
Institutional Strategy

# Bildung durch Wissenschaft

## Educating Enquiring Minds

Individuality – Openness – Guidance

**Institutional Strategy**
**to Promote Top-Level Research**

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Individuality – Openness – Guidance

Humboldt-Universität zu Berlin

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Individuality – Openness – Guidance

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*Technische Universität Berlin*
*Helmholtz Association of German Research Centres, Berlin*
*Max Planck Society, Munich*
*Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz, Bonn*
*Berlin-Brandenburg Academy of Sciences and Humanities, Berlin*
*Max Delbrück Center for Molecular Medicine, Berlin-Buch*
*Helmholtz-Zentrum Berlin für Materialien und Energie*
*Social Science Research Center Berlin*

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# 1. Overview

## 1.1. Abstract

Humboldt-Universität zu Berlin (HU) stands in the tradition of a founding idea that has lost none of its relevance. In short, that idea is **Bildung durch Wissenschaft**. Meaning *education through learning and research*, this concept interprets and emphasises the eternally productive relationship that exists between objective academic knowledge and the subjective aspects of acquiring and generating it. *Education through learning and research* is therefore not a static formula; it expresses the permanently evolving process of finding a meaningful way of relating knowledge to education. The idea thus also applies in the opposite direction – *learning and research through education*.

This relationship has always defined the way in which HU sees itself. Over the course of its history, the University has experienced painful ruptures in the continuity of this approach. Nevertheless, the conceptual pillars that support it – **education through learning and research**, **unity of research and teaching** and unconditional **academic freedom** – rest on scholarship as the source of knowledge and humanity and thus continue to provide the foundations for necessary, enlightened discussions about reform.

In line with its tradition of research-based education, HU's Institutional Strategy is founded on three central concepts: **individuality**, **openness** and **guidance**. In combination with HU's goals, these concepts provide the structure for the Institutional Strategy. At the centre of this structure is the concept of individuality (**Goal 1: Excellent framework conditions for top-level research**). This reflects the conviction that research will not fit into predefined structures, but that the structures should be as flexible as possible to allow room for research and, above all, to meet the requirements of the scientists and scholars involved. Excellent research does not derive from a predetermined plan – it is a product of the curiosity, imagination and intelligence of the researchers who give the University its unique identity. With this in mind, HU aims to create optimum conditions for all members of the University to develop their full potential and creativity. As part of the Institutional Strategy, HU has therefore developed the **Strategic Innovation Fund** as a central reform project for the entire University. The fund consists of a portfolio of support mechanisms, including the core project of Integrative Research Institutes (IRIs), the Caroline von Humboldt Programme for Gender Equality and the funding programme Internationalisation of Research.

This approach is geared towards the individual and is closely linked to the central concept of openness (**Goal 2: Personal development and promotion of young researchers**). Here, HU has set up a **Phase Model** to guide its support for the members of the University at all stages of their academic careers. Since only openness between excellent research and exemplary teaching offers the opportunity to incorporate young talent into research as early as possible, this concept is crucial to the Institutional Strategy as a whole. As the Role-model Cooperative University, HU will also maintain and further develop its openness to partner institutions. In doing so, it aims to promote academic freedom in collaborative research and to become an effective partner in social discourse.

Finally, under the central concept of guidance (**Goal 3: Governance for academia – a culture of enablement**) HU will **reform its governance**. This will strengthen the University's management processes as well as the faculties' strategic capacity with regard to profile-building and decision-making. In parallel to this process, HU will restructure its administration to create a well-networked service body. As part of the **culture of enablement** that HU is striving to implant in all parts of the University, its administrative forms of organisation and working methods will be redesigned so as to remove obstacles to research, teaching and effective studying. All resources – above all, time – shall be made available for these primary functions of the University to the greatest possible extent.

HU's participation in all three funding lines of the Excellence Initiative of the German federal and state governments has opened up enormous development potential for the University and has sparked a multitude of creative forces. Over a period of more than two years, the process of compiling HU's Institutional Strategy was carried out in a transparent and participative way. When the Excellence Initiative Task Force – a preparatory group for the draft proposal, initially led solely by professors – was set up in 2009, it was the beginning of a process that firmly anchored the programme of the Institutional Strategy in the University. When the Presidency changed hands in autumn 2010, this group was expanded to create a permanent **Excellence Initiative Forum**, or FOX for short. This think tank, which was set up by the President with the support of the Academic Senate, includes representatives of all groups within the University. For the core sections of the Institutional Strategy, the Forum appointed temporary working groups, each of which included numerous other members of the University.

Based on this broad support within the University, on HU's strengths in research, on its recent successes in third-party funding for improving the quality of teaching, and on the new Executive Committee, HU has now firmly committed itself to a challenging and ambitious Institutional Strategy as a united and well-positioned research university.

## 1.2. Financial planning: Measure, types of expenditure per year

### List of measures

| Measure | Proposed funding (for the entire funding period) in thousands of euros |
|---|---|
| **Goal 1** | |
| Strategic Innovation Fund | |
| 1. Funding programme: Excellent Research and Teaching | 16,700 |
| 2. Funding programme: Caroline von Humboldt Programme | 2,605 |
| 3. Funding programme: Internationalisation of Research | 3,500 |
| 4. Funding programme: Collaborative Research | 12,375 |
| The Role-model Cooperative University | 670 |
| **Goal 2** | |
| Humboldt Graduate School | 5,960 |
| Postdoctoral funding | 4,480 |
| Senior Advisors | 1,260 |
| **Goal 3** | |
| Culture of enablement | 875 |
| Expanding measures for personnel development | 1,900 |
| **Project management** | 2,945 |
| **Total** | **53,270** |

### **Types of expenditure** (per year, in thousands of euros)

| | 2012 Nov./Dec. | 2013 | 2014 | 2015 | 2016 | 2017 Jan.-Oct. | Total |
|---|---|---|---|---|---|---|---|
| Staff expenses | 217 | 5,179 | 8,388 | 9,350 | 9,433 | 7,352 | 39,919 |
| Other direct expenses | 107 | 3,116 | 2,919 | 2,634 | 2,661 | 1,914 | 13,351 |
| Investments | – | – | – | – | – | – | – |
| **Total** | **324** | **8,295** | **11,307** | **11,984** | **12,094** | **9,266** | **53,270** |

# 2. Status Quo

## 2.1./2.2. Research profile and research quality

HU's research profile has three defining characteristics:

- The excellent work of individual researchers, which is reflected in the University's first-rate overall reputation, in constantly high levels of third-party funding and top positions in the Funding Ranking of the German Research Foundation (DFG), in academic distinctions such as eight Leibniz Prizes,[1] and in the University's most recent successes, which include the award of two Advanced Investigator Grants from the European Research Council (ERC) in 2008 and 2009.
- The development and shaping of new academic fields at the interfaces of different areas of research, e.g. as part of HU's Integrative Research Institutes (IRIs), its numerous Research Units and Collaborative Research Centres (SFBs), its Interdisciplinary Centres (ICs), and in facilities designed to promote young researchers, such as Graduate Schools and Research Training Groups.
- The extensive use of the opportunities presented by the Berlin-Brandenburg region as a hub of science and technology, firstly to develop partnerships with numerous non-university research institutions, e.g. in biology with the Max Delbrück Center for Molecular Medicine (MDC), and secondly in pioneering collaborative research projects – such as the DFG Research Center Matheon – Mathematics for Key Technologies, and the Berlin College of Antiquity, which commenced work in late May 2011 in collaboration with strong partners at Berlin's three other universities and at non-university research institutions.

HU's research strength is founded on the broad spectrum of its disciplines, which are represented by more than 400 professors and almost 1,900 other researchers.[2]

The research profile of a university as large and diverse as HU can only ever provide a snapshot of a process of perpetual change, as new areas of focus are constantly emerging. This process is very complex because within it, individual projects run by internationally renowned researchers complement large-scale collaborative projects but also constantly compete with them in a productive sense.

1 Three of the prize winners have moved to other institutions, one prize winner holds an honorary professorship at HU.

2 These and following figures all exclude the Charité - Universitätsmedizin Berlin. As the medical faculty of HU and Freie Universität Berlin, it belongs to both universities. In terms of statistics, relating to third-party funding, each institution is attributed half of the overall figure.

Collaborative projects like the Cluster of Excellence Topoi – The Formation and Transformation of Space and Knowledge in Ancient Civilizations and the Cluster project Image Knowledge Gestaltung. An Interdisciplinary Laboratory[3] show that in the humanities – as is the case in all disciplines – although individual activities are absolutely central to the way in which researchers arrive at new insights, the image of the lonely researcher must be reconciled with that of one who actively cooperates in large-scale research structures. The Topoi Cluster of Excellence is run by archaeology, classical and modern philology, European and non-European regional studies, and cultural history and theory. By combining disciplines focusing on classical studies and those more concerned with the present-day, the Cluster has created a constellation that is probably unique in Europe in the way it situates research into cultures of the Old World within the context of modern-day questions and methods. The Cluster's work benefits from close relationships – which can only be fostered in Berlin – with the German Archaeological Institute (DAI), with the facilities of the Prussian Cultural Heritage Foundation, and with projects of the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW).

Under the scientific coordination of the Departments of Art and Visual History and the Department of Cultural History and Theory, the Cluster project Image Knowledge Gestaltung integrates strategies from the humanities, natural sciences and engineering sciences – which are based on fundamentally different methodologies and usually practiced separately – and incorporates them into an interdisciplinary laboratory as a joint operational platform. The goal of this project, which exemplifies HU's central concepts of individuality, openness and guidance, is to explicitly make visible the implicit creative power of imaging methods and knowledge structures, and to use this as a basis for developing an innovative model of interdisciplinary university research. The many non-university partners involved in the Cluster include institutions as diverse as the Max Planck Institute for the History of Science and the Max Planck Institute of Colloids and Interfaces. The unique combination of individual and collaborative research in the domains of history and regional studies, art and visual history, and cultural history and theory makes HU one of the most important locations for these fields in Germany.

Philosophy is another field that combines individual research work – which is often highly esteemed by the public – with participation in large-scale historical and editorial projects and in interdisciplinary networks. For example, philosophers are working with neuroscientists to develop the research area of decision-making, and in collaboration with the Charité - Universitätsmedizin Berlin and the Max Planck Institute for Human

3 Projects financed from Excellence Initiative funds are marked green; new projects submitted in this round are marked blue.

Cognitive and Brain Sciences in Leipzig they run the Berlin School of Mind and Brain. The Leibniz Prize awarded to Dominik Perler in 2006 testifies to the quality of research and teaching in this discipline.

The Faculty of Law at HU enjoys both national recognition, as shown in the 2011 University Ranking of the Centre for Higher Education (CHE), and an excellent international reputation. Many fields of research in law adopt transnational and interdisciplinary approaches. One example of this is the Berlin research network Law in Context, which forms part of the Forum Transregional Studies and is headed by the Faculty of Law at HU. The programme aims to develop interdisciplinary research cooperation that focuses on law in its cultural contexts and incorporates systematic and regional science approaches. It also directly combines research with the promotion of young researchers by annually inviting postdoctoral fellows from different jurisdictions and cultural backgrounds to Berlin for one year.

HU is recognised throughout Germany as being particularly productive in the field of economics. This is reflected in the classic and innovative approaches applied in mathematical economics, business studies and management science (with numerous financial contributions from the private sector, e.g. for endowed professorial chairs). The 2011 CHE University Ranking puts HU in the top group for economics research performance in Germany.

In collaboration with the Social Science Research Center Berlin, the Hertie School of Governance and a number of other important partners, the Department of Social Sciences at HU – whose reputation in research is also in the top group of the current CHE University Ranking – runs the Berlin Graduate School of Social Sciences. A unique characteristic of HU is the rapidly developing field of empirical research into education and teaching, which also includes the didactics of individual disciplines in collaboration with the HU-affiliated Institute for Quality Management in Education and the Max Planck Institute for Human Development. Further strengths of HU in this area are empirical science studies and empirical higher education research carried out in collaboration with the Institute for Research Information and Quality Assurance (iFQ).

Sustainability research at HU is an interdisciplinary research field of the future and links the social sciences with economics and the natural sciences. This field is the focus of the FutureLand Graduate School – The Transformation of Land Use to Sustainability, which also provides the foundation for the new **IRI THESys – The Great Transformations of Human-Environmental Systems**. Both these projects are coordinated by the Depart-

ment of Geography and also involve the Potsdam Institute for Climate Impact Research (PIK) and other non-university partners, as well as the Faculty of Economics and the Department of Agricultural Economics in HU's Faculty of Agriculture and Horticulture.

With the founding of the Institute for Theoretical Biology (ITB) in the early 1990s, biology and medicine at HU entered into an alliance to establish a new discipline. They jointly fund the ITB and have established its professorships at the Charité and in the natural sciences at HU. This interdisciplinary collaboration, which gained its institutional form at an early stage, creates long-term benefits for medicine and biology at HU. While these effects are probably most obvious in the Bernstein Center for Computational Neuroscience Berlin (BCCN), they also radiate out to the joint work on neuroscience and to the systems biology partnership, which began in 2009, between HU, the Charité and the MDC. This strong research field gains long-term institutional support with the founding of an **IRI for the Life Sciences**, in which HU's biology and neurosciences will cooperate with the Charité and the MDC. This IRI provides university and non-university initiatives situated at the rapidly developing research location of Campus Nord with the opportunity to design joint programmes for research, teaching and the promotion of young researchers.

Systems biology is integral to new projects like the Cluster project GenoRare – Medical Genomics of Rare Disease, which adopts a translational approach to the medical genetics of rare diseases. It is also involved in the project for a Berlin School of Integrative Oncology (BSIO), and in the planned Robert Koch Graduate School Berlin (RKGS). On the basis of the paradigm of infection and immunity, the latter aims to set the education of young biomedical researchers on a new footing. The most important areas of focus in this entire field are undoubtedly the cognitive sciences and the neurosciences – and this involves the whole range of both disciplines, from the clinical study of diseases of the central nervous system, to theoretical neurobiology, to approaches drawn from neuropsychology and behavioural science, to philosophy of the mind. These fields are fundamental to both the NeuroCure Cluster of Excellence and the Berlin School of Mind and Brain.

The Charité was formed by merging two major medical faculties with four clinical locations. The result is one of the biggest university hospitals in Europe, where top-level research in a large variety of areas gives rise to outstanding diagnostic and therapeutic results, as well as innovative teaching concepts. In addition to medical systems biology and the neurosciences, the traditional core areas of the Charité include cardiovascular medicine, immunology and inflammation, oncology (which supports the BSIO project), and regenerative medicine which is involved in the Berlin-Brandenburg Center for Re-

generative Therapies (BCRT) funded by the German Federal Ministry of Education and Research (BMBF), and in the Berlin-Brandenburg School for Regenerative Therapies (BSRT). Thanks to a variety of joint projects with the MDC and the Leibniz Institute for Molecular Pharmacology (FMP), approaches and methods in molecular medicine are being implemented at the Charité on an ever-increasing scale.

The Museum für Naturkunde, an independent research institute affiliated with HU, is world-renowned in the field of evolutionary and biodiversity research, and a research museum of the Leibniz Association. The museum and HU have a long shared history and they collaborate intensively in disciplines within the life sciences. Particularly with regard to questions of evolution and systems biology, the museum's collections are of great importance to research and in the education of young researchers at HU, and in helping the life sciences engage in dialogue with the public.

While biology at HU is located next to the Charité at Campus Nord, mathematics and the other natural sciences, computer science (one of HU's research strengths with Leibniz Prize-winner Susanne Albers), geography and psychology are all situated at Campus Adlershof in south-eastern Berlin. Along with many non-university research institutions, these disciplines form the academic core of the highly productive science and technology park of Berlin Adlershof, which is home to some 400 companies. These include a variety of HU spin-offs which receive guidance in their start-up phase from Humboldt Innovation GmbH (HI), a legally and financially independent HU organisation specialising in knowledge and technology transfer. One of HI's services involves managing the "Spin-off Zone" at Campus Adlershof. Designed for graduates interested in setting up their own companies, this pre-incubator offers space for developing innovative ideas into successful business concepts. As part of its collaboration with WISTA-Management GmbH – the company that operates the Berlin Adlershof park – HU is actively involved in the strategic development of the location. This creates good prospects for recruiting academic and industrial partners and encouraging them to set up in Adlershof.

Since 2002, mathematics in Berlin have a common flagship in the DFG Research Center Matheon. Over the ten years of its funding, this all-Berlin enterprise, headed by Technische Universität Berlin (TU), has achieved a reputation that extends far beyond Germany's borders. In 2009, the institutions that run Matheon concluded a pioneering agreement that provides the foundation for continuing this unique institution into the future. HU and Freie Universität Berlin (FU) also make essential contributions to the Research Center. All three universities jointly run the Berlin Mathematical School (BMS), which is associated with Matheon. Furthermore, computer science at HU is attracting increasing

attention thanks to work on software development and, in particular, on self-organising systems.

The natural sciences at HU are, like mathematics, characterised by close cooperation with research institutions in the Berlin area and by an exceptionally broad spectrum of academic approaches. To develop new interdisciplinary research projects, HU used initial funding from its own budget to set up the **Integrative Research Institute for the Sciences** (IRIS Adlershof) in 2009. Interdisciplinary research at IRIS Adlershof focuses on two main areas. The first is concerned with "new concepts for information processing using hybrid systems made up of organic and inorganic materials". The second looks at the "structure of space, time and matter on very large and very small length and time scales, as well as in complex systems". With regard to the first area, in May 2011 the DFG approved the setting up of the new SFB HIOS – Hybrid Inorganic/Organic Systems for Opto-Electronics. It focuses on innovative hybrid systems that combine inorganic semiconductors, metallic nanostructures and conjugated organic materials.

Within IRIS Adlershof, HU researchers from physics, chemistry, mathematics and computer science work closely with their strategic university and non-university partners. These include technology-focused companies, and institutes of the Helmholtz and Leibniz associations, the Max Planck Society, the Fraunhofer-Gesellschaft, and the Federal Government's departmental research.

Physics at HU works in partnership with institutions like the Deutsches Elektronen-Synchrotron (DESY) in Zeuthen, and the Max Planck Institute for Gravitational Physics (Albert Einstein Institute) in Potsdam. It makes important contributions to the major international collaborative projects focusing on particle physics and astrophysics, and is also working on developing a new basis for mathematical physics. At the same time, physics at HU is also a partner of the Helmholtz-Zentrum Berlin für Materialien und Energie (HZB), the Federal Institute for Materials Research and Testing (BAM), the Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy (MBI), and of other institutions of the Leibniz Association in projects on interdisciplinary materials research and optics. Chemistry at HU participates in these investigations, but in particular, it plays a crucial role in the TU-headed Cluster of Excellence Unifying Concepts in Catalysis (UniCat) and runs the project for the Graduate School for Analytical Sciences Adlershof (SALSA) in collaboration with BAM and physics at HU. Klaus Rademann and Nikolaus Ernsting are the Leibniz Prize-winners in the Department of Chemistry.

The current upswing in the natural sciences at Adlershof is a product of two factors. On the one hand, the positive development rests on a consistent policy of strategic cooperation between the University and non-university institutes. HU will continue to expand on this development in future by making extensive and diverse use of the instrument of joint appointments. On the other hand, the success of the natural sciences at HU is the result of providing young researchers working in the field with intensive support – which includes appointing individuals to key positions early on in their careers. It is thanks to such long-term efforts to provide comprehensive support to young researchers that HU is the only university to have reached the full-proposal phase of the second phase of the Excellence Initiative with four new draft proposals for Graduate Schools.

In summary, HU is a research university that delivers top-level achievements in a wide variety of fields in both national and international comparisons. Leading positions in rankings are proof of this, as are the University's institutional renown and the high standing of many of its members within the academic community and in society as a whole. Following German reunification, HU accomplished an impressive feat of reconstruction to reattain this status, which it was able to take for granted in the 19th and early 20th centuries. HU owes this success to its determination to stay true to its central concept of individuality by attracting and retaining the brightest minds. To maintain and raise this level in the face of increasing competition, HU will continue to focus on the concept of **individuality** in its Institutional Strategy. At the same time and in line with the central concepts of **openness** and **guidance**, HU is continually improving its institutional profile by identifying new areas of research focus and by building new partnerships.

## 2.3. Existing framework for top-level research

### 2.3.1. Internal research promotion

Ever since it was founded, one of HU's fundamental principles has been to appoint outstanding individuals to the University. The large number of excellent faculty appointed since 1990 shows that HU offers its professors an extraordinary level of freedom in realising their academic ideas, a creative atmosphere, a wide variety of opportunities for networking and collaborations, and very good working conditions. The University uses performance incentives and objectives in allocating resources between faculties – but faculties are free to apply this system as they wish when allocating resources internally. The focus is on providing individual researchers with optimum support.

HU's instruments for internal research promotion are designed to support the initiatives of its individual researchers and thereby to develop the University's research profile. HU provides financial support for preparing applications for national and European funding bodies. To promote intra-university collaborations, HU has set up **Interdisciplinary Centres** (ICs) and **Integrative Research Institutes** (IRIs). The ICs, successively established since 2000, are focused collaborative research projects that run for a limited period of time. They receive financing from HU and will supplement this with third-party funding. The University now has 13 ICs, which cover a broad spectrum of topics and range from the Center of Infection Biology and Immunity (ZIBI), to the Hermann von Helmholtz-Zentrum für Kulturtechnik, to the C.A.S.E. – Center for Applied Statistics and Economics.

As part of HU's 2007 Institutional Strategy in the first phase of the Excellence Initiative, the IRIs were conceived as research-strong interdisciplinary institutes that shape the University's academic profile and develop focal areas of collaborative research at HU over the long term. In summer 2009 HU founded the **IRIS Adlershof** (see above) and provided it with funding. In addition to its research activities, IRIS Adlershof has also established itself as a framework for interdisciplinary collaboration and as a laboratory for developing the campus and renewing its research structures. In line with these functions, the instrument of **Bridging Professorships** is being expanded as a constitutive element of IRIS Adlershof. It is used strategically to identify upcoming research foci at the boundaries of individual disciplines. A new Professorship of Mathematical Physics of Space, Time and Matter – created using University funds – has been complemented with an Alexander von Humboldt Professorship for Mathematical Physics. IRIS Adlershof also takes on functions of an Institute for Advanced Studies by bringing international researchers to HU. The Centre for Integrative Life Sciences (CILS) was originally designed as an IRI in 2009. Since then it has refined its focus to concentrate on human decision-making, and has thus developed into a smaller-scale centre – Mind and Brain Research (MBR) – which is part of the Berlin School of Mind and Brain. In the future, MBR will bring a humanities perspective to the biology- and medicine-focused **IRI for the Life Sciences** at Campus Nord (cf. Section 3.3.1., p. 40).

As a service for members of HU, the Research Division holds informational events directed at various target groups and provides individual advice on applications for external funding. A large part of the Research Division's work currently involves managing third-party funds. Funds from industry and advice on EU programmes are currently taken care of by Humboldt Innovation (HI). To provide greater support for top-level research at

HU by screening funding opportunities in advance, and to relieve researchers of ancillary tasks, the Division will be restructured and expanded to create a **Research Service Centre**.

Using national and international comparative data, the **Quality Management Unit**, which evaluates teaching and research, analyses the strengths and weaknesses of HU's research profile and of the activities of individual departments. These analyses serve as the basis for the Executive Committee's strategic planning.

Research at HU benefits from this research-promotion framework and is now highly developed and capable of competing at an international level. However, the University still does not have an internal funding system that can complement financing from the major organisations, launch initiative projects, offer short-term interim funds, or provide flexible financing to bring top-level researchers to the University, retain them or open up special research opportunities for them. The **Strategic Innovation Fund** that HU developed as part of its Institutional Strategy responds to these requirements.

### 2.3.2. Collaborative research

The Berlin-Brandenburg region, with its unusually dense network of universities and research institutions, offers a unique location for collaborations in every academic field. Most collaborative research projects come about through contacts between individuals (bottom-up). They provide the basis for successful partnerships in Collaborative Research Centres, Research Training Groups and other joint projects, right up to the schemes that are already receiving, or are applying for funding through the first and second funding lines of the Excellence Initiative.

Within HU's high-profile areas, collaboration is particularly close and intensive. Around 50 leading researchers from non-university research institutions have been appointed as **Special Professors** (S Professors) at HU. This form of collaboration opens up a variety of networking opportunities. They range from incorporating research topics from non-university institutions into academic teaching, via HU scientists performing research at a non-university institution, to dual appointments with separate functions and shared facilities at the University and the partner institution. In recent years the variety of HU's instruments for academic collaboration has once more increased significantly. The University operates coordinated investment and building planning, and has numerous agreements in **profile and staff planning** that go above and beyond the traditional S Professorship. In addition, HU maintains a wide range of partnerships, particularly with the

Leibniz Institutes in Berlin Adlershof, with the MDC (especially in the field of systems biology) and with HZB in materials research and accelerator physics. At IRIS Adlershof, HU and HZB have established a new Bridging Professorship for Supramolecular Systems. Situated at the interface of physics and chemistry, the new position will help develop research at the boundaries of these disciplines. This professorship also comprises the OPen Access Laboratory (OPAL) for Advanced Materials. OPAL supports cooperation between materials sciences at HU and relevant partners from research and industry. It transfers expertise from the University to industry. Businesses and research institutions can choose to send their own employees to OPAL or involve staff in joint projects.

As part of a privileged partnership, HU has worked with the Leibniz Association to set up joint **Leibniz-Humboldt Professorships** for young researchers. The professorships, which run for nine years and have a teaching load of four hours per week, will strengthen the connection between teaching and non-university research. The first two professorships of this kind were set up with the help of the Einstein Foundation Berlin. One is a joint appointment in structural physics with the Leibniz Institute for Crystal Growth. The other is in the field of chemical biology and was set up with the FMP.

HU organises numerous projects and exhibitions with the State Museum of Berlin and the Prussian Cultural Heritage Foundation. It is also working with them to set up the future Humboldt Forum, which is to be installed within the Berlin Palace currently under reconstruction in Berlin-Mitte. HU receives support from the **Humboldt-Universitäts-Gesellschaft** and the **Stiftung Humboldt-Universität** (the University's associations of alumni, friends and sponsors) for a wide variety of activities designed to engage the public in academic discourse.

This extensive collaboration is an indicator of the top-level research being done at HU. However, the complexity of the organisation of collaborative research projects today confronts universities with increasing challenges when they wish to conclude suitably efficient, reliable and legally secure agreements with partner institutions. As part of the Institutional Strategy and in line with the concept of **the Role-model Cooperative University**, HU is exploring new ways of strengthening the professionalism which university management in this field demands.

### 2.3.3. Promotion of young researchers

HU made **promoting young researchers** one of its central concerns at an early stage and has since succeeded in becoming one of Germany's leading locations for educating young talent. HU consciously focuses on a variety of possible routes to gaining a PhD so

that it can offer each doctoral student an academic working environment tailored to his or her individual needs.

The majority of PhD students at HU perform their research in an individual mentoring relationship where they receive support for their academic progress mainly from their PhD supervisor. Within the departments, students are often members of working groups or collaborative projects. Parallel to this, HU also places great importance on using structured programmes to promote PhD students. Since the mid-1990s, the University has been a front-runner for many years by the number of its DFG Research Training Groups. Its success in this area continued this year, when the latest DFG communication on Research Training Groups, published in May 2011, again put HU at the very top of the list. HU is well-positioned in the competition of the Excellence Initiative, with four approved Graduate Schools and four applications for new Graduate Schools. For these, it was able to build on the experience of structured programmes in almost every discipline. HU currently has 33 young researchers working on DFG grants for “temporary positions for principal investigators”, nine junior research groups receiving funding from different sources (e.g. the Emmy Noether Programme funds three of the nine), twelve Research Training Groups (and seven participations in groups led by other universities), as well as 30 other Graduate Schools and PhD programmes (funded by the Excellence Initiative, DFG, the German Academic Exchange Service DAAD and others).

When it founded the **Humboldt Graduate School** (HGS) in 2006, HU created an umbrella organisation for promoting PhD students and for encouraging communication between its structured doctoral programmes. HGS currently includes 14 selected programmes, which fulfil particularly demanding requirements in terms of supervision of PhD students, of academic training and of internationalisation, and gender equality. The programmes range from the Graduate School of **A**ncient Philosophy to the **Z**IBI Graduate School for Infection Biology and Immunity. An admissions procedure is used to accept additional programmes into the HGS if they meet strict quality criteria. The HGS has the core task of developing supervision standards and at ensuring the quality of structured PhD programmes; thus it is a visible affirmation of HU’s commitment to fostering its excellent young researchers.

The HGS currently has three main tasks. In addition to the subject-specific training provided by the HGS member programmes, the School offers PhD students a wide range of soft-skills training that covers academic courses (teaching, presentation and publishing skills, etc.) and career-oriented activities (networking, coaching). It also runs further-training events and organises a one-year mentoring programme.

HU is also very successful with regard to **Junior Professorships**. Since this staff category was introduced in the 2002 summer semester, HU has appointed 96 junior professors, which the CHE found to be more than any other university in Germany in 2007. As a rule, every Junior Professorship awarded has a **tenure option**. Of the 48 Junior Professorships that have expired to date, 43 professors have been appointed to universities in Germany and abroad. Of those, 11 have been appointed to HU via the tenure option.

However, beyond the Junior Professorships and junior research groups, HU has not yet developed systematic concepts for promoting individuals in the delicate postdoctoral phase. With its **HU Postdoctoral Fellowships** and **Scholarships**, which form part of the Institutional Strategy, the University will provide solutions for stabilising this phase. At the same time, it will develop an instrument to significantly increase the number of women working in this crucial phase of an academic career. By developing the HGS into an overarching platform for securing a culture of supervision and mentoring in PhD studies, HU is improving the basis for students with *enquiring minds* to make successful transitions to this next qualification phase. As such, the HGS is a major component of the Institutional Strategy.

### 2.3.4. Gender equality

Based on the total number of its members, HU is a female university. Well over 50% of all students who successfully gain their first degree are women. But with every further level of qualification, that figure drops – especially in the stage between PhD and professorship. From 2007 to 2009, the number of female professors continually increased, and the proportion of female junior professors appointed in this period even grew from 54% to 73%. However, with regard to all W2 and W3 positions, the proportion held by women, about 20%, is unsatisfying. For new appointments to W2 and W3 positions made since 2002, the figure is currently around 23%.

To tangibly increase the number of women in top academic positions, one of HU's main priorities is to drive forward the principle of equality between men and women. Gender equality is a goal anchored in HU's constitution and in its 2002 mission statement. Responsibility for implementing this goal lies with the President.

HU has carried out considerable preliminary work to achieve gender equality. In June 2011, as part of the follow-up to the "Research-Oriented Standards on Gender Equality", a DFG working group found that HU is among the 20 German universities whose gender-equality concepts are already at the highest level (Level Four) of implementation and demonstrate an entirely convincing overall strategy. This is also confirmed by HU's good

results in the university ranking in terms of gender equality published by the Center of Excellence Women and Science (CEWS).

The instruments HU uses to achieve equality between men and women include incentive systems for promoting women, a **female Junior Professorship Programme**, a **gender equality fund** and the **Caroline von Humboldt Prize**. The latter aims at promoting young female researchers and is endowed with €15,000. It was awarded for the first time in October 2010. The **Harnack Programme**, originally introduced by HU in 2002, is designed to promote female professors through anticipated appointments to succeed chair holders on their upcoming retirement. It has since been taken up by the public authorities and is continuing to be run successfully.

HU also helps its members to reconcile the demands of working/studying and family. It is expanding its services in this area to help relieve the pressure on fathers and mothers alike. With the **Family Friendly University Certificate** that it received in 2009, HU has undertaken a long-term commitment to improve and further expand its existing measures. This led to the opening of the **Family Office** in June 2010. The Office provides University staff and students with information, advice and support in all aspects of work/study and family compatibility. In collaboration with the Studentenwerk Berlin, HU is planning to re-establish a University kindergarten. With regard to recruiting and retaining staff, HU and the other Berlin universities are working together in the **Dual Career Network Berlin**.

HU has developed an effective portfolio of measures for promoting equality between men and women. The **Caroline von Humboldt Programme** aims to help the University now make the leap to anchoring gender equality in its Institutional Strategy for promoting top-level research.

### 2.3.5. Internationalisation

Academics at HU work in high-level international research projects that are based on individual contacts. Further international collaboration at HU is built on intensive student- and researcher-exchanges (HU was ranked top of the list in the 2010 ERASMUS Annual Report), academic collaboration at the faculty/departmental level, in interdisciplinary collaborations and in joint degree programmes that award dual or joint master's degrees and PhDs. It also involves joint applications for third-party funding, summer and winter universities, and administrative benchmarking.

At the heart of HU's international collaboration are its contacts to universities such as **King's College London**, **Sciences Po** (Paris), **Peking University** and **Waseda University** (Tokyo), as well as its long-standing partnerships with **Universidad de La Habana** and **Vietnam National University** (Hanoi). HU is currently expanding alliances with strong research universities in its high-profile areas – such as physics, which is linked to **Chiba University** (Japan) and to the **National University of Singapore**. In total, HU has faculty and university partnerships with some 200 universities around the world.

HU currently offers 63 international programmes (27 master's and 36 doctoral programmes). Most of these are run in collaboration with international partners, and almost all of them are taught in English. One very good example is the Humboldt European Law School, which is jointly run by HU, the University of London and the Université de Paris 2. It offers an integrated European law programme that leads to three professional qualifications. The German Turkish Masters Program in Social Sciences, a collaboration with the Middle East Technical University in Ankara, is another example of HU's successful international joint degree programmes.

A new master's programme in European History is currently being set up under HU's leadership and in collaboration with ten other universities in the UNICA Network of Universities from the Capitals of Europe. Starting in the 2011/12 winter semester, HU will be offering new international degree and PhD programmes in partnership with Vietnam National University, the University of Virginia and King's College London.

The study entitled "International Student Support in European Higher Education", which was recently carried out across Europe and published in 2010, certified HU's wide variety of services for foreign students as being of the highest quality according to European standards. The first port of call for international students coming to HU is the recently opened **Student Service Centre**, which is located in the main building on Unter den Linden. The Centre also offers advice for HU students wishing to go abroad.

HU succeeded in attracting around 25% of its PhD students from abroad in 2009/10. In the DAAD Funding Ranking, it has been top of the list for years, both with respect to individual support programmes and to institutional funding mechanisms, including exchanges of teaching staff. Since 2005, HU has also been one of the three most popular universities among scholars who attend German universities on funding from the Alexander von Humboldt Foundation, receiving 176 visiting fellows in that period.

HU has an excellent international reputation – a fact that was confirmed by the **Audit Internationalisation of Universities**, carried out by the German Rectors' Conference

(HRK) in 2011. To date, however, the University has not had sufficient success in visibly bringing its international contacts into line with its research profile and in prioritising them accordingly. With this in mind, HU developed the **KOSMOS Summer University** and the **Humboldt International Scholars** as part of its Institutional Strategy. These two instruments are designed to make the University's research strengths the focus of its policy for international networking.

### 2.4. Research-oriented teaching

Teaching at HU faces a double challenge. On the one hand, it has to guarantee an education that provides an academically demanding professional qualification; on the other hand, it has to educate and promote *enquiring minds* as future researchers. In the coming years, the student body will become increasingly heterogeneous – with regard to the qualifications with which students enter their courses, their cultural and social backgrounds, countries of origin and study expectations. HU is preparing for this development in the following ways:

In 2009, under the motto **Humboldt studies Bologna**, HU completed the process of converting all programmes set out in the Bologna reform to bachelor's and master's programmes (German average: 82%). Of these, 69% are accredited. This puts HU ahead of the average in Germany's federal states (54%) and in the State of Berlin (52%). In addition, HU places great importance on a teaching culture where it is a matter of course for exemplary teaching and excellent research to be closely intertwined. To continually improve teaching from the undergraduate level upwards, HU participates in the Berliner Zentrum für Hochschullehre (BZHL), whose further-training programmes and resources for university teaching can be used by all teaching staff at HU. The University honours outstanding teaching with its annual **Teaching Award**, which is endowed with €10,000. Individual faculties also have their own awards for recognising excellent teaching. The positive effects of these initiatives are reflected in HU's graduation success rate, which exceeds 80%. The German average is around 70%. In addition, students who wish to gain teaching experience at an early stage in their academic careers can propose to run their own **project tutorials**.

