occasions, most notably in the European Foundation Initiative for Neglected Tropical Diseases (EFINTD). It aims at establishing symmetric partnerships between researchers from Africa and Europe focusing on the production of urgently needed knowledge and capacity development for African universities and research centers. The sheer quality of the quite diversified partnerships established and consolidated during the last six years is based upon the great level of trust existing between all participating foundations as well as their joint perspectives. The results already attained by EFINTD reflect the potential value and strategic importance of partnerships between foundations at a transnational level.”

Professor Artur Santos Silva
President of the Calouste Gulbenkian Foundation, Lisbon

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“The Volkswagen Foundation and the Riksbankens Jubileumsfond have a long track record of successful collaborations. They include bilateral as well as multilateral way initiatives. Together with Compagnia di San Paolo from Torino we have created an initiative with high visibility and leverage that would have been beyond the capacity of each one of us if launched on our own. The Volkswagen Foundation has always set high quality standards for our joint activities. Its modes of operations inspire us to try to be even more effective and efficient!”

Dr. Göran Blomqvist
Director of the Bank of Sweden Tercentenary Foundation, Stockholm

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“Working across national borders has become even more important since the beginning of the financial crisis as well as the subsequent turmoil of the Euro and in various democracies. These developments make it even clearer that we need to work on a scale that goes beyond the nation-state. In this perspective, it is a particular pleasure to cooperate with the Volkswagen Foundation on programs such as ‘European Foreign and Security Policy Studies’ and ‘Europe and Global Challenges’. These joint initiatives are not only relevant with respect to financial burden sharing but even more so with respect to mutually beneficial learning processes and better results as well as higher impact. The Volkswagen Foundation’s methodologies and standards have become, thanks to these shared experiences, an inspiration for our work.”

Dr. Piero Gastaldo
Secretary General of the Compagnia di San Paolo Foundation, Turin

high quality standards

inspiration

great level of trust

rich interdisciplinary scholarly discussions

strategic importance

“In an increasingly globalized world transatlantic partnerships and scholarly exchanges in the humanities are key to our common understanding of the respective social and cultural phenomena. One of the most significant institutional innovations at the Mahindra Humanities Center is our postdoctoral program which combines the Volkswagen Foundation fellows with our own fellows. The combination of the two fellowships has consistently produced remarkable academic work and generated fascinating dialogues at the Center. The Volkswagen Foundation has to be warmly commended for taking up this international partnership at the very outset of the postdoctoral program. Furthermore, this collaboration has been crucial to our success as a breeding ground for new ideas.”

Professor Dr. Homi Bhabha
Director of the Mahindra Humanities Center at Harvard University, Cambridge

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“Offering opportunities to postdoctoral scholars to pursue a research topic in the humanities in an attractive international environment, to take advantage of rich interdisciplinary scholarly discussions and research networks, to make use of local libraries, archives and other facilities as well as to attend international conferences and symposia are at the heart of a joint initiative by the Andrew W. Mellon Foundation and the VolkswagenStiftung in close cooperation with some of the most distinguished scholarly institutions in the United States and Germany. ‘Postdoctoral fellowships in the humanities at universities and research institutes in Germany and the U.S.’ seems to me a timely initiative to come to terms with the huge challenges provided by globalization and its social as well as cultural implications. It is a great pleasure for us to see how these young scholars strengthen their capacity in a specific field of the humanities and thus sharpen their individual research profile. »

Professor Earl Lewis
President of the Andrew W. Mellon Foundation, New York

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