DFG New Year's Reception 2007 in Berlin Matthias Kleiner

Your Excellencies, Undersecretaries of State, distinguished Members of the German Parliament, distinguished University Presidents and Rectors, distinguished Representatives of Partner Organisations, Ladies and Gentlemen, dear Guests,

I would like to warmly welcome all of you to the New Year's reception of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), here in the beautiful Leibniz Hall at the Berlin-Brandenburg Academy of Sciences and Humanities.

I am very pleased that so many of you are able to attend the first event of the new year. The DFG and its Head Office are represented in large numbers this evening to join you for champagne and sparkling water, as we review the year that has just passed, exchange news, and look ahead at the year to come.

You have already enjoyed hearing from one of the people in our Head Office, Mr. Kuhn. You may know him as the head of our Budget and Accounting Division, but tonight he is here to entertain us with his band, the Blues Messengers. I would like to thank Mr. Kuhn and his colleagues for starting us off with some great live music. You will be hearing more from them later on.

Excellence Initiative

Ladies and gentlemen, "Nothing is older than yesterday's newspaper," as they say in journalism. This past Friday, decisions were announced regarding the draft proposals that were entered in the second round of the Excellence Initiative programme. The weekend papers reported on it extensively. The Joint Commission's decision enables 44 graduate schools, 40 clusters of excellence, and 8 universities with institutional strategies to submit full proposals. This means that a total of 35 universities — about half of all DFG member universities — took the first hurdle in a two-step selection process. The fairness of these decisions is now being publicly discussed, as is the distribution across geographic regions and subject areas. If we were to follow the journalists' adage, we would have to consider Friday's news as old news and move on to the next thing.

But I think it is important that we spend just a little more time on yesterday's news. For those universities that were already awarded funding in the first round, as well as for those that will be selected in the fall of this year, the decisions in the Excellence Initiative are anything but old hat. For our nation's universities and researchers, this is about something new — it is about establishing new structures, moving forward, joining forces; it is about opportunities for scientists and academics to investigate big questions and to have significant resources to do so.

Media attention has been focused on the universities, and rightfully so. But I would also like to thank all the partners of the universities in this Excellence Initiative, the non-university partners, especially the Max Planck Society, the Helmholtz Association, the Fraunhofer Society and the Leibniz Association, but also the industrial partners. I want to thank them for their outstanding commitment to renewing and redesigning research in Germany. Ladies and gentlemen, ongoing excellence requires ongoing competition. That is why the sustainability of the Excellence Initiative is of great concern to me. We need to make the Excellence Initiative, along with the dynamic it has brought to our research system, a permanent feature. Our financial backers have already given encouraging signals along these lines. Of course, when thinking about the long term, we have to carefully consider objectives, criteria and procedures, as we have aimed to do with all DFG-funded programmes.

The Excellence Initiative is not an isolated feature within the DFG funding spectrum. Excellence funding does not stop with the Excellence Initiative, nor does it necessarily start there. This I want to make very clear. In any serious competition, there are winners as well as losers. And yet, initial disappointment must be followed by another try. This is important, not only for those who are not approved for funding right away, but also for competition as a whole. The top must remain dynamic, and we need a broad range of high-potential institutions. And if a new attempt is not possible under the same programme, then perhaps there will be one that is better suited for that particular idea.

This is why the other DFG funding programmes — the Individual Grants Programme, the Research Units and Collaborative Research Centres, the Priority Programmes, as well as the entire range of programmes for the promotion of young researchers — are equally important. They too are first-rate programmes that promote excellence and top-level research. That is why we are very happy finally to be in a position this year to begin the sorely needed funding of indirect project costs, or overheads, in these programmes. For this we are greatly indebted to our financial backers. In one aspect, however, the Excellence Initiative does differ from other funding programmes — it has made German research highly visible in the international arena. The Excellence Initiative is being noticed abroad like no other research policy development of recent years. We are pleased to see this degree of interest in Germany as a research location.

In this context, allow me to once again thank all those colleagues who work for the Excellence Initiative as reviewers and members of the Joint Commission — quite a percentage of them not from Germany — and who help make this programme a success by contributing their time and expertise.

I do believe that, in the international arena, we should more strongly highlight the quality of German research that these programmes have demonstrated. It seems to me that we Germans like to play the world's resident curmudgeons, known abroad primarily for being critical of what we do at home, especially in education and research. "A German, even if he has nothing else, will still have objections," goes a quote by Kurt Tucholsky. I certainly do not want to undermine critical thinking, which is fundamental to scientific investigation. But I would like to encourage us to accentuate the positive a bit more when we represent German research in other countries.