At present, HU is systematically redrafting its existing study regulations to drive the reform process forward in order to improve study feasibility, raise graduation rates and make the curricula more flexible. This includes creating more opportunities for students to define individual areas of focus within a degree programme, and providing more time for them to pursue their own academic interests.

The possibility of completing a **fast-track PhD** – which is currently only offered in mathematics, the natural sciences and one of HU's Faculties of Arts and Humanities – increases the options for individuals to shape their own route into a research career. HU plans to gradually introduce the fast-track PhD to all disciplines. This will allow particularly talented students to move directly from their bachelor's degree to a PhD that incorporates a master's qualification.

With the success of its **Transitions** proposal in the "Quality Pact for Teaching" of the federal and state governments in May 2011 and its acquisition of €13 million for the next five years, HU is raising its initiatives to strengthen teaching and secure the sustainability of excellent learning and research to a new level. The Transitions proposal focuses on the transitional phases of academic careers and was developed and submitted as a counterpart to the Institutional Strategy. HU will use funds from the "Quality Pact for Teaching" to set up integrated projects that promote research-oriented teaching and focus on these transitions.

One important requirement for quality in research-oriented teaching is excellent **teacher training**: 17% of HU students are enrolled in teacher-training programmes. Overall, HU offers the most comprehensive range of study options in this field in the State of Berlin. In recent years, the University has gone to great lengths to create didactic professorships for all disciplines relevant to teacher-training. Their successful research is underscored by active acquisition of third-party funding, staff links with the IQB (founded in 2003) and collaboration in the Interdisciplinary Centre for Educational Research (IZBF, founded in 2007). However, because HU previously lacked a joint platform for curricula and organisation in the teacher-training fields, it was unable to pool and develop these positive developments. Alongside the teacher-training faculties, the responsibilities were divided between the Joint Commission for Teacher-training Programmes (founded in 2006) and the Teacher-training Service Centre. HU's success in the "Quality Pact for Teaching" has changed this situation: with the **Humboldt Professional School of Education** (PSE), teacher training now has an organisation within the University that reflects the importance of this field.

With a multitude of other activities – e.g. the 24 existing project tutorials, which are to be doubled in number through the **HU Q Programme** (cf. Section 3.3.3.), and the Humboldt-ProMINT-Kolleg, which is funded by the Deutsche Telekom Stiftung – HU is focusing a great deal of attention on research-oriented teaching. Another core project, the National Centre for Teacher Training in Mathematics was also approved by the Deutsche Telekom Stiftung in June 2011. Six universities from Berlin and North Rhine-Westphalia

will participate here under the coordination of HU. Establishing this centre is another example of the way in which HU's Institutional Strategy links all its initiatives for strengthening teaching and teacher training with its plans to promote top-level research. Yet another important contribution to research-based teacher training is expected to come from the research programme "Measuring and Modelling Competence in Higher Education", which is being funded by the BMBF since July 2011 and coordinated by HU.

### 2.5. Governance and decision-making

As a university with a complete range of disciplines and currently eleven faculties – one of which, the Medical Faculty (Charité), also belongs to FU – HU must respond to complex governance requirements on a daily basis. HU's departments are independent units within the faculties that hold full responsibility for research, teaching and the promotion of young researchers in their fields. The same applies to "monodisciplinary faculties", which are not subdivided into departments.

HU's **Executive Committee** comprises the President and the Vice-Presidents, who are responsible for Research, for Academic and International Affairs, for Finance, Personnel and Technical Matters, and who lead the University's central administrative units. The authority to determine general policy lies with the President.

The **Board of Trustees**, the **Council** and the **Academic Senate** are the central governing bodies of HU. The Board of Trustees performs strategic supervisory and consulting tasks, and is responsible for budget and structural development decisions. The Council has two main tasks: it decides on the constitution and elects the members of the Executive Committee. The Academic Senate takes decisions on academic matters and therefore on crucial processes, such as defining the academic domains of professorships, structural planning for the University, establishing and discontinuing degree programmes, founding ICs and IRIs, and opening SFBs. At present, the **Concilium Decanale** mainly serves as a forum for regular exchange between the Executive Committee and the deans of the faculties.

The core processes of the University involve setting up degree programmes, appointing professors and managing the budget. Given the long-term nature of these positions, the process of appointing professors has by far the greatest impact on the University's identity. The faculties and the University management jointly organise appointments. Participating in these processes, academic staff are forced to perform ever more administrative functions as part of academic self-governance. The University administration has yet to establish suitable structures to allow staff throughout the University to adequately per-

form inter-departmental multi-sector tasks. To solve both of these problems and to support academic and administrative staff in performing their core duties – and above all to allow sufficient time for researchers to carry out their research and teaching work – HU's Institutional Strategy will create the conditions for developing a **culture of enablement**.

HU's internal governance is underpinned by its relationship to the state government. University Contracts secure basic financing over several years and guarantee that the State of Berlin will not intervene in the current University budget.

HU receives its **budget as a block grant** in which costs for staff and consumables are interchangeable, and investment funds may be increased unilaterally. Internally, HU applies the principle of subsidiarity to transfer budgetary responsibility to the faculties and departments. They receive funds for consumables and running expenses on the basis of a performance-based allocation procedure and are then free to manage the resources themselves (decentralised block grants) and to undertake decentralised staff planning. Faculties and departments enjoy a great deal of freedom and authority to decide on all matters that directly affect research and teaching. The relative independence provided by the decentralised structure is one of HU's strengths. The structure, however, has one key weakness: there is not yet sufficient coordination among the faculties themselves, between the faculties and the Executive Committee, and between the faculties and HU's central administrative units. However, these processes of coordination are crucial to a university, particularly in contexts that relate to its strategy (e.g. identifying areas for development in the research profile, monitoring reforms of degree programmes, and improving the internationalisation of the University as a whole). HU is planning to resolve this problem by reforming its governance to encourage closer collaboration between faculties and, above all, to strengthen their capacities for decision-making and strategic planning. As a complementary measure, the Executive Committee's scope for action will also be increased. This will enable it to reinforce and improve management mechanisms appropriate to an academic institution, to reach better-targeted decisions faster, and to use funds to enhance the University's competitive capacity.

## 2.6. SWOT analysis

### Strengths

- Excellent appointments since 1990
- Outstanding research achievements and high third-party funding acquisitions
- Well-balanced research profile that focuses on the humanities, the life sciences, the natural sciences, and innovative interdisciplinary fields
- Close coordination of proposals in all funding lines of the Excellence Initiative; complementary links between the Institutional Strategy and the Transitions project from the "Quality Pact for Teaching"
- Strong collaborative research, cooperative networks in the research location of Berlin-Brandenburg
- Successful models for promoting young researchers: structured PhD programmes, early establishment of Junior Professorships
- Early implementation and continuation of the Bologna reform
- International perspective and openness towards the public
- An inspiring atmosphere and a high level of identification with HU amongst its members

### Weaknesses

- Executive Committee has relatively weak decision-making powers and few options for funding research
- Lack of coordination between faculties and University management, low level of involvement of faculties in strategic decisions, partially inconsistent faculty structure
- Lack of clear distinction between the IC and IRI funding formats
- Strengths in research collaborations and international relationships are not yet sufficiently visible as focus areas of the University strategy, and are not adequately linked to the research profile
- Few women in leading positions, instruments for personnel development not sufficiently tapped
- The administration faces difficulties in performing inter-departmental multi-sector tasks, administration not sufficiently service-oriented
- Extensive administrative burden on researchers
- Teacher training lacks internal networking and research-orientation, and offers too few attractive career opportunities for young researchers

### Opportunities

- Increase scope of action for the Executive Committee, higher strategic planning capacities in the faculties – e.g. through a faculty reform
- Transform HU into the Role-model Cooperative University, e.g. through new IRIs and by developing its research profile with international partners
- Achieve gender equality, especially in top-level research, as part of the Institutional Strategy through the Caroline von Humboldt Programme
- Promote HU members in all phases of their careers and strengthen comprehensive personnel development
- Provide scope to concentrate on top-level research by establishing a culture of enablement
- Strengthen research-oriented teaching and develop research-based teacher training

### Threats

- Budget situation in Berlin affords limited opportunities for equipping professorships – this could threaten HU's ability to compete in the field of appointments
- Delays in investment (long planning times for new buildings, holdups in renovation work due to lack of resources)
- Weakening of the unity of research and teaching as a result of strong large-scale and cluster research projects, top-level research could become disconnected from teaching

# 3. Institutional Strategy: Bildung durch Wissenschaft – Educating Enquiring Minds
Individuality – Openness – Guidance

## 3.1. Goals

With its Institutional Strategy HU is pursuing three goals, which it will implement under the central concepts of **individuality**, **openness** and **guidance**.

Goal 1: Excellent framework conditions for top-level research
Goal 2: Personal development and promotion of young researchers
Goal 3: Governance for academia – a culture of enablement

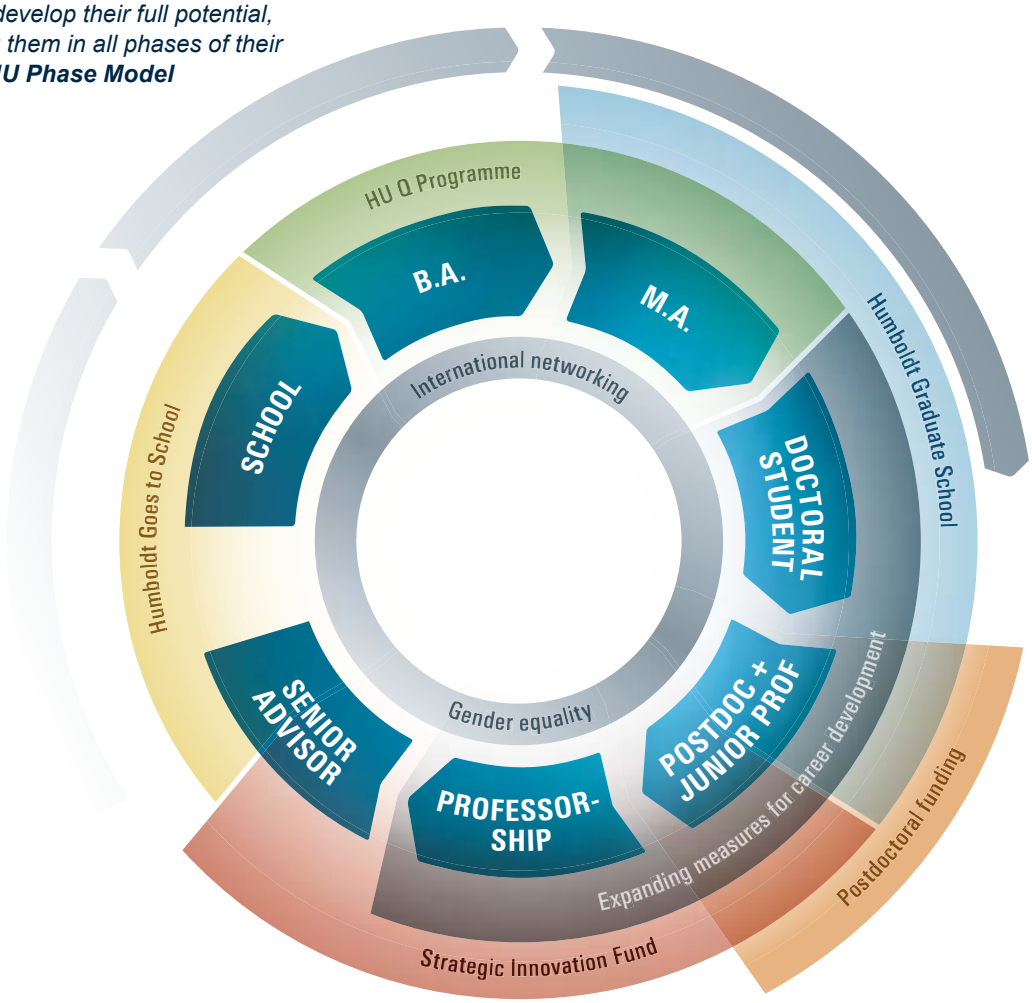

These goals conform to the objectives of the Excellence Initiative and address the challenges that German and European universities face today. Among these are the increasing regional and international competition to attract the brightest minds, the growing importance of securing career pathways for young researchers and, above all, the need to provide space for creativity and freedom in research. This is why HU's programme of **Bildung durch Wissenschaft** – *Educating Enquiring Minds* – places its main emphasis on allowing all individuals to develop their full potential. HU sees this process as an essential foundation for excellent research and teaching, and has therefore put it at the heart of its Institutional Strategy.

## 3.2. Strategy

HU is taking a multi-stage approach to implementing its Institutional Strategy. The first stage involves performing a comprehensive analysis of conditions and requirements and

then designing measures which precisely correspond to these. The second stage concerns intensive communication between the University management and HU's members, and their participation in developing concepts. The third stage is to establish effective project management.

*Recognising personal strengths, allowing individuals to develop their full potential, and promoting them in all phases of their career* ***– the HU Phase Model***




*Stage 1*

Using the SWOT analysis to develop measures for the Institutional Strategy:

The funding formats developed in the Institutional Strategy respond to the identified weaknesses and are designed to prevent risks and exploit opportunities. The **HU Phase Model** was developed on the basis of the analysis. This model maps the phases of an academic career which are key to allowing individuals to develop their full potential. It then relates the phases to funding formats tailored to individual needs, as set out in the Institutional Strategy. In particular, the model places customised support mechanisms at the transitions between phases. These mechanisms include a variety of formats, from

Humboldt Goes to School to the HU Q Programme and from graduate and postdoctoral funding to incorporating Senior Advisors. Furthermore, the model is open to the non-academic world, because it offers opportunities for entry and re-entry, as well as attractive exit options.

Differentiated support for research and use of best practices:
To take account of different research needs, HU has developed a range of funding structures that close gaps (e.g. initial funding, interim funds, creating opportunities) and respond to the cultures of different disciplines to give them the best possible scope to develop their potential. As a *learning organisation* and to avoid duplicate structures, HU has designed the new support mechanisms as pilot projects which can be expanded if they prove successful.

Increased use of profile-building measures:
The University's upcoming structural planning – the strategic allocation of resources which forms the multiannual basis for HU's budgets – is closely aligned with the Institutional Strategy. Along with the reform of the faculties, both these projects will constitute the key measures for shaping the University's profile. To develop areas of research focus, HU will use a combination of bottom-up and top-down management. Through a regular process of aligning their academic profile with the Executive Committee in executing the structural plan, the faculties will in future be closely involved in profile-building for the University as a whole. At the same time the Strategic Innovation Fund provides the Executive Committee with a steering instrument for launching research fields and internal competitive processes to promote overarching topics. This process is supported by the constitutional reform initiated by the HU Council on 14 June 2011. One of its aims is to simplify profile-building by clarifying rights of initiative and accelerating the overall process.

*Stage 2*
Use of communication and participation structures:
All University groups were involved in developing the Institutional Strategy at an early stage, in FOX and its working groups. There was also continual communication with the Academic Senate, with other governing bodies, and in specific Excellence Initiative information events for the wider University public. This involvement and communication will be continued throughout the implementation of the Institutional Strategy and supplemented by official reporting to the Senate and Board of Trustees.

*Stage 3*

Centralised project management, quality assurance:
The Institutional Strategy is being implemented by numerous individual agents throughout the University. However, all their activities converge at the point where the drafting of the proposal was coordinated and where it was harmonised with the projects in the first and second funding lines. This centralised project management ensures successful implementation of the entire process, and of quality assurance policies, which are supported by external consultations and evaluations.

Linking the three funding lines of the Excellence Initiative:
HU has produced proposals for all three funding lines of the Excellence Initiative and has networked them to form an integrated whole. Its first level comprises a common funding strategy. Resources from the third funding line are used to fund overarching projects concerning the University's research profile as a whole. The Graduate Schools and Clusters of Excellence take up the most important formats of support developed as part of the Institutional Strategy and implement them with their own funds, e.g. by setting up their own programmes for postdoctoral researchers.

On the second level of the network, the Institutional Strategy creates frameworks that support the projects in the first and second funding lines. This primarily concerns the IRIs, but also applies to the expanded services of the University administration, and to new structures for overarching University tasks. These include the HGS's services for promoting young researchers, the Centre of Expertise for Cooperation in Academic Research and outreach projects like Humboldt Goes to School. For gender equality and family-friendliness, the projects in the first and second funding lines are planning financing that will complement the support coming from the third funding line, e.g. by pooling resources.

At the third level, the new internal funding formats of the Institutional Strategy provide a better foundation for the continuation of research projects, particularly those in the first and second funding lines. Resources from the Strategic Innovation Fund can provide projects in the Excellence Initiative with interim financing to help them acquire follow-up financing or initiate new projects. The ICs and IRIs in particular have proven to be instruments that make it possible to continue, in an attractive environment at HU, collaborative research projects previously supported externally.

By coordinating the three funding lines via a common strategy, by sharing joint structures (which saves resources) and by creating long-term perspectives, HU is ensuring that the Institutional Strategy takes effect at every level of the University.

## 3.3. Measures and expected effects

### Goal 1:
### Excellent framework conditions for top-level research

#### 3.3.1. Strategic Innovation Fund

As a central component of its efforts to improve the framework conditions for top-level researchers, HU is setting up a **Strategic Innovation Fund**[4]. With the aim of establishing a differentiated system of internal research funding, this project pursues the following key objectives:

- Open up opportunities for creativity in developing concepts for research and teaching
- Provide flexible, targeted support for promising research initiatives from individual researchers
- Offer appropriate funding formats for creating new research collaborations in different disciplinary cultures and on different scales
- Improve the implementation of new strategic directions and of sharpening the research profile through more precise, focus-oriented allocation of resources
- Promote international networking in research
- Achieve gender equality throughout the University

As part of HU's internal research funding, the University will allocate resources from the Strategic Innovation Fund in the following competitive **funding programmes**:

- Excellent Research and Teaching
- Caroline von Humboldt Programme for Gender Equality
- Internationalisation of Research
- Collaborative Research

A multi-stage process exists for quality assurance in allocating resources from this flexible fund. For overarching structural and strategic decisions, HU consults its Scientific Advisory Board. External reviewers are called upon and evaluations commissioned for decisions on research proposals.

Resources in the research-oriented funding programmes Excellent Research and Teaching, and Collaborative Research are interchangeable, which provides flexibility in their use.

4 In this section, **coloured marking** is used for measures that are to be funded from the third funding line of the Excellence Initiative.

## Funding programme: Excellent Research and Teaching

The four funding lines in this underlying programme are designed to complement the portfolio of existing national and European research funding organisations. HU uses different funding formats, which are tailored to the specific needs of the natural sciences, the humanities and the social sciences.

### *Funding line: Creating Opportunities – Focus on the Humanities*

Key criteria for the ability to compete in the academic world today are defined by the need to adopt an interdisciplinary approach and by the undeniable benefits of developing far-reaching networks. Standard formats of research funding are geared towards this situation. However, there is an element of uncertainty with regard to identifying optimum conditions for excellent individual research at the University, particularly in the humanities. Given the high level of cultural, social and political interest in a variety of questions in the realm of the humanities, this field is in special need of links to a wider public to improve its visibility.

Most researchers in the humanities are not involved in large collaborative projects. This is partly due to the objects of their research and their approaches to them. But regardless of the culture of the discipline, individual researchers – as the authorities indispensable for understanding and for the advancement of knowledge – must receive distinctions and awards on the basis of merit, be supported in a collegial spirit, and be protected in their rights by their institution.

Concentrated thinking needs places for retreat, but it also requires opportunities for discussions free of time pressure. The colloquium is the traditional social space for exchanging ideas and discussing project initiatives and innovative applications. Therefore, the advancement of research in the humanities should be geared towards an interplay of the investigation of sources, reading, writing, expert debates, argumentative scrutiny, exchange in small groups, and the testing of findings in the public sphere. The University should encourage these activities and provide places and events that challenge individuals to go beyond their boundaries. The humanities need options that both inspire intradisciplinary dialogue and simplify interdisciplinary collaboration – also (and in particular) with the natural and social sciences. With its universities, research institutions, academies and collegia, as well as a high level of public interest, Berlin presents unique opportunities for making these options a reality.

The disciplines and domains in the humanities distinguish themselves through a productive transfer between research and teaching. It therefore appears desirable to create

conditions to stimulate research achievements at this point of intersection, too. For example, in certain project phases – like finishing a book – researchers need to be relieved of their teaching load but not of regular contact to their colleagues or to students outside normal teaching contexts. Funding appropriate forums for exchange, for sharing information on current projects or for presenting books is just as important for stimulating inspiration in research as it is for maintaining a culture of communication within the University.

Overall, the advancement of research in the humanities does not so much need another format as it needs a different *approach* that recognises its various individual working methods (including the more contemplative), and creates an environment that accommodates their specific needs. This kind of approach should apply to academia as a whole, but HU currently feels that it is particularly needed in the humanities.

With this in mind – and also with a view to the culture of enablement it is striving for – HU is setting up the funding line **Creating Opportunities**. Within the Strategic Innovation Fund, it will contain a range of tailored measures, which will make it possible to support planned individual projects or experimental ideas for new research trends. As part of the Creating Opportunities funding programme, HU is setting up the **Humanities Forum**, which will monitor developments in the relevant disciplines at the University, recognise or initiate new trends, identify needs and encourage meetings. The Forum comprises a group of renowned researchers from the field, who will regularly advise the Executive Committee and make recommendations on promoting the humanities at HU.

***Funding line: Kick-off Funding***

To develop larger research projects in all disciplines (e.g. in coordinated DFG programmes and similar programmes at other organisations), HU will provide **start-up funding** and resources for **securing renewal proposals**.

In addition, the Executive Committee is launching a University-wide competition for the **Humboldt Research Award**, which will have a different theme every year and will provide funding for projects in research and research-oriented teaching. The chosen themes will focus on current topics in research that require contributions from different disciplines.

***Funding line: Tandem Funding***

To support **joint research and teaching**, HU will use the Strategic Innovation Fund to give young researchers a limited contract to participate in the teaching commitments of a tandem partner (a University teacher). The young researchers receive mentoring from their partner and also work in a team on a joint research project. The goals of the tandem are to provide young academics with greater experience in research and teaching, and

to enable researchers of different generations to inspire each other through collaborative academic work.

***Funding line: Continuity of Excellence in Research***

If HU is to remain competitive, it must have the capability to retain excellent researchers and pursue a proactive international appointment policy. Therefore, it is setting up a pool within the Strategic Innovation Fund for **anticipated appointments**, **interim funding**, and for **investments** needed at short notice for high-profile areas.

**Caroline von Humboldt Programme**

By setting up the **Caroline von Humboldt Programme for Gender Equality**, HU has made the promotion of equal opportunities for men and women one of its major strategic organisational goals. It is thus counteracting the fact that women leave the academic system more often than they reach senior positions in it, despite holding the highest qualifications. As an overarching programme of measures to promote gender equality, the Caroline von Humboldt Programme will further the targeted recruitment of (junior) female faculty, support women individually at all career levels, and in particular enhance the visibility of top female researchers.

The measures will be implemented following the HU Phase Model to improve the parameters for women's career paths from the PhD to the full professorship level and to remove structural barriers. On the PhD level, the programme supports the targeted enrolment of junior female researchers, for example with the **Women's Travel Award**, which is based on a best-practice example at the Berlin School of Mind and Brain. This award is aimed at young female researchers who are considering to undertake a PhD in one of HU's structured PhD programmes. During a one-week stay, the potential candidates gain insight into the relevant programmes and are encouraged to apply for them. The "Graduate Programme Adlershof for Female PhD Students" is specifically geared towards outstanding young female researchers interested in a PhD in one of HU's mathematical or natural sciences fields. **Short-term**, **completion** and **return grants** allow young researchers to prepare for a PhD examination, to offset disadvantages or to facilitate returning to research following a break, thus compensating for personal circumstances (e.g., childcare, looking after relatives) and/or ill health. These grants aim to encourage excellent female graduates to stay in academia. In addition, transitional grants are provided for PhD students on parental leave who are not receiving parental-leave or extension grants from their third-party funding sources. An **Officer for Gender Equality and Family-Friendliness** will be based permanently at the HGS to provide support.

In the following and often decisive stage of an academic career, the postdoctoral phase, half of the grants in **HU's postdoctoral programmes** are to be awarded to young female researchers. A **Leadership Programme for Female Professors in Executive-level Positions** is set up for the tenured professorship stage. This will provide coaching for female faculty and will be developed in line with expanding measures for personnel development.

As a complement to the Caroline von Humboldt Award, which is aimed at junior female researchers at HU, a special award is allocated to outstanding experienced female researchers at HU. This serves both to recognise their achievements and provide start-up funding for further research projects. The title, **Caroline von Humboldt Professor**, enhances their visibility, not least as a role model for young researchers.

### Funding programme: Internationalisation of Research

HU fosters its diverse international contacts through its researchers and a large number of student exchange programmes. The funding programme **Internationalisation of Research** in the Strategic Innovation Fund builds on this strength. It consists of two combined funding measures, the **KOSMOS Summer University** and the **Humboldt International Scholars**, which are coordinated by the University's **International Office**.

With the KOSMOS Summer University, HU is providing an instrument for intensifying its researchers' international contacts. KOSMOS Summer Universities are set up on the initiative of HU researchers. Academics from HU, selected partner universities and non-university institutions will usually meet for two weeks at a KOSMOS Summer University to conduct research and teach together. The programmes are each drawn up in tandem with a colleague from an international university with proven strengths in the relevant field.

These international colleagues will be invited to HU for a year as Humboldt International Scholars to pursue research projects in the thematic context of a forthcoming KOSMOS Summer University. During this year, they will make contacts in the Berlin academic scene, have the opportunity to acquire intercultural teaching experience, and improve "international networking at home" at HU. Finally, KOSMOS Summer Universities will also serve as a governance instrument for a more intensive alignment of international partnerships with HU's high-profile areas. In this way, HU is focusing its international cooperations on excellent research partners and raising the international visibility of its research profile. It is thus pursuing a strategy that was recently praised in a preliminary interim report of the Audit "Internationalisation of Universities". This report also welcomed HU's plans to use Institutional Strategy funding to employ **Officers for International Affairs** in the faculties, who will serve as contact persons for all international matters.

Promoting young researchers by encouraging advanced bachelor's, master's and doctoral students from HU and the partner universities to participate in the KOSMOS Summer University is a further goal. During the summer universities, the participating students will collaborate in project groups, attend seminars, and learn about Berlin as a city and academic location during excursions. In addition, they will gain insight into the work of non-university research institutions and companies with close links to academia, and will receive information about opportunities for research and company internships.

The first KOSMOS Summer University will take place at Campus Adlershof in September 2011 on the physics topic of "Frontiers of Organic/Inorganic Hybrid Materials for Electronics and Optoelectronics". Chiba University in Japan and the National University of Singapore are the partner universities. The project is funded by the Master Plan of the Berlin Senate. A KOSMOS Summer University in the field of cultural studies is planned for 2012, while HU's high-profile area of systems biology will be the focal point in a subsequent year, in cooperation with the Charité and the MDC. In the future, two KOSMOS Summer Universities dedicated to varying topics from HU's high-profile areas are to be held each year. The focus on research and the active involvement of young researchers should make the KOSMOS Summer Universities attractive to international visitors.

**Funding programme: Collaborative Research**

As part of its Institutional Strategy to create tailor-made research environments for its outstanding researchers and to continually develop its profile, HU is concentrating on two funding formats for research cooperation: **Interdisciplinary Centres** (ICs) and **Integrative Research Institutes** (IRIs). These determine the profile of excellent interdisciplinary work and the promotion of young researchers at HU to a considerable extent. Both formats initially provide funding for a limited period and can be transformed into permanent university structures if they achieve sustainably excellent results. In such cases, they remain effective as research-led structures alongside the faculties or form the basis for the establishment of new faculties.

IRIs and ICs receive basic funding from the Strategic Innovation Fund for a limited period. This funding must be supplemented by the acquisition of third-party funding. The ratio of basic funding to acquired external support, including the possibility of providing matching funds, will be negotiated and will take into account discipline-specific features such as the possibilities to obtain third-party funding.

In providing these two funding formats, HU aims to differentiate the promotion of its research collaborations in functional terms, based on the different needs of the faculty

cultures (from working conditions and funding volumes to time constraints). ICs primarily develop from initiatives by cooperating faculties in a bottom-up process, while IRIs, as an instrument of overall university governance, are set up on the basis of the right of initiative held by the Executive Committee.

***Interdisciplinary Centres***

ICs have existed at HU since 2000 and have proven their value as smaller research incubators with a primary focus on intramural research. They support the development of thematic research collaborations between the faculties and provide them with a shared identity. In the context of the ongoing evaluation of the 13 ICs that exist at present, their profiles are sharpened, their funding criteria are made more precise, and the path to their establishment is simplified. The decision-making criteria for these changes are drafted by the Executive Committee and will be submitted to the **Scientific Advisory Board** for discussion. The goal is to use the ICs more consistently in the development of HU's research profile, to improve their working conditions and to increase their visibility. Promising initiatives for new ICs will receive start-up financing from the Institutional Strategy's funds on the basis of an assessment by external experts.

***Integrative Research Institutes***

With the IRIs, HU has developed an instrument that has already proven itself as a means of facilitating and promoting top-level research by building bridges between different disciplines (e.g. IRIS Adlershof). As a focal point in HU's Collaborative Research funding programme, which is a central part of its Institutional Strategy, the IRIs are helping HU respond to the "pillarisation" of Germany's university and academic system (the separation of universities and the non-university research sector into "pillars"). This phenomenon continues to make it difficult to optimally develop the existing potential found at the points of intersection between research by universities and non-university research institutions. In the future, the IRIs are to be effective in improving collaborative research in the Berlin-Brandenburg area in the framework of open cooperation structures that are conducive to academic work.

In this sense, an IRI provides:

- Further development of and strategic guidance on one or more of HU's profile-defining focal areas in collaborative research
- Coordination of professorial appointments, investments (equipment, buildings, infrastructure) and proposals for third-party funding for collaborative research projects

among the collaboration partners, including management of drafting the proposals

- Coordination of the promotion of young researchers, particularly the organisation of the IRI's own PhD and postdoctoral programmes
- Strategic discussion on personnel decisions and a proactive personnel policy, taking gender equality aspects particularly into account
- Shared use of office and laboratory space for interdisciplinary research projects and as locations for communication between the researchers involved
- Steering of campus development at HU's individual locations with cooperating non-university institutions
- Organisation of scientific events

This diversity clearly illustrates that the highest level of structural flexibility should be given to the interdisciplinary research collaborations combined in an IRI. An **IRI office** carries out the relevant coordination, organisational and advisory tasks. It works closely with the Centre of Expertise for Cooperation in Academic Research (cf. Section 3.3.2.) and simultaneously ensures the administrative support of the IRI by one or more HU faculties.

In each IRI, steering committees made up of representatives of the participating institutions and research projects, among others, define the strategic course, make operative decisions and steer the processes. In addition, a general assembly consisting of the researchers involved in the IRI may be set up.

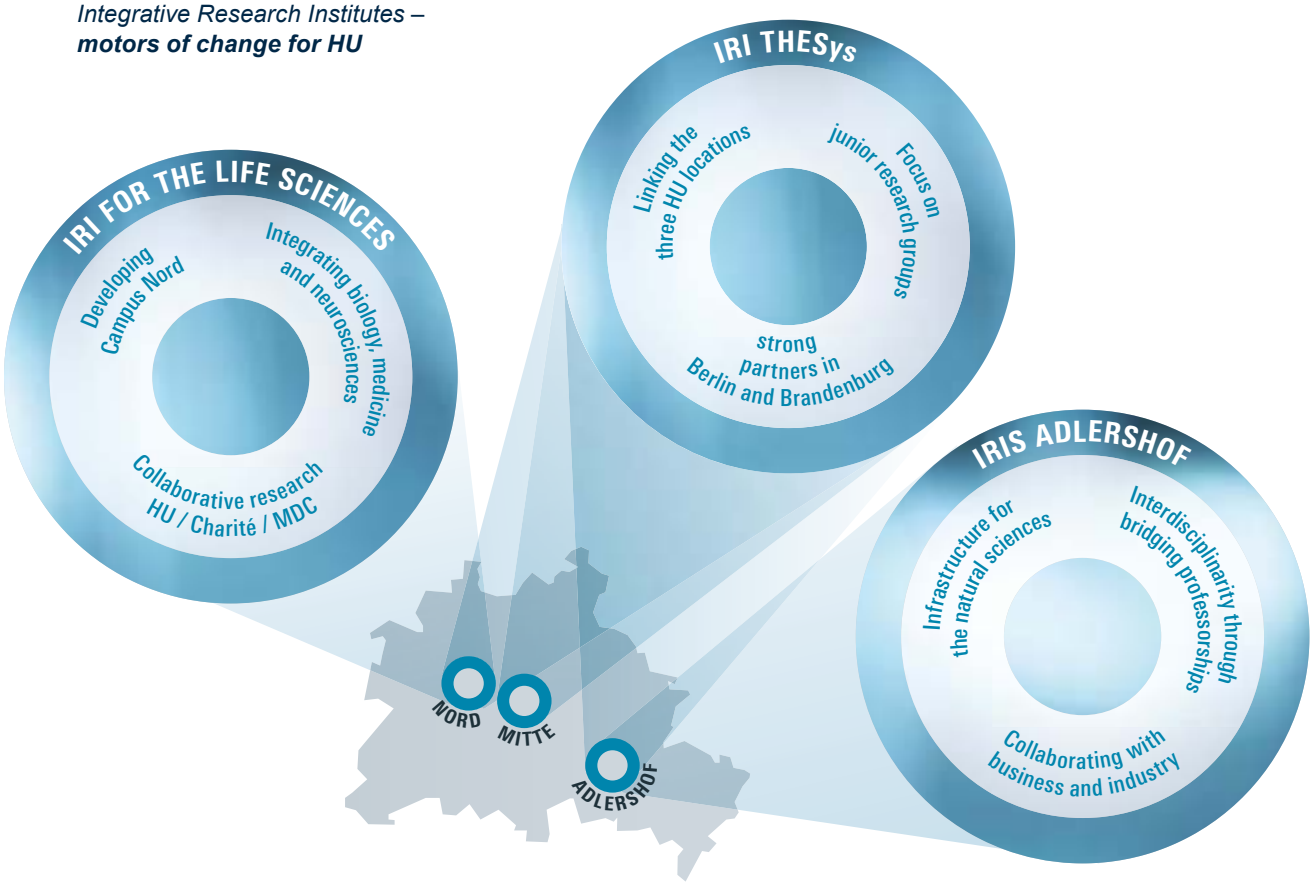
In its Institutional Strategy, HU is presenting a comprehensive development plan for three initial IRIs to be funded by the Innovation Fund. It is thus pursuing overarching strategic profile-building goals and, in each IRI, implementing specific – and complementary – structural motors of change for the entire university. This development plan consists of:

- The **further development of IRIS Adlershof**, with the expansion of the best-practice model of interdisciplinary Bridging Professorships, the further development of cooperative infrastructure for the natural sciences and the strengthening of cooperation with business and industry
- The **establishment of the IRI for the Life Sciences at Campus Nord**, with the integration of biology, medicine and the neurosciences in the framework of building new

structures for research collaboration between HU, the Charité and the MDC, and development of the location at Campus Nord

- The **plans for the IRI THESys**, with the linking of the three HU locations for research on sustainability, synergies from collaboration on climate research in the Berlin-Brandenburg area and beyond, and a focus on junior research groups

*Integrative Research Institutes –*
***motors of change for HU***




*Further development of IRIS Adlershof*

**IRIS Adlershof** is currently funded by HU and other participating institutions such as the Helmholtz-Zentrum für Materialien und Energie Berlin (HZB) with major support provided by the DFG, the BMBF and the EU. New Bridging Professorships were recently established financed by HU and with external funding, at the interfaces between physics and mathematics and between physics and chemistry. These professorships will be complemented by an additional **professorship that is focused on hybrid components**. Its goal is to drive the rapid transformation of basic research at IRIS Adlershof into applied

research and innovations. The professorship is supported by links to a number of research facilities, some of which will be operated in cooperation between several institutions. Examples include: the Open Access Laboratory for Analytical Sciences, which is currently being set up; the new Core Facility for Analytical Sciences at IRIS Adlershof; and the Joint Laboratory for Structural Research (JLSR), which is a part of HU's strategic partnership with HZB. In order to be able to develop this integration process productively, funds from HU's budget will be used to customise a central research building for IRIS Adlershof. A Professorship for History and Theory of Experimental Systems from the Cluster Project Image Knowledge Gestaltung shall be based in this new building. The same applies to the master's and PhD programmes linked to IRIS, including the planned SALSA Graduate School. A proposal for a further research building for hybrid systems will be submitted to the German Council of Science and Humanities.

