

Research in
Germany



Land of Ideas

HRK German Rectors' Conference

The Voice of the Universities

BMBF Campaign

„Korea and Germany: Partners in Research and Development“

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Universities as the Core of the German Science System

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Ladies and gentlemen,

Dear colleagues,

It is a pleasure and a privilege to be part of this important conference today, launching the campaign „Korea and Germany: Partners in Research and Development“.

I.

All over the world, universities conserve and hand down existing knowledge and create and generate new knowledge. They also train the next generation of leaders in science, business and society as a whole. Through the intrinsic correlation between study, research and technology transfer, higher education institutions are placed at the centre of national innovation systems and global competitiveness. Universities are at the “heart” of our science systems.

With more than 340 institutions of higher education – 117 universities, 164 universities of applied sciences and 57 colleges of arts and music among them – Germany has a well developed, diverse and highly productive tertiary sector.

To give you an idea of the actual figures: In 2004, German higher education institutions spent € 21 billion on research and teaching (incl. third-party funding). Within our system, 38,000 professors train and educate roughly two million students. Altogether about 240,000 scientists and supporting staff teach and research at our universities. Total spending for research and development at the national scale amounted to almost € 55 billion, the largest sector by far being industry with € 39 billion. German universities came in second with € 9 billion.¹

II.

Quantity alone is not enough. The continuous assurance and enhancement of quality is central to the mission of universities. Institutions have to constantly adapt and renew themselves in order to remain competitive. This is especially true for universities: They are agents of change; while they are – at the same time – undergoing change processes themselves. Now more than ever higher education institutions – in Korea as well as in Germany, I am sure – are facing tough competition and they are increasingly also competing against each other. At the same time, expectations from business and the general community towards universities are rising.

With a view to enabling universities to fulfil their mission at the core of the science system the German Rectors' Conference considers it of paramount importance that the funding and legal frameworks support, not hinder

¹ Source: BMBF, Forschung und Innovation in D 2006, p. 16.

universities. In our point of view, the universities themselves know best what is good for them. Universities need to have significant autonomy in determining and developing their academic profile, student profile, staffing requirements, internationalisation strategy and research and development strategy in order to remain on top. Universities need to shape their specific profile in order to promote excellence in teaching, research, development and knowledge transfer.

III.

Acceptance of the fact that future growth and jobs depend on a well functioning system of research and innovation and on a well educated work force has grown in the aftermath of the Lisbon meeting of European heads of state in the year 2000, in which they declared their intention "to make Europe the most competitive knowledge-based economy in the world". It is obvious that investment into universities at the core of the European science system and investment into the brains of young Europeans is key to the achievement of this ambitious goal.

With a view to increasing global competition, European states agreed to invest three per cent of GDP into research and development by the year 2010. We highly welcome the fact that the German federal government has endorsed the Lisbon agenda and has declared research and development a top priority. With the new high-tech strategy, being implemented under the leadership of the Federal Ministry of Education and Research, the government has – for the first time – formulated an overarching national strategy, involving all relevant actors.

Also the Bologna process focuses on European universities, aiming to strengthen the brand "Higher Education made in Europe". 45 European ministers in charge of higher education have agreed to introduce a number

of reform measures, the most striking feature being the Europe-wide introduction of a two-tiered system of degrees. These recent developments prove that a European Area of Higher Education and Research is clearly taking shape, putting higher education institutions where they belong to be: into the centre of the European science and research system.

IV.

Allow me to put forward three statements on the role and nature of our universities.

1. Universities as the core of the German science system are diverse.

The unity of research and teaching is still essential to the German universities of today. Just as Humboldt's famous principle is part of the idea of "universitas", so is a wide and diverse spectrum of academic subjects. Not seldom will the strength of individual universities lie in the so-called small subjects. The plurality of disciplines – from archaeology to zoology – is certainly one of the internationally visible trademarks of German higher education.

The German Rectors' Conference has been promoting the differentiation of the higher education system – within and between different types of higher education institutions – for a long time. Ideally, in our point of view, each and every institution will be able to find its adequate role and place within a diversified system.

However, we need to take a close look, ensuring that the overall system is fit to cope with the challenges of international competition. Why is it that only rarely German universities do reach top places in internationally published rankings? It is our conviction that – in the national interest and with a view to the challenging tasks at hand – universities and extra-university institutions need to build regional clusters of excellence. Already now, cooperation

between both sides is extensive: We carry out joint research projects and establish joint graduate schools. We jointly appoint professors and share large-scale research equipment. Frequently, the directors of extra-university research institutes are tenured professors at close-by universities. This highly symbiotic form of cooperation has an added value for researchers and students. However, I feel that the already existing cooperation needs to become more visible – nationally as well internationally.