After all, there is a global competition for the best minds, which will revolutionise our research system in ways we cannot begin to imagine. And this competition makes it mandatory that we point out the opportunities we offer young researchers, especially in graduate schools and clusters of excellence under the Excellence Initiative. Together with clusters of excellence and graduate schools, we should therefore visit important research locations around the globe and introduce these new professional avenues. This would also give us a chance to target outstanding researchers, young talent, and those with international experience, in North America, China, India, Japan, Russia, and many other countries with a strong research focus, and attract them to work in Germany. We want to support you, ladies and gentlemen, to the best of our ability, in your efforts to find cooperation partners abroad and invite them to Germany. Our offices in North America, China, India, and Moscow can be very helpful here by serving as base camps.

Promoting young researchers

In spite of all this one cannot deny that there is still a lot of room for improvement when it comes to promoting young researchers. We have to tackle the tenure track issue. We have to make careers in science and academia more attractive by ensuring adequate pay — and that means significantly better pay — during all career stages, and by improving opportunities and flexibility for researchers and their work. The meetings of Emmy Noether researchers and DFG fellows, most recently in Potsdam and Boston, have clearly shown what the best and brightest of our young researchers hope for and expect. We must take this very seriously.

They ask for reliable career prospects, while acknowledging the need for strict, performance-based selectivity on the path to professorship. They ask that researchers be able to work independently early on. And they ask for academic career paths other than professorships. Against this backdrop, I welcome the proposed new rules for temporary positions, assuming there will be funding available for such jobs in research and teaching. In the same vein, the DFG may have to reconsider the age limit up to which principal investigators can apply for funding for their own position.

Without backing down from my strong position in favour of a collective agreement for scientists and academics, I would like to point out that, according to the new collective agreements, federal and state governments can now offer performance bonuses to attract and retain especially qualified employees; DFG-funded projects in particular should take advantage of this. At the same time, I would like to emphasise that medical researchers should not be bound by a less favourable collective agreement than those who work in healthcare.

Promoting young researchers will also increasingly have to include research management training, especially for those who will be heading our large research networks, such as the young people in our Emmy Noether Programme. Beyond Collaborative Research Centres and large Research Centres, new and varied kinds of associations are being created by clusters of excellence and graduate schools, and these associations need leaders with excellent management skills.

Special highlights

Ladies and gentlemen, the work of the DFG reveals an unequalled richness of scientific activity across the entire spectrum of research, from A to Z. So allow me to pick three special highlights from the ABC of life sciences that I find impressive in various ways:

Biodiversity

Let's begin with the second letter in the funding alphabet — B, as in biodiversity.

One of our biggest global problems today is the irreversible loss of biodiversity — in other words, the decreasing number of species. According to estimates, our ecosystem loses up to 130 species each day, species whose significance for the stability of the ecosystem is yet unknown. The DFG has a long history of funding individual projects in this field, but the year 2006 saw the launch of three long-term research platforms, so-called biodiversity exploratories, in Brandenburg, Thuringia, and Baden-Württemberg. With their strong focus on experimentation, these exploratories are unique throughout the world. Their main objective is to investigate, over the long term, the relationships between changes in the diversity of species and the intensity of land use, as well as the effects of these changes on processes within the ecosystem.

Because issues of biodiversity ultimately require an international approach, a special working group, led by the DFG, was established at the conference of research funding organisations from the G8 countries. This working group will pave the way for biodiversity research and initiate projects that seek to answer the pressing questions surrounding the loss of biodiversity.

Clinical research

And how about the letter C, as in Clinical Research Units.

This programme aims to improve the research-oriented structure of a clinic for the long term, and also to pioneer the much-needed improvement of medical training structures in Germany. These projects integrate clinical and basic research, and their results are remarkable. In a DFG-funded Clinical Research Unit on the prevention of type 2 diabetes, the opportunity to analyse various parameters in detail enabled researchers to distinguish between genetic components and environmental influences as causes of this disease. The in-depth phenotyping in these investigations gives them a strong edge over most international studies on the same topic.

Zoology

Finally, let's take a look at Z, as in zoology.

The fact that scent plays a role in mating behaviour, and ultimately also in how human beings choose their partners, is well known today. But zoologists further discovered that unicellular organisms, for example amoebas, are also able to smell. While this chemical sense, which might be called olfaction in a general way, does not exactly influence mate selection in these smallest of life forms, zoologists today do believe that this sensory function influences mechanisms underlying activation or orientation. It is possible that even plants are able to perceive scents. Perhaps a flower smells in more ways than one?