*Establishment of the IRI for the Life Sciences at Campus Nord*

In recent years, HU's Campus Nord has developed into a vibrant location for top-level research in biology, medicine and the neurosciences. Researchers from HU's Department of Biology, the Charité, the Bernstein Center for Computational Neuroscience Berlin (BCCN), the MPI for Infection Biology, the German Rheumatology Research Centre, and HU's Centres for Infection Biology and Immunology (ZIBI) and for Biophysics and Bioinformatics (BPI), as well as the Center for Sports Science and Sports Medicine Berlin (CSSB) work closely together at Campus Nord. The Berlin School of Mind and Brain at HU and its Mind and Brain Research Centre (MBR) link the life sciences and humanities in the field of brain research. This successful combination will be further extended by a new HU research building to be completed by 2015, which will make it possible for most of the Department of Biology to be concentrated at one location. In addition, the Berlin Institute for Medical Systems Biology (BIMSB) – an MDC institution consisting of over 20 working groups – will be relocated to a new building to be constructed on HU's Campus Nord (see Annex 9b).

In the light of this unique potential, HU has founded the **IRI for the Life Sciences** in cooperation with the Charité and the MDC, strengthening HU in one of the focus areas of its research profile. Successful collaborations between HU's Department of Biology and the Charité with the MDC and other non-university research institutions will create a highly competitive research campus in the heart of Berlin. This campus will stimulate synergies in terms of content and methodology, thus creating integrative approaches ranging from the molecular to the systems-biological level, and from biological fundamentals to clinical research. With the aim of joint strategic development and of raising the

academic profile of HU's Campus Nord through the participating institutions, the IRI for the Life Sciences will improve the links between quantitative experimental and theoretical biology on the one hand and disease-oriented research on the other.

At its core, the IRI for the Life Sciences is defined by the following research fields at Campus Nord and the associated collaborations:

- Systems biology and theoretical biology, represented by the BPI, the Institute of Theoretical Biology (which belongs both to HU and the Charité) and the MDC's BIMSB
- The neurosciences, represented by the BCCN (which is very closely linked to the NeuroCure Cluster of Excellence and optogenetics research at the BPI) and HU's MBR Centre at the convergence with research in the humanities
- Infection biology/immunology, represented by the ZIBI and the planned Robert Koch Graduate School Berlin

Taking the current biomedical research areas in the participating institutes as its starting point, the IRI for the Life Sciences will also, in an open institutional matrix structure, strengthen links between the experimental and theoretical methods of these fields on the one hand and clinical application areas on the other. This particularly applies to the transitions to:

- Diseases of the nervous system at the NeuroCure Cluster of Excellence and institutions such as the Center for Stroke Research Berlin
- Genetic disorders and genomics at the GenoRare Cluster of Excellence
- Cancer research with the BSIO Graduate School project
- Regenerative medicine from functional detection to prevention, represented by the Berlin-Brandenburg Center for Regenerative Therapies (funded by the BMBF) and the BSRT Graduate School

The links between these translational research areas will be reinforced by **Bridging Professorships**. These will be set up in the framework of projects for which HU and the Charité are applying for funding in the first and second funding lines of the Excellence Initiative. This applies to the planned W3 Professorships for Genomics of Model Systems (GenoRare), Cell Interactions with Native and Artificial Materials (BSRT) and Behavioural Physiology (NeuroCure), as well as to the joint appointment of a planned MDC/BIMSB W1 Professorship for Computational Biology (RKGS).

Collaboration in the IRI will take the form of joint research projects, the cooperative use of existing instruments, and joint work on the development of advanced future technology and infrastructure platforms in fields such as deep sequencing, mass spectrometry and high-resolution microscopy. It will also involve joint planning of research structures in the scientific fields concerned, and of campus development measures (see Annex 9a).

The **IRI Professorships** – which will be funded by HU, the Charité and the MDC – will constitute the foundations for developing new scientific focal areas at the IRI for the Life Sciences. These professorships will provide staff for new research fields in the life sciences on an international level in areas such as molecular fundamentals of senescence, molecular fundamentals of circadian rhythms, and cell or DNA-based biological computer models. They will be situated at the points of convergence between focal areas in terms of content, topics, methodology and translational research. **Junior research groups** working on related or complementary topics will be set up around the IRI Professorships, and co-funded tenure-track models will be established for the leaders of these groups. A **Fellow Programme** will reinforce collaboration between the life sciences in Berlin and internationally renowned researchers. In terms of promoting young researchers, agreement has been reached with the Wissenschaftskolleg zu Berlin – Institute for Advanced Study on cooperation with the College for Life Sciences that is currently being set up there. Strengthening academic collaboration in the life sciences with the other natural science departments based on Campus Adlershof and with IRIS Adlershof will be another important task of the IRI. For example, the great potential of chemical biology in research topics on medical systems biology can be exploited with the help of the two IRIs.

The IRI will provide the proposed initiatives in the first and second funding lines of the Excellence Initiative – GenoRare, BSIO and RKGS – and the projects that are already receiving funding – BSRT, Berlin School of Mind and Brain and the NeuroCure Cluster of Excellence – with a multi-project location for networking, competitive allocation of additional resources, and support services. There are plans for cooperation with the Cluster of Excellence project Image Knowledge Gestaltung. In addition, the IRI for the Life Sciences will offer flexible infrastructure in order to ensure that there is sufficient scope at the interfaces of its research fields for life-science projects pursuing highly relevant topics and methodologies and promising an international impact. Incentive and support mechanisms such as an IRI fund and up-to-date academic management provided by the **IRI office** will facilitate pioneering research in the life sciences. Participation by representatives from HU, the Charité and the MDC in the **IRI's governance**, comprising a steering committee and a general assembly, will ensure effective collaboration.

The foundation of the IRI for the Life Sciences is an important step in the development of Berlin into a central, internationally visible location for life-science research in Germany. This is based on the expansion of the traditional research location at Campus Nord into a modern campus for the life sciences. Expansion commenced with the establishment of the BCCN and CSSB, and the location will be considerably upgraded in terms of infrastructure by the planned new research buildings. The signing of a Joint Declaration on Future Collaboration on 16 March 2011 marked the first step for closer institutional collaboration between the three institutions – HU, the Charité and the MDC. This was followed on 8 July 2011 by the signing of a Memorandum of Understanding for the foundation of the IRI for the Life Sciences (cf. Annex 10a).

*Planning the IRI THESys – The Great Transformations of Human-Environmental Systems*

The **IRI THESys** is being set up to organise interdisciplinary research aimed at a better understanding of societal opportunities and limitations in the light of current transformation processes in human-environmental systems. Fundamental research questions on these transformations are as follows:

- How can decarbonisation of society be speeded up to reduce the impact of climate change?
- How will the rapidly increasing demand for bioenergy change global land use systems and influence the supply security of food and water?
- What role does an ever-more urbanised world play in preserving or restoring ecological-system performance, and how can it reduce its impact on climate change?
- How can the use of natural resources be harmonised with the conservation of biodiversity?

To answer such questions, HU is conducting extensive research, particularly in the domains of sustainability, land use and globalisation. HU has the scientific expertise needed to work on such interdisciplinary research questions in a well-deployed research network.

The IRI THESys will be based on three keystones. First, the IRI will reinforce existing collaborations between the natural sciences, the humanities and the social sciences, and will initiate new collaborations between HU's three campuses in Adlershof, Berlin-Mitte and Nord. Second, it will invest extensively in young researchers, for example through the FutureLand Graduate School proposed in the Excellence Initiative. This aspect will range from research-oriented curricula and excellent research training for PhD

students, to **three junior research groups** at the points of intersection between the participating faculties. These groups will be set up as competitive career options for post-doctoral fellows. Third, its work will be underpinned by a national and international research network of outstanding quality (see Annex 9c).

HU's Department of Geography, which will coordinate the IRI THESys, holds second place in the latest DFG Funding Ranking. Its Professorship for Sustainability, which is unique in Germany, was set up in cooperation with the Potsdam Institute for Climate Impact Research (PIK). The expertise in agricultural sciences at HU will reinforce the investigations into food and water supply issues and to research on institutional change. However, HU's specific strength is that THESys will integrate state-of-the-art research in ethnology, philosophy, cultural studies, education studies, psychology, physics and information systems in sustainability science.

The researchers involved in THESys are already working intensively in sustainability and climate impact research networks in the Berlin-Brandenburg region. Cooperation agreements currently involve three centres of the Helmholtz Association and six institutions of the Leibniz Association. The IRI THESys will add a further four professorships to the 20 existing joint professorships with these partner institutes.

THESys will establish close relations to the Institute for Advanced Sustainability Studies (IASS) in Potsdam, a think tank linking research with politics, the economy, and the public. Fundamental research on sustainability at HU will provide an excellent basis for such a partnership. The Institute of Energy Economics, which is currently being set up at TU, will complement THESys' research in an ideal way.

On an international level, HU's cooperation agreements with three of the world's leading schools in sustainability science – the School of Sustainability Science in Tempe, Arizona (USA), the Lund University Centre of Excellence for Integration of Social and Natural Dimensions of Sustainability (Sweden), and the Research School for Socio-Economic and Natural Sciences of the Environment in Wageningen (the Netherlands) – provide an excellent framework for research on *The Great Transformations of Human-Environmental Systems*.

### 3.3.2. The Role-model Cooperative University

In line with its guiding principle of **openness** and as the **Role-model Cooperative University**, HU is opening the IRIs to non-university partners. The resulting collaborations will strengthen Berlin as a location for research. Service-oriented collaboration manage-

ment based on HU's culture of enablement will aid all of the University's future collaborative research projects. In the framework of privileged partnerships, this will come into effect in two ways:

- By setting up joint **steering committees** with non-university partners
- By setting up a **Centre of Expertise** for Cooperation in Academic Research

**Cooperation management I:**
**Setting up joint steering committees with non-university partners**

The development of HU's collaborations is focused on expanding cooperation with nearby non-university research institutions. Examples are the case for systems biology and infection biology/immunology in the IRI for the Life Sciences (including the MDC, the German Rheumatology Research Centre and the MPI for Infection Biology), sustainability research in the IRI THESys (the German Research Centre for Geosciences – Helmholtz Centre Potsdam, the German Aerospace Center (DLR), the Helmholtz Centre for Environmental Research, the PIK and other Leibniz Institutes), and structural research at IRIS Adlershof (HZB, the Federal Institute for Materials Research and Testing (BAM), the Max Born Institute for nonlinear optics and short pulse spectroscopy (MBI) and other natural science Leibniz Institutes). Beyond the IRIs, HU has many more strategic collaborations in other research fields, e.g. in the Berlin-wide Centre for the History of Knowledge – in cooperation with the Max Planck Institute for the History of Science, FU and TU – and in the Humboldt Forum that is to be incorporated in the reconstructed Berliner Schloss (palace). Yet another example for this type of inter-institutional cooperation is the projected Center for Jewish Studies, for which all three research universities in Berlin, the University of Potsdam and a number of other institutions have made a joint funding proposal to BMBF in July 2011.

HU's collaborations will be supported by more effective cooperation management in the future. The University will set up **joint steering committees** with its partner institutions to discuss and decide on major projects. The commmittees will comprise researchers and, where necessary, representatives of the management of HU and its collaborative research partners. The committees' role will be to provide guidance on all important matters regarding the relevant research collaboration. Apart from joint campus development, these will include questions concerning the academic profile, resources and personnel planning, and cost sharing, such as the following:

**Establishment, funding and use of research infrastructure** (large-scale equipment, instrument facilities and other resources, including buildings). Examples are the three shared laboratories recently established with the HZB (see Annex 10b).

- The Joint Berlin MX-Laboratory for structural biological research projects and the further development of the BESSY-II MX beamlines, which was set up in 2010
- The Centre for Accelerator Physics, which was also set up in 2010; here, jointly appointed researchers pool equipment (BESSY-II, MLS, a planned Energy Recovery Linac accelerator)
- The Joint Laboratory for Structural Research for further methodological development, particularly in cryogenic transmission electron microscopy, and for improving accessibility to external users; this laboratory was approved in 2011

**Promotion of young researchers** both at the postgraduate level in the form of further joint PhD programmes and on the postdoctoral level, especially via joint staffing of junior research groups. The development of inter-institutional tenure-track models represents an important task for the joint steering committees.

**Collaboration in teaching** on all levels, from bachelor's degrees to PhD theses through the linking of contractually regulated and voluntary services by researchers from all of the institutions involved.

### Cooperation management II:
### Setting up a Centre of Expertise for Cooperation in Academic Research

HU will establish a **Centre of Expertise for Cooperation in Academic Research** to react more flexibly and rapidly to collaboration opportunities in the future by pooling administrative, financial and logistical resources for teaching and research. In the spirit of the culture of enablement, the Centre of Expertise will have the following tasks:

- Pool and share expertise on all regulatory issues concerning collaborations (framework agreements, model statutes, legal advice, budget matters, etc.)
- Support members of the University in initiating collaborations and drawing up cooperation agreements, and guide the realisation of collaborations by providing professional service
- Develop flexible collaboration formats with new forms of shared funding of personnel and equipment (including exit strategies) and with a focus on the University's interests in the design of the collaborations

### Staff numbers employed for the measures in *Goal 1**

(per personnel category and year of funding period,
staff numbers are in the following format: number of funded staff / total number of staff involved)

| | Staff numbers (full-time equivalent) or fellowship holders per year | | | | | |
|---|---|---|---|---|---|---|
| **Personnel category** | **2012** Nov./Dec. | **2013** | **2014** | **2015** | **2016** | **2017** Jan.-Oct. |
| Professorships | 1 / 31 | 4 / 34 | 5 / 35 | 6 / 36 | 6 / 36 | 6 / 36 |
| Heads of junior research groups | | 2 | 4.5 | 5 | 5 | 5 |
| Postdoctoral researchers and similar positions | 0 / 14 | 2 / 16 | 3 / 17 | 3 / 17 | 3 / 17 | 3 / 17 |
| PhD students and similar positions | 0 / 34 | 7.5 / 41.5 | 14 / 48 | 15.5 / 49.5 | 15.5 / 49.5 | 15.5 / 49.5 |
| Other academic research staff | 0 / 1 | 2 / 3 | 3 / 4 | 3 / 4 | 3 / 4 | 3 / 4 |
| Non-research staff** | 8.5 / 19.5 | 17 / 28 | 19 / 30 | 19.5 / 30.5 | 19.5 / 30.5 | 19.5 / 30.5 |
| Fellowship holders | 0 / 10 | 13 / 33 | 25 / 45 | 25 / 45 | 25 / 45 | 25 / 45 |
| Students (40 h/week) | 6 / 21 | 20 / 35 | 30 / 45 | 35 / 50 | 35 / 50 | 35 / 50 |
| **Total** | **15.5 / 130.5** | **67.5 / 192.5** | **103.5 / 228.5** | **112 / 237** | **112 / 237** | **112 / 237** |

* Does not include staff who may be funded within the funding programme Excellent Teaching and Research, since the use of these funds is not determined in advance.

** Of these, 9.5 / 14.5 (from 2013) are academically qualified research managers.

## Goal 2:
## Personal development and promotion of young researchers

### 3.3.3. Concept for research-oriented teaching

In terms of teaching, HU is currently making the transition from a “mass production University” to a differentiated institution providing a sound academic education for large numbers of students and for a wide range of careers requiring a degree. While doing so it will endeavour to maintain the unity of teaching and top-level research (including its excellent promotion of young researchers). To this end, the University will restructure its degree courses by introducing three different yet mutually permeable academic training paths: bachelor’s degree programmes will offer professional training for large numbers of students in a wide range of disciplines and lay the foundations for academic competence; master’s degree programmes will build on the undergraduate degrees and focus either on more intensive preparation for employment in careers requiring a degree (teacher training at the Humboldt Professional School of Education, for example) or on developing research skills (careers in research). This creates a Y-shaped model after the bachelor’s degree, with two options for differentiated master’s degrees (one of which offers the pos-

sibility of pursuing a master's degree focused on professional training at a later date). The aim of this range of options is to exploit the potential of science and scholarship for driving personal development to the best possible extent. This evolution of its curricula is a vital part of HU's Institutional Strategy for the future. With the funds granted for its **Transitions** project in the "Quality Pact for Teaching", HU now has the possibility to lay the foundations for this evolution in a variety of projects:

The first transition stage to receive attention under this programme, "From School to University", combines various initiatives to prepare pupils for their studies at university from an early age under the heading of Humboldt Goes to School. These initiatives range from the Children's University to HU laboratories for pupils. The second transition stage concerns the shift from reproductive learning in schools to method-driven scholarship at university. With "Creating scope for enquiring minds" as its maxim, the University's **HU Q Programme** (see below) provides incentives for getting acquainted with academic working methods and trying them out for oneself. The **bologna.lab**, which has been specially set up for this purpose, will make important contributions in this area. The purpose of this "reform laboratory" is to have teachers and students work side-by-side with experts on teaching and learning research to develop and test innovative, research-oriented forms of teaching and learning. They then recommend best practices for implementation across the entire University. The bologna.lab works closely with the Dieter Scheffner Training Centre at the Charité, the first nationwide training centre for medical teaching at universities. The third transition stage forms part of the University's central concept of "Open up for practice" and concerns the transition from university studies to professional practice or research.

*HU Q*

The HU Q Programme forms the innovative heart of the University's quest for research-oriented teaching. HU Q will be the motto used in the introduction of new, research-oriented courses and formats primarily funded by the "Quality Pact for Teaching". These will be integrated into the bachelor's and master's programmes and will gradually familiarise students with academic work. In this way, students will be able to specify their degree objective and choose the options that are best suited to them during the various stages of their academic training (Y model). Q stands for *enquiring minds* making their own inquiries (*question*), asking about issues that appear self-evident (*query*), independently looking for solutions (*quest*) and acquiring new knowledge or additional skills (*qualification*). The programme's individual components are dovetailed. They rely on the students' own initiative and include the possibility of forming student research teams. HU has thus

further developed the idea of an *Undergraduate Research Opportunities Programme*, as set out in the Draft Proposal, in its Q Programme and implements it in the following ways:

HU Q gives interested students from the third semester on the opportunity to acquire the contents of a degree module independently and without obligatory class attendance, in a so-called **Q Module**. The focus of the programme is on student research groups, known as **Q Teams**, which are set up to work on a specific investigation and can apply for funding for equipment and materials. Students from exchange programmes with HU's partner universities are to be more closely included in this work so that international **Q Colleges** can be formed. The HU Q Programme also gives advanced master's students the opportunity to hold **Q Tutorials**, which they organise themselves, and thus to acquire their first teaching experience. The tutors are supervised by a HU lecturer. Using funds from the Transitions Programme, the number of these Q Tutorials (formerly project tutorials) will be doubled from 24 at present to 48, and they will encompass the natural sciences to a greater extent than is currently the case. A supervisory element provided by the bologna.lab will be added to them.

The HU Q Programme creates important links between studying and top-level research. At the same time, it aids the students' personal development and provides guidance in academic work, both keystones of the Institutional Strategy of **education through learning and research**.

*Humboldt Bachelor*

HU is currently developing the Humboldt Bachelor, a special degree format for its bachelor's programmes in which an interdisciplinary degree element will be integrated with disciplinary training in the core subject. This degree structure is based on the Anglo-Saxon concept of a Bachelor of Liberal Arts. In the Humboldt Bachelor, students will be able to choose from the wide range of modules in HU's academic focal areas and thus acquire interdisciplinary, research and personality-shaping skills in the sense of a *studium fundamentale*, which will guide and complement the degree in their chosen discipline.

*Humboldt Professional School of Education (PSE)*

With the PSE, HU is currently developing a new central resource. Its aim is to improve the organisational, practical and academic foundations of teacher training. The Academic Senate passed a resolution to this end on 5 July 2011. The PSE bridges the gap between research on education, schools and teaching on the one hand and practical teacher training and further training for qualified teachers on the other. It provides students who are training to become teachers with a central meeting place and an academic milieu

focused on their future profession. In the PSE, staff of all levels belong both to their own faculty and to the PSE (as secondary members) and work together like members of a faculty. PSE membership consists of professors who focus on educational studies, non-professorial teaching staff, non-academic personnel, and all students enrolled in **Master of Education** degrees. This organisational form not only allows for intense collaboration in the research and teaching that is vital in teacher training, but also safeguards disciplinary links to education studies and subject-specific didactics.

The PSE performs a wide range of tasks:

- Involvement of teacher-training students in current projects on school and teaching research and education studies
- Coordination of teaching in the Master of Education programmes, support for teaching projects, improvement of contents, structures and processes of degree courses
- Participation in professorial appointments for the didactics of individual disciplines
- Organisation of work experience semesters, development of a work placement pool, contacts with partner schools and those offering work placements and training
- Information and guidance for students
- Further training for school mentors, further and continuing training courses for teachers that focus on current research

At the same time, the PSE forms the coordinating framework for research on education, schools and teaching at HU. The institutions involved in education studies (Interdisciplinary Cente for Education Research (IZBF), IQB, the National Centre for Teacher Training in Mathematics (NZLM) and the Humboldt-ProMINT-Kolleg) work together in the PSE to plan and coordinate research and teaching activities. A significant amount of application-oriented top-level research is already conducted in the context of the IQB and IZBF, e.g. on the harmonisation and specification of educational standards. This leading position is to be extended by the establishment of a new Professorship for Design-based Research. It will be closely linked to the NZLM, where HU will be the project coordinator.

The PSE's role is to provide guidance for academically trained individuals, all the way from their teacher-training studies to their first teaching job or to research for a career as professors of teacher training. A fast-track master's degree integrated into a PhD course has been developed with the aim of identifying and promoting academic talent from an early stage. Students work on their PhDs in a structured programme, for which the IZBF and PSE share responsibility.

Research-based studies beginning as early as at the Master of Education level enhance the academic foundation of the teaching profession. HU's Transitions project focuses on one of the priorities of the Berlin school system, "learning under heterogeneous conditions", which concentrates on the topics of migration, inclusion, and the nurturing of gifted pupils. Students are involved in research from an early stage and receive support, for example in the development and implementation of explorative studies during their work placement semester, or in the form of systematic methodology training and colloquia when they are working on their master's thesis. The PSE also uses funds from the "Quality Pact for Teaching" to support additional Q Teams in education studies and to run bridging courses for school pupils from educationally disadvantaged backgrounds. Academic training schools, in which new teaching methods and curricular innovations are tested, are being set up with the help of a network of HU partner schools. Both forms of collaboration improve cooperation with schools and serve to advance practical relevance in teacher training. The Humboldt-ProMINT-Kolleg is leading the way in this type of collaboration.

In the longer term, the PSE concept will make it possible to develop a joint organisational form for teacher-training work in the Berlin region – for example to safeguard comparability among the degree curricula, make courses available to students from other universities, mutually recognise credits, and coordinate the allocation of work placements.

### 3.3.4. Promotion of young researchers

In analogy to its successful proposal in the "Quality Pact for Teaching", HU has set the focus of its overarching Phase Model of personal development on safeguarding transitions in the academic qualification path. It is specifically concentrating on phases with a particularly high drop-out rate by making the transition from PhD to the postdoctoral phase more straightforward – especially for women – and by providing support to researchers in the transition from the postdoctoral phase to a professorship.

**Excellent PhD training at the Humboldt Graduate School (HGS)**

The mission of **HGS** is to combine personal development and quality assurance. Originally set up in 2006 as an umbrella organisation for HU's structured PhD programmes, HGS will use funds from the Excellence Initiative in the future to serve the entire University as an overarching facility for the development and maintenance of a high-quality culture of mentoring and support in the PhD programmes. Building on experiences from its member programmes, HGS develops standards for the supervision of PhD projects at HU and establishes a framework for PhD regulations.

HGS will set up its own format for **supporting graduate schools and PhD programmes** at HU, parallel to the other graduate schools funded by the Excellence Initiative and from other sources. This format will support relevant initiatives by the faculties (including the Faculty of Medicine). In the future, HGS will thus invite proposals from the faculties for **sets of PhD scholarships**, which will be awarded in a competitive process and form the basis for new structured faculty programmes. The prerequisite is that these faculty programmes observe HGS' supervision standards. The scholarships will be awarded for three years (with progress evaluation after the second year). HGS will apply for external funding for this scheme and expects support from the Humboldt-Universitäts-Gesellschaft. In addition, HU intends to include this form of graduate funding in its regular budget and to conduct budget negotiations with the State of Berlin on this basis.

In line with its three central concepts – **individuality**, **openness** and **guidance** – HU also wishes to create a dedicated space at HGS for young researchers to reflect on their own field and to share views with contemporaries from other disciplines. In cooperation with HU's Personnel Development Unit and the Berlin Centre for University Teaching, HGS is developing a soft-skills curriculum in the **Academy for Young Researchers**. This curriculum will include courses on the rules of good academic practice, workshops on developing methodology, and discussions on transdisciplinary topics. Furthermore, the academy will organise a PhD congress every two years, which will provide PhD students at HU and its cooperation partners with an opportunity to exchange views and share experiences. In the medium term, HGS plans to set up sections for related subject groups and to develop multi-disciplinary programmes for encounters between individual disciplines.

HGS will expand its **support services for member programmes**. It will offer administrative assistance in PhD matters, and guidance on applying for third-party funding for PhD and postdoctoral scholarships, for establishing junior research groups and for fellowships. It will work with HU's International Office to provide support for stays abroad and similar matters. Furthermore, it will set up an **Arbitration Board** to mediate in conflicts, and will appoint a Gender Equality Officer. It will also staff an information desk in Adlershof that will give initial information and advice on all matters regarding doctoral training at HU.

For the purpose of constantly assuring quality and ascertaining that the PhD and supervision standards are working well, HGS will not only evaluate PhD matters at HU by means of statistical analyses, but will also conduct regular surveys of PhD students and their supervisors, in cooperation with the Quality Management Unit.

***Bridging the gap between a master's degree and a PhD: Research Tracks***

In order to facilitate the transition to a PhD for students from HU or other universities, who have particularly strong research skills, HGS awards **Research Tracks** for a maximum of 12 months in a competitive procedure. Research Tracks provide financial security during the transition phase between graduating from a master's programme and acquiring PhD funding. Excellent students who wish to do their PhD at HU can apply for this funding on the recommendation of their supervisor while they are still doing their master's degree. The aim is that these students then apply as quickly as possible for PhD funding from recognised funding institutions or one of the graduate programmes based at HU.

### Postdoctoral Support Programme

A PhD and the following stage that leads to a professorship are in many ways the decisive phases in a researcher's career. While PhD funding and support has significantly improved and expanded all over Germany in recent years, solutions that tackle the uncertain prospects for further professional development in the academic system in the postdoctoral phase are still rare.

HU will therefore set up its own **Postdoctoral Support Programme**, in which the Executive Committee will award internationally announced **HU Postdoctoral Fellowships** (eight positions for a limited period of up to two years to conduct a research project) on the recommendation of HGS. The funding decisions will be prepared by HGS with the help of an external selection board. The **HU Postdoctoral Scholarships** will provide interim funding for excellent PhD graduates from HU to allow them to publish their thesis or prepare a funding proposal. Half of the Postdoctoral Fellowships and Scholarships will be awarded to women.

### Junior Professorships

The **tenure-track concept** established in 2006 will be developed further in order to give the Junior Professorship a greater level of stability and to provide stepping stones to the next career stage. Hence, future announcements of Junior Professorships will concentrate to a greater extent on the option for being appointed to a tenured professorship. Where there is a time gap between the end of a Junior Professorship and the opening of a tenured professorship, junior professors, whose high qualifications have been confirmed in a progress report and subsequent evaluation, can be awarded **interim funding** from the Strategic Innovation Fund to allow for their appointment up to three years in advance.

### 3.3.5. Senior Advisors

With the ongoing generational shift, many leading researchers are now approaching retirement. The universities are thus losing great potential in terms of knowledge and experience. This potential should be better utilised in promoting young researchers. In recent years, HU has had good experiences with the appointment of senior professors who were mainly active in providing teaching support in the departments. HU will use funds from the Institutional Strategy to establish positions for **Senior Advisors** who will complement Senior Professorships and will be responsible for guiding research projects and mentoring young researchers. They may also serve as contact persons for community outreach projects, for example in the Humboldt Goes to School initiative.

**Staff numbers employed for the measures in *Goal 2***

(per personnel category and year of funding period,
staff numbers are in the following format: number of funded staff / total number of staff involved)

| | Staff numbers (full-time equivalent) or fellowship holders per year | | | | | |
|---|---|---|---|---|---|---|
| **Personnel category** | **2012** Nov./Dec. | **2013** | **2014** | **2015** | **2016** | **2017** Jan.-Oct. |
| Professorships | 0 / 2 | 3 / 5 | 5 / 7 | 7 / 9 | 10 / 12 | 10 / 12 |
| Postdoctoral fellows and similar positions | | 5 | 12 | 14 | 14 | 10 |
| Non-research staff* | 0 / 6 | *4 / 10 | 4 / 10 | 4 / 10 | 4 / 10 | 4 / 10 |
| Fellowship holders | | 45 | 70 | 92,5 | 82,5 | 60 |
| Students (40h/week) | 2 / 5 | 10 / 13 | 19 / 22 | 23 / 26 | 26 / 29 | 22 / 25 |
| **Total** | **2 / 13** | **67 / 78** | **110 / 121** | **140.5 / 151.5** | **136.5 / 147.5** | **106 / 117** |

* Of these, 1 / 5 (from 2013) are academically qualified research managers.

## Goal 3:
## Governance for academia – a culture of enablement

HU's most important governance goal is to develop processes of communication, steering and decision-making that provide the best support to top-level research, excellent teaching and the promotion of young researchers. Two complementary projects based on the central concepts of **guidance** and **openness** are at the heart of governance reform at HU: One is to increase the Executive Committee's scope for action. The other aims at better communication on strategic issues and improved working relationships between central University management and the faculties. The basis of this reform lies in actively shaping a **culture of enablement**, which is to be created by improving service

orientation at all levels of the University. This culture of enablement is underpinned by the provision of a comprehensive range of training courses that lead to new qualifications and are open to all University members, particularly those in administration and academic management.

### 3.3.6. Scope for action and participation on strategy

The extension of the Executive Committee's scope for action stems from the aim of **establishing a form of management suited to academia** and based on the needs of HU's individual researchers. Management suited to academia means including as many features as possible from primary academic activities in the ways in which these are steered, promoted and supported. It thus implies rationality, plausibility, methodical safeguards and openness to verification, as well as cooperation, communication, and transparency. Providing support to researchers, who face vastly differing constraints in conducting their research projects, through a suitable governance framework is an increasingly important task. At the same time, HU must meet the challenge of providing orientation to the complex entity of a university offering a complete range of disciplines by setting priorities and posteriorities and by positioning the institution as a whole in the competition for resources. Through its Institutional Strategy, the University is therefore expanding the Executive Committee's steering options as part of the central concept of **guidance,** and is simultaneously upgrading the faculties' strategic developmental and decision-making capacities as part of the central concept of **openness**. In order to involve as many University members as possible, HU is applying consultative participation, incorporating suggestions and ideas from members of all status groups into managerial decisions.

To this end, HU will implement a **faculty reform** in the coming years under the following premises: The faculties, represented by their deans in the **Concilium Decanale**, will take on the role of a strategic link between the departments and University management to a greater extent than before. The faculties are the best possible partners for the Executive Committee to ensure that structural decisions are relevant in terms of science and scholarship. The faculty boards, but above all the deans, will receive greater scope for decisions, which they may use for coordinating the departments and for shaping their faculties' academic profile. This includes managing a faculty budget and a roster of professorships which will be partly variable. The dean will decide on the allocation of the variable professorships in consultation with the faculty board. This framework of fixed and variable professorships will be introduced under HU's upcoming structural planning. It will provide

deans with greater flexibility in aligning the staffing of professorships more closely with the dynamics of the academic field in question.

Greater flexibility for the Executive Committee will be introduced through the **Strategic Innovation Fund**, which includes a pool for interim funding and anticipated professorial appointments, and for funding collaborative research. This fund provides the Executive Committee with instruments that allow it to take current developments and needs into account and to launch initiative projects.

The aim of strengthening the faculties is to better integrate the individual departments' different interests and needs. Faculties that are capable of strategic action and equipped with **professionally run dean's offices** will provide the Executive Committee with research-relevant evaluation and decision-making parameters for strategic initiatives and new directions. This requires sufficiently large units and sensible combinations of related disciplines or of disciplines working on joint projects. The faculty reform will not assign the institutes to positions in a top-down organogram, but will take the form of a new structural model derived from academic developmental needs. This will enhance the faculties' strategic competence and make it accessible to the Executive Committee. Traditional relations in the context of monodisciplinary and multidisciplinary faculties will naturally be maintained where they make sense. Thus, competition between the departments for their specific interests may be replaced by their ties to an overall faculty profile, which will in turn form part of the developmental strategies of the University as a whole.

For the **governance of its Institutional Strategy**, HU will already count upon the strengthened strategic decision-making and developmental capacities of the faculties and take decisions against a background of dovetailed top-down and bottom-up initiatives. In the spring of 2011, the HU Council initiated an amendment to the University's Constitution of 2006, and resolved on 14 June 2011 to set up a Constitutional Commission. One of its aims is to adapt the Constitution to needs related to the implementation and efficient operationalisation of the Institutional Strategy measures. This particularly applies to the Executive Committee's right of initiative to establish IRIs and to the pool for anticipated professorial appointments, as well as to the provision of interim funding. In terms of the envisaged culture of enablement, it also applies to simplified procedures for setting up and managing ICs.

In this way, HU is laying comprehensive foundations for the successful implementation of its Institutional Strategy and for developing a new governance structure, which will shape the University in the future and simplify steering processes.

### 3.3.7. Culture of enablement

As the basis for achieving its overriding governance goals, HU will make the University administration more effective by establishing a service network that will develop a culture of enablement for all matters concerning the University's research, teaching and self-governance. This **extension of administrative services** will be accompanied by a comprehensive **personnel development concept**, which will take up the central principle of **individuality** in HU's Institutional Strategy and sustainably support the individual potential of its members.