An interesting approach has just been acclaimed by the international jury of the German initiative for excellence: The University of Karlsruhe and the Forschungszentrum Karlsruhe (Karlsruhe Research Centre) have institutionalised their collaboration under the umbrella “Karlsruhe Institute of Technology (KIT)”.

The initiative for excellence, which is being funded by the Federal Ministry of Education and Research as well as the Science Ministers of the Federal States, visibly shows how great the wealth of ideas is that exists at our universities. I am confident that the initiative, which provides funding in the order of €1.9 billion between 2006 and 2011, will have a long-lasting effect on our universities and will highlight the strength of university research in Germany, nationally as well as internationally. Nevertheless, it is only part of a permanent process of change and differentiation. HRK strongly advocates that all higher education institutions meet the challenges of increasing competition and differentiation. However, this process can only be fair and beneficial for our universities and universities of applied sciences within a framework of sustainable state funding.

My second statement:

2. Universities as the core of the German science system are strong in research.

The results of the recently published fourth funding ranking of the German Research Foundation, which gives an overview of the distribution of third-party funding to universities and non-university research institutions, clearly document the high quality of research performed at German universities and universities of applied sciences. On average, 13 per cent of university budgets now come from third-party funding.

The ranking also proves that the one-size-fits-all university does not exist. Each institution needs to define a recognisable profile. This is the secret of success of top-rated institutions: They have set foci in research and have thereby become internationally recognised research locations.

Quality of research and development is, in the first place, independent of the size of an institution. Nevertheless, regional clusters need to be built up in order to reach a certain "critical mass" with a view to the overall performance of the science system. Universities as unique and internationally comparable institutions are well equipped to play a leading role in the creation of such internationally visible competence clusters.

Let me come to my third statement:

3. Universities as the core of the German science system are innovative and increasingly entrepreneurial.

Alexander von Humboldt was a well-travelled man. Already in a lecture at the Sing-Akademie zu Berlin in 1827 he held the view that national systems of higher education and research on the one hand and business and industry on the other hand are highly interdependent and would have to face international competition in a concerted effort in order to survive.

German higher education institutions are recently discovering their economic potential and are taking the commercialisation of newly created knowledge into focus. The universities as a whole are now in the top-ranked group of the 50 largest patent applicants in Germany.

We observe that especially those universities are successful which position themselves as a "brand", forge strong alliances with industry and build up – virtual or actual – clusters with other universities and research institutes as well transfer centres and large or small companies.

V.

Ladies and gentlemen,

Since their beginnings, universities have been acting in an international context. Nowadays, just as in the past, international collaboration enriches research, teaching and study. Therefore, the free mobility of students, teachers and researchers – and the international outlook of university leaders and managers – are prerequisites for the successful operation of universities.

German higher education institutions are open to the world. As one of the biggest industrial and scientific nations on the European continent Germany aims to attract excellent students and researchers from all over the world. We invite young, talented people to German in order to study and to research – and to feel at home – at our institutions of higher learning. Germany is now the number-three destination for internationally mobile students and researchers. Approximately 10 per cent of our student body is international.

But competition for the „best brains“ is not the only thing that matters. With a view to global challenges – be they of economic, ecologic, social or political nature – we have to strengthen international collaboration in research and development. The exchange of researchers – especially the joint promotion of early-stage researchers – and the joint use of scientific and technological

potential will help us to solve global problems and create and market innovative products more quickly and efficiently. For our mutual benefit, we need well educated people who know and have experienced different cultures and we need sustainable international linkages.

Currently the Higher Education Compass, a database of the German Rectors' Conference, lists 87 cooperative links between Korean and German higher education institutions. The republic of Korea is one of the important sending countries of international students in Germany. Especially our colleges of arts and music are in high demand from Korean students.

We feel that it is about time to put our collaboration between the universities of our two countries on a broader basis. In a diversified German higher education system Korean universities will be able to find their match, either to cooperate and exchange students and staff or to forge strong links for top-level research on a bilateral basis.

Allow me mention one further aspect: language training. Even though – as we can see today – English clearly is the *lingua franca* of the international science community, we have to pay special attention to promoting the acquisition of Korean and German.

The German Rectors' Conference has always emphasized the importance of international cooperation at „eye level“. We have always been – and still are – actively engaged in facilitating international collaboration for our member institutions. We are open to enter into a dialogue with our Korean partners on how we can jointly enhance the exchange of students and researchers between our two countries. In addition to joint research projects, joint graduate schools and bilateral PhD programmes, for instance, are innovative forms of international research collaboration at a very early stage.

We all know: Establishing mutually beneficial research links is not always easy: Diverging interests need to be negotiated and common interests need to be defined.

We need to build up trust in long-term partnerships.

We need to build bridges between the higher education institutions of our two countries.

This is why the BMBF initiative „Korea and Germany: Partners in Research and Development“ is important and why we are gladly part of it. Thank you.