The variety just within these three examples does not only show the enormous breadth of DFG funding across all disciplines. More than that, it demonstrates the overall variety and capability of research in Germany, which, appropriate self-criticism and continued ambition notwithstanding, can definitely hold its own, within Europe and beyond.

Year of the Humanities

This holds especially true for the humanities, even if some representatives of these disciplines — one might call them professional critics —do not seem to want to believe it. Perhaps the fact that 2007 has been declared the Year of the Humanities will help these disciplines garner the attention and recognition they deserve. However, looking at the scientific themes of previous years, such as the Year of Computer Science, we have to admit that one single year for all the humanities disciplines can only do limited justice to the enormous breadth of this field.

Still, the year is well chosen, especially as a capstone to the DFG Humanities Research Funding Initiative. Since 2003, we have been analysing the working conditions and needs of researchers in the humanities, and we have accordingly adjusted our funding instruments a number of times. The long-term programme has been modernised, applying for time to do research has been made easier, scientific networks have been created, and a model for Research Units in the humanities has been introduced.

Early last year, the German Science Council, with its recommendations for the humanities, confirmed our analyses and conclusions, and at the same time triggered a dynamic movement in support of the humanities. I am very pleased that, in the course of this development, the DFG was able to join forces with the Federal Ministry of Education and Research, so that now, at the beginning of the Year of the Humanities, we can offer a concerted effort to promote these disciplines — on the DFG side, in the form of inviting proposals for Humanities Research Units. This, along with the expansion of our long-term programme and of scientific networks, will ensure our continued focus on the humanities and social sciences.

Digital library services

Ladies and gentlemen, we will also make big steps along another important path, important especially, but by no means only, for the humanities.

Printing was one of the most important inventions in human history. Victor Hugo once called it "the mother of all revolutions." To me, it is an exciting example of what can happen when technology and culture join forces.

Today, we are in the middle of a digital revolution. In the future, researchers will be able to access any important publication, book, or collection in their specialty directly from their workplaces. In other words, you won't have to make a trip to the library, because you can simply log on to a database to read journals, and even entire books, right on your computer screen. Knowledge published anywhere in the world will be accessible from any location. The DFG provides funding for the establishment of digital media as primary carriers of scientific information and communication. Significant financial resources have been invested in national licences, which allow free access to a multitude of electronic text collections and digital journal archives. At the same time, a kind of digital national library is being created through the digitisation of literature. The DFG has developed a comprehensive plan for the funding of digital library services, with a proposed overall budget of 250 million euros over the next five years. We hope to inspire additional partners to support this exciting project, because the digital revolution in German research is only feasible as a joint effort.

Refining the set of instruments

Ladies and gentlemen, when we look not only at the humanities, but at the entire range of DFG-funded disciplines and their needs, we can see that supporting people and projects appropriately requires specific instruments. This holds especially true if research funding is also meant to make a difference in the necessary major reform of our research system, while respecting the uniqueness of each discipline. That is why I consider it crucial that we refine our set of instruments as we move, in a manner of speaking, from open-heart surgery to minimally invasive procedures.

A case in point is the creation of structured doctoral programmes. In many disciplines, these programmes are a great way of promoting young researchers who are working on their doctorate. But especially in the engineering sciences, as well as in other disciplines, doctoral project assistantships present another viable route, certainly on DFG projects. This model also ensures the performance strength of our research system, as a statement by the mechanical engineering association VDMA clearly stated. Mandatory postdoctoral training as a step toward professorship, which is standard in the natural and life sciences, generally cannot substitute for relevant industry experience prior to an appointment. Still, we should enable young scientists also in the field of engineering to gain international and interdisciplinary research experience, and to work independently early on. The funding system therefore has to make it possible to combine different paths, for example by integrating project assistants into graduate schools.

In the spirit of flexibility and sensitivity to different subject cultures, we have also modified the Emmy Noether Programme: substantial international research experience, as a prerequisite for funding, can also be demonstrated in forms other than postdoctoral training. Furthermore, part of the research funded under this programme may now be conducted within a commercial business. This innovation reflects our increased efforts to encourage knowledge transfer between science and industry.

Further development of funding instruments

The further development of funding instruments is an ongoing task for the DFG. Its motto might be, "More time for research, less bureaucracy." We want to design all our programmes in ways that allow researchers to spend as little time as possible on administrative matters, while still allowing us to make sure that the right people and the right projects get the right resources.