The goal of expanding the administrative services and adapting them to current requirements is to develop HU's service orientation, relieve researchers of the burden of administrative tasks and open up more individual opportunities for research and teaching. In total, four units are to be reorganised and connected to each other in a **service network**: the Research Service Centre, the Student Service Centre, Personnel Development and International Affairs. The transformation of HU's Research Division into a **Research Service Centre** is the most important element here.

This service centre's main tasks will include:

- Guidance and information on all national and international research funding programmes
- Administrative guidance on and management of Excellence Initiative projects
- Project administration and management of third-party funding
- Knowledge transfer and patents
- Statistics and documentation on all research activities at HU

Guidance and support services on European research funding are to be significantly expanded within this range of tasks. The objective is to appreciably increase the number of ERC grant-holders at the University. Furthermore, HU's successful transfer and spin-off practices will be developed via links to Humboldt Innovation GmbH (HI), the subsidiary of HU responsible for contract research and spin-off companies. There will be close cooperation with HU's Quality Management Unit in the compilation and evaluation of research data.

HGS will take the lead on matters relating to junior researchers and career guidance up to PhD completion. HGS and the Research Service Centre will work hand-in-hand in this area to ensure the best possible guidance for young researchers on funding opportunities following their PhD.

A central help desk will be the first point of contact for HU members and external partners at the Research Service Centre. It will be based on the principle of a one-stop-shop. In addition, an online portal will be set up for principal investigators, which will provide them with access to relevant, user-friendly project administration data. Typical service routes for different internal user groups (user profiles) will be defined in order to optimise the processes in the new Research Service Centre. This will also make it possible to take into account the different needs of the natural sciences, humanities and social sciences, and of monodisciplinary and interdisciplinary research projects. In the light of similar endeavours in service-oriented research management at the Charité, the Research Service Centre at HU is to be developed in cooperation with the Faculty of Medicine in order to benefit from possible synergies, particularly as regards international research funding, the management of Excellence Initiative projects, data and information management, and internationalisation.

In the coming years, the Department of International Affairs will extend its services to students, HU faculty members and researchers from abroad and will function as an **International Office**. A database of international collaborations will help HU researchers to locate colleagues in Berlin who are in professional contact with foreign universities to which the HU researchers wish to establish new links, and who are able to provide guidance. The visa service section in the International Office will expanded to relieve University members and their international guests from time-consuming bureaucracy.

With the **expansion of measures for personnel development**, HU is reacting to the increasing number of tasks that researchers must perform in personnel and research management and the acquisition of third-party funding, as well as to new qualification profiles in administration. HU is developing an integrated personnel development concept that reflects the needs of the various target groups. Its aim is to improve the core processes derived from the strategic organisational goals and to promote the talents of all University staff members.

The responsibility for the academic processes of the University is at the heart of the professors' duties. In the future, services will be developed for professors, particularly junior and newly appointed professors, to help them structure their working environments and to support them in their various functions in the University. These services will offer training in general-management and people-management skills, provide guidance on acquiring and managing third-party funding, and run courses on academic teaching. In addition, coaching, mentoring and management feedback will be applied to a greater extent than before and a Leadership Programme for Female Professors in Executive-level Posi-

tions will be set up. The Executive Committee will ask candidates about their further training wishes during the appointment negotiations, offer courses and set up pools for sharing experiences. Further training programmes will be developed specifically for the deans and their staff.

The interdependence of university governance, research, teaching and resource deployment calls for an institutional understanding of the University's structures and processes so that complex interrelated tasks in university management and academic organisation can be performed efficiently and to a high standard. HU already uses structured selection procedures (e.g. assessment centres) for high-ranking administrative and technical personnel and will produce a greater number of multi-year staffing concepts for senior positions in the future. Analyses of potential, specialised further training, managerial further training and personnel rotation are used as instruments. Taken together, these measures aim to comprehensively support university processes (specialised qualifications, communication, data processing skills, language skills, etc.), promote professional development and multi-functionality, and facilitate flexible deployment of personnel.

**Staff numbers employed for the measures in *Goal 3***

(per personnel category and year of funding period,
staff numbers are in following the format: number of funded staff / total number of staff involved)

| | Staff numbers (full-time equivalent) per year | | | | | |
|---|---|---|---|---|---|---|
| **Personnel category** | **2012** Nov./Dec. | **2013** | **2014** | **2015** | **2016** | **2017** Jan.-Oct. |
| Non-academic staff* | 3 / 15 | *7 / 19 | 7 / 19 | 7 / 19 | 7 / 19 | 7 / 19 |
| Students (40h/week) | 3 | 5 | 5 | 5 | 5 | 5 |
| **Total** | **6 / 18** | **12 / 24** | **12 / 24** | **12 / 24** | **12 / 24** | **12 / 24** |

* Of these, 2 / 6 are academically qualified research managers.

## 3.4. Concepts for Research-oriented teaching

Please see Goal 2, section 3.3.3.

## 3.5. Project management

The action plan for the Institutional Strategy presented in this section is derived from its subject matter as described in section 3.3. It focuses on the three goals of the Institutional Strategy and contains information on the Strategy's milestones, decision-making bodies and the working levels involved in its implementation.

## Overall coordination for the implementation of the Institutional Strategy

### Coordination Unit

The realisation of HU's Institutional Strategy will commence from July 2012 with the implementation of the necessary structures and the definition of responsibilities for coordinating the implementation process. The Strategic Planning Office will be responsible for the overall coordination of the strategy. This office will steer the implementation process in close consultation with all of the HU units involved. In addition, annual reports will be produced on the basis of ongoing evaluations and submitted to the German Council of Sciences and Humanities.

| | | |
|---|---|---|
| Milestones | Recruitment of Strategic Planning Office staff | by 1 Nov. 2012 |
| | Restructuring of the Scientific Advisory Board | by 1 Oct. 2012 |
| | Presentation of the implementation concept to the Scientific Advisory Board | Nov. 2012 |
| | Development of the administrative structure of the Strategic Innovation Fund, including reviewing procedures | by 1 Jan. 2013 |
| | Progress report to the Scientific Advisory Board; discussion, evaluation and recommendations for future action | annually |
| | Reports to the German Council of Sciences and Humanities and final report | by 31 Mar. each year |
| Decision-making bodies | Executive Committee, heads of the administrative departments | |

### Evaluation and quality assurance

HU's Scientific Advisory Board is consulted on overarching, structural and strategic decisions and advises HU on the overall process of implementing the Institutional Strategy. External reviews are commissioned for funding decisions pertaining to research (establishment and interim evaluations of IRIs, allocation of funds from the Strategic Innovation Fund and for the promotion of junior researchers). At the end of the project period, the results will undergo a final evaluation. The Strategic Planning Office, in close consultation with the Quality Management Unit, will be responsible for the overall quality assurance process and the pooling of best-practice models.

| | | |
|---|---|---|
| Milestones | Continual commissioning of reviews on allocating funding from the Strategic Innovation Fund | from 30 April 2013 |
| | Completion of the first external evaluation of the IRIs | by 1 Sept. 2015 |
| Decision-making bodies | Executive Committee, external experts (in an advisory capacity) | |

## Goal 1: Create excellent framework conditions for top-level research

### Excellent Research and Teaching
(1. Creating Opportunities, 2. Kick-off, 3. Tandem, 4. Continuity of Excellence in Research)

| | | |
|---|---|---|
| Milestones | Announcement of the funding lines | by 1 Jan. 2013 |
| | Funding decisions by the Executive Committee, usually four times per year | for the first time by 1 June 2013 |
| | Establishment of the Centre of Expertise for Cooperation in Academic Research | by 1 Jan. 2013 |
| Decision-making bodies | Executive Committee, external experts (in an advisory capacity) | |

### Caroline von Humboldt Programme

| | | |
|---|---|---|
| Milestones | Announcement of the scholarship programme every six months, first awarding of scholarships | by 1 April 2013 |
| | Appointment of the first Caroline von Humboldt Professor | for the first time in 2013/14 |
| | Report by the Gender Equality Officer every two years on the development of measures to promote women at HU | by 1 April 2013 |
| Decision-making bodies | Executive Committee, Commission on the Advancement of Women (KFF) | |

| | | |
|---|---|---|
| **Internationalisation of Research** (KOSMOS Summer University, Humboldt International Scholars) | | |
| Milestones | Start of the HU International Scholar Programme | by 1 Oct. 2012 |
| | The first KOSMOS Summer University funded by the Excellence Initiative | 2013 |
| Decision-making bodies | Faculties, Executive Committee | |
| **Research collaborations (ICs)** | | |
| Milestones | Initiation and funding of new ICs | from 1 Jan. 2013 |
| | Evaluation of the existing ICs and implementation of the evaluation results | by 1 Jan. 2015 |
| Decision-making bodies | Executive Committee, Scientific Advisory Board (in an advisory capacity) | |
| **Research collaborations (IRIs)** | | |
| Milestones | Final agreements on targets between the Executive Committee and the IRIs<br>IRIS Adlershof<br>IRI for the Life Sciences / IRI THESys | <br><br>1 Jan. 2012<br>1 Jan. 2013 |
| | IRIS Adlershof<br>Appointment of the new Bridging Professor of Hybrid Components | <br><br>by 1 July 2013 |
| | IRI for the Life Sciences<br>Setting up the IRI office<br>Start of the Fellow Programme<br>Appointment of IRI Professor 1 / IRI Professor 2<br>Recruitment of the first junior research group | <br><br>by 1 Jan. 2013<br>by 1 April 2013<br>by 1 July 2013 / 1 Jan. 2014<br>by 1 Feb. 2013 |
| | IRI THESys<br>Setting up the IRI office<br>Recruitment of the first junior research group | <br><br>by 1 Jan. 2013<br>by 1 July 2013 |
| | Regular meetings with heads of IRIs to discuss the status of the agreed targets | |
| Decision-making bodies | Executive Committee, Scientific Advisory Board (in an advisory capacity) | |

### Goal 2: Personal development and promotion of young researchers

| | | |
|---|---|---|
| **Junior researchers / HGS** | | |
| Expansion of HGS services in the field of key skills and mentoring. Funding decisions for the scholarship programmes (Research Track, PhD scholarships) by the Scientific Director in cooperation with the board of HGS. Support and proactive promotion of new structured PhD programmes in the faculties. | | |
| Milestones | Appointment of the Gender Equality Officer in HGS | by 1 Jan. 2013 |
| | First announcement of all scholarship programmes | by 1 Jan. 2013 |
| | Completion of the framework for PhD regulations | by 1 Jan. 2013 |
| | First awarding of scholarships | by 1 Apr. 2013 |
| | Receipt of the first proposals for structured PhD programmes in the faculties / first funding decisions | from 1 Jan. 2013 / from 1 Apr. 2013 |
| Decision-making bodies | HGS, Executive Committee | |

| | | |
|---|---|---|
| **Postdoctoral funding** (HU Postdoctoral Fellowships, HU Postdoctoral Scholarships) | | |
| Milestones | Announcement of the first fellowships appointment of postdoctoral fellows | by 1 Oct. 2012 / by 1 April 2013 |
| | Announcement of the first scholarships awarding of scholarships twice per year | by 1 Oct. 2012 / by 1 April 2013 for the first time |
| Decision-making bodies | Faculties, Executive Committee, HGS | |
| **Senior Advisor** | | |
| Milestones | Selection and appointment of the first Senior Advisors | by 1 April 2013 |
| Decision-making bodies | Faculties, Executive Committee | |

**Goal 3: Governance for academia – a culture of enablement**

| | | |
|---|---|---|
| **Further development: reform of administration and expanding measures for personnel development** | | |
| Milestones | Finalisation of Reform Plan for the Establishment of the Administrative Service Network | by 1 July 2012 |
| | Restructuring of the Research Service Centre | from 1 Aug. 2012 |
| | Restructuring of the International Office | from 1 Oct. 2012 |
| | Restructuring of the Personnel Service Centre | from 1 Jan. 2013 |
| | New design of the personnel development programme for all HU staff members | by 1 April 2013 |
| | Evaluation of the reform of administration | by 1 Nov. 2014 |
| Decision-making bodies | Executive Committee, heads of department | |

## 3.6. Interdisciplinarity

Please see in particular: Funding programme: Collaborative Research (see p. 36)

## 3.7. Internationality

Please see: Funding programme: Internationalisation of Research (see p. 35)

## 3.8. Gender equality

Please see: Caroline von Humboldt Programme (see p. 34)

## 3.9. Partner institutions

Please see in particular 3.2.2. The Role-model Cooperative University

## 3.10. Overall financial planning

### Projected expenditure on measures during the funding period

(in thousands of euros)*

| Measure | Personnel expenditure | Material | Total |
|---|---|---|---|
| **Goal 1** | | | |
| Strategic Innovation Fund | | | |
| 1. Excellent research and teaching | 11,310 | 5,390 | 16,700 |
| - Creating Opportunities | 2,440 | 1,110 | 3,550 |
| - Kick-off | 2,640 | 1,200 | 3,840 |
| - Tandem | 1,810 | 470 | 2,280 |
| - Continuity of Excellence in Research | 4,420 | 2,610 | 7,030 |
| 2. Caroline von Humboldt Programme | 2,500 | 106 | 2,606 |
| 3. Internationalisation of Research | 2,596 | 904 | 3,500 |
| 4. Research Collaborations | 9,543 | 2,832 | 12,375 |
| - ICs | 279 | 130 | 409 |
| - IRIS Adlershof | 1,378 | 728 | 2,106 |
| - IRI for the Life Sciences | 5,389 | 1,668 | 7,057 |
| - IRI THESys | 2,497 | 306 | 2,803 |
| The Role-model Cooperative University | 542 | 127 | 669 |
| **Goal 2** | | | |
| HGS | 4,330 | 1,630 | 5,960 |
| Postdoctoral funding | 4,148 | 332 | 4,480 |
| Senior Advisors | 1,166 | 94 | 1,260 |
| **Goal 3** | | | |
| Culture of enablement | 815 | 60 | 875 |
| Expanding measures for personnel development | 720 | 1,180 | 1,900 |
| **Project management** | | | |
| Coordination unit | 1,271 | 189 | 1,460 |
| Quality management | 363 | 167 | 530 |
| PR | 615 | 340 | 955 |
| **Total** | **39,919** | **13,351** | **53,270** |

* Expenditures for investments are not projected.

### Projected annual expenditure on measures during the funding period

(in thousands of euros)

| Measure | 2012 Nov./Dec. | 2013 | 2014 | 2015 | 2016 | 2017 Jan.-Oct. | Total |
|---|---|---|---|---|---|---|---|
| Goal 1 | 136 | 6,069 | 7,858 | 7,795 | 7,815 | 6,177 | 35,850 |
| Goal 2 | 22 | 1,213 | 2,276 | 3,007 | 3,097 | 2,085 | 11,700 |
| Goal 3 | 34 | 443 | 603 | 603 | 603 | 489 | 2,775 |
| Project management | 132 | 570 | 570 | 579 | 579 | 515 | 2,945 |
| **Total** | **324** | **8,295** | **11,307** | **11,984** | **12,094** | **9,266** | **53,270** |

**Total number of persons participating in the *Institutional Strategy***

(listed by personnel category and year,
staff numbers are in the following format: number of funded staff / total number of staff involved)

| | Staff numbers (full-time equivalent) or fellowship holders per year | | | | | |
|---|---|---|---|---|---|---|
| **Personnel category** | **2012** Nov./Dec. | **2013** | **2014** | **2015** | **2016** | **2017** Jan.-Oct. |
| Professorships | 1 / 33 | 7 / 39 | 10 / 42 | 13 / 45 | 16 / 48 | 16 / 48 |
| Heads of junior research groups | | 2 | 4.5 | 5 | 5 | 5 |
| Postdoctoral researchers and similar positions | 0 / 14 | 7 / 21 | 15 / 29 | 17 / 31 | 17 / 31 | 13 / 27 |
| PhD students and similar positions | 0 / 34 | 7.5 / 41.5 | 14 / 48 | 15.5 / 49.5 | 15.5 / 49.5 | 15.5 / 49.5 |
| Other academic research staff | 0 / 1 | 2 / 3 | 3 / 4 | 3 / 4 | 3 / 4 | 3 / 4 |
| Non-research staff* | 21.5 / 60.5 | 38 / 77 | 40 / 79 | *40.5 / 79.5 | 40.5 / 79.5 | 40.5 / 79.5 |
| Fellowship holders | 0 / 10 | 58 / 78 | 95 / 115 | 117.5 / 137.5 | 107.5 / 127.5 | 85 / 105 |
| Students (40 h/week) | 17 / 38 | 41 / 62 | 60 / 81 | 69 / 90 | 72 / 93 | 68 / 89 |
| **Total** | **39.5 / 190.5** | **162.5 / 323.5** | **241.5 / 402.5** | **280.5 / 441.5** | **276.5 / 437.5** | **246 / 407** |

* Of these, 16.5 / 39.5 are academically qualified research managers.

## 3.11. Sustainability

All initiatives in this Institutional Strategy are aimed at sustainably improving processes and structures in HU's internal organisation, in line with the University's long-term development plan. HU will undertake the following steps in order to safeguard the sustainability of its implemented Institutional Strategy after the end of the Excellence Initiative funding period:

- Take account of changes in the research profile in the ongoing structural planning and the pending **faculty reform** (continuing the principal academic positions and activities of the Clusters of Excellence, stabilising collaborative research by establishing professional cooperation management, developing graduate funding through HGS)
- Intensify the **promotion of young researchers** in the focal areas of the research profile in order to ensure the sustainability of top-level research
- Observe the **strictest quality standards** in the evaluation and funding procedures for which the Executive Committee is responsible
- Negotiate with the Berlin Senate on enhancing HU's top-level research areas in the forthcoming **University Contract** (to take effect from 2014)

- Use the new funding formats provided by the Einstein Foundation Berlin (**Einstein Centres**)
- Develop the **IRI**s as permanent research infrastructure and for acquiring third-party funding.

In February 2011, HU began preparing the **2020 Structural Plan**, which is to be synchronised with the plans for faculty reform. In the 2011/12 winter semester, the Executive Committee put forward initial proposals to the Academic Senate on measures to ensure the sustainability of two IRI professorships at the IRI for the Life Sciences and a Bridging Professorship at IRIS Adlershof following the end of funding provided in the Excellence Initiative's third funding line. Two further professorships at the IRI for the Life Sciences will be funded by the Charité and the MDC respectively; the latter will be a joint appointment with HU.

In order to safeguard the sustainability of the Institutional Strategy – particularly for measures involving internal research funding, the promotion of young researchers, gender equality, internationalisation and personnel development – HU has registered additional funding for the upcoming negotiations on the next **University Contract**. The responsible Senate Department has indicated its willingness to negotiate.

The Einstein Foundation Berlin has set up a new funding format under the name of Einstein Centres. Using a competitive procedure, it provides the option of maintaining successful collaborative research projects from the Excellence Initiative as long-term institutions.

According to the performance-based mechanism of the current University Contract, HU can expect to generate a significantly higher income if it is successful in the Excellence competition. Developments in university **fundraising** in recent years have shown that success in the Excellence Initiative makes it easier to attract private donations for individual projects. In the future, therefore, HU will mainly focus its already well-developed fundraising on the long-term consolidation of the promotion of research and young researchers and on the Caroline von Humboldt Programme.

# 4. The Institutional Strategy in the context of HU's long-term planning

## 4.1. Goals

HU's long term development plan is in complete agreement with the goals set out in the Institutional Strategy. HU wants to achieve these within the next five years. All three goals – first, **create excellent framework conditions for top-level research**; second, **drive personal development and promote young researchers**; and third, **rethink governance for academia** – serve to define HU's identity in the coming years and reinforce HU's claim for a top position not only on the national, but also on the international level.

Under the current conditions of competition between institutions, universities' activities on this path are becoming increasingly characterised by planning, management and agreed targets, which also include external expectations directed at academia. HU is taking up these challenges. It is legitimising its aspiration to autonomy by producing quality and ensuring sustainability. Hence, the main focus of HU's Institutional Strategy is on safeguarding the unimpeded development of its members' potential. A successful implementation of this approach will be of benefit to the individuals involved, to academic work itself and to society as a whole. Above all, facilitating this freedom makes it possible to develop the creative strengths of the University's members in achieving outstanding performance in research and teaching. Hence, the main aim of HU's long-term development plan is to maintain constant equilibrium between both tasks – the safeguarding of a top international position by the University as a location for excellent research and teaching, while simultaneously preserving its researchers' freedom and opportunities to develop within their institution – and to draw upon both to generate innovations in research and serve as a motor of change for society.

## 4.2./4.3. Strategic approach and foreseeable effects

The measures contained in the Institutional Strategy will establish a new foundation for the University's scope of action as an institution. The Strategic Innovation Fund provides the Executive Committee with much greater capacity to link long-term strategic decisions with the allocation of resources and to consolidate HU's successful professorial appointment policy. This is achieved through differentiated **research funding**, which will strengthen profile-building focal areas. It will also fill structural gaps by providing transi-

tional or start-up funding, and facilitate targeted promotion of individuals. Thus, a tenure-track option will be part of all Junior Professorships set up under the Institutional Strategy. Outstanding, and possibly even risky projects will benefit from rapid and flexible deployment of funding; their quality will be assured by external feedback or recommendations from the University's Scientific Advisory Board. The quality assurance procedures implemented by the University in this context (evaluation, peer reviews, quality management) will set standards at HU, create trust in the respective procedures and strengthen the culture of enablement.

The fact that the Caroline von Humboldt Programme for Gender Equality and the International Research Funding Programme in the Strategic Innovation Fund are central components of the Institutional Strategy shows that both these overarching tasks represent core concerns of the University's overall policy. **Increasing the proportion of women in executive positions** in top-level research is the primary focus of all measures to promote gender equality. This is as important to the development of women's personal potential as it is to academic work. Hence, the promotion of junior female researchers in particular is one of HU's most important tasks. In the field of internationalisation, the KOSMOS Summer University, the Humboldt International Scholars and the recruitment of Officers for International Affairs in the faculties will be the main instruments to bring an **international perspective to all areas of academic work** at HU. They will enable the University to establish long-lasting contacts, which will be maintained after the end of the Excellence Initiative funding and renewed in follow-up projects. As a strategy to introduce a **management system suited to the needs of academia**, this package consisting of the Strategic Innovation Fund, the Caroline von Humboldt Programme and the Programme for Internationalisation will strengthen the scope of action of the University as a whole.

The reforms intended to improve HU's governance will create a new equilibrium between the University's management and administration on the one hand and the faculties and departments on the other. In the medium term, the **faculty reform** will regroup the faculties and improve their networking capabilities with regard to fundamental parameters such as coherence between the disciplines, the focus and number of professorships, and joint strategic projects. The main thrust of this project is improved participation of the faculties in shaping the University's strategy, and a broader scope of action for the faculties, deans and faculty boards. This restructuring process involves significant demands in terms of communication. It can only be successful if it is based on the highest levels of

plausibility, transparency and consultative participation. This will be provided by the Executive Committee.

Amendments to HU's Constitution are also necessary in this context. The Council began discussions on the amendments on 14 June 2011. **Constitutional reform** will create a basis for implementing strategic decisions more rapidly and in a more targeted way, even after the end of the Excellence Initiative's funding period. This particularly applies to the establishment of IRIs and ICs, which serve as units for interdisciplinary research at HU and build structures for the continuous renewal of the University's research profile. With the right of initiative to establish IRIs, the Executive Committee will, in the long term, acquire an instrument which it can use to specifically trigger structural effects that reflect the dynamics of academic developments.

In addition, the IRIs establish a new **culture of cooperation** with non-university partners at HU. The planned Centre of Expertise for Cooperation in Academic Research will continuously support and advance professionalisation in the way collaborations are organised. HU will thus establish a profile as the Role-model Cooperative University.

With its focus on collaboration in academic work and on the development and testing of new types of cooperation formats, HU also aims to set a trend for greater coherence between the scientific institutions based in Berlin. Across Germany, but to an even greater extent in Europe and internationally, the challenge of competing for talent, reputation and funding increasingly involves Berlin as a whole. Berlin-based research institutions will only have a chance of being successful in international competitions in the future if all those who represent the city's research excellence join forces. HU is expressly pursuing this goal. In its collaborative research, the University is not only able to build on a large number of individual academic collaborations, but also on a growing series of institutional agreements, which serve as models for future joint activities. The administrative agreement on the Matheon research centre and the recently established Berlin College of Antiquity, as well as the privileged partnerships with non-university research institutions in Adlershof and on Campus Nord are good examples. The Humboldt Professional School of Education is also structured in such a way that it can be upgraded in the medium term to a joint project among the teacher-training universities in the Berlin region.

Collaborative research is not only the hallmark of internal research funding in HU's Institutional Strategy; it also characterises the 12 projects that HU coordinates in the first and second funding lines of the Excellence Initiative. All these projects feature significant involvement by non-university institutions. In the interests of complementarity and synergy,

characteristic focal areas in HU's future research profile such as systems biology and research on sustainability are closely linked to non-university partners.

In **teaching**, HU will continue to provide a large number of students with training leading to professional qualifications. It will also implement its concept for attracting excellent young researchers at an early stage in order to discover and promote outstanding talents. Using funds from the "Quality Pact for Teaching", among other sources, the University will design its curricula and its teaching reform projects in such a way that they focus on the principle of involving students in research from an early stage. The aim is to activate, foster and enhance the young students' entire potential, irrespective of their gender, background or social situation. HU will continue to expand its master's degrees in differentiated ways and to develop them into a transparent and permeable system of courses focused either on professional qualifications or on research (Y model). In the future, the master's degree can be integrated as a module in a PhD programme (fast track) by students who wish to do so and whose performance warrants this choice. Where different discipline-specific contents are to be linked with interdisciplinary professional qualifications, as in teacher training, HU will use the PSE example as a model to combine them. It will also introduce a fast-track PhD option in its Master of Education. This is an important prerequisite, particularly as regards discipline-specific didactics and school and teaching research, for effectively tackling the grave shortage of young researchers in this field.

The **promotion of young researchers** – starting with research-oriented teaching and continuing with support mechanisms tailored to each particular career stage up to the completion of the PhD or postdoctoral thesis or attainment of a junior professorship – has been one of HU's specific strengths for a long time and remains a fundamental principle of its approach to identifying, promoting and retaining the brightest minds. In order to achieve this, HGS will be developed so that its standards shape PhD programmes across the entire University. The framework for PhD regulations to be drafted by HGS will be an important instrument in reaching this goal, and will have a long-term impact. Supporting young researchers during the postdoctoral stage puts the promotion of the next generation of researchers during this crucial transition period on a new basis, both on the level of the University as a whole and on that of individual research collaborations (e.g. the IRIs). Wherever possible, tenure-track programmes for the heads of junior research groups and junior professors will be set up or reorganised in cooperation with non-university partners. The regulation whereby at least half of the postdoctoral funding should be awarded to women corresponds to HU's overall strategy of making gender equality a priority on all decision-making levels of the promotion of its members.

***Forum on the University's Development***

HU is establishing a **Forum on the University's Development** as part of the implementation of its Institutional Strategy. This forum consists of five experienced and internationally renowned HU professors who are proposed by the Executive Committee and appointed by the Board of Trustees. They have the right to expand their number by up to five further members of their choice from all status levels. The forum personally invites these individuals to join.

The task of the Forum on the University's Development is to discuss the future of the University independently of the everyday problems of academic life, the work of HU's committees, and structural and funding issues. The forum will analyse developmental trends in education, science, politics, economics and culture. It will explore their consequences for the University, examine needs and requirements, develop prognoses and scenarios, and design an ideal HU profile for the coming decades. Its members will inform the Board of Trustees annually about the state of their discussions and will provide the Executive Committee with advice on strategy. Every two years, the forum will invite the members of the University to a **Conference on the University's Development**, at which the results of its work will be presented and publicly discussed.

## 4.4. Legal preconditions

Beyond the financial commitments prescribed in the framework of the Excellence Initiative, HU's Institutional Strategy does not require any new legal regulations on the federal state level. The legal prerequisites for its achievement already exist in the State of Berlin.

# 5. Annexes
## Table of Contents

# Annex 1
# Basic data of the university

## 1. Total budget (revenue)

### a) HU (excluding Charité)

| Total budget in thousands of euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **411,225** | **391,877** | **438,586** |
| **of which** | | | |
| Subsidies for operations | 197,403 | 182,489 | 195,052 |
| Subsidies for investment | 29,403 | 21,333 | 32,843 |
| Administration revenue | 28,383 | 9,026 | 8,845 |
| Third party funding | 79,500 | 90,378 | 100,238 |

### b) Charité[1]

| Charité – Total budget in thousands of euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total**[2] | **381,501** | **389,072** | **391,574** |
| **of which** | | | |
| Subsidies for operations | 203,287 | 190,076 | 178,000 |
| Subsidies for investment | 12,000 | 15,000 | 29,606 |
| Administration revenue | n/a | n/a | n/a |
| Third party funding | 123,214 | 137,996 | 144,429 |

## 2. Funds allocated according to performance

### a) HU (excluding Charité)

| Funds allocated according to performance in euros | 2009 | 2010 | 2011 |
|---|---|---|---|
| **Total** | **499,992** | **252,071** | **771,330** |
| Teaching – Humanities and Social Sciences | -176,212 | 443,494 | 227,930 |
| Teaching – Natural Sciences, Others | -216,770 | -117,633 | 135,750 |
| Promotion of young researchers – Humanities and Social Sciences | 775,038 | -280,841 | -375,784 |
| Promotion of young researchers – Natural Sciences, Others | 307,247 | 287,894 | 905,285 |
| Gender Equality – Humanities and Social Sciences | 17,278 | 27,282 | -21,796 |
| Gender Equality – Natural Sciences, Others | -206,589 | -108,125 | -100,054 |

1 University medical training in Berlin has undergone several structural changes since the 1990s. According to the Berlin University Medicine Act of 2005, which is currently in force, Charité – Universitätsmedizin Berlin is a joint institution of Freie Universität Berlin and Humboldt-Universität Berlin. The faculty of medicine is part of it and belongs to both universities. Statistically, the third-party funding and projects the Charité receives is assigned to each of the two universities in equal parts unless it can be allocated entirely to one of them.

2 Without medical treatment income and other income.

### b) Charité

| **Funds allocated according to performance** in thousands of euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **37,738** | **28,031** | **29,346** |

## 3. Third-party funding (expenditures) per professor and per academic staff member

### a) HU (excluding Charité)

| **Third party funding per professor*** (including junior professors) in euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **169,703** | **185,810** | **216,883** |
| Language, Cultural Studies | 80,691 | 95,225 | 113,151 |
| Sports | 47,153 | 84,548 | 165,407 |
| Law, Economics, Social Sciences | 97,155 | 78,757 | 80,985 |
| Mathematics, Natural Sciences | 213,797 | 213,224 | 228,339 |
| Agriculture, Forestry, Nutrition | 148,686 | 185,089 | 220,333 |
| Fine Arts | n/a | 135,828 | 130,775 |

| **Third party funding per scientific staff member*** (including professors, junior professors) in euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **32,178** | **34,967** | **39,883** |
| Language, Cultural Studies | 17,283 | 19,319 | 22,630 |
| Sports | 8,420 | 10,793 | 24,811 |
| Law, Economics, Social Sciences | 21,243 | 17,732 | 18,438 |
| Mathematics, Natural Sciences | 37,429 | 35,992 | 35,913 |
| Agriculture, Forestry, Nutrition | 26,936 | 29,563 | 34,710 |
| Fine Arts | n/a | 29,928 | 31,031 |

* Including scientific staff members financed from third party funds.

### b) Charité

| **Third party funding per professor** (including junior professors) in euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **494,835** | **526,702** | **566,000** |

| **Third party funding per scientific staff member*** (excluding professors, junior professors) in euros | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **30,544** | **33,633** | **34,000** |

* Including scientific staff members financed from third party funds.

## 4. Students enrolled

### a) HU (excluding Charité)

| Students enrolled* ** | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **23,409** | **22,657** | **23,739** |
| Female, absolute | 13,526 | 13,042 | 13,695 |
| Female, % | 57.8 % | 57.6 % | 57.7 % |
| International, absolute | 2,245 | 2,104 | 2,253 |
| International, % | 9.6 % | 9.3 % | 9.5 % |
| Bachelor | 7,743 | 8,629 | 10,580 |
| Master | 2,387 | 3,422 | 4,504 |
| Diploma and Diploma in Theological and Pastoral Studies | 5,436 | 4,253 | 3,304 |
| Magister Artium | 4,163 | 3,105 | 2,295 |
| State Examination | 3,610 | 3,167 | 2,878 |
| Certificate | 70 | 81 | 178 |

* Number of persons at official statistic dates (15. November for 2008/09, 30. November for 2010).
** Numbers exclude exchange programme students, PhD/doctoral students and suspended students.

### b) Charité

| Students enrolled | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **7,166** | **7,032** | **6,992** |
| Female, absolute | 4,556 | 4,462 | 4,455 |
| Female, % | 63.6 % | 63.5 % | 63.7 % |
| International, absolute | 1,032 | 1,044 | 1,086 |
| International, % | 14.4 % | 14.8 % | 15.5 % |
| Master | 434 | 458 | 535 |
| Diploma | 504 | 539 | 498 |
| State Examination | 5,650 | 5,416 | 5,336 |

## 5. Number of doctoral researchers

### a) HU (excluding Charité)

| Doctoral researchers | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **4,034** | **4,454** | **5,023** |
| Female, absolute | 1,879 | 2,117 | 2,428 |
| Female, % | 46.6 % | 47.5 % | 48.3 % |
| International, absolute | 934 | 1,057 | 1,195 |
| International, % | 23.2 % | 23.7 % | 23.8 % |

### b) Charité

| Doctoral researchers | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **643** | **643** | **566** |
| Female, absolute | 356 | 371 | 331 |
| Female, % | 55.4 % | 57.7 % | 58.5 % |
| International, absolute | 48 | 40 | 52 |
| International, % | 7.5 % | 6.2 % | 9.2 % |

## 6. Number of professors

### a) HU (excluding Charité)

| Professors | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **387** | **411** | **427** |
| Female, absolute* | 87 | 100 | 111 |
| Female, % | 22.5 % | 24.3 % | 26.0 % |
| International, absolute | 31 | 39 | 45 |
| International, % | 8.0 % | 9.5 % | 10.5 % |
| **Grade W3/C4** | **214** | **227** | **247** |
| Female, absolute | 26 | 28 | 38 |
| Female, % | 12.1 % | 12.3 % | 15.4 % |
| International, absolute | 21 | 25 | 29 |
| International, % | 9.8 % | 11.0 % | 11.7 % |
| **Grade W2/C3** | **130** | **134** | **128** |
| Female, absolute | 37 | 41 | 40 |
| Female, % | 28.5 % | 30.6 % | 31.3 % |
| International, absolute | 4 | 4 | 4 |
| International, % | 3.1 % | 3.0 % | 3.1 % |
| **Grade W1/C2** | **43** | **50** | **52** |
| Female, absolute | 24 | 31 | 33 |
| Female, % | 55.8 % | 62.0 % | 63.5 % |
| International, absolute | 6 | 10 | 12 |
| International, % | 14.0 % | 20.0 % | 23.1 % |

* As agreed with FU Berlin and TU Berlin, a different calculation basis to that used in the Interim Report by the Humboldt-Universität zu Berlin on the DFG's Research-Oriented Standards on Gender Equality has been chosen here and for other parts of this annex containing indications of female quota. The calculation basis used to compile statistical data in this proposal corresponds to the guidelines set by the Berlin Senate for university performance reports.

### b) Charité

| Professors | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **249** | **262** | **255** |
| Female, absolute | 35 | 43 | 43 |
| Female, % | 14.1 % | 16.4 % | 16.9 % |
| International, absolute | 10 | 9 | 10 |
| International, % | 4.0 % | 3.4 % | 3.9 % |
| **Grade W3/C4** | **108** | **107** | **105** |
| Female, absolute | 9 | 9 | 10 |
| Female, % | 8.3 % | 8.4 % | 9.2 % |
| International, absolute | 3 | 5 | 5 |
| International, % | 2.8 % | 4.7 % | 4.8 % |
| **Grade W2/C3** | **131** | **140** | **135** |
| Female, absolute | 23 | 27 | 26 |
| Female, % | 17.6 % | 19.3 % | 19.3 % |
| International, absolute | 6 | 4 | 5 |
| International, % | 4.6 % | 2.9 % | 3.7 % |
| **Grade W1/C2** | **10** | **15** | **15** |
| Female, absolute | 3 | 7 | 7 |
| Female, % | 30.0 % | 46.7 % | 46.7 % |
| International, absolute | 1 | 0 | 0 |
| International, % | 10.0 % | 0.0 % | 0.0 % |

## 7. Student/professor ratio (enrolled students per professorship)

### a) HU (excluding Charité)

| **Students enrolled per professorship** (excl. junior professors) | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total** | **68.0** | **62.8** | **63.3** |
| Language, Cutural Studies | 81.3 | 83.6 | 79.8 |
| Sports | 165.8 | 129.7 | 123.8 |
| Law, Economics, Social Sciences | 79.1 | 69.8 | 71.9 |
| Mathematics, Natural Sciences | 37.6 | 34.1 | 37.3 |
| Agriculture, Forestry, Nutrition | 64.1 | 62.0 | 65.0 |
| Fine Arts | n/a | 81.0 | 78.2 |

### b) Charité

| **Students enrolled per professor** (excl. junior professors) | 2007 | 2008 | 2010 |
|---|---|---|---|
| **Total** | **28** | **27** | **27** |

## 8. Academic staff (excluding professors)

### a) HU (excluding Charité)

| **Scientific staff members** (excluding professors) | **2008** | **2009** | **2010** |
|---|---|---|---|
| **Total** | **1,654** | **1,773** | **1,895** |
| Financed from third-party fund, absolute | 689 | 809 | 973 |
| Financed from third-party fund, % | 41.7 % | 45.6 % | 51.3 % |
| Female, absolute | 732 | 801 | 871 |
| Female, % | 44.3 % | 45.2 % | 46.0 % |
| International, absolute | 233 | 261 | 294 |
| International, % | 14.1 % | 14.7 % | 15.5 % |

### b) Charité

| **Scientific staff members** (excluding professors) | **2008** | **2009** | **2010** |
|---|---|---|---|
| **Total** | **4,034** | **4,103** | **4,190** |
| Financed from third-party fund, absolute | 1,199 | 1,324 | 1,406 |
| Financed from third-party fund, % | 29.7 % | 32.3 % | 33.6 % |
| Female, absolute | 1,972 | 2,022 | 2,112 |
| Female, % | 48.9 % | 49.3 % | 50.4 % |
| International, absolute | 377 | 395 | 417 |
| International, % | 9.3 % | 9.6 % | 10.0 % |

## 9. Number of graduates

### a) HU (excluding Charité)

| **Graduates** | **2008** | **2009** | **2010** |
|---|---|---|---|
| **Total, p.a.** | **3,547** | **3,846** | **3,766** |
| Female, absolute | 2,201 | 2,498 | 2,342 |
| Female, % | 62.1 % | 65.0 % | 62.2 % |
| International, absolute | 343 | 406 | 340 |
| International, % | 9.7 % | 10.6 % | 9.0 % |
| Language, Cultural Studies | 1,585 | 1,845 | 1,784 |
| Sports | 88 | 121 | 154 |
| Law, Economics, Social Sciences | 995 | 918 | 823 |
| Mathematics, Natural Sciences | 586 | 631 | 671 |
| Agriculture, Forestry, Nutrition | 209 | 229 | 189 |
| Fine Arts | 84 | 102 | 145 |
| Bachelor | 796 | 1,170 | 1,504 |
| Master | 373 | 506 | 605 |
| Diploma and Diploma in Theological and Pastoral Studies | 975 | 900 | 732 |
| Magister Artium | 751 | 681 | 584 |
| State Examination | 587 | 556 | 340 |
| Certificate | 65 | 33 | 1 |

### b) Charité

| Graduates | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **886** | **853** | **878** |
| Female, absolute | 591 | 544 | 547 |
| Female, % | 66.7 % | 63.8 % | 62.3 % |
| International, absolute | 116 | 91 | 93 |
| International, % | 13.1 % | 10.7 % | 10.6 % |
| Master | 119 | 104 | 111 |
| Diploma | 51 | 52 | 36 |
| State Examination | 716 | 697 | 731 |

## 10. Number of doctorates

### a) HU (excluding Charité)

| Doctorates | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **480** | **499** | **486** |
| Female, absolute | 207 | 219 | 226 |
| Female, % | 43.1 % | 43.9 % | 46.5 % |
| International, absolute | 94 | 110 | 133 |
| International, % | 19.6 % | 22.0 % | 27.4 % |
| Language, Cutural Studies | 145 | 135 | 129 |
| Sports | 1 | 4 | 6 |
| Law, Economics, Social Sciences | 116 | 121 | 87 |
| Mathematics, Natural Sciences | 170 | 200 | 211 |
| Agriculture, Forestry, Nutrition | 35 | 30 | 38 |
| Fine Arts | 13 | 9 | 15 |

### b) Charité

| Doctorates | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **579** | **645** | **633** |
| Female, absolute | 331 | 358 | 359 |
| Female, % | 57.2 % | 55.5 % | 56.7 % |
| International, absolute | 37 | 41 | 47 |
| International, % | 6.4 % | 6.4 % | 7.4 % |

## 11. Number of habilitations

### a) HU (excluding Charité)

| Habilitations | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **23** | **44** | **31** |
| Female, absolute | 8 | 16 | 11 |
| Female, % | 34.8 % | 36.4 % | 35.5 % |
| International, absolute | 3 | 3 | 2 |
| International, % | 13.0 % | 6.8 % | 6.5 % |
| Language, Cultural Studies | 9 | 20 | 18 |
| Sports | 0 | 0 | 0 |
| Law, Economics, Social Sciences | 5 | 6 | 4 |
| Mathematics, Natural Sciences | 5 | 12 | 6 |
| Agriculture, Forestry, Nutrition | 2 | 3 | 0 |
| Fine Arts | 2 | 3 | 3 |

### b) Charité

| Habilitations | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **71** | **68** | **74** |
| Female, absolute | 19 | 20 | 14 |
| Female, % | 26.8 % | 29.4 % | 18.9 % |
| International, absolute | 0 | 0 | 12 |
| International, % | 0.0 % | 0.0 % | 16.2 % |

## 12. Number of professors appointed

### a) HU (excluding Charité)

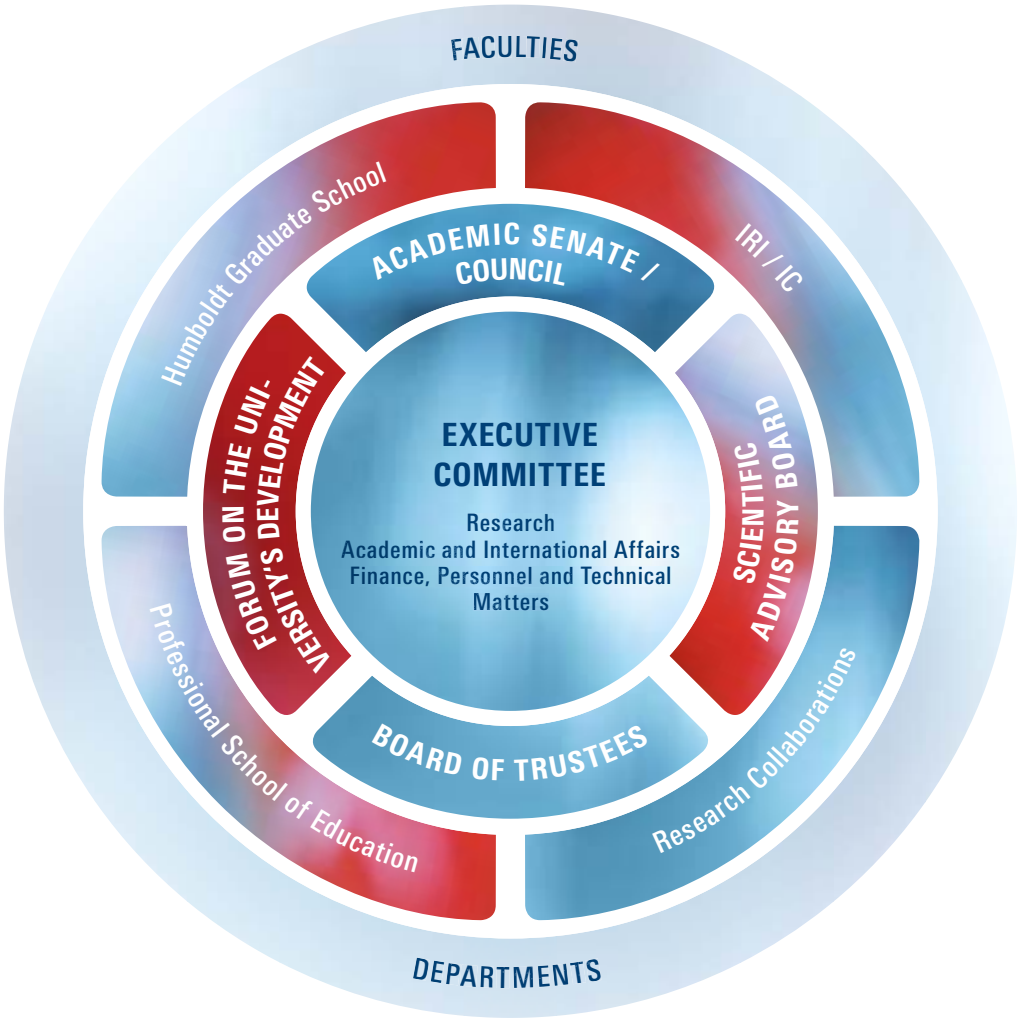
| Professors appointed | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **36** | **65** | **41** |
| Female, absolute | 13 | 24 | 17 |
| Female, % | 36.1 % | 36.9 % | 41.5 % |
| International, absolute | 4 | 13 | 5 |
| International, % | 11.1 % | 20.0 % | 12.2 % |
| Grade W3 | 12 | 35 | 32 |
| Grade W2 | 12 | 15 | 1 |
| Grade W1 | 12 | 15 | 8 |

### b) Charité

| Professors appointed | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Total, p.a.** | **26** | **28** | **15** |
| Female, absolute | 10 | 6 | 3 |
| Female, % | 38.5 % | 21.4 % | 20.0 % |
| International, absolute | 2 | 1 | 1 |
| International, % | 7.7 % | 3.6 % | 6.7 % |
| Grade W3 | 3 | 6 | 4 |
| Grade W2 | 21 | 16 | 11 |
| Grade W1 | 2 | 6 | 0 |

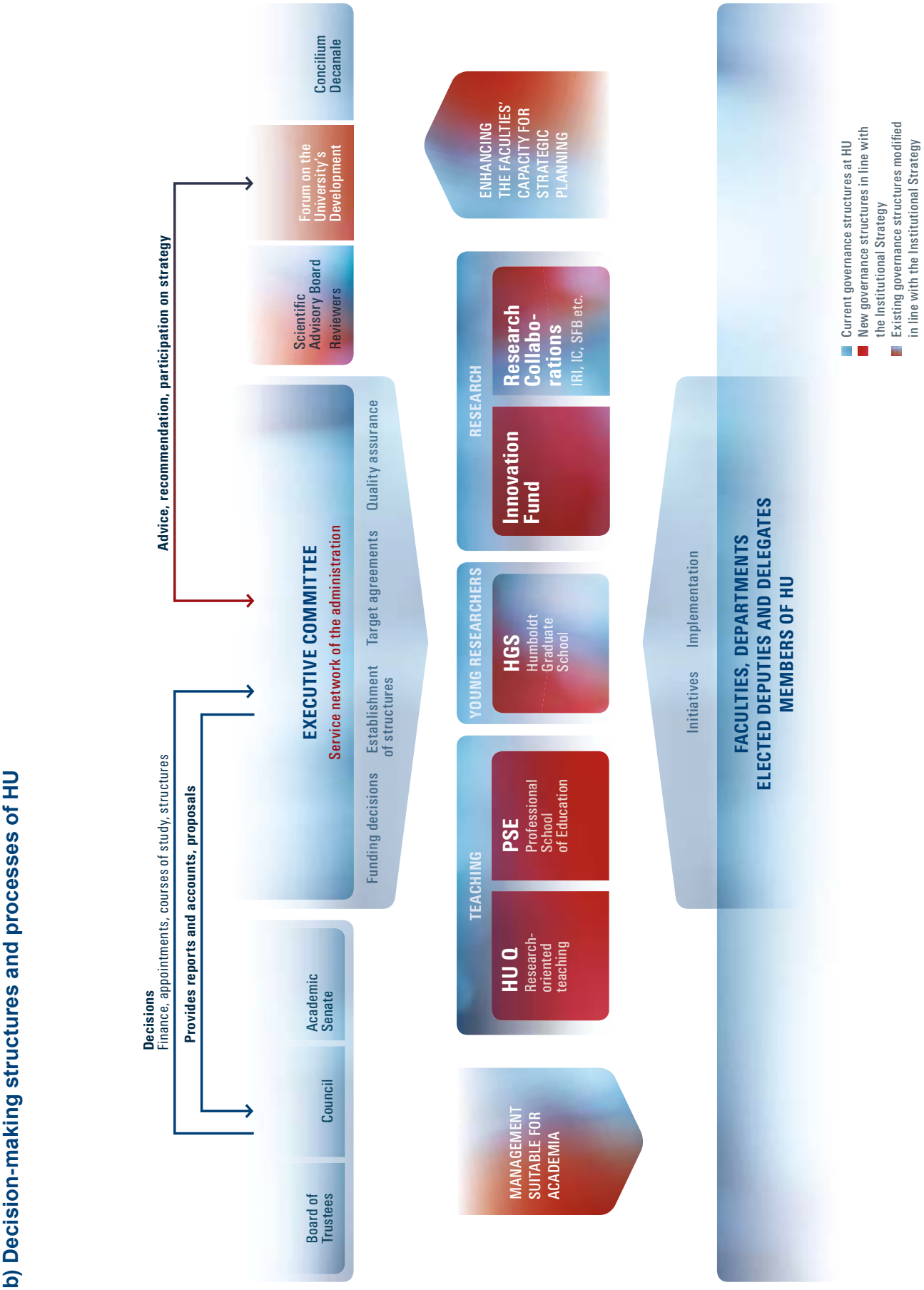
# Annex 2

## a) Structure of HU




- Current governance structures at HU
- New governance structures in line with the Institutional Strategy
- Existing governance structures modified in line with the Institutional Strategy

## b) Decision-making structures and processes of HU



# Annex 3
## Information pertaining to the quality and structure of research, training and support of young researchers and teaching

### 1. Academic distinctions (active university members)

| Type/Year | Name of awardee | Organisational affiliation of the awardee |
|---|---|---|
| **Gottfried Wilhelm Leibniz Prize** | | |
| 1998 | Prof. Nikolaus Ernsting PhD and Prof. Dr. Klaus Rademann | Physical Chemistry |
| 2001 | Prof. Dr. Dr. h.c. Christoph Markschies | Theology |
| 2006 | Prof. Dr. Dominik Perler | Philosophy |
| 2008 | Prof. Dr. Susanne Albers | Theoretical Computer Science |
| **ERC Advanced Investigator Grant** | | |
| 2008 | Prof. Dr. Michael Brecht | Animal Physiology and Systems Neurobiology |
| 2009 | Prof. Dr. Thomas Elsässer (*head of MBI and S-Professor at HU)* | Experimental Physics |
| 2010 | Prof. Dr. Klaus Peter Hofmann (Charité) | Medical Physics and Biophysics |
| 2010 | Prof. Dr. Christian Rosenmund (Charité) | Neuroscience |
| **ERC Starting Independent Researcher Grant** | | |
| 2010 | Prof. Dr. Janina Kneipp | Optical Spectroscopy |
| 2011 | Dr. Daniel Senkowski (Charité) | Psychiatry and Psychotherapy |
| **Max Planck Research Award** | | |
| 2001 | Prof. Dr. Andreas Griewank | Mathematics and Computer Sciences |
| 2006 | Prof. Dr. Horst Bredekamp | Art History |
| **Alexander von Humboldt Professorship** | | |
| 2009 | Prof. Dr. Philip van der Eijk | Classics and the History of Science |
| 2010 | Prof. Dr. Dirk Kreimer | Physics |
| **Heinz Maier-Leibnitz Award** | | |
| 1992 | Prof. Dr. Gerd Graßhoff | Philosophy |
| **Sofja Kovalevskaja Award** | | |
| 2002 | Prof. Dr. Stefan Hecht | Chemistry |
| 2010 | Prof. Andreas Möglich PhD | Biophysical Chemistry |
| **Heisenberg Professorship** | | |
| 2007- | Prof. Dr. Elmar Große-Klönne | Mathematics |
| 2007- | Prof. Dr. Roland Strausz | Economic Theory |
| 2010- | Prof. Dr. Rasha Abdel Rahman | General and Physiological Psychology |

| | | |
|---|---|---|
| **Heisenberg Fellowship** | | |
| 1999-2008 | Prof. Dr. Christian Limberg | Chemistry |
| 2000- | Prof. Dr. Martin Grohe | Mathematics |
| 2000- | Prof. Dr. Geert Keil | Philosophy |
| 2002-2009 | Prof. Dr. Tom Güldemann | Area Studies, Languages and Cultures |
| 2002-2011 | Prof. Dr. Lutz Rzehak | Muslim Studies, Arabistics, Semitistics |
| 2002- | Prof. Dr. Oliver Seitz | Molecular Chemistry |
| 2004- | Prof. Dr. Markus Asper | Greek Studies |
| 2005- | Dr. Ines Beilke-Voigt | Ancient History |
| 2008- | Dr. Reinhard Flogaus | Theology |
| 2008- | Dr. Thomas Scheffer | Sociological Theory |
| 2009- | Dr. Peter beim Graben | General and Physiological Psychology |
| 2009- | Dr. Andrea Shindler | Nuclear and Elementary Physics |
| 2010- | Prof. Dr. Christoph Arenz | Biological and Biomimetic Chemistry |
| 2010- | Dr. Erna Fiorentini | Art History |
| 2010- | Dr. Héctor Wittwer | Philosophy |
| **Hans Kilian Award for Research and Adavancement of Metacultural Humanisation** | | |
| 2011 | Prof. Dr. Hartmut Böhme | Cultural Theory |
| **Klung Wilhelmy Weberbank Award** | | |
| 2010 | Prof. Dr. Stefan Hecht | Chemistry |
| **Bunsen-Kirchhoff Award for Optical Spectroscopy** | | |
| 2010 | Prof. Dr. Janina Kneipp | Optical Spectroscopy |
| **Dilthey Fellowship** | | |
| 2011 | Dr. Marcus M. Payk | Contemporary History |

## 2. Rankings

| Ranking | Description | Rank | Comments |
|---|---|---|---|
| **DFG Funding ranking 2009** (2005-2007 period) | In terms of total funding (DDG grant volume) | 10 | |
| | Humanities and Social Sciences | 2 | 199,900 euros per professor |
| | Life Sciences | 5 | 375,100 euros per professor |
| | Natural Sciences | 15 | 384,200 euros per professor |
| | In terms of number of professorships | | 295,000 euros per professor (our own calculation based on data from the DFG funding ranking for 2009, section 4) |
| | For Research Training Groups | 1 | |
| | For Collaborative Research Centres | 4 | |
| | For participation in DFG-coordinated programmes | 3 | |
| **CHE Research Ranking 2009** (2007-2009 period) | Biology | Top group | 2009 first time in top group |
| | Educational Science | Top group | in top group before 2007 |
| | History | Top group | in top group before 2007 |
| | Medicine | Top group | same score as FU |
| | Mathematics | Top group | in top group before 2009 |
| | Political Economics | Top group | in top group before 2008 |
| **CHE Excellence Ranking 2010** | Biology | in Excellence Group | |
| | Economics | in Excellence Group | |
| | Mathematics | in Excellence Group | |
| | Physics | in Excellence Group | |
| | Political Sciences | in Excellence Group | |
| | Psychology | in Excellence Group | |
| **German Academic Exchange Service (DAAD) 2008** | Lecture exchange 2009/2010 Funding for ERASMUS lecturers | Number 1 | |
| **Alexander von Humboldt Foundation** | Participants in all foundation programmes 2005-2009 | Rank 3 | following LMU München and FU |

## 3. Projects and structures for the development of young researchers financed with third-party funding

Only currently (1.9.2011) funded projects are included

| Type | Description | Number | Comments |
|---|---|---|---|
| **DFG-funding** | Cluster of Excellence (coordinator) | 2 | thereof 1 Charité |
| | Cluster of Excellence (participation) | 2 | |
| | Graduate Schools (coordinator) | 4 | thereof 1 Charité |
| | Graduate Schools (participation) | 1 | |
| | Collaborative Research Centres (coordinator) | 12 | thereof 6 Charité |
| | Collaborative Research Centres (participation) | 15 | thereof 3 Charité |
| | Research Training Groups (coordinator) | 12 | thereof 3 Charité |
| | Research Training Groups (participation) | 7 | |
| | Research Units (coordinator) | 10 | thereof 6 Charité |
| | Research Units (participation) | 4 | |
| | DFG Junior Research Groups | 6 | |
| | Heisenberg Professorships | 3 | |
| | Heisenberg Fellowships | 12 | |
| | “Programme Temporary positions for principal investigators” (EIN) | 33 | |
| **EU-funding** | Integrated Projects (coordinator) | 2 | thereof 2 Charité |
| | Integrated Projects (participation) | 3 | |
| | Networks of Excellence (participation) | 1 | |
| | ERC Advanced Investigators Grant | 3 | thereof 2 Charité |
| | ERC Starting Independent Researcher Grant | 2 | thereof one Charité |
| **Federal funding** | Total number of projects | 158 | thereof BMBF: 106<br>thereof BMWi: 25 |
| | Projects with an average annual funding volume of more than 1 million euros | 8 | |
| | Projects with an average annual funding volume between 300,000 euros and 500,000 euros | 27 | |
| | Projects with an average annual funding volume between 100,000 euros and 300,000 euros | 65 | |
| **State funding** | Projects receiving funding from states (including State of Berlin) | 23 | thereof 8 State of Berlin |
| **Funding from business and industry** | Total number of projects | 28 | only projects with a duration of more than 12 months |
| **Funding from foundations** | Total number of projects | 152 | projects with a duration of more than 11 months: 145 |
| | **Notable projects** | | |
| | Professorial chairs endowed by foundations | 4 | |
| | Visiting professorships endowed by foundations | 8 | |
| | Lichtenberg Professorships | 2 | |
| | Junior research groups | 1 | |
| | Alexander von Humboldt Scholars | 68 | |

## 4. Patents and licenses

| Type | Description | Number | Comments |
|---|---|---|---|
| **Patents and licenses** | Patent families (pending) | 20 | as of 30.6.2011 |
| | Patent portfolio (pending) | 78 | |
| | Patent application | | |
| | • DE (Germany) | 13 | |
| | • EP (Europe) | 13 | |
| | • PCT (Patent Cooperation Treaty) | 6 | |
| | • USA | 11 | |
| | • Others | 4 | |
| | Issued (accumulated/pending) | 39 / 31 | as of 30.6.2011 |
| | Current licence agreements | 5 | |

| | In the years | | | | |
|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011* |
| Invention disclosures | 28 | 23 | 20 | 15 | 9 |
| Patent application (prio) | 13 | 8 | 12 | 6 | 3 |
| Issued | 9 | 3 | 2 | 13 | 4 |
| Current licence agreements | 4 | 4 | 4 | 5 | 5 |

* 1.1. until 30.6.2011

## 5. Evidence for teaching quality

| Type | Description | Comments |
|---|---|---|
| 2011 Third party funding from Quality pact for Teaching | • Federal and state quality pact for the promotion of teaching<br>• HU successful with proposal Übergänge (Transitions) | Total funding volume 13 million euros |
| 2009 Third party funding from competition Deutsche Telekom Stiftung | • Programme to promote teacher training in mathematics, the sciences and engineering of Deutsche Telekom Stiftung<br>• Humboldt ProMINT-Kolleg one of four successful proposals | Total funding volume 750,000 euros |
| 2011 Third party funding from competition Deutsche Telekom Stiftung | • Programme to promote teacher training in mathematics, the sciences and engineering of Deutsche Telekom Stiftung<br>• National Centre for teacher training in mathematics (NZLM) coordinated by HU | Total funding volume 5 million euros |
| 2011 Third party funding from competition BMBF | • BMBF Funding Programme „Measuring and Modelling Competence in Higher Education"<br>• HU's IC for Education Research will coordinate the programme and comes out as the most successful proposer | Total funding volume 1.2 million euros |

# Annex 4
## Third-party funding

### a) Funding volume (Annual expenditure in thousands of euros, 2007-2010) [3]

| Overall funding volume HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **55,968** | **65,675** | **76,368** | **92,609** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 13,806 | 16,086 | 20,498 | 23,504 |
| Sports | 200 | 236 | 507 | 992 |
| Law, Business / Economics, Social Sciences | 6,089 | 6,607 | 6,064 | 6,398 |
| Mathematics and Natural Sciences | 21,798 | 26,738 | 28,146 | 30,597 |
| Agriculture, Forestry, Nutritional Science | 3,435 | 3,717 | 4,257 | 5,068 |
| Art, Aesthetics and Art History | 2,380 | 3,007 | 1,766 | 1,831 |
| **Charité – Universitätsmedizin Berlin** | **109,698** | **123,214** | **137,996** | **144,430** |

| DFG-Funding HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **24,786** | **31,261** | **34,148** | **37,208** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 6,313 | 7,353 | 9,208 | 10,787 |
| Law, Business / Economics, Social Sciences | 2,238 | 2,672 | 1,962 | 2,399 |
| Mathematics and Natural Sciences | 12,235 | 16,494 | 15,169 | 16,338 |
| Agriculture, Forestry, Nutritional Science | 352 | 337 | 467 | 778 |
| Art, Aesthetics and Art History | 1,460 | 2,202 | 1,357 | 1,445 |
| Funds from the Excellence Initiative (GSC, EXC) | 952 | 3,366 | 5,737 | 8,284 |
| **Charité – Universitätsmedizin Berlin** | **23,825** | **30,284** | **36,912** | **38,587** |

| EU-Funding HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **4,076** | **4,490** | **4,979** | **3,847** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 389 | 294 | 237 | 335 |
| Sports | 101 | 97 | 79 | 0 |
| Law, Business / Economics, Social Sciences | 105 | 163 | 181 | 141 |
| Mathematics and Natural Sciences | 1,954 | 1,342 | 2,028 | 1,918 |
| Agriculture, Forestry, Nutritional Science | 641 | 908 | 674 | 215 |
| Art, Aesthetics and Art History | 1,5 | 1,8 | 0 | 0 |
| **Charité – Universitätsmedizin Berlin** | **13,884** | **9,127** | **9,816** | **11,712** |

3 In all tables of Annex 4a, there may be differences between the figures for total expenses and the sums of the figures for the individual groups of disciplines, due to rounding. Total expenses for all funding organisations except DFG may include costs not referrable to individual discipline groups (e.g. administrative expenses).

| Federal Funding HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **8,944** | **11,671** | **16,251** | **24,870** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 1,003 | 1,799 | 2,536 | 3,729 |
| Sports | 20 | 72 | 354 | 760 |
| Law, Business / Economics, Social Sciences | 1,220 | 1,094 | 1,210 | 1,010 |
| Mathematics and Natural Sciences | 3,776 | 5,088 | 7,312 | 7,846 |
| Agriculture, Forestry, Nutritional Science | 1,025 | 1,540 | 2,176 | 2,733 |
| Art, Aesthetics and Art History | 179 | 156 | 13 | 3,7 |
| **Charité – Universitätsmedizin Berlin** | **20,971** | **29,670** | **32,917** | **36,601** |

| State Funding HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **4,084** | **5,345** | **7,320** | **5,126** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 3,463 | 4,514 | 5,650 | 4,653 |
| Sports | 2,5 | 0 | 0 | 38 |
| Law, Business / Economics, Social Sciences | 1,2 | 147 | 87 | 29 |
| Mathematics and Natural Sciences | 368 | 129 | 364 | 291 |
| Agriculture, Forestry, Nutritional Science | 88 | 76 | 92 | 80 |
| Art, Aesthetics and Art History | 111 | 68 | 22 | 0 |
| **Charité – Universitätsmedizin Berlin** | **400** | **424** | **2,287** | **8,573** |

| Funds from Foundations HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **6,177** | **5,695** | **6,272** | **10,710** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 1,730 | 1,409 | 1,920 | 2,547 |
| Law, Business / Economics, Social Sciences | 1,088 | 857 | 1,100 | 1,043 |
| Mathematics and Natural Sciences | 1,245 | 1,220 | 1,024 | 1,233 |
| Agriculture, Forestry, Nutritional Science | 411 | 191 | 173 | 202 |
| Art, Aesthetics and Art History | 255 | 257 | 204 | 214 |
| **Charité – Universitätsmedizin Berlin** | **10,712** | **11,216** | **12,691** | **12,421** |

| Funds from Private Sector / Industry HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **3,816** | **3,993** | **3,720** | **4,671** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 321 | 211 | 306 | 534 |
| Sports | 77 | 66 | 73 | 75 |
| Law, Business / Economics, Social Sciences | 869 | 957 | 699 | 668 |
| Mathematics and Natural Sciences | 1,390 | 1,790 | 1,857 | 2,538 |
| Agriculture, Forestry, Nutritional Science | 338 | 283 | 311 | 390 |
| Art, Aesthetics and Art History | 258 | 175 | 162 | 148 |
| **Charité – Universitätsmedizin Berlin** | **30,351** | **36,450** | **36,084** | **29,627** |

| Others HU | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|
| **Total** (excluding Charité) | **4,085** | **3,221** | **3,678** | **6,178** |
| **Thereof** | | | | |
| Languages, Cultural Studies | 587 | 506 | 642 | 910 |
| Sports | 0 | 0,9 | 1,2 | 120 |
| Law, Business / Economics, Social Sciences | 568 | 715 | 825 | 1,112 |
| Mathematics and Natural Sciences | 829 | 676 | 392 | 432 |
| Agriculture, Forestry, Nutritional Science | 581 | 382 | 365 | 670 |
| Art, Aesthetics and Art History | 115 | 146 | 10 | 21 |
| **Charité – Universitätsmedizin Berlin** | **9,556** | **6,042** | **7,289** | **6,910** |

## Annex 4b: Projects and their funding periods

### Abbreviations specific to Annex 4b

| | |
|---|---|
| BMBF | Federal Ministry for Education and Research |
| BMFSFJ | Federal Ministry for Family Affairs, Senior Citizens, Women and Youth |
| BMWi | Federal Ministry of Economics and Technology |
| DAAD | German Academic Exchange Service |
| DFG ENP | DFG Junior Group in the Emmy Noether Programme |
| DFH | German-French University |
| EXC | Cluster of Excellence |
| FOR | Research Unit |
| FU | Freie Universität Berlin |
| FZT | DFG Research Centre |
| GRK | Research Training Group |
| GSC | Graduate School |
| GSI | Helmholtzzentrum für Schwerionenforschung GmbH Darmstadt |
| HGF | Helmholtz Association |
| ICT | Information and Communication Technologies |
| IGRK | International Research Training Group |
| IP | Integrated Programme |
| KFO | Clinical Research Unit |
| SFB | Collaborative Research Centre |
| TRR | Collaborative Research Centre – Transregio |
| TU | Technische Universität Berlin |
| U | University |

**Comment**

As recommended by the Science Council, projects are listed by funding organisations and, within these, where necessary, by funding lines and then according to discipline groups of the Federal Statistical Office. Unless otherwise marked, HU is the university responsible for a project (sometimes jointly with one or more other universities). Projects in which HU is a participant are marked with an *asterisk followed by an indication of the lead university in brackets.