Giving the right resources to the right people means, first and foremost, that we provide the optimum kind of funding for excellent scientists and academics during each stage of their career. In my opinion, we are going to need additional modules here, which we should discuss in our committees. One such module could be a starting grant for outstanding young people — a one-time allowance of about a hundred or two hundred thousand euros for somebody's first project, simply on the basis of a well-founded recommendation from a reputable, and preferably international, researcher. Such a programme would provide an uncomplicated way to promote innovation and creativity in young researchers during the early stages of their careers.

Another module could be a merit grant, which would be a type of longterm funding given to top-level researchers based on their successful track record. They would enjoy considerable leeway, founded on considerable trust. A hypothetical example would be an outstanding materials scientist who had completed several DFG projects with great success over the course of a decade. Now she wants to turn her research focus to entirely new types of high-performance materials. After submitting a short proposal, she receives a lump sum of 2 million euros to fund a high-risk five-year project that cannot be planned in detail.

Yet another module could be a senior grant. It would allow retired professors, together with an inviting faculty — preferably not their previous one — to request lump-sum funding for staff and consumables, and maybe also for supplementing their pension.

In addition, there could be what we might call "joker projects" — meaning that the review boards should be given greater discretion to approve grants for certain high-risk or interdisciplinary research endeavours.

To be able to better respond to the needs of different subject cultures and individual projects, DFG funding programmes as a whole are increasingly going to be modularised. In other words, they will consist of modules that can be combined in various ways. We got started along these lines in our Collaborative Research Centre programme, with a module called "Integrated Research Training Groups." More will follow. This approach makes the application process more flexible and adaptable to the changing requirements of research work, even while a project is underway. Going forward, grants should increasingly be approved as lump sums to allow for greater latitude in project execution. In other words: more flexibility during the application phase through modularised funding programmes, and more flexibility during the project phase through lump-sum grants.

We know from other areas of life that there are no panaceas. While research funding does require security and structure in order to guarantee fairness and dependability, we also want to make more room in our funding portfolio for the unique, the novel and the unexpected. The architect Heinrich Tessenow put it like this: "Simple isn't always best. But the best is always simple." In this spirit, the proposed modularisation should be seen as a simplification that brings out the best in research funding.

As an analogy for this new model, imagine a kitchen. The applicant will be like a gourmet chef who has a delicious recipe. The DFG will provide the ingredients that allow this chef to realise his recipe for a research project, with fewer and fewer guidelines. The applicant will be able to combine various ingredients as he sees fit. In other words: flexible, modular project design as a new kind of fusion cooking. With all this, we want to keep our administrative costs for the DFG Head Office at the previous low record level of under 3.5 percent of the total budget. Processing times for proposals, short as they already are, should be reduced even more. The only way to accomplish this is by further simplifying business processes and by implementing the wholly electronic submission, processing, and review of proposals. Thus, technical standardisation in the various funding modules means more freedom for proposal submission and funding.

Internationalisation

Ladies and gentlemen, allow me to finally broach a topic that is very dear to me: internationalisation, which continues to be one of the most important forward-looking issues for the DFG. Our international as well as our national activities are guided by clear objectives:

- First, to intensify networking and cooperation in order to meet today's major scientific challenges. Among the most important and substantial research tasks of our time and probably our children's and grand-children's as well are the issues of energy, environment, and climate change. Like many other key issues, they cannot be dealt with by Germany alone, or even by Europe alone.
- Second, to give young people the opportunity to gain international research experience, to impart to them a sense of cosmopolitan openmindedness, and
- third, to then make an effort to get these young people to come back, in order to gain more of the best minds. I would like to repeat the words of my predecessor as DFG President, Professor Winnacker who, by the way, is here today and whom I have the privilege to wel-

come. Mr. Winnacker, shortly after he took office as DFG President, rightly put it this way: "We have to become an immigration country for scientists and researchers."

 Fourth, and finally, to expose basic research in Germany to more international competition and thus further improve its quality. This happens especially in bilateral or multilateral funding programmes ideally involving common-pot financing and joint evaluation — in which individual subjects or groups of subjects stand in direct, comparative competition.

Consequently, our Sino-German Center in Beijing and the DFG offices in Washington and Moscow, as well as the new office we opened in Delhi, with its branch in Hyderabad, in 2006 — incidentally, the first to be established in cooperation with the Alexander von Humboldt Foundation (AvH) and the German Academic Exchange Service (DAAD), as a "German Centre for Research and Higher Education" — these offices are of great importance. We plan to further strengthen our international presence, in a highly selective and differentiated fashion.