Abbreviations in the “description” column are taken from the responsible funding organisations wherever possible.

| DFG Funding | Description | Title | Funding period |
|---|---|---|---|
| **Languages, Historical and Cultural Studies** | | | |
| | **EXC 264** | Topoi – The Formation and Transformation of Space and Knowledge in Ancient Civilizations | 2007-2012 |
| | **GSC 86**[4] | Berlin School of Mind and Brain | 2006-2012 |
| | **EXC 302* (FU)** | Languages of Emotion | 2007-2012 |
| | **GSC 153* (FU)** | Berlin Graduate School Muslim Cultures and Societies | 2007-2012 |
| | SFB 640 | Changing Representations of Social Order – Intercultural and intertemporal comparisons | 2006-2012 |
| | SFB 644 | Transformations of Antiquity: Media of knowledge – constructions of culture | 2005-2012 |
| | SFB 447* (FU) | Performing Cultures. Performative turns in the middle ages and in early and late modern times | 1999-2010 |
| | SFB 632* (U Potsdam) | Information Structure: The linguistic means for structuring utterances, sentences and texts | 2003-2015 |
| | FOR 955 | Actors of Cultural Globalisation, 1860-1939 | 2008-2011 |
| | FOR 1008 | Collegium for the Advanced Study of the Picture Act and of Embodiment | 2008-2011 |
| | FOR 1120[5] | Cultures of Insanity (1870-1930). Threshold phenomena of urban modernity | 2008-2011 |
| | GRK 1014 | Gender as a Category of Knowledge | 2005-2013 |
| | IGRK 1015* (TU) | Berlin – New York: History and culture of the metropolis in the 20th century | 2005-2010 |
| | GRK 1571* (FU) | Between Spaces. Movements, actors and representations of globalisation | 2009-2014 |
| | DFG ENP | Explanations in Philosophy and the Philosophy of Explanation: On the semantics, logic, and philosophical applicability of the sentential connector “weil” | 2007-2011 |
| | DFG ENP | Intellectuals in Berlin, 1800-1830 | 2010-2013 |
| **Law, Economics, Social Sciences** | | | |
| | **GSC 243** | Berlin Graduate School of Social Sciences | 2007-2012 |
| | SFB 649 | Economic Risk | 2005-2012 |
| | TRR 15* (U Bonn) | Governance and the Efficiency of Economic Systems | 2004-2015 |
| | SFB 700* (FU) | Governance in Areas of Limited Statehood | 2006-2013 |
| | GRK 1263 | Multilevel Constitutionalism: European experiences and global perspectives | 2006-2015 |
| | GRK 1659 | Interdependencies in the Regulation of Market Processes | 2011-2016 |

4 Interdisciplinary Graduate School. See also Medicine (Charité)
5 Research Unit led by the History of Medicine Department at Charité

| Mathematics, Natural Sciences | | | |
|---|---|---|---|
| Mathematics | **GSC 14** | Berlin Mathematical School | 2006-2012 |
| | FZT 86* (TU) | MATHEON – Mathematics for key technology areas | 2002-2015 |
| | SFB 919* (TU) | Control of Self-Organizing Nonlinear Systems | 2011-2014 |
| | FOR 797* (U Bochum) | Analysis and Computation of Microstructure in Finite Plasticity | 2007-2013 |
| | GRK 870 | Arithmetic and Geometry | 2004-2009 |
| | GRK 1128 | Analysis, Numerics and Optimisation of Multiphase Problems | 2005-2009 |
| | IGRK 1740 | Dynamical Phenomena in Complex Networks: Fundamentals and applications | 2011-2016 |
| | GRK 1408* (TU) | Methods of Discrete Structures | 2006-2015 |
| | IGRK 1339* (TU) | Stochastic Models of Complex Processes and their Applications | 2006-2011 |
| Computer Science | FOR 1306* (TU) | Stratosphere – Information management on the cloud | 2010-2013 |
| | GRK 1324 | METRIK – Model-based development of technologies for self-organizing decentralized information systems in disaster management | 2006-2015 |
| | GRK 1651 | SOAMED: Service-oriented architectures for the integration of software-based processes, exemplified by health-care systems and medical technology | 2010-2014 |
| Physics | SFB 448 | Mesoscopically Organized Composites | 1998-2008 |
| | SFB 555 | Complex Nonlinear Processes | 1998-2010 |
| | SFB 647 | Space – Time – Matter. Analytic and geometric structures | 2005-2012 |
| | SFB 951 | Hybrid Inorganic/Organic Systems (HIOS) for Opto-Electronics | 2011-2015 |
| | SFB 658* (FU) | Elementary Processes in Molecular Switches at Surfaces | 2005-2013 |
| | SFB 787* (TU) | Semiconductor Nanophotonics: Materials, models, devices | 2008-2011 |
| | TRR 9* (RWTH Aachen/KIT Karlsruhe) | Computational Particle Physics | 2003-2014 |
| | SFB 450* (FU) | Analysis and Control of Ultrafast Photo-Induced Reactions | 1998-2010 |
| | GRK 1504 | Mass, Spectrum, Symmetry: Particle physics in the era of the Large Hadron Collider | 2009-2013 |
| | GRK 1524* (TU) | Self-Assembled Soft-Matter Nanostructures at Interfaces | 2009-2013 |
| | DFG ENP | Supramolecular Systems with Large Energy Level Offset for Organic Electrons | 2004-2009 |
| | DFG ENP | Opening Celestial Horizons: Detecting astrophysical high energy electron and tau neutrinos with IceCube | 2006-2009 |
| | DFG ENP | Lattice QCD with 2+1+1 Dynamic Quark Flavours: Aspects of simulation and analysis | 2011-2015 |
| Chemistry | **EXC 314* (TU)** | Unifying Concepts in Catalysis (UniCat) | 2007-2012 |
| | SFB 546 | Structure, Dynamics, and Reactivity of Aggregates of Transition Metal Oxides | 1999-2011 |

| | | | |
|---|---|---|---|
| | SFB 765* (FU) | Multivalency as a Chemical Organisation and Action Principle: New architectures, functions, and applications | 2008-2011 |
| | GRK 1025 | Fundamentals and Functionality of Size- and Interface-Controlled Materials | 2004-2008 |
| | GRK 1582* (FU) | Fluorine as a Key Element. Discovering innovative synthetic concepts to generate novel molecules with unique properties | 2009-2014 |
| Psychology | FOR 778 | Conflicts as Signals in Cognitive Systems | 2006-2013 |
| | FOR 868* (U Potsdam) | Computational Modeling of Behavioral, Cognitive, and Neural Dynamics | 2011-2013 |
| | GRK 1013* (TU) | prometei: Prospective design of human-technology interaction | 2004-2013 |
| Biology | SFB 429 | Molecular Physiology, Energetics, and Regulation of Primary Metabolism in Plants | 1999-2010 |
| | SFB 618 | Theoretical Biology: Robustness, modularity and evolutionary design of living systems | 2002-2013 |
| | SFB 449* (FU) | Structure and Function of Membrane-Integral Receptors | 1999-2010 |
| | SFB 498* (FU) | Protein-Cofactor Interactions in Biological Processes | 2000-2009 |
| | SFB 852* (FU) | Nutrition and Intestinal Microbiota Host Interactions in the Pig | 2010-2013 |
| | FOR 526 | Photoreceptors Sensitive to Blue Light | 2004-2010 |
| | FOR 804 | Retrograde Signalling in Plants | 2007-2010 |
| | FOR 1279 | Protein-Based Photoswitches as Optogenetic Tools | 2010-2013 |
| | FOR 1261* (U Jena) | Specific Light-Driven Reactions in Unicellular Model Algae | 2009-2012 |
| | GRK 1121 | Genetic and Immunological Determinants of Pathogen-Host-Interactions | 2005-2014 |
| | IGRK 1360 | Genomics and Systems Biology of Molecular Networks | 2006-2010 |
| | GRK 1772 | Computer-Based Systems Biology | 2011-2015 |
| | GRK 837* (U Potsdam) | Functional Insect Science | 2003-2010 |
| | GRK 1589* (TU) | Sensory Computation in Neural Systems | 2010-2014 |
| | GRK 1673* (FU) | Functional Molecular Infection Epidemiology | 2010-2015 |
| | DFG ENP | Analysis of Pentatricopetide Repeat Proteins in vivo: Target RNAs and functions | 2005-2011 |
| | DFG ENP | Biological Networks: Design principles of robust information processing | 2006-2010 |
| | DFG ENP | Plasticity and Stability | 2003-2008 |
| Geography | GRK 780 | Perspectives on Urban Ecology | 2002-2011 |

| Medicine (Projects of the Charité) | | | |
|---|---|---|---|
| | **EXC 257** | NeuroCure | 2007-2012 |
| | **GSC 86** | Berlin School of Mind and Brain[6] | 2006-2012 |
| | **GSC 203** | Berlin Brandenburg School for Regenerative Therapies | 2007-2012 |
| | SFB 507 | The Significance of Non-Neuronal Cells for Neurological Diseases | 1995-2007 |
| | SFB 577 | Molecular Basis of Clinical Variability in Mendelian Disorders | 2001-2009 |
| | SFB 633 | Induction and Modulation of T-Cell-Mediated Immune Reactions in the Gastrointestinal Tract | 2003-2015 |
| | SFB 650 | Cellular Approaches to the Suppression of Unwanted Immune Reactions – From bench to bedside | 2005-2012 |
| | SFB 665 | Developmental Disturbances in the Nervous System | 2005-2013 |
| | SFB 740 | From Molecules to Modules: Organisation and dynamics of functional units in cells | 2007-2014 |
| | SFB 760 | Biomechanics and Biology of Musculoskeletal Regeneration | 2007-2010 |
| | TRR 19 | Inflammatory Cardiomyopathy – Molecular pathogenesis and therapy | 2004-2012 |
| | TRR 36 | Principles and Applications of Adoptive T-Cell Therapy | 2006-2014 |
| | TRR 43 | The Brain as a Target of Inflammatory Processes | 2008-2011 |
| | TRR 54 | Growth and Survival, Plasticity and Cellular Interactivity of Lymphatic Malignancies | 2008-2011 |
| | TRR 84 | Innate Immunity of the Lung: Mechanisms of pathogen attack and host defence in pneumonia | 2010-2014 |
| | TRR 3* (U Bonn) | Mesial Temporal Lobe Epilepsies | 2001-2012 |
| | TRR 52* (U Würzburg) | Transcriptional Programming of Individual T Cell Subsets | 2008-2012 |
| | KFO 102 | Biomechanics and Biology of Bone Healing: Individual, load adapted osteosynthesis | 2002-2009 |
| | KFO 105 | Growth Control of Neoplastic B-Cells: Tumor biology and molecular therapies | 2002-2009 |
| | KFO 192 | Regulation and Dysregulation of Skeletal Muscle Growth | 2007-2011 |
| | KFO 213 | Magnetic Iron Oxide Nanoparticles for Cellular and Molecular MR Imaging | 2008-2011 |
| | KFO 218 | Hormonal regulation of Body Weight Maintenance | 2009-2012 |
| | KFO 247 | Deep Brain Stimulation: Mechanisms, physiology of cortex and basal ganglia, and therapy optimization | 2010-2013 |
| | FOR 667 | Epithelial Mechanisms in Renal Volume Regulation | 2006-2012 |

6 Interdisciplinary Graduate School. See also Languages, History, Cultural Studies

| | | | |
|---|---|---|---|
| | FOR 721 | Molecular Structure and Function of the Tight Junction | 2006-2012 |
| | FOR 1054 | Gender-Specific Mechanisms in Myocardial Hypertrophy | 2008-2011 |
| | FOR 1336 | From Monocytes to Brain Macrophages – Influences on the properties of myeloid cells in the brain | 2009-2012 |
| | FOR 1368 | Hemodynamic Mechanisms of Acute Kidney Injury | 2010-2013 |
| | GRK 754 | Myocardial Gene Expression and Function – Myocardial hypertrophy | 2001-2010 |
| | GRK 1258 | The Impact of Inflammation on Nervous System Function | 2006-2010 |
| | GRK 1123 | Cellular Mechanisms of Learning and Memory Consolidation in the Hippocampal Formation | 2005-2014 |
| | GRK 1208 | Hormonal Regulation of Energy Metabolism, Body Weight and Growth | 2005-2014 |
| | GRK 1631 | MyoGrad | 2010-2014 |
| Agriculture | FOR 986 | Structural Change in the Agricultural Sector | 2007-2013 |

| EU-Funding | Description | Title | Funding period |
|---|---|---|---|
| **Medicine (Projects of the Charité)** *only projects coordinated by HU* | | | |
| | IP in Health Programme, clinical studies | Affording Recovery In Stroke | 2008-2013 |
| | IP in Health Programme, clinical studies | International Study for Treatment of Childhood Relapsed ALL 2010 with standard therapy, systematic integration of new agents, and establishment of standardized diagnostic and research | 2011-2016 |
| | IP in Health Programme, clinical studies and drug development | Studies Investigating Co-Morbidities Aggravating Heart Failure | 2009-2013 |
| | Project in ICT Programme | Enhanced Patient Safety by Computational Modelling from Clinically Available X-rays to Minimise the Risk of Overload and Instability for Optimised Function and Joint Longevity | 2010-2012 |

| Federal Funding | Description | Title | Funding Period |
|---|---|---|---|
| **Languages, Historical and Cultural Studies** | | | |
| | BMBF International Käte Hamburger Collegium | Work and Human Lifecycle in Global History | 2009-2015 |
| | BMBF Competence Network | Phantom Boundaries in Eastern Central Europe | 2011-2015 |
| | BMBF Competence Network | Dynamics of Religion in South-East Asia | 2011-2015 |
| | BMBF Competence Network | Crossroads Asia, Working Packages “language and conflict”, “spaces for refuge”, “the quiet mobility of women”, “concise dictionary of social order terminology” | 2009-2014 |
| **Law, Economics, Social Sciences** | | | |
| | BMBF | The Integration of Highly Qualified Women from Immigrant Families into the German Job Market, Effects of Migration on the Career Development of Highly Qualified Women in the Technology Sector | 2009-2011 |
| | BMBF Joint Research Project | External Flexibility and Internal Stability within the Automobile Added Value System (EFIS) – Subproject: Free lance workers in the creative industry chain of automobile economic added value system | 2009-2013 |
| | BMFSFJ et al. | Gender Competence Centre | 2003-2010 |
| | BMBF | Representations of Man as a Model for Social and Professional Practice: A symmetrical study of the case of cardiovascular prevention programmes | 2006-2010 |
| | BMBF Joint Research Project | Imagined Europeans. The learned construction of Homo Europaeus | 2006-2009 |
| | BMBF Junior Group | Biofuel as a Social Fuel for Sustainable Development? | 2009-2013 |
| | BMBF | Measuring Research Diversity | 2009-2012 |
| Education and Didactics | Federal Ministry of the Interior/Office for Migration and Refugees | Developing a Pool of Examination Tasks: Test sentences for the orientation course | 2007-2010 |
| | BMBF | The Future of the Humboldt Model: The modern research university in the international economic system | 2009-2011 |
| | BMBF | What Does Elementary Written Language Command Contribute to Basic Qualifications and Increased Chances of Professional and Social Participation? | 2009-2011 |
| | BMBF | Teacher Education and Development Study: Learning to teach | 2008-2011 |
| | BMBF | Research Data Centre for Empirical Research into Education | 2007-2011 |
| | BMBF | Model Competence in Teaching Biology | 2009-2013 |
| | BMBF Programme Coordination | Measuring and Modelling Competence in Higher Education | 2011-2016 |

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|---|---|---|---|
| | BMBF Joint Research Project | InterVal: Berlin research centre for internet economics (six separate projects) | 2003-2007 |
| | BMBF Joint Research Project | Aletheia: Semantic federation of comprehensive product information | 2008-2011 |
| **Mathematics, Natural Sciences** | | | |
| Computer Science | BMWi Consortium | Efficient Collaboration in Logistic Networks Supported by RFID | 2006-2009 |
| | BMWi Consortium | A Process Library for German Administration | 2010-2013 |
| | BMBF | Hyperimage. Image-oriented e-science networks | 2006-2009 |
| | BMBF | e-Competence in Context: Integrative structural measures to support a research-oriented teaching and learning culture at HU | 2006-2009 |
| Physics | BMBF Joint Research Project | H.E.S.S.: Data acquisition systems, data analysis and extension of the observatory | 2002-2011 |
| Cooperation with DESY Zeuthen | BMBF Joint Research Project | ATLAS: Trigger, luminosity, data analysis, pixel detector, software, data analysis | 2006-2012 |
| Cooperation with Stanford University | BMBF Joint Research Project | BABAR: Study of CP violation in B-meson decays, detector operation, data analysis, simulation and GridKa operation | 2008-2012 |
| | BMBF Joint Research Project | Bose-Einstein Condensates in Free Fall and in Microgravity | 2004-2010 |
| | BMBF | Cherenkov Telescope Array (CTA) Prototypes and Dark Matter Studies | 2010-2013 |
| Cooperation with University of Wisconsin | BMBF | IceCube (University of Wisconsin Neutrino Experiment in Antarctica) | 2008-2011 |
| Cooperation with GSI Darmstadt | BMBF | FLAIR-Horizon: Prediction of cross-sections for the interaction of slow antiprotons | 2006-2009 |
| Cooperation with GSI Darmstadt | BMBF | Theoretical Investigation of the Behaviour of Molecular Hydrogen in Intense Ultrashort Laser Pulses | 2009-2012 |
| | BMBF | Low Energy Nanolayer Sensors (LENAS) | 2011-2013 |
| | BMBF | KEPHOSI: Compact single-photon norm light source based on defect centres in diamond | 2008-2011 |
| | BMWi | Development of New Diod Laser Systems for Precision Experiments in Zero Gravity (LasUS) for Future TEXUS-Missions | 2009-2012 |
| | BMWi | Experiments with Quantum Gases in Zero Gravity | 2010-2013 |
| | BMBF | Interface Analysis of BAYTRON-Layers | 2006-2009 |
| | BMBF | Interface Analysis of CLEVIOS-Layers | 2009-2012 |
| | BMBF | Injection Barriers at Interfaces of Conducting and Electroluminescent Polymers | 2009-2012 |
| | BMBF, Foundations, Private Sector | HERE COMES THE SUN – An exhibition for children from the age of 8, school classes, and families with experimental facilities | 2009-2011 |
| | BMBF et al. | Research in the Framework of the Helmholtz Alliance “Physics at the Terascale”: Physical analysis, grid computing, detector development and accelerator physics | 2007-2012 |
| Chemistry | BMBF | Nanoscopic Metal Fluorides for Important Organic Transformations | 2009-2011 |

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|---|---|---|---|
| | BMWi | Transparent, Scratch-Resistant, Antireflective Surfaces | 2009-2013 |
| Biology and Biomedicine | BMBF | Design of Natural and Biomimetic Systems for Light-Driven Hydrogen Production | 2005-2012 |
| | BMBF | Metabolic Design of Ralstonia Eutropha for the Production of Amino Acids and Proteins with Stable Isotope Markers | 2006-2012 |
| | BMBF | Systems Biology of Biofuel Production by Cyanobacteria | 2008-2011 |
| | BMBF | Systems Biology: Tools development for cell therapy and drug development – SYSTHER | 2007-2012 |
| | BMBF | Models for Ion Homeostasis in Saccharomyces Cerevisiae | 2009-2012 |
| | BMBF | Drug Mediated Induction of Pluripotent Human Stem Cells from Human Somatic Cells | 2009-2011 |
| | BMBF | GerontoSys: Mitochondrial networks of signal pathways in aging and in life span control – a systems biology approach | 2010-2012 |
| | BMBF | Microsecond Precision in the Avian Auditory System: Analysis and simulation of the neurophonic potential | 2004-2007 |
| | BMBF | Design and Implementation of a Neuroinformatics Internet Gateway for the Promotion of Data- and Method-Exchange in the Neurosciences | 2004-2007 |
| | BMBF Bernstein Center | Bernstein Center for Computational Neuroscience Berlin (includes numerous individual projects, junior groups, prizes etc., also in the Charité, with separate grants) | 2004-2015 |
| | BMBF | Dynamical Switching Between Network States in Hippocampal Area CA3 | 2010-2015 |
| | BMBF | ColoNET: A systems biology approach for integrating molecular diagnostics and targeted therapy in colorectal cancer (several individual projects) | 2009-2012 |
| Earth Sciences | BMBF | Land Use Innovations and Information Flows | 2007-2010 |
| | BMBF et al. Joint Research Project | INKA BB – Innovation network for climate adaptation in the Berlin-Brandenburg region (numerous individual projects) | 2009-2014 |
| | BMBF | ELaN – Development of an integrated land management for the sustainable use of water and other resources in North East Germany (several individual projects) | 2011-2015 |
| | BMBF Joint Research Project | Climate and Energy in a Complex Transition Process towards Sustainable Hyderabad. Mitigation and adaptation strategies by changing institutions, governance structures, life styles and consumption patterns | 2005-2013 |
| | BMBF Joint Research Project | EnMAP Core Science Team (German Environmental Satellite Mission, several separate projects) | 2009-2012 |
| | BMBF Joint Research Project | Carbon Sequestration, Biodiversity and Social Structures in Southern Amazonia: Models and implementation of carbon-optimized land management strategies | 2011-2015 |

| Medicine (Projects of the Charité)[7] | | | |
|---|---|---|---|
| | BMBF Competence Network | Pediatric Oncology and Hematology | 1999-2009 |
| | BMBF Joint Research Project | Functional Genomics of Childhood ALL | 2008-2011 |
| | BMBF | FORSYS: Quantitative analysis of bacterial gene regulation by small RNAs | 2008-2013 |
| | BMBF | Systems Biology of Pulmonary Inflammation (FORSYS-Lung) | 2008-2013 |
| | BMBF | FORSYS Junior Research Group – Adaptation mechanisms of signal transmission in the MAPK cascade | 2008-2013 |
| | BMBF Joint Research Project | MedSys – Therapeutic systems immunology, project coordinator | 2009-2012 |
| | BMBF | Neurocomputation and Neuroimaging – Modelling of somatosensory information processing | 2007-2012 |
| | BMBF Joint Research Project | Neurodegeneration: Classification of phenotype-to-genotype relationships for neurodegenerative diseases | 2008-2011 |
| | BMBF | Single Cell to Network: The influence of cell-intrinsic properties on neuronal signal processing | 2009-2014 |
| | BMBF | Centre for Stroke Research Berlin | 2008-2013 |
| | BMBF | Innoprofile Junior Research Group: Optimized peptide lead structures for diagnostic tumor imaging and for tumor therapy | 2007-2012 |
| | BMBF | Monitoring of Cancer Therapy with Superparamagnetic Nanoparticles | 2009-2012 |
| | BMBF Joint Research Project | ColoNET: A systems biology spproach for integrating molecular diagnostics and targeted therapy in colorectal cancer[8] | 2009-2012 |
| | BMBF | Berlin Brandenburg Center for Regenerative Therapies | 2006-2014 |
| | BMBF Competence Network | The Virtual Liver | 2010-2015 |
| | BMBF | Arthromark: Prospective multicenter study on biomarkers in arthritis therapy | 2010-2013 |
| | BMBF | CirNet: Study network in surgery | 2010-2013 |
| | BMBF | FONTANE – Northern Brandenburg, Health Region of the Future – Coordination of clinical studies | 2010-2013 |
| | BMBF | GERONTOSYS Junior Group: CIRCAGE – Systems biology of cellular aging and circadian rhythms | 2011-2016 |

7 A more comprehensive selection of federally funded Charité projects is at www.charite.de/forschung/projekte/bundes_und_landesfoerderungen

8 Example of a joint project of HU Biology and Charité, see above “Biology and Biomedicine”

| Funding by Berlin and/or other States | Description | Title | Funding period |
|---|---|---|---|
| **Languages, History and Cultural Studies** | | | |
| | Berlin for the Einstein Foundation Berlin | Einstein Visiting Fellow at the Berlin School of Mind and Brain | 2011 |
| | Berlin for the Einstein Foundation Berlin | Einstein Visiting Fellowship in the Cluster of Excellence Topoi | 2011 |
| | Several States | Historical Graduate School of the German-French University | 2010-2012 |
| **Law, Economics, Social Sciences** | | | |
| Education | Berlin and other States | Aptitude Test for University Entrants | 2007-2009 |
| | Bremen | Scientific Investigation for the State of Bremen | 2008-2010 |
| | Several States | Educational Standards for the Final Years in Secondary Schools (Project of the IQB) | 2009-2015 |
| Social Sciences | Several States | Interdisciplinary Research Collaboration Social Anthropology and Life Sciences | 2004-2009 |
| | Berlin for the Einstein Foundation Berlin | Einstein Visiting Fellowship at the Berlin Graduate School of Social Sciences | 2010-2011 |
| **Mathematics, Natural Sciences** | | | |
| | Berlin for the Einstein Foundation Berlin | Leibniz Humboldt Professorship “Structural Physics – High resolution electron microscopy of crystalline solids” | 2011-2015 |
| | State of Berlin | Virus-Immune System-Interaction in the Context of a Polyoma Virus – associated nephropathy | 2009-2012 |

| Funding by Foundations | Description | Title | Funding period |
|---|---|---|---|
| **Languages, History, Cultural Studies** | | | |
| | Alexander von Humboldt Professorship | Classical Antiquity and History of Science | 2010-2014 |
| | Alfred Freiherr von Oppenheim Foundation | Alfred Freiherr von Oppenheim Professorship | 2010-2015 |
| | Alfried Krupp von Bohlen und Halbach Foundation | Professorship of Library and Information Science with Special Reference to Digital Libraries | 2005-2011 |
| | Daimler Benz Foundation | ClockWORK. Circadian factors in language processing | 2006-2010 |
| | Donors’ Association for German Science | Dag Hamarskjöld Visiting Professorship | 2002-2011 |

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|---|---|---|---|
| | Donors' Association for German Science | Guardini Visiting Professorship for Religious Philosophy and Roman Catholic Theology | 2004-2013 |
| | Donors' Association for German Science | Norwegian Visiting Professorship "Henrik Steffens" | 1998-2018 |
| | Hamburg Foundation for Scholarship and Culture | Exclusion and Strategies for Survival: Small and medium Jewish professional enterprises in Berlin, Frankfurt/Main and Breslau 1929/30-1945 | 2005-2009 |
| | Max Planck Research Prize by Alexander von Humboldt Foundation | The Power of Images – From the history of art to a pictorial science | 2006-2011 |
| | Volkswagen Foundation | Autonomy. The self's degrees of freedom for action | 2008-2012 |
| | Volkswagen Foundation | Democratic Symbols. Staging, representation and the constitution of the political imaginary | 2009-2014 |
| | Volkswagen Foundation | Documentation of the Laal Language (Tchad) | 2011-2014 |
| | Volkswagen Foundation | Ernst Cassirer Visiting Professorship in Sweden | 2005-2010 |
| | Volkswagen Foundation (Junior Group) | Globalisation as a Historical Process: Agricultural markets, global food supply and transnational politics 1870-1970 | 2005-2011 |
| | Volkswagen Foundation (Monograph) | Light, Colour, Darkness: Newton's optical proofs and Goethe's criticism of them in the light of present-day philosophy of science | 2010-2012 |
| | Volkswagen Foundation | Rational Approaches to Fuzzy Boundaries. An interdisciplinary project to investigate phenomena of vagueness and imperfect definition in law and in philosophy | 2010-2012 |
| | Volkswagen Foundation | The History of Perestroika in Central Asia (Social transformation in Kazakhstan, Kyrgyzstan and Mongolia, 1982-1991) | 2010-2013 |
| **Law, Economics, Social Sciences** | | | |
| | Alexander von Humboldt Foundation | Transatlantic Research on Gender Equity Training (TARGET): Restructuring of modern knowledge economies and management | 2010-2013 |
| | Donors' Association for German Science | Haniel Visiting Professorship for Entrepreneurship | 2000-2010 |
| | Donors' Association for German Science | Professorship for Assurance and Risk Management | 1997-2011 |
| | Donors' Association for German Science | Professorship for Moscow | 2009-2013 |
| | Donors' Association for German Science | Professorships for Public Economics and Economic Policy | 1995-2008 |
| | Donors' Association for German Science (Daimler-Chrysler Fund) | Visiting Professorship for General Economic Policy | 1992-2010 |

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|---|---|---|---|
| | Donors' Association for German Science | Visiting Professorship for Educational Diagnostics | 2006-2011 |
| | German Association for Intellectual Property Rights | Visiting Professorship for Intellectual Property, especially patent law | 2002-2010 |
| | Heinz Nixdorf Foundation | Heinz Nixdorf Professorship | 2000-2009 |
| | Meyer-Struckmann Foundation | Visiting Professorship for Jewish Law | 2009-2014 |
| | Volkswagen Foundation | Contract Governance | 2010-2015 |
| | Volkswagen Foundation (Junior Group) | Hybrid Identities in Germany: Rituals of identity and definition of muslim migrants from within and from outside in Germany and Europe | 2009-2013 |
| | Volkswagen Foundation | Lichtenberg Professorship for Comparative Criminal Law | 2007-2012 |
| | Volkswagen Foundation (Junior Group) | Micropolitics of Armed Groups | 2001-2009 |
| **Mathematics, Natural Sciences** | | | |
| | Alexander von Humboldt Foundation | Sofja Kovalevskaja-Prize | 2010-2015 |
| | Deutsche Bundesstiftung Umwelt | Autonomously Flying Drones for Sustainable Agriculture | 2009-2012 |
| | Deutsche Telekom Stiftung | Continuing Education for Mathematics Teachers across Germany | 2007-2011 |
| | Deutsche Telekom Stiftung et al. | Humboldt ProMINT-Kolleg. The college allows school teachers, undergraduate and graduate students and HU staff from mathematics, the sciences and their didactics to work together in developing new teaching and learning concepts for schools and for teacher training at HU. (numerous individual projects) | 2009-2013 |
| | Deutsche Telekom Stiftung | Mathematics along the Educational Chain | 2009-2010 |
| | Hans Sauer Foundation | Professorship for Inventor Research | 2004-2011 |
| | Hans Sauer Foundation | Visiting Professorship for Metropolitan and Innovation Research | 2004-2010 |
| | Volkswagen Foundation (Junior Group) | Dynamical Mechanisms of B-Cell Selection and Characterization of Protein Bindings: Theoretical and experimental investigations | 2002-2008 |
| | Volkswagen Foundation (Junior Group) | Learning Invariancies | 2000-2007 |
| | Volkswagen Foundation (Junior Group) | Special Geometries in Mathematical Physics | 2003-2009 |
| | Volkswagen Foundation (Lichtenberg Professorship) | The Fundamental Structure of String Theory and its Relation to Gauge Field Theories | 2006-2014 |

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|---|---|---|---|
| | Wilhelm and Else Heraeus-Foundation | Senior Professorship for Advancing Teacher Training in Physics | 2010-2011 |
| | Various Foundations | Humboldt-Bayer-Mobil (a mobile research lab for schoolboys and -girls; several individual projects) | 2010-2013 |

| **Other Funding Agencies** (including Enterprises) | **Description** | **Title** | **Funding period** |
|---|---|---|---|
| **Languages, History, Cultural Studies** | | | |
| | Embassy of the Republic of Aserbaidjan | Professorship for the History of Aserbaidjan | 2010-2015 |
| | DAAD | PhD Programme “The Knowledge of Literature” | 2008-2013 |
| | DAAD | Bachelor Plus: Programme for developing four year bachelor curricula with an integrated year abroad | 2010-2012 |
| | DAAD | Siegfried Unseld Professorship | 2009-2014 |
| | The Packhard Humanities Institute u.a. | Humboldt University Nubian Expedition: Archaeological salvage work in the Fourth Nile Cataract/Sudan | 2004-2011 |
| | Stiftung Brandenburger Tor, DAAD et al. | Rudolf Arnheim Visiting Professorship | 2001-2010 |
| | Berlin-Brandenburg Academy of Sciences and Humanities | Census of Antique Works of Art and Architecture Known in the Renaissance | 2003-2017 |
| **Law, Economics, Social Sciences** | | | |
| | DAAD | European PhD in Socio-Economic and Statistical Studies | 2008-2010 |
| | DAAD | Integrated International Curricula with Double Degree (Humboldt European Law School) | 2010-2011 |
| | Private Donors | Humboldt Law Clinic | 2010-2011 |
| | DAAD | Legal Scholarship Centres in Subsaharan Africa | 2008-2013 |
| **Mathematics, Natural Sciences** | | | |
| | Max Planck Society | Analysis of H.E.S.S. Data and Software Development | 2004-2011 |
| | Human Frontier Science Program | Mathematic Modelling of the Wnt/Beta-Catenin Signal Pathway | 2004-2009 |
| | HGF | EnMAP (Environmental Satellite Mission) | 2007-2012 |
| | DAAD | Humboldt Goes to School | 2009-2010 |
| | HGF | Planet Development and Life – Hydrocode modeling of impact processes and shock wave experiments | |

# Annex 5
## Activities in the first and second funding line of the Excellence Initiative

| Funding Line | Nr. | Titel | Status | Spokespersons |
|---|---|---|---|---|
| **GSC** (in cooperation with FU and TU) | 14 | Berlin Mathematical School | funded since 2006, renewal proposal | Prof. Dr. Konrad Polthier (FU), Prof. Dr. Günter Ziegler (TU), Prof. Dr. Jürg Kramer (HU) |
| **GSC** | 86 | Berlin School of Mind and Brain | funded since 2006, renewal proposal | Prof. Dr. Arno Villringer (Charité), Prof. Dr. Michael Pauen (HU) |
| **GSC** (Charité – Universitäts-medizin Berlin) | 203 | Berlin-Brandenburg School for Regenerative Therapies | funded since 2007, renewal proposal | Prof. Dr. Georg Duda (Charité), Prof. Dr. Hans-Dieter Volk (Charité) |
| **GSC** | 243 | Berlin Graduate School of Social Sciences | funded since 2007, renewal proposal | Prof. Dr. Klaus Eder |
| **GSC** (with contributions from HU) | 153 | Berlin Graduate School Muslim Cultures and Societies | funded since 2007, renewal proposal | Prof. Dr. Dr. h.c. Gudrun Krämer (FU) |
| **EXC** (Charité – Universitäts-medizin Berlin) | 257 | NeuroCure | funded since 2007, renewal proposal | Prof. Dr. Dietmar Schmitz (Charité) |
| **EXC** (in cooperation with FU) | 264 | Topoi – The Formation and Transformation of Space and Knowledge in Ancient Civilizations | funded since 2007, renewal proposal | Prof. Dr. Gerd Graßhoff (HU), Prof. Dr. Michael Meyer (FU) |
| **EXC** (with contributions from HU) | 302 | Languages of Emotion | funded since 2007, renewal proposal | Prof. Dr. Hermann Kappelhoff (FU) |
| **EXC** (with contributions from HU) | 314 | UniCat – Unifying Concepts in Catalysis | funded since 2007, renewal proposal | Prof. Dr. Matthias Driess (TU) |

**Proposals for 2012**

| | | | |
|---|---|---|---|
| **GSC** | FutureLand Graduate School – The Transformation of Land Use to Sustainability | Proposal | Prof. Dr. Patrick Hostert |
| **GSC** | Robert Koch Graduate School Berlin (RKGS) | Proposal | Prof. Dr. Richard Lucius |
| **GSC** | School of Analytical Sciences Adlershof (SALSA) | Proposal | Prof. Dr. Janina Kneipp, Prof. Dr. Ulrich Panne |
| **GSC** (Charité – Universitäts-medizin Berlin) | Berlin School of Integrative Oncology (BSIO) | Proposal | Prof. Dr. Clemens Schmitt (Charité) |
| **EXC** | Image Knowledge Gestaltung. An Interdisciplinary Laboratory | Proposal | Prof. Dr. Horst Bredekamp, Prof. Dr. Wolf-gang Schäffner |
| **EXC** (Charité – Universitäts-medizin Berlin) | GenoRare – Medical Genomics of Rare Disease | Proposal | Prof. Dr. Stefan Mundlos |

# Annex 6
## Biographical sketches of researchers of HU

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|---|---|
| **Name** | Prof. Dr. Susanne Albers |
| **Date of birth** | 10 June 1965 |
| **Year appointed** | 2009 |

### Academic career

Professor at the Department of Computer Science at HU since 2009

1990 Diplom degree in mathematics at Universität Osnabrück

1993 PhD (Dr. rer. nat.) in computer science at Universität des Saarlandes and at MPI for Computer Science, Saarbrücken

1999 Habilitation for computer science at the Universität des Saarlandes

1999-2001 Associate professor at the Department of Computer Science at Technische Universität Dortmund

2001-2009 Full professor at the Department of Computer Science at Albert-Ludwigs-Universität Freiburg

### Main areas of research

Computer science; design and analysis of algorithms; algorithmic game theory; online and approximation algorithms; algorithmic problems arising in large networks; algorithm engineering

### Major academic achievements

1993 Otto Hahn Medal of the Max Planck Society

2008 Gottfried Wilhelm Leibniz Award of DFG

### Selected publications

Albers, S. (2010). Energy-efficient algorithms. In: *Communications of the ACM*, Vol. 53, pp. 86-96.

Albers, S. (2009). On the value of coordination in network design. In: *SIAM Journal on Computing*, Vol. 38, pp. 2273-2302.

Albers, S. & Fujiwara, H. (2007). Energy-efficient algorithms for flow time minimization. In: *ACM Transactions on Algorithms*, Vol. 3, pp. 1-17.

Albers, S. & Favrholdt, L.M. & Giel, O. (2005). On paging with locality of reference. In: *Journal of Computer and System Sciences*, Vol. 70, pp. 145-175.

Albers, S. & Bals, H. (2005). Dynamic TCP acknowledgement: Penalizing long delays. In: *SIAM Journal on Discrete Mathematics*, Vol. 199, pp. 938-951.

Albers, S. & Schmidt, M. (2005). On the performance of greedy algorithms in packet buffering. In: *SIAM Journal on Computing*, Vol. 35, pp. 278-304.

Albers, S. & Henzinger, M.R. (2000). Exploring unknown environments. In: *SIAM Journal on Computing*, Vol. 29, pp. 1164-1188.

Albers, S. & Garg, N. & Leonardi, S. (2000). Minimizing stall time in single and parallel disk systems. In: *Journal of the ACM*, Vol. 47, pp. 969-986.

Albers, S. (1999). Better bounds for online scheduling. In: *SIAM Journal on Computing*, Vol. 29, pp. 459-473.

Albers, S. (1998). Improved randomized on-line algorithms for the list update problem. In: *SIAM Journal on Computing*, Vol. 27, pp. 682-693.

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|---|---|
| **Name** | Prof. Jutta Allmendinger PhD |
| **Date of birth** | 26 September 1956 |
| **Year appointed** | 2007 |

### Academic career

Professor of sociology of education and labour markets at HU since 2007

President of the Social Science Research Center Berlin (WZB) since 2007

1982 Diplom degree in social sciences at Universität Mannheim

1987 MA in social sciences at Harvard University, Cambridge, MA

1989 PhD in social sciences at Harvard University, Cambridge, MA

1993 Habilitation for sociology at FU

### Main areas of research

Sociology of labour markets; education and life-courses; social inequality; sociology of organisations

### Major academic achievements

2006 Member of the Scientific Commission of the German Academy of Sciences and Humanities

2009 Communicator Award of the Stifterverband für die Deutsche Wissenschaft

### Selected publications

Allmendinger, J. & Ludwig-Mayerhofer, W. & Hirseland, A. & Schneider, W. (forthcoming 2011). The Power of Money in Dual Earner Couples – A Comparative Study. In*: Acta Sociologica.*

Allmendinger, J. (2010). *Verschenkte Potenziale: Lebensverläufe nichterwerbstätiger Frauen*. Frankfurt/New York: Campus.

Allmendinger, J. & Barham, E. & Nikolai, R. & West, A. (2010). Decentralisation and educational achievement in Germany and the UK. In: *Government & Policy: Environment and Planning C*, Vol. 28, No. 3 , pp. 450-468.

Allmendinger, J. (2009). *Frauen auf dem Sprung. Wie junge Frauen heute leben wollen*. Munich: Pantheon.

Allmendinger, J. & Leibfried, S. (2003). Education and the Welfare State: The Four Worlds of Competence Production. In: *European Journal of Social Policy*, Vol. 13, No. 1, pp. 63-81.

Allmendinger, J. & Hackman, J.R. (1996). Organizations in a Changing World: The Case of East-German Orchestras. In: *Administrative Science Quarterly*, Vol. 41, pp. 337-369.

Allmendinger, J. (1989). Educational Systems and Labor Market Outcomes. In: *European Sociological Review*, Vol. 5, No. 3, pp. 231-250.

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|---|---|
| **Name** | Prof. Dr. Jörg Baberowski |
| **Date of birth** | 24 March 1961 |
| **Year appointed** | 2002 |

### Academic career

Professor of eastern european history at HU since 2002

Coordinator of SFB 640 Changing Representations of Social Order – Intercultural and intertemporal comparisons since 2004

1982-1988 Studied history and philosophy at Georg-August-Universität Göttingen

1993 PhD at the Department of Eastern European History at Johann Wolfgang Goethe-Universität Frankfurt am Main

2000 Habilitation at the Institute for Eastern European History at Eberhard Karls Universität Tübingen

2000-2002 Deputy Chair of Eastern European History at Universität Leipzig

### Main areas of research

The history of Russia and the Soviet Union, the history of Stalinism and the Russian/Soviet multi-ethnic empire; theories of violence and the history of violence; theories of history and the philosophy of history

### Selected publications

Baberowski, J. (2011). *Erbarmungslos. Stalinistischer Terror in der Sowjetunion*. Munich: Beck.

Baberowski, J. (2009). *Arbeit an der Geschichte. Wie viel Theorie braucht die Geschichtswissenschaft?* Frankfurt am Main: Campus.

Baberowski, J. (ed.) (2008). *Imperiale Herrschaft in der Provinz. Repräsentationen politischer Macht im späten Zarenreich*. Frankfurt am Main: Campus.

Baberowski, J. (ed.) (2006). *Moderne Zeiten? Krieg, Revolution und Gewalt im 20. Jahrhundert*. Göttingen: Vandenhoeck und Ruprecht.

Baberowski, J. & Döring-Manteuffel, A. (2006). *Ordnung durch Terror. Vernichtungsexzesse im nationalsozialistischen und stalinistischen Imperium*. Bonn: Dietz-Verlag.

Baberowski, J. (2005). *Der Sinn der Geschichte. Geschichtstheorien von Hegel bis Foucault*. Munich: Beck.

Baberowski, J. (2005). *Zivilisation der Gewalt. Die kulturellen Ursprünge des Stalinismus*. Berlin: Humboldt-Universität.

Baberowski, J. (2004). *Der Rote Terror. Geschichte des Stalinismus* (2nd edition). Munich: DVA.

Baberowski, J. (2003). *Der Feind ist überall. Stalinismus im Kaukasus*. Munich: DVA.

Baberowski, J. (1996). *Autokratie und Justiz. Zum Verhältnis von Rechtsstaatlichkeit und Rückständigkeit im ausgehenden Zarenreich, 1864-1914*. Frankfurt am Main: Klostermann.

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|---|---|
| **Name** | Prof. Dr. Susanne Baer, LLM |
| **Date of birth** | 16 February 1964 |
| **Year appointed** | 2002 |

### Academic career

Professor of public law and gender studies at HU since 2002

Justice of the German Federal Constitutional Court since 2011

Director of the Law and Society Institute (LSI) at HU since 2009

William W. Cook Global Law Professor at the University of Michigan Law School, MI since 2009

1983-1987 Studied law and politics at FU

1992-1993 Master of Laws (LLM) at the University of Michigan Law School, MI

1995 PhD in law at Johann Wolfgang Goethe-Universität Frankfurt am Main

2002 Habilitation for public law, administrative science, legal theory and comparative law at HU

2003-2010 Director of the GenderCompetenceCenter

2005-2006 Vice President for Academic and International Affairs at HU

### Main areas of research

German, European and comparative constitutional law; fundamental rights; feminist legal studies and gender studies; socio-legal studies; law and society

### Major academic achievements

1995 Walter Kolb Memorial Award, City of Frankfurt am Main

2002 Good Teaching Award, HU

### Selected publications

Baer, S. & Dorsen, N. & Rosenfeld, M. & Sajó, A. (2010). *Comparative Constitutionalism* (2nd edition). St. Paul, MN: Thomson/West Publishing.

Baer, S. (2010). Interdisziplinäre Rechtsforschung: Was uns bewegt. In: *Festschrift 200 Jahre Juristische Fakultät der HU* (pp. 917-936). Berlin: De Gruyter.

Baer, S. (2010). A closer look at law: human rights as multi-level sites of struggles over multi-dimensional equality. In: *Utrecht Law Review*, Vol. 6, No. 2, pp. 56-76.

Baer, S. (2009). Dignity, Liberty, Equality: A Fundamental Rights Triangle of Constitutionalism. In: *University of Toronto Law Journal*, Vol. 59, No. 4, pp. 417-468.

Baer, S. (2009). Demografischer Wandel und Generationengerechtigkeit. In: Engel, C. (Hg.). *Veröffentlichungen der Vereinigung der Deutschen Staatsrechtslehrer, Erosionen von Verfassungsvoraussetzungen*. VVdStRL 68 (pp. 290-354). Berlin: De Gruyter.

Baer, S. (2006). *"Der Bürger" im Verwaltungsrecht zwischen Obrigkeit und aktivierendem Staat*. Tübingen: Mohr-Siebeck.

Baer, S. (1995). *Würde oder Gleichheit? Zur angemessenen grundrechtlichen Konzeption von Recht gegen Diskriminierung am Beispiel sexueller Belästigung am Arbeitsplatz in der Bundesrepublik Deutschland und den USA*. Baden-Baden: Nomos.

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|---|---|
| **Name** | Prof. Dr. Hartmut Böhme |
| **Date of birth** | 5 May 1944 |
| **Year appointed** | 1993 |

### Academic career

Professor of cultural history and theory at HU since 1993

Coordinator of SFB 644 Transformations of Antiquity: Media of knowledge – constructions of culture since 2005

1963-1969 Studied German studies, philosophy, theology and education at the Universität Bonn and the Universität Hamburg

1973 PhD at the Universität Hamburg

1973-1977 Research assistant for German literature at the Universität Hamburg

1977-1993 Professor of modern German literature at the Universität Hamburg

### Main areas of research

Cultural history since antiquity; cultural theories; 18th-20th century literary history; ethnopoetry and autobiography; natural and technical history in the overlapping fields of philosophy, art and literature; historical anthropology and psychohistory

### Major academic achievements

2006 Meyer-Struckmann Award for Research in Humanities and Social Sciences

2011 Hans Kilian Award

### Selected publications

Böhme, H. & Benthien, C. & Stephan, I. (ed.) (2011). *Freud und die Antike*. Göttingen: Wallstein.

Böhme, H. & Formisano, M. (ed.) (2010). *Krieg in Worten / War in Words. Transformations of War from Antiquity to Clausewitz*. Berlin: De Gruyter.

Böhme, H. & Adamowsky, N. & Felfe, R. (ed.) (2010). *Ludi Naturae. Spiele der Natur in Kunst und Wissenschaft*. Munich: Fink.

Böhme, H. & Toepfer, G. (ed.) (2010). *Transformationen antiker Wissenschaften*. Berlin: De Gruyter.

Böhme, H. & Endres, J. (ed.) (2010). *Der Code der Leidenschaften. Fetischismus in den Künsten*. Munich: Fink.

Böhme, H. & Rapp, C. & Rösler, W. (ed.) (2007). *Übersetzung und Transformation*. Berlin: De Gruyter.

Böhme, H. (2006). *Fetischismus und Kultur. Eine andere Theorie der Moderne*. Reinbek: Rowohlt.

Böhme, H. (ed.) (2005). *Topographien der Literatur. Deutsche Literatur im transnationalen Kontext*. Stuttgart: Metzler.

Böhme, H. & Böhme, G. (1996). *Feuer Wasser Erde Luft. Eine Kulturgeschichte der Elemente*. Munich: Beck.

Böhme, H. & Böhme, G. (1983). *Das Andere der Vernunft. Zur Entwicklung von Rationalitätsstrukturen am Beispiel Kants*. Frankfurt am Main: Suhrkamp.

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|---|---|
| **Name** | Prof. Dr. Michael Brecht |
| **Date of birth** | 22 January 1967 |
| **Year appointed** | 2006 |

### Academic career

Professor of biology at HU since 2006

Coordinator of Bernstein Center for Computational Neuroscience Berlin

1994 Diplom degree of biology at University of California, CA and Eberhard Karls Universität Tübingen

1998 PhD at Eberhard Karls Universität Tübingen

2004 Habilitation at Eberhard Karls Universität Tübingen

### Main areas of research

Neuronal basis of behaviour; single-cell stimulation; in vivo whole-cell recordings; systems neuroscience, vibrissae, barrel cortex, motor cortex, hippocampus; tactile behaviours

### Major academic achievements

2003 Vidi Grant for Talented Young investigators from The Netherlands Organisation for Scientific Research (NWO)

2009 ERC Advanced Investigators Grant

### Selected publications

Burgalossi, A. & Herfst, L. & Von Heimendahl, M. & Förste, H. & Haskic, K. & Schmidt, M. & Brecht, M. (2011). Microcircuits of Functionally Identified Neurons in the Rat Medial Entorhinal Cortex. In: *Neuron*, Vol. 70, pp. 773-786.

Epsztein, J. & Brecht, M. & Lee, A.K. (2011). Intracellular Determinants of Hippocampal CA1 Place and Silent Cell Activity in a Novel Environment. In: *Neuron*, Vol. 70, pp. 109-120.

Epsztein, J. & Lee, A.K. & Chorev, E. & Brecht, M. (2010). Impact of Spikelets on Hippocampal CA1 Pyramidal Cell Activity During Spatial Exploration. In: Science, Vol. 327, pp. 474-477.

Chorev, E. & Epsztein, J. & Houweling, A.R. & Lee, A.K. & Brecht, M. (2009). Electrophysiological recordings from behaving animals-going beyond spikes. In: Current Opinion in Neurobiology, Vol. 19, No. 5, pp. 513-519.

Lee Albert, K. & Epsztein, J. & Brecht, M. (2009). Head-anchored whole-cell recordings in freely moving rats. In: Nature Protocols, Vol. 4, No. 3, pp. 385-392.

Voigt, B.C. & Brecht, M. & Houweling, A.R. (2008). Behavioral detectability of single-cell stimulation in the ventral posterior medial nucleus of the thalamus. In: *The* Journal of Neuroscience, Vol. 28, No. 47, pp. 12362-12367.

Houweling, A. & Brecht, M. (2008). Behavioural report of single neuron stimulation in somatosensory cortex. In: Nature, Vol. 451, pp. 65-68.

Brecht, M. (2007). Barrel cortex and whisker-mediated behaviors. In: Current Opinion in Neurobiology, Vol. 4, pp. 408-416.

Lee, A.K. & Manns, I.D. & Sakmann, B. & Brecht, M. (2006). Whole-cell recordings in freely moving rats. In: *Neuro*n, Vol. 51, pp. 399-407.

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|---|---|
| **Name** | Prof. Dr. Horst Bredekamp |
| **Date of birth** | 29 April 1947 |
| **Year appointed** | 1993 |

### Academic career

Professor of art history at HU since 1993

Coordinator of EXC Image Knowledge Gestaltung. An Interdisciplinary Laboratory (initial proposal)

1967 Studied art history, archaeology, philosophy and sociology at the universities of Kiel, Munich, Berlin and Marburg

1974 PhD in art history at Philipps-Universität Marburg

1982 Professor of art history at the Universität Hamburg

### Main areas of research

Iconoclasm; Romanic sculpture; Renaissance and Mannerist art; political iconography; art and technology; new media

### Major academic achievements

2001 Sigmund Freud Prize from Deutsche Akademie für Sprache und Dichtung

2005 Aby M. Warburg Prize from City of Hamburg

2006 Max Planck Research Award from Max Planck Society and Humboldt Foundation

2009 Richard Hamann Prize from Philipps-Universität Marburg

2010 Meyer Struckmann Prize for research in the humanities and social sciences

### Selected publications

Bredekamp, H. (2010). *Theorie des Bildakts: Frankfurter Adorno-Vorlesungen 2007*. Berlin: Suhrkamp.

Bredekamp, H. (2007). *Galilei der Künstler: Der Mond, die Sonne, die Hand*. Berlin: Akademie.

Bredekamp, H. (2007). *Bilder bewegen: Von der Kunstkammer zum Endspiel*. Berlin: Wagenbach.

Bredekamp, H. (2005). *Darwins Korallen: Die frühen Evolutionsdiagramme und die Tradition der Naturgeschichte*. Berlin: Wagenbach.

Bredekamp, H. (2004). *Die Fenster der Monade: Gottfried Wilhelm Leibniz' Theater der Natur und Kunst*. Berlin: Akademie.

Bredekamp, H. (2003). *Thomas Hobbes: Der Leviathan. Das Urbild des modernen Staates und seine Gegenbilder, 1651-2001*. Berlin: Akademie.

Bredekamp, H. (2000). *Sankt Peter in Rom und das Prinzip der produktiven Zerstörung: Bau und Abbau von Bramante bis Bernini*. Berlin: Wagenbach.

Bredekamp, H. (1992). *Antikensehnsucht und Maschinenglauben: Die Geschichte der Kunstkammer und die Zukunft der Kunstgeschichte*. Berlin: Wagenbach.

Bredekamp, H. (1985). *Vicino Orsini und der heilige Wald von Bomarzo: Ein Fürst als Künstler und Anarchist*. Worms: Werner.

Bredekamp, H. (1975). *Kunst als Medium sozialer Konflikte: Bilderkämpfe von der Spätantike bis zur Hussitenrevolution*. Frankfurt am Main: Suhrkamp.

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|---|---|
| **Name** | Prof. Dr. Jochen Brüning |
| **Date of birth** | 29 March 1947 |
| **Year appointed** | 1995 |

### Academic career

Professor of mathematics at HU since 1995

Coordinator of SFB 647 Space – Time – Matter. Analytic and geometric structures since 2005

1972 PhD (Dr. rer. nat.) in mathematics at Philipps-Universität Marburg

1977 Habilitation for mathematics at Philipps-Universität Marburg

1979 Professor of mathematics at Ludwig-Maximilians-Universität München

1979 Professor of mathematics at Universität Duisburg-Essen

1983 Professor of mathematics at Universität Augsburg

### Main areas of research

Geometric analysis on singular spaces; spectral theory; cultural history of mathematics

### Major academic achievements

1978 Heisenberg Fellowship

2004 Member of the European Academy of Sciences

### Selected publications

Brüning, J. & Kamber, F. & Richardson, K. (2010). The equivariant index theorem for transversally elliptic operators. In: *Electronic Research Announcements in Mathematical Sciences*, Vol. 17, pp. 138-154.

Brüning, J. (2009). The signature operator on manifolds with a conic singular stratum. In: *Astérisque*, Vol. 328, pp. 1-44.

Ballmann, W. & Brüning, J. & Carron, G. (2008). Regularity and index theory for Dirac-Schrödinger systems with Lipschitz coefficients. In: *Journal de Mathématiques Pures et Appliquées*, Vol. 89, pp. 429-476.

Brüning, J. (2003). Wissenschaft und Sammlung. In: Krämer, S. & Bredekamp, H. (ed.). *Bild, Schrift, Zahl* (pp. 87-113). Munich: Fink.

Brüning, J. & Lesch, M. (1992). Hilbert complexes. In: *Journal of Functional Analysis*, Vol. 108, pp. 88-132.

Brüning, J. & Seeley, R.T. (1988). An index theorem for first order regular singular operators. In: *The American Journal of Mathematics*, Vol. 110, pp. 659-714.

Brüning, J. & Heintze, E. (1979). Representations of compact lie groups and elliptic operators. In: *Inventiones mathematicae*, Vol. 50, pp. 169-203.

Brüning, J. (1974). Zur Abschätzung der Spektralfunktion elliptischer Operatoren. In: *Mathematische Zeitschrift*, Vol. 137, pp. 75-85.

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| **Name** | Prof. Michael C. Burda PhD |
| **Date of birth** | 4 April 1959 |
| **Year appointed** | 1993 |

### Academic career

Professor of economic theory at HU since 1993

1977 High school diploma at Jesuit High School, Shreveport, LA

1981 AB in economics at Harvard College, Cambridge, MA

1987 PhD in economics at Harvard University, Cambridge, MA

1987-1991 Assistant Professor of economics, INSEAD Fontainebleau

1996-1997 Visiting Professor of economics at University of California at Berkeley, CA

### Main areas of research

Macroeconomics; labour economics; European integration

### Major academic achievements

2007 Wim Duisenberg Research Fellow at European Central Bank

2010 Fellow at the Netherlands Institute for Advanced Studies (NIAS)

### Selected publications

Burda, M. & Hunt, J. (forthcoming 2011). What Explains the German Labor Market Miracle in the Great Recession? In: *Brookings Papers on Economic Activity*.

Bachmann, R. & Burda, M. (2010). Sectoral Transformation, Turbulence, and Labor Market Dynamics in Germany. In: *German Economic Review*, Vol. 11, No. 2, pp. 37-59.

Burda, M. & Hamermesh, D. (2010). Unemployment, Market Work and Household Production. In: *Economic Letters*, Vol. 107, No. 2, pp. 131-133.

Burda, M. & Wyplosz, C. (2009). *Macroeconomics: A European Text* (5th edition). Oxford: Oxford University Press.

Burda, M. & Severgnini, B. (2009). TFP Growth in Old and New Europe. In: *Comparative Economic Studies*, Vol. 51, pp. 447-466.

Burda, M. & Boeri, T. (2009). Preferences for Rigid versus Individualized Wage Setting. In: *Economic Journal*, Vol. 119, pp. 1440-1463.

Burda, M. (2008). What Kind of Shock was it? Regional Integration and Structural Change in Germany after Unification. In: *Journal of Comparative Economics*, Vol. 36, pp. 557-567.

Burda, M. & Hamermesh, D. & Weil, P. (2008). The Distribution of Total Work in the EU and the US. In: Boeri, T. & Burda, M. & Kramarz, F. (ed.). *Working Hour and Job Sharing in the EU and the USA: Are Europeans Lazy or Americans Crazy?* Oxford: Oxford University Press.

Burda, M. & Kramarz, F. & Boeri, T. (2008). *Working Hours and Job Sharing in the EU and USA: Are Europeans Lazy? Or Americans Crazy?* Oxford: Oxford University Press.

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|---|---|
| **Name** | Prof. Dr. Georg N. Duda |
| **Date of birth** | 18 June 1966 |
| **Year appointed** | 2007 |

### Academic career

Professor of biomechanics at Charité since 2007

Coordinator of GSC 203 Berlin-Brandenburg School for Regenerative Therapies since 2007

Vice-Director of the Berlin-Brandenburg Center for Regenerative Therapies since 2006

1985-1991 Studied precision and biomedical engineering at TU

1996 PhD at Technische Universität Hamburg-Harburg/Mayo Clinic

2001 Habilitation at Charité

### Main areas of research

Biomechanical aspects of bone and soft tissue healing and regeneration; development of new methods to document healing progress in experimental and clinical settings

### Major academic achievements

2000 Clinical Biomechanics Award of the European Society of Biomechanics

2002 S.M. Perren Award of the European Society of Biomechanics

### Selected publications

Wulsten, D. & Glatt, V. & Ellinghaus, A. & Schmidt-Bleek, K. & Petersen, A. & Schell, H. & Lienau, J. & Seebald, W. & Plöger, F. & Seemann, P. & Duda, G.N. (2011). Time kinetics of bone defect healing in response to BMP-2 and GDF-5 characterized by in vivo biomechanics. In: *European Cells & Materials*, Vol. 21, pp. 177-192.

Toben, D. & Schroeder, I. & El-Khassawna, T. & Mehta, M. & Hoffmann, J.E. & Frisch, J.T. & Schell, H. & Lienau, J. & Serra, A. & Radbruch, A. & Duda, G.N. (2011). Fracture healing is accelerated in the absence of the adaptive immune system. In: *Journal of Bone and Mineral Research*, Vol. 26, No. 1, pp. 113-124.

Mehta, M. & Strube, P. & Peters, A. & Perka, C. & Hutmacher, D. & Fratzl, P. & Duda, G.N. (2010). Influences of age and mechanical stability on volume, microstructure, and mineralization of the fracture callus during bone healing: Is osteoclast activity the key to age-related impaired healing? In: *Bone*, Vol. 47, No. 2, pp. 219-228.

Kasper, G. & Ode, A. & Groothuis, A. & Glaeser, J. & Gaber, T. & Wilson, C.J. & Geissler, S. & Duda, G.N. (2010). Validation of beta-actin used as endogenous control for gene expression analysis in mechanobiology studies: amendments. In: *Stem Cells*, Vol. 28, No. 3, pp. 633-634.

Manjubala, I. & Liu, Y. & Epari, D.R. & Roschger, P. & Schell, H. & Fratzl, P. & Duda, G.N. (2009). Spatial and emporal variations of mechanical properties and mineral content of the external callus during bone healing. In: *Bone*, Vol. 45, No. 2, pp. 185-192.

Winkler. T. & Von Roth, P. & Matziolis, G. & Mehta, M. & Perka, C. & Duda, G.N. (2009). Dose-response relationship of mesenchymal stem cell transplantation and functional regeneration after severe skeletal muscle injury in rats. In: *Tissue Engineering Part* A, Vol. 15, No. 3, pp. 487-492.

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|---|---|
| **Name** | Prof. Dr. Andreas Eckert |
| **Date of birth** | 12 February 1964 |
| **Year appointed** | 2007 |

### Academic career

Professor for African history at HU since 2007

Head of the International Research Center Work and Human Lifecycle in Global History since 2009

1985-1990 Studied history, french and journalism at the universities in Hamburg, Yaoundé (Cameroon) and Aix-en-Provence

1990 Magister Artium degree at the Universität Hamburg

1995 PhD in medieval and modern history at the Universität Hamburg

2002 Habilitation for modern and contemporary history at HU

2002-2007 Professor of modern history and african history at the Universität Hamburg

### Main areas of research

African history of the 19th and 20th centuries; labour history; global history

### Selected publications

Eckert, A. & Randeria, S. (2009). *Vom Imperialismus zum Empire. Nicht-westliche Perspektiven auf die Globalisierung*. Frankfurt am Main: Suhrkamp.

Eckert, A. (2008). “We are all planners now”. Planung und Dekolonisation in Afrika. In: *Geschichte und Gesellschaft*, Vol. 34, No. 3, pp. 375-397.

Eckert, A. (2007). Useful instruments of participation? Local government and co-operative societies in Tanzania, 1940s to 1970s. In: *International Journal of African Historical Studies*, Vol. 40, No. 1, pp. 97-118.

Eckert, A. (2007). *Herrschen und Verwalten. Afrikanische Bürokraten, staatliche Ordnung und Politik in Tanzania, 1920-1970*. Munich: Oldenbourg.

Eckert, A. (2006). *Kolonialismus*. Frankfurt am Main: Fischer.

Eckert, A. (2004). Regulating the Social. Social Security, Social Welfare and the State in Late Colonial Tanzania. In: *Journal of African History*, Vol. 45, No. 3, pp. 467-489.

Eckert, A. (2003). Comparing coffee production in Cameroon and Tanzania, c.1900-1960s: land, labour and politics. In: Clarence-Smith, W.G. & Topik. S. (ed.). *The Global Coffee Economy in Africa, Asia, and Latin America, 1500-1989* (pp. 286-311). New York: Cambridge University Press.

Eckert, A. (1999). Arbeitergeschichte und Geschichte der Arbeit in Afrika. In: *Archiv für Sozialgeschichte*, Vol. 39, pp. 502-530.

Eckert, A. (1999). *Grundbesitz, Landkonflikte und kolonialer Wandel. Douala 1880-1960*. Stuttgart: Steiner.

Eckert, A. (1998). Slavery in Colonial Cameroon, 1880s to 1930s. In: *Slavery & Abolition*, Vol. 19, No. 2, pp. 133-148.

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|---|---|
| **Name** | Prof. Dr. Klaus Eder |
| **Date of birth** | 2 September 1946 |
| **Year appointed** | 1994 |

### Academic career

Professor of comparative structural analysis at HU since 1994

Coordinator of GSC Berlin Graduate School of Social Science since 2007

1971 Diplom degree of sociology at Johann Wolfgang Goethe-Universität Frankfurt am Main

1971-1983 Research assistant at the MPI for the Research of living conditions in a scientific technical world

1976 PhD at Universität Konstanz

1983 Habilitation for sociology at Heinrich-Heine-Universität Düsseldorf

1986-1989 Heisenberg fellowship from DFG

1989-1994 Professor of sociology at the European University Institute

### Main areas of research

Political mobilisation, social movements and collective identities; the public sphere and political communication

### Selected publications

Eder, K. (2011). Europe as a narrative network. In: Cerutti, F. & Lucarelli, S. & Schmidt, V.A. (ed.). *The Europeans: On the Political Identity of the EU citizens and the Legitimacy of the Union* (pp. 38-54). London: Routledge.

Eder, K. (2009). The Making of a European Civil Society: “Imagined”, “Practised” and “Staged”. In: *Policy and Society*, Vol. 28, pp. 23-33.

Eder, K. (2007). The public sphere and European democracy. Mechanisms of democratization in the transnational situation. In: Fossum, J.E. & Schlesinger, P. (ed.). *The European Union and the Public Sphere* (pp. 44-64). London: Routledge.

Eder, K. (2007). Cognitive sociology and the theory of communicative action: the role of communication and language in the making of the social bond. In: *European Journal of Social Theory*, Vol. 10, pp. 389-408.

Eder, K. (2001). Integration through culture. The paradox of the search for a European identity. In: Eder, K. & Giesen, B. (ed.). *European Citizenship. National Legacies and Postnational Projects* (pp. 222-244). Oxford: Oxford University Press.

Eder, K. (1996). *The Social Construction of Nature. A Sociology of Ecological Enlightenment*. London: Sage.

Eder, K. (1993). *The New Politics of Class. Social Movements and Cultural Dynamics in Advanced Societies*. London: Sage.

Eder, K. (1985). *Geschichte als Lernprozess? Zur Pathogenese politischer Modernität in Deutschland.* Frankfurt am Main: Suhrkamp.

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|---|---|
| **Name** | Prof. Dr. Bärbel Friedrich |
| **Date of birth** | 29 July 1945 |
| **Year appointed** | 1994 |

### Academic career

Professor of microbiology at HU since 1994

Scientific Director of the Alfried Krupp Institute of Advanced Studies in Greifswald since 2008

1965-1970 Studied biology at Georg-August-Universität Göttingen

1973 PhD in microbiology

1983 Habilitation for microbiology

1985-1994 Full Professor of microbiology at FU

1997-2003 Vice-President of the DFG

### Main areas of research

Synthesis, regulation and function of hydrogen-converting enzymes (hydrogenases); functional genomics of lithoautotrophic bacteria

### Major academic achievements

1997-1999 Member of the German Council of Science and Humanities

2010 Guest Lecture Award in Frontiers in Biological Chemistry of Max Planck Society

### Selected publications

Goris, T. & Wait, A.F. & Saggu, M. & Fritsch, J. & Heidary, N. & Stein, M. & Zebger, I. & Lendzian, F. & Armstrong, F. A. & Friedrich, B. & Lenz, O. (2011). A unique iron-sulfur cluster is crucial for oxygen tolerance of a [NiFe]-hydrogenase. In: *Nature Chemical Biology*, Vol. 7, pp. 310-318.

Cracknell, J.A. & Wait, A.F. & Lenz, O. & Friedrich, B. & Armstrong, F.A. (2009). A Kinetic and thermodynamic understanding of O2 tolerance in [NiFe]-Hydrogenases. In: *Proceedings of the National Academies of Science of the United States of America*, Vol. 106, pp. 20681-20686.

Pohlmann, A. & Fricke, W.F. & Reinecke, F. & Kusian, B. & Liesegang, H. & Cramm, R. & Eitinger, T. & Ewering, C. & Pötter, M. & Schwartz, E. & Strittmatter, A. & Voss, I. & Gottschalk, G. & Steinbüchel, A. & Friedrich, B. & Bowien, B (2006). Genome sequence of the bioplastic-producing "Knallgas" bacterium *Ralstonia eutropha* H16. In: *Nature Biotechnology*, Vol. 24, pp. 1257-1262.

Vincent, K.A. & Parkin, A. & Lenz, O. & Albracht, S.P. & Fontecilla-Camps, J.C. & Cammack, R. & Friedrich, B. & Armstrong, F.A. (2005). Electrochemical definitions of O2 sensitivity and oxidative inactivation in hydrogenases. In: *Journal of the American Chemical Society*, Vol. 127, pp. 18179-18189.

Buhrke, T. & Lenz, O. & Porthun, A. & Friedrich, B. (2004). The H2-sensing complex of *Ralstonia eutropha*: interaction between a regulatory [NiFe] hydrogenase and a histidine protein kinase. In: *Molecular Microbiology*, Vol. 51, pp. 1677-1689.

Schwartz, E. & Henne, A. & Cramm, R. & Eitinger, T. & Friedrich, B. & Gottschalk, G. (2003). Complete nucleotide sequence of pHG1: a *Ralstonia eutropha* H16 megaplasmid encoding key enzymes of H2-based lithoautotrophy and anaerobiosis. In: *Journal of Molecular Biology*, Vol. 332, pp. 369-383.

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|---|---|
| **Name** | Prof. Dr. Dr. h.c. Volker Gerhardt |
| **Date of birth** | 21 July 1944 |
| **Year appointed** | 1992 |

### Academic career

Professor of philosophy at HU since 1992

1965-1971 Studied philosophy, psychology, law and sociology at Westfälische Wilhelms-Universität Münster and Johann Wolfgang Goethe-Universität Frankfurt am Main

1974 PhD at Westfälische Wilhelms-Universität Münster

1984 Habilitation at Westfälische Wilhelms-Universität Münster

1985 Professor of philosophy at Westfälische Wilhelms-Universität Münster

### Main areas of research

Ethics and bioethics; political philosophy; aesthetics; metaphysics

### Major academic achievements

2006 Honorary doctorate (Dr. h.c.) from the University of Debrecen

### Selected publications

Gerhardt, V. (2009). *Existenzieller Liberalismus: Beiträge zur Politischen Philosophie und zum politischen Zeitgeschehen*. Berlin: Duncker & Humblot.

Gerhardt, V. (2007). *Partizipation: Das Prinzip der Politik*. Munich: Beck.

Gerhardt, V. (2004). *Die angeborene Würde des Menschen: Aufsätze zur Biopolitik*. Berlin: Parerga.

Gerhardt, V. (2002). *Immanuel Kant: Vernunft und Leben*. Stuttgart: Reclam.

Gerhardt, V. (2001). *Der Mensch wird geboren: Kleine Apologie der Humanität*. Munich: Beck.

Gerhardt, V. (2000). *Individualität: Das Element der Welt*. Munich: Beck.

Gerhardt, V. (1999). *Selbstbestimmung: Das Prinzip der Individualität*. Stuttgart: Reclam.

Gerhardt, V. (1996). *Vom Willen zur Macht: Anthropologie und Metaphysik der Macht am exemplarischen Fall Friedrich Nietzsches*. Berlin: De Gruyter.

Gerhardt, V. (1995). *Immanuel Kants Entwurf „Zum ewigen Frieden“: Eine Theorie der Politik*. Darmstadt: Wissenschaftliche Buchgesellschaft.

Gerhardt, V. (1992). *Friedrich Nitzsche*. Munich: Beck.

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|---|---|
| **Name** | Prof. Dr. Gerd Graßhoff |
| **Date of birth** | 12 June 1957 |
| **Year appointed** | 2010 |

### Academic career

Professor of history of ancient science at HU since 2010

Director of the EXC Topoi since 2010

1986 PhD (Dr. rer. nat.) at the Institute for the History of Science at Universität Hamburg

1988-95 Assistant professor of philosophy at Universität Hamburg

1995 Habilitation for philosophy at Universität Hamburg

1999-2010 Professor of history and philosophy of science and Director of the Institute for Philosophy at University of Bern

### Main areas of research

Theoretical philosophy; history and philosophy of science; methods of scientific discovery; philosophical models of causal reasoning; Babylonian astronomy

### Major academic achievements

1992 Heinz Maier Leibnitz Prize from DFG

1987 Award of the Institute for Advanced Study, Princeton, NJ

### Selected publications

Graßhoff, G. (2011). Babylonian meteorological observations and the empirical basis of ancient science. In: Selz, G.J. & Wagensonner, K. (ed.). *The Empirical Dimension of Ancient Near Eastern Studies / Die empirischen Dimensionen altorientalischer Forschungen, Wiener Offene Orientalistik*, 6, pp. 33-48.

Graßhoff, G. (ed.) (2009). *The Bern Digital Pantheon project.* Vienna: LIT.

Graßhoff, G. & Mittenhuber, F. (2009). *Untersuchungen zum Stadiasmos von Patara: Modellierung und Analyse eines antiken geographischen Streckennetzes*. Bern: Bern Studies in the History and Philosophy of Science.

Graßhoff, G. (2008). Innovation – Begriffe und Thesen. In: Graßhoff, G. & Schwinges, R.C. (ed.). *Innovationskultur: von der Wissenschaft zum Produkt* (pp. 13-32). Zurich: vdf Hochschverlag an der ETH.

Graßhoff, G. & Hentschel, A. (2005). *Albert Einstein: "Those happy Bernese years"*. Bern: Stämpfli.

Graßhoff, G. & Portmann, S. & Wüthrich, A. (2005). Minimal assumption derivation of a Bell-type inequality. In: *British Journal for the Philosophy of Science*, Vol. 56, pp. 663-680.

Baumgartner, M. & Graßhoff, G. (2003). *Kausalität und kausales Schliessen: eine Einführung mit interaktiven Übungen.* Bern: Bern Studies in the History and Philosophy of Science.

Graßhoff, G. & Treiber, H. (2002). *Naturgesetz und Naturrechtsdenken im 17. Jahrhundert: Kepler – Bernegger – Descartes – Cumberland*. Baden-Baden: Nomos.

Graßhoff, G. (1990). *The History of Ptolemy's Star Catalogue*. New York: Springer.

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|---|---|
| **Name** | Prof. Dr. Peter Hammerstein |
| **Date of birth** | 4 July 1949 |
| **Year appointed** | 1996 |

### Academic career

Professor at the Institute for Theoretical Biology at HU since 1996

Chair of the SFB 618 Theoretical Biology since 2002

External Professor at the Santa Fe Institute, NM since 2003

1975 Diploma degree in mathematics at Universität Bielefeld

1982 PhD in biology at Universität Bielefeld

1986 Habilitation for theoretical biology at Universität Bielefeld

1996 Founding Professor of the Institute for Theoretical Biology at HU

### Main areas of research

The biological study of conflict and cooperation; evolutionary game theory; evolution of mitochondria and intracellular bacteria; host-parasite interactions; evolutionary decision theory; biological markets; human evolution and social cognition.