In the United States, we are going to expand our commitment by setting up office in the German House in New York, together with the DAAD, and in Washington, together with the AvH. For the medium term, we are also considering establishing a presence on the West Coast. Regarding Japan, we have informed the Federal Ministry of Education and Research of our need for, and strong interest in, a German House in that country.

In all these various activities, our close collaboration with the other German players in the international arena is very important to me; not only with the Federal Ministry of Education and Research, the Federal Foreign Office and the embassies, but especially also with the AvH and the DAAD, as well as with the Alliance organisations, the academies, our future cooperation with acatech, and the German academies of sciences and humanities. I would like to thank all of them for a productive and purposeful cooperation, which I am determined to continue and intensify further throughout my term in office, in order to strengthen Germany's image as an international centre of science and research.

Europe

Europe, of course, has a special significance for the DFG. Much could be said about Commission President Barroso's plans for the European Institute of Technology, for the development of the European Research Area, for the European Science Foundation, and for the group of European Heads of Research Councils.

However, in light of recent events — after all, the new ERC Secretary General, Professor Winnacker, is with us this evening — I would like to visit just one topic:

Ladies and gentlemen, the hopes of European scientists these days are directed toward the ERC, the European Research Council, which is something like a European DFG, and which has just begun its work. Expectations run high that the ERC will implement a European funding programme for top-level research, without thematic guidelines and committed only to scientific excellence.

The DFG has worked patiently and persistently toward the establishment of the ERC in Brussels. Naturally, we are going to continue our support of the ERC to the best of our ability, because we believe that Europewide competition will add significant value. We want as many German researchers as possible to succeed in ERC programmes, and we want as many internationally successful researchers as possible to come to Germany with ERC funding.

A successful ERC therefore depends on strong domestic funding and complements it. Certainly, situations may, and will, arise in which the DFG and the ERC compete against each other, for example when it comes to attracting the best applicants. But research is not conceivable, let alone feasible, without cooperation and competition. That is why we look forward to it.

In this overall European context, the DFG-funded Liaison Office of the German Research Organisations (KoWi) — essentially our joint mission in Brussels, headed by Dr. Doll-Sellen, is playing an increasingly important role. In the future the DFG will require even more of the services offered by KoWi.

Omitted topics

Ladies and gentlemen, there are some topics I did not address, even though you may have expected me to.

- Stem cell research, perhaps?
- Or green gene technology?
- Or the role of the engineering sciences?
- Or strategy processes?
- Or knowledge transfer?
- Or gender equality issues?

The DFG, and I personally, certainly want to respond to all of your questions, and there is much more I could have said. But my speaking time is limited, and so we are going to have to continue the discussion informally after this address.

Acknowledgements

I do want to take a moment though to express my gratitude.

First of all, I would like to thank our financial backers, the federal and state governments, as well as the Donor's Association, for their generous support of our work.

But in particular I want to thank all those who make the DFG the German researchers' own organisation; all those who live by the words of former DFG President Wolfgang Frühwald: "We are the DFG." This includes our members; our committee members and reviewers, who generously volunteer their time and expertise to the cause of research autonomy; and last, but not least, our applicants, because a funding organisation is only as good as its funding recipients.

Likewise, I would like to offer my warmest thanks to all the colleagues in our Head Office, who manage a wide variety of day-to-day activities, as well as a number of strategic tasks, with enthusiasm and a great understanding of research issues.

I would like to express my gratitude to the Head Office, represented by my Executive Board colleague, Secretary General Dr. Grunwald, as well as the three department heads and deputy board members, Dr. Konze-Thomas, Dr. Königs, and — succeeding Dr. Zienicke — Dr. von Kalm, whom I wish the best for his new position.

The same wish also goes to Dr. Koch-Krumrei, who recently returned from her term in Washington to once again head our Berlin Office.

Closing words

Ladies and gentlemen, for the new year I wish you and yours, with all my heart, much success in your personal and professional endeavours; the courage to take risks; many great ideas and inspiring partners to share them with; well-being; and, if necessary, a little bit of luck.

I want to thank all of you for joining us in such large numbers and thereby showing your interest in the DFG. I hope you will stay around for the evening and join in discussions with us.

The Federal Chancellor said in her New Year's address: "We'll simply have to work twice as hard in 2007."

And the DFG has proven, not only through the Excellence Initiative, that it is not afraid of hard work. Because, as Martin Luther said in his table talk, "Hard work keeps you healthy and strong." And so I wish you health and strength for the year that lies ahead, and I do hope that you will continue to support the DFG.

Thank you very much.