### Selected publications

Bossan, B. & Koehncke, A. & Hammerstein, P. (2011). A new model and method for understanding Wolbachia-induced cytoplasmic incompatibility. In: *PLoS ONE*, Vol. 6, Issue 5, pp. 19757.

Figueiredo, A.S. & Höfer, T. & Klotz, C. & Sers, C. & Hartmann, S. & Lucius, R. & Hammerstein, P. (2009). Modelling and simulating interleukin-10 production and regulation by macrophages after stimulation with an immunomodulator of parasitic nematodes. In: *The FEBS Journal*, Vol. 276, Issue 13, pp. 3454-3469.

Sullivan, R.J. & Hagen, E.H. & Hammerstein, P. (2008). Revealing the paradox of drug reward in human evolution. In: *Proceedings of the Royal Society B*, Vol. 275, pp. 1231-1241.

Hammerstein, P. & Hagen, E.H. (2005). The second wave of evolutionary economics in biology. In: *Trends in Ecology and Evolution*, Vol. 20, pp. 604-609.

Kowald, A. & Jendrach, M. & Pohl, S. & Bereiter-Hahn, J. & Hammerstein, P. (2005). On the relevance of mitochondrial fusions for the accumulation of mitochondrial deletion mutants: A modelling study. In: *Aging Cell*, Vol. 4, pp. 273-283.

Telschow, A. & Hammerstein, P. & Werren, J.H. (2005). The effect of *Wolbachia* versus genetic incompatibilities on reinforcement and speciation. In: *Evolution*, Vol. 59, pp. 1607-1619.

Hammerstein, P. (ed.) (2003). *Genetic and Cultural Evolution of Cooperation*. Cambridge: MIT Press.

Leimar, O. & Hammerstein, P. (2001). Evolution of cooperation through indirect reciprocity. In: *Proceedings of the Royal Society B*, Vol. 268, pp. 745-753.

Hammerstein, P. (1996). Darwinian adaptation, population genetics and the streetcar theory of evolution. In: *Journal of Mathematical Biology*, Vol. 34, pp. 511-532.

Noë, R. & Hammerstein, P. (1995). Biological markets. In: *Trends in Ecology and Evolution*, Vol. 10, pp. 336-339.

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|---|---|
| **Name** | Prof. Dr. John-Dylan Haynes |
| **Date of birth** | 7 February 1971 |
| **Year appointed** | 2006 |

### Academic career

Professor of theory and analysis of large-scale brain signals at Charité since 2006

Professor at Bernstein Center for Computational Neuroscience Berlin since 2006

Head of the Berlin Center for Advanced Neuroimaging (BCAN) since 2009

1992-1997 Diplom degree in psychology at Universität Bremen

2003 PhD (Dr. rer. nat.) at Universität Bremen

2001-2003 Visiting Researcher at the Institute for Cognitive Neuroscience and the Welcome Department of Imaging Neuroscience at University College London

### Main areas of research

Brain mechanisms of consciousness and attention; functional magnetic resonance imaging; neurocognition and large-scale brain connectivity; pattern recognition and machine learning of neuroimaging data; intentions and executive functions; reward and neuromarketing; decoding mental states from brain activity (brain reading)

### Selected publications

Kahnt, T. & Grueschow, M. & Speck, O. & Haynes, J.D. (2011). Perceptual learning and decision-making in human medial frontal cortex. In: *Neuron*, Vol. 70, pp. 549-559.

Tusche, A. & Bode, S. & Haynes, J.D. (2010). Neural responses to unattended products predict later consumer choices. In: *Journal of Neuroscience*, Vol. 30, pp. 8024-8031.

Kahnt, T. & Heinzle, J. & Park, S.Q. & Haynes, J.D. (2010). The neural code of reward anticipation in human orbitofrontal cortex. In: *Proceedings of the National Academy of Sciences of the USA*, Vol. 107, pp. 6010-6015.

Howard, J.D. & Plailly, J. & Grueschow, M. & Haynes, J.D. & Gottfried, J.A. (2009). Odor quality coding and categorization in human posterior piriform cortex. In: *Nature Neuroscience*, Vol. 12, pp. 932-938.

Soon, C.S. & Brass, M. & Heinze, H.J. & Haynes, J.D. (2008). Unconscious determinants of free decisions in the human brain. In: *Nature Neuroscience*, Vol. 11, pp. 543-545.

Haynes, J.D. & Sakai, K. & Rees, G. & Gilbert, S. & Frith, C. & Passingham, R.E. (2007). Reading hidden intentions in the human brain. In: *Current Biology*, Vol. 17, pp. 323-328.

Haynes, J.D. & Rees, G. (2006). Decoding mental states from brain activity in humans. In: *Nature Reviews Neuroscience*, Vol. 7, pp. 523-534.

Haynes, J.D. & Tregellas, J. & Rees, G. (2005). Attentional integration between anatomically distinct stimulus representations in early visual cortex. In: *Proceedings of the National Academy of Sciences of the USA*, Vol. 102, pp. 14925-14930.

Haynes, J.D. & Deichmann, R. & Rees, G. (2005). Eye-specific effects of binocular rivalry in the human lateral geniculate nucleus. In: *Nature*, Vol. 438, pp. 496-499.

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|---|---|
| **Name** | Prof. Dr. Stefan Hecht |
| **Date of birth** | 6 January 1974 |
| **Year appointed** | 2006 |

### Academic career

Professor of organic chemistry and functional materials at HU since 2006

1992-1997 Studied chemistry at HU and the University of California, Berkeley, CA

1997-2001 PhD in organic polymer chemistry at the University of California, Berkeley, CA

2001-2004 Junior research group leader at FU

2005-2006 Habilitation and group leader at the MPI für Kohlenforschung in Mülheim an der Ruhr

### Main areas of research

Supramolecular and macromolecular chemistry and organic synthesis; goal: to produce molecular building blocks for creating functional nanostructures and intelligent materials, and for their characterization; topics: photoswitches, chromophores, foldamers, surfaces

### Major academic achievements

2002 Sofja Kovalevskaja Award of the Alexander von Humboldt Foundation

2004 Top 100 Young Innovator Award of MIT's *Technology Review*

2005 ADUC Young Investigator Award of the German Chemical Society

2010 Klung Wilhelmy Weberbank Prize in Chemistry

### Selected publications

Yu, H. & Hecht, S. (2011). Reversible and Quantitative Denaturation of Amphiphilic Oligo(azobenzene) Foldamers. In: *Angewandte Chemie International Edition*, Vol. 50, pp. 1640-1643.

Lafferentz, L. & Ample, F. & Yu, H. & Hecht, S. & Joachim, S. & Grill, L. (2009). Conductance of a Single Conjugated Polymer as a Continuous Function of Its Length. In: *Science*, Vol. 323, pp. 1193-1197.

Dri, C. & Peters, M.V. & Schwarz, J. & Hecht, S. & Grill, L. (2008). Spatial periodicity in molecular switching. In: *Nature Nanotechnology*, Vol. 3, pp. 649-653.

Peters, M.V. & Stoll, R.S. & Kühn, A. & Hecht, S. (2008). Photoswitching Basicity. In: *Angewandte Chemie International Edition*, Vol. 47, pp. 5968-5972.

Meudtner, R.M. & Hecht, S. (2008). Helicity Inversion in Novel Responsive Foldamers Induced by Achiral Halide Anions. In: *Angewandte Chemie International Edition*, Vol. 47, pp. 4926-4930.

Grill, L. & Dyer, M. & Lafferentz, L. & Persson, M. & Peters, M.V. & Hecht, S. (2007). Construction of covalently bound molecular nano-architectures. In: *Nature Nanotechnology*, Vol. 2, pp. 687-691.

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|---|---|
| **Name** | Prof. Dr. Fritz Henneberger |
| **Date of birth** | 4 December 1951 |
| **Year appointed** | 1993 |

### Academic career

Professor of experimental physics at HU since 1993

Coordinator of SFB 951 HIOS – Hybrid Inorganic/Organic Systems for Opto-Electronics since 2011

1970-73 Studied physics at HU

1980 PhD in theoretical physics at HU

1980-81 Senior scientist at the Ioffe Institute, Leningrad

1989 Habilitation for experimental physics at HU

### Main areas of research

Photonic properties of semiconductor nanostructures and components; organic and inorganic hybrid structures

### Major academic achievements

1986 Heinrich Hertz Award of the German Physical Society

### Selected publications

Kalusniak, S. & Wünsche, H.-J. & Henneberger, F. (2011). Random semiconductor lasers: Scattered versus Fabry-Perot Feedback. In: *Physical Review Letters*, Vol. 106, pp. 013901-1-013901-4.

Henneberger, F. & Benson, O. (ed.) (2009). *Semiconductor quantum bits*. Singapore: Pan Stanford Publishing.

Blumstengel, S. & Sadofev, S. & Xü, C. & Puls, J. & Henneberger, F. (2006). Converting Wannier into Frenkel excitons in an inorganic-organic hybrid semiconductor nanostructure. In: *Physical Review Letters*, Vol. 97, pp. 237401-1-237401-4.

Sadofev, S. & Blumstengel, S. & Cui, J. & Puls, J. & Rogaschewski, R. & Henneberger, F. (2006). Visible band-gap ZnCdO heterostructures grown by molecular beam epitaxy. In: *Applied Physics Letters*, Vol. 89, pp. 201907-1-21907-3.

Schikora, S. & Hövel, P. & Wünsche, H.-J. & Schöll, E. & Henneberger, F. (2006). All-optical noninvasive control of unstable steady states in a semiconductor laser. In: *Physical Review Letters*, Vol. 97, pp. 213902-1-213902-4.

Wünsche, H.-J. & Bauer, S. & Kreissl, J. & Ushakov, O. & Korneyev, N. & Henneberger, F. & Wille, E. & Erzgräber, H. & Peil, M. & Elsäßer, W. & Fischer, I. (2005). Synchronization of delay-coupled oscillators: A study of semiconductor lasers. In: *Physical Review Letters*, Vol. 94, pp. 163901-1-163901-4.

Flissikowski, T. & Hundt, A. & Lowisch, M. & Rabe, M. & Henneberger, F. (2001). Photon beats from a single semiconductor quantum dot. In: *Physical Review Letters*, Vol. 86, pp. 3172-3175.

Henneberger, F. (1986). Optical bistability at the fundamental absorption edge of semiconductors. In: *physica status solidi* (b), Vol. 137, pp. 371-432.

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|---|---|
| **Name** | Prof. Dr. Andreas Herrmann |
| **Date of birth** | 4 August 1953 |
| **Year appointed** | 1993 |

### Academic career

Professor of molecular biophysics at HU since 1993

1974-1979 Studied biology at HU

1979-1982 PhD (Dr. rer. nat.) in biophysics at HU

1982-1986 Habilitation for biophysics at HU

### Main areas of research

Molecular and membrane biophysics; entry and assembly of enveloped viruses; nano-biotechnology

### Major academic achievements

2001 Gay-Lussac-Humboldt Prize of the French and German Ministry of Research

### Selected publications

Kummer, S. & Knoll, A. & Socher, E. & Bethge, L. & Herrmann, A., & Seitz, O. (2011). Fluorescence imaging of influenza H1N1 mRNA in living infected cells using single chromophore FIT-PNA. In: *Angewandte Chemie*, Vol. 50, pp. 1931-1934.

Nikolaus, J. & Stöckl, M. & Langosch, D. & Volkmer, R. & Herrmann, A. (2010). Direct visualization of large and protein-free hemifusion diaphragms. In: *Biophysical Journal*, Vol. 98, pp. 1192-1199.

Nikolaus, J. & Scolari, S. & Bayraktarov, E. & Jungnick, N. & Engel, S. & Plazzo, A.P. & Stöckl, M. & Volkmer, R. & Veit, M. & Herrmann, A. (2010). Hemagglutinin of influenza virus partitions into the nonraft domain of model membranes. In: *Biophysical Journal*, Vol. 99, pp. 489-498.

Scolari, S. & Engel, S. & Krebs, N. & Plazzo, A.P. & De Almeida, R.F.M. & Prieto, M. & Veit, M. & Herrmann, A. (2009). Lateral distribution of the transmembrane domain of influenza virus hemagglutinin revealed by time-resolved fluorescence imaging. In: *The Journal of Biological Chemistry*, Vol. 284, pp. 15708-15716.

Ludwig, K. & Schade, B. & Böttcher, C. & Korte, T. & Ohlwein, N. & Baljinnyam, B. & Veit, M. & Herrmann, A. (2008). Electron cryomicroscopy reveals different F1+F2 protein states in intact parainfluenza virions. In: *Journal of Virology*, Vol. 82, pp. 3775-3781.

Eifart, P. & Ludwig, K. & Böttcher, C. & de Haan, C.A.M. & Rottier, P.J.M. & Korte, T. & Herrmann, A. (2007). Role of endocytosis and low pH in murine hepatitis virus strain A59 cell entry. In: *Journal of Virology*, Vol. 81, pp. 10758-10768.

Rachakonda, P.S. & Veit, M. & Korte, T. & Ludwig, K. & Böttcher, C. & Huang, Q. & Schmidt, M.F.G. & Herrmann, A. (2007). The relevance of salt bridges for the stability of the influenza virus hemagglutinin. In: *The FASEB Journal*, Vol. 21, pp. 995-1002.

Kurz, A. & Bunge, A. & Windeck, A.K. & Rost, M. & Flasche, W. & Arbuzova, A. Strohbach, D. & Mueller, S. & Liebscher, J. & Huster, D. & Herrmann, A. (2006). Lipid-anchored oligonucleotides for stable double-helix formation in distinct membrane domains. In: *Angewandte Chemie International Edition*, Vol. 45, pp. 4440-4444.

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|---|---|
| **Name** | Prof. Dr. Patrick Hostert |
| **Date of birth** | 29 December 1967 |
| **Year appointed** | 2002 |

### Academic career

Professor of geomatics at HU since 2006

Coordinator of GSC FutureLand Graduate School (initial proposal)

1987-1994 Diplom degree in physical geography at Universität Trier

1994-1995 MSc in geographical information systems at University of Edinburgh

1996-2001 PhD at Universität Trier

2002-2006 Junior professor at HU

### Main areas of research

Remote sensing and geomatics; land system science

### Major academic achievements

2002 Dissertation Prize – Outstanding PhD Award of Universität Trier

2007 Best Teaching Award of HU

### Selected publications

Klaus, M. & Holsten, A. & Hostert, P. & Kropp, J.P. (2011). Integrated methodology to assess windthrow impacts on forest stands under climate change. In: *Forest Ecology and Management*, Vol. 261, No. 11, pp. 1799-1810.

Sonnenschein, R. & Kuemmerle, K. & Udelhoven, T. & Stellmes, M. & Hostert, P. (2011). Differences in Landsat-based trend analyses in drylands due to the choice of vegetation estimate. In: *Remote Sensing of the Environment*, Vol. 115, pp. 1408-1420.

Damm, A. & Erler, A. & Gioli, B. & Hamdi, K. & Hutjes, R. & Kosvancova, M. & Meroni, M. & Miglietta, F. & Moersch, A. & Moreno, J. & Schickling, A. & Sonnenschein, R. & Udelhoven, T. & Van der Linden, S. & Hostert, P. & Rascher, U. (2010). Remote sensing of sun induced fluorescence yield to improve modelling of diurnal courses of Gross Primary Production (GPP). In: *Global Change Biology*, Vol. 16, pp. 171-186.

Griffiths, P. & Hostert, P. & Gruebner, O. & Van der Linden, S. (2010). Mapping megacity growth with multi-sensor data. In: *Remote Sensing of the Environment*, Vol. 114, pp. 426-439.

Hostert, P. (2010). Processing techniques for hyperspectral data. In: Rashed, T. & Jürgens, C. (ed.). *Remote Sensing of Urban and Suburban Areas* (pp. 165-180). Berlin: Springer Academic.

Hostert, P. & Swayne, F. & Cohen, W.B. & Chipman, J. (2010). The role of remote sensing in LTER projects. In: Baessler, C. & Frenzel, M. & Klotz, S. & Müller, F. & Schubert, H. (ed.). *Long Term Ecological Research – Theory and Application* (pp. 131-142). Heidelberg: Springer Academic.

Kuemmerle, T. & Olofsson, P. & Chaskovskyy, O. & Baumann, M. & Ostapowicz, K. & Woodcock, C.E. & Houghton, R.A. & Hostert, P. & Keeton, W.S. & Radeloff, V.C. (2010). Post-Soviet farmland abandonment, forest recovery, and carbon sequestration in western Ukraine. In: *Global Change Biology*, Vol. 17, No. 3, pp. 1335-1349.

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|---|---|
| **Name** | Prof. Dr. Dr. h.c. Edda Klipp |
| **Date of birth** | 4 June 1965 |
| **Year appointed** | 2008 |

### Academic career

Professor of theoretical biophysics at HU since 2008

Coordinator of the Research Training Group Computer based Systembiology since 2011

1985-1990 Studied biophysics at HU and Moscow State University

1990-1994 PhD in theoretical biophysics at HU

2007- 2008 Visiting professorship of theoretical biophysics at HU

### Main areas of research

Computational systems biology; analysis of dynamics of biological systems in time and space; development of tools and approaches for systems biology; regulation and stress response in model organism yeast; regulatory processes in mammalian cells

### Major academic achievements

2009 Honorary doctorate from University of Gothenburg

### Selected publications

Zi, Z. & Feng, Z. & Chapnick, D.A. & Dahl, M. & Deng, D. & Klipp, E. & Moustakas, E. & Liu, X. (2011). Quantitative analysis of transient and sustained transforming growth factor-signalling dynamics. In: *Molecular Systems Biology*, Vol. 7, p. 492.

Krause, F. & Uhlendorf, J. & Lubitz, T. & Schulz, M. & Klipp, E. & Liebermeister, W. (2010). Annotation and merging of SBML models with semantic SBML. In: *Bioinformatics*, Vol. 26, No. 3, pp. 421-422.

Lubitz, T. & Schulz, M. & Klipp, E. & Liebermeister, W. (2010). Parameter Balancing in Kinetic Models of Cell Metabolism. In: *Journal of Physical Chemistry B*, Vol. 114, No. 49, pp. 16298-16303.

Klipp, E. & Wade, R.C. & Kummer, U. (2010). Biochemical network-based drug-target prediction. In: *Current Opinion in Biotechnology*, Vol. 21, No. 4, pp. 511-516.

Klipp, E. & Liebermeister, W. & Wierling, C. & Kowald, A. & Lehrach, H. & Herwig, R. (2009). *Systems Biology. A Textbook*. Weinheim: Wiley-VCH.

Erjavec, N. & Cvijovic, M. & Klipp, E. & Nyström, T. (2008). Selective benefits of damage partitioning in unicellular systems and its effects on aging. In: *PNAS*, Vol. 105, No. 48, pp. 18764-18769.

Herrgård, M.J. et al. (2008). A consensus yeast metabolic network reconstruction obtained from a community approach to systems biology. In: *Nature Biotechnology*, Vol. 26, No. 10, pp. 1155-1160.

Klipp, E. & Liebermeister, W. & Helbig A. & Kowald, A. & Schaber, J. (2007). Systems Biology standards – the community speaks. In: *Nature Biotechnology*, Vol. 25, No. 4, pp. 390-391.

Le Novère, N. & Finney, A. & Hucka, M. & Bhalla, U.S. & Campagne, F. & Collado-Vides, J. & Crampin, E.J. & Halstead, M. & Klipp, E. & Mendes, P. & Nielsen, P. & Sauro, H. & Shapiro, B. & Snoep, J.L. & Spence, H.D. & Wanner, B.L. (2005). Minimum Information Requested In the Annotation of biochemical Models (MIRIAM). In: *Nature Biotechnology*, Vol. 23, No. 12, pp. 1509-1515.

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|---|---|
| **Name** | Prof. Dr. Janina Kneipp |
| **Date of birth** | 30 July 1974 |
| **Year appointed** | 2008 |

### Academic career

Junior Professor of optical spectroscopy at HU since 2008

Coordinator of GSC of Analytical Sciences Adlershof (SALSA) (initial proposal)

Scientist at the Federal Institute for Materials Research and Testing since 2005

1992-1998 Studied biology and physics at FU

2002 PhD (Dr. rer. nat.) at FU

2003-2005 Research associate at Princeton University, NJ

2005 Visiting research scientist at Harvard University Medical School, Boston, MA

### Main areas of research

Analytical chemistry; spectroscopy; nanobiophotonics

### Major academic achievements

2010 Bunsen-Kirchhoff Award of the German Chemical Society

### Selected publications

Joseph, V. & Matschulat, A. & Polte, J. & Rolf, S. & Emmerling, F. & Kneipp, J. (forthcoming 2011). SERS enhancement of gold nanospheres of defined size. In: *Journal of Raman Spectroscopy* DOI: 10.1002/jrs.2939.

Drescher, D. & Orts-Gil, G. & Laube, G. & Natte, K. & Veh, R. W. & Österle, W. & Kneipp, J. (2011). Toxicity of amorphous silica nanoparticles on eukaryotic cell model is determined by particle agglomeration and serum protein adsorption effects. In: *Analytical and Bioanalytical Chemistry*, Vol. 400, pp. 1367-1373.

Matschulat, A. & Drescher, D. & Kneipp, J. (2010). Surface-Enhanced Raman Scattering Hybrid Nanoprobe Multiplexing and Imaging in Biological Systems. In: *ACS Nano*, Vol. 4, pp. 3259-3269.

Joseph, V. & Schulte, F. & Rooch, H. & Feldmann, I. & Dörfel, I. & Österle, W. & Panne, U. & Kneipp, J. (2011). Surface-enhanced Raman scattering with silver nanostructures generated in situ in sporopollenin biopolymer matrix. In: *Chemical Communications*, Vol. 47, pp. 3236-3238.

Schulte, F. & Panne, U. & Kneipp, J. (2010). Molecular changes during pollen germination can be monitored by Raman microspectroscopy. In: *Journal of Biophotonics*, Vol. 3, pp. 542-547.

Kneipp, J. & Kneipp, H. & Wittig, B. & Kneipp, K. (2010). Following the Dynamics of pH in Endosomes of Live Cells with SERS Nanosensors. In: *Journal of Physical Chemistry C*, Vol. 114, pp. 7421-7426.

Schulte, F. & Mäder, J. & Kroh, L.W. & Panne, U. & Kneipp, J. (2009). Characterization of pollen carotenoids with in situ depletion and HPTLC-aided resonant Raman spectroscopy. In: *Analytical Chemistry*, Vol. 81, pp. 8426-8433.

Schulte, F. & Lingott, J. & Panne, U. & Kneipp, J. (2008). Chemical characterization and classification of pollen. In: *Analytical Chemistry*, Vol. 80, pp. 9551-9556.

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|---|---|
| **Name** | Prof. Dr. Norbert Koch |
| **Date of birth** | 20 June 1971 |
| **Year appointed** | 2009 |

### Academic career

Professor at the Department of Physics at HU since 2009

Head of a joint Research Unit of Helmholtz-Zentrum Berlin and HU since 2010

2000 PhD in solid state physics at Graz University of Technology

2000-2002 Postdoctoral researcher at Princeton University, NJ

2003 Postdoctoral researcher at HU

2004-2009 Junior research group leader for DFG Emmy Noether-Programme at HU

### Main areas of research

Structure and electronic properties of organic semiconductors; surface and interface physics; organic opto-electronic components

### Major academic achievements

2008 Scheel Prize of the Society for Physics Berlin

### Selected publications

Lange, I. & Blakesley, J.C. & Frisch, J. & Vollmer, A. & Koch, N. & Neher, D. (2011). Band bending in conjugated polymer layers. In: *Physical Review Letters*, Vol. 106, p. 216402.

Duhm, S. & Heimel, G. & Salzmann, I. & Glowatzki, H. & Johnson, R.L. & Vollmer, A. & Rabe, J.P. & Koch, N. (2008). Orientation-dependent ionization energies and interface dipoles in ordered molecular assemblies. In: *Nature Materials*, Vol. 7, p. 326.

Romaner, L. & Heimel, G. & Brédas, J.-L. & Gerlach, A. & Schreiber, F. & Johnson, R.L. & Zegenhagen, J. & Duhm, S. & Koch, N. & Zojer, E. (2007). Impact of bi-directional charge transfer and molecular distortions on the electronic structure of a metal-organic interface. In: *Physical Review Letters*, Vol. 99, p. 256801.

Koch, N. & Vollmer, A. & Salzmann I. & Rabe, J.P. & Weiss, H. & Nickel, B. (2006). Evidence for temperature dependent band dispersion in pentacene. In: *Physical Review Letters*, Vol. 96, p. 156803.

Koch, N. & Duhm, S. & Vollmer, A. & Rabe, J.P. & Johnson, R.L. (2005). Optimized hole injection with strong electron acceptors at organic-metal interfaces. In: *Physical Review Letters*, Vol. 95, p. 237601.

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|---|---|
| **Name** | Prof. Dr. Jürg Kramer |
| **Date of birth** | 3 June 1956 |
| **Year appointed** | 1994 |

### Academic career

Professor of mathematics at HU since 1994

Deputy Coordinator of GSC Berlin Mathematical School since 2006

1980 Diplom degree in mathematics, physics and astronomy at the University of Basel

1985 PhD in mathematics at the University of Basel

1993 Habilitation for mathematics at Swiss Federal Institute of Technology Zürich

1994 Associate professor at the Department of Mathematics at Université Laval, Québec

### Main areas of research

Arithmetic algebraic geometry, in particular Arakelov geometry; theory of automorphic forms, in particular the theory of modular forms; analytic number theory of modular forms

### Selected publications

van der Meer, E. & Beyer, R. & Horn, J. & Foth, M. & Bornemann, B. & Ries, J. & Kramer, J. & Warmuth, E. & Heekeren, H.R. & Wartenburger, I. (2010). Resource Allocation and Fluid Intelligence: Insights from Pupillometry. In: *Psychophysiology*, Vol. 47, No. 1, pp. 158-169.

Jorgenson, J. & Kramer, J. (2009). Bounds on Faltings's delta function through covers. In: *Annals of Mathematics* (2nd series), Vol. 170, No. 1, pp. 1-43.

Kramer, J. (2008). *Zahlen für Einsteiger: Elemente der Algebra und Zahlentheorie*. Wiesbaden: Vieweg Verlag.

Burgos Gil, J.I. & Kramer, J. & Kühn, U. (2007). Cohomological arithmetic Chow rings. In: *Journal of the Institute of Mathematics of Jussieu*, Vol. 6, No. 1, pp. 1-172.

Jorgenson, J. & Kramer, J. (2006). Bounds on canonical Green's functions. In: *Compositio Mathematica*, Vol. 142, No. 3, pp. 679-700.

Burgos Gil, J.I. & Kramer, J. & Kühn, U. (2005). Arithmetic characteristic classes of automorphic vector bundles. In: *Documenta Mathematica*, Vol. 10, pp. 619-716.

Jorgenson, J. & Kramer, J. (2004). Bounding the sup-norm of automorphic forms. In: *Geometric and Functional Analysis*, Vol. 14, No. 6, pp. 1267-1277.

Jorgenson, J. & Kramer, J. (2001). Star products of Green's currents and automorphic forms. In: *Duke Mathematical Journal*, Vol. 106, No. 3, pp. 553-580.

Kramer, J. (1995). An arithmetic theory of Jacobi forms in higher dimensions. In: *Journal für die reine und angewandte Mathematik*, Vol. 458, pp. 157-182.

Soulé, C. & Abramovich, D. & Burnol, J.-F. & Kramer, J. (1992). Lectures on Arakelov Geometry. In: *Cambridge Studies in Advanced Mathematics*, Vol. 33. Cambridge: Cambridge University Press.

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|---|---|
| **Name** | Prof. Dr. Dirk Kreimer |
| **Date of birth** | 12 July 1960 |
| **Year appointed** | 2011 |

### Academic career

Alexander von Humboldt Professor at the Department of Physics and the Department of Mathematics at HU since 2011

1984-89 Studied physics at Johannes Gutenberg-Universität Mainz

1992 PhD in physics

1993-1995 Postdoctoral research at the University of Tasmania

1997 Habilitation at the Johannes Gutenberg-Universität Mainz

1997-2001 Heisenberg fellowship of the Johannes Gutenberg-Universität Mainz

2001-2002 Professor of physics and mathematics at the Boston University, MA

2002-2010 French National Centre for Scientific Research-professor at the Institut des Hautes Études Scientifiques

### Main areas of research

Basic principles of quantum field theory; connections between number theory and physics

### Major academic achievements

2010 Alexander von Humboldt Professorship

1998-2001 Clay Mathematics Institute Prize Fellow

### Selected publications

Bloch, S. & Kreimer, D. (2010). Feynman amplitudes and Landau singularities for 1-loop graphs. In: *Communications in Number Theory and Physics*, Vol. 4, No. 4, p. 709.

Van Baalen, G. & Kreimer, D. & Uminsky, D. & Yeats, K (2010). The QCD beta-function from global solutions to Dyson-Schwinger equations. In: *Annals of Physics*, Vol. 325, p. 300.

Bloch, S. & Kreimer, D. (2008). Mixed Hodge Structures and Renormalization in Physics. In: *Communications in Number Theory and Physics*, Vol. 2, No. 4, p. 637.

Kreimer, D. (2008). A remark on quantum gravity. In: *Annals of Physics*, Vol. 323, p. 49.

Kreimer, D. (2006). Anatomy of a gauge theory. In: *Annals of Physics*, Vol. 321, p. 2757.

Bloch, S. & Esnault, H. & Kreimer, D. (2006). On Motives Associated to Graph Polynomials. In: *Communications in Mathematical Physics*, Vol. 267, p. 181.

Connes A. & Kreimer, D. (2001). Renormalization in quantum field theory and the Riemann-Hilbert problem. II: The beta-function, dieomorphisms and the renormalization group. In: *Communications in Mathematical Physics*, Vol. 216, p. 215.

Connes, A. & Kreimer, D. (1998). Hopf algebras, renormalization and noncommutative geometry. In: *Communications in Mathematical Physics*, Vol. 199, p. 203.

Kreimer, D. (1998). On the Hopf algebra structure of perturbative quantum field theories. In: *Advances in Theoretical and Mathematical Physics*, Vol. 2, p. 30.

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|---|---|
| **Name** | Prof. Dr. Manfred Krifka |
| **Date of birth** | 26 April 1956 |
| **Year appointed** | 2000 |

### Academic career

Professor at the Department of Linguistics at HU since 2000

Director of the Centre for General Linguistics in Berlin since 2001

1976-1981 Studied theoretical linguistics, logics and philosophy of science, and psycholinguistics at Ludwig-Maximilians-Universität München

1986 PhD in theoretical linguistics at Ludwig-Maximilians-Universität München

1990-2000 Assistant, Associate and Full professor at the Department of Linguistics at the University of Texas, Austin, TX

### Main areas of research

Semantics, syntax and pragmatics of human languages; linguistic typology; Austronesian languages

### Major academic achievements

2008 Member of Academia Europaea

### Selected publications

Krifka, M. (2010). How to interpret “expletive” negation under “bevor” in German. In: Hanneforth, T. & Fanselow, G. (ed.). *Language and logos. Studies in theoretical and computational linguistics* (pp. 214-236). Berlin: Akademie Verlag.

Krifka, M. (2009). Approximate interpretations of number words. In: Hinrichs, E. & Nerbonne, J. (ed.). *Theory and evidence in semantics* (pp. 109-132). Stanford: CSLI Publications.

Krifka, M. & Grosu, A. (2008). “The gifted mathematician that you claim to be”: Equational intensional “reconstruction” relatives. In: *Linguistics and Philosophy*, Vol. 30, pp. 445-485.

Krifka, M. (2007). The semantics of questions and the focusation of answers. In: Chungmin, L. & Gordon, M. & Büring, D. (ed.). *Topic and Focus. Cross-linguistic perspectives on meaning and intonation* (pp. 139-150). Dordrecht: Springer.

Krifka, M. (2004). Bare NPs: Kind-referring, indefinites, both, or neither? In: *SALT XIII*. Cornell: CLC Publications.

Krifka, M. (2001). Quantifying into question acts. In: *Natural Language Semantics*, Vol. 9, pp. 1-40.

Krifka, M. (1998). The origins of telicity. In: Rothstein, S. (ed.). *Events and grammar* (pp. 197-235). Dordrecht: Kluwer.

Krifka, M. (1995). The semantics and pragmatics of polarity items. In: *Linguistic Analysis*, Vol. 25, pp. 209-257.

Krifka, M. (1992). Thematic relations as links between nominal reference and temporal constitution. In: Sag, I.A. & Szabolcsi, A. (ed.). *Lexical Matters* (pp. 29-53). Stanford: CSLI.

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|---|---|
| **Name** | Prof. Dr. Verena Lobsien |
| **Date of birth** | 13 May 1957 |
| **Year appointed** | 1999 |

### Academic career

Professor of English literature at HU since 1999

1975-1980 Studied English studies, German studies, education and philosophy at Universität Hannover and at the University of East Anglia, Norwich

1984 PhD at Leibniz Universität Hannover

1992 Habilitation at Johann Wolfgang Goethe-Universität Frankfurt am Main

### Main areas of research

Early modern literature and culture; poetry and aesthetics; theory of the imagination; transformation of antiquity in early modern culture and literature

### Selected publications

Lobsien, V.O. (2011). Nekroprosa. Fragen nach den letzten Dingen in Später und Früher Neuzeit: W. G. Sebald und Sir Thomas Browne. In: Nordverbund Germanistik (ed.). *Frühe Neuzeit – Späte Neuzeit: Phänomene der Wiederkehr in Literaturen und Künsten ab 1970* (pp. 169-186). Bern/New York: Peter Lang.

Lobsien, V.O. (2011). The Space of the Human and the Place of the Poet: Excursions into English Topographical Poetry. In: Höfele, A. & Laqué, S. (ed.). *Humankinds: The Renaissance and Its Anthropologies* (pp. 41-68). Berlin: De Gruyter.

Lobsien, V.O. (2010). Transparency and Dissimulation: Configurations of Neoplatonism. In: *Early Modern English Literature*. Berlin: De Gruyter.

Lobsien, V.O. (2009). Zweifel am Römertum. Hellenismen in Shakespeares Römerdramen. In: Schmitt, A. & Radke-Uhlmann, G. (ed.). *Philosophie im Umbruch: Der Bruch mit dem Aristotelismus im Hellenismus und im späten Mittelalter – seine Bedeutung für die Entstehung eines epochalen Gegensatzbewußtseins von Antike und Moderne* (pp. 177-199). Stuttgart: Franz Steiner.

Lobsien, V.O. & Olk, C. (ed.) (2007). *Neuplatonismus und Ästhetik: Zur Transformationsgeschichte des Schönen*. Berlin: De Gruyter.

Lobsien, V.O. (2005). ”Richtet nicht, damit ihr nicht gerichtet werdet!“ Biblische, säkulare und poetische Gerechtigkeit im England der Frühen Neuzeit. In: *Poetica*, Vol. 37, No. 3-4, pp. 311-347.

Lobsien, V.O. (2005). ‘Transformed in show, but more transformed in mind’: Sidney’s *Old Arcadia* and the Performance of Perfection. In: Rupp, S. & Döring, T. (ed.). *Performances of the Sacred in Late Medieval and Early Modern England* (pp. 105-117). Amsterdam/New York: Rodopi.

Lobsien, V.O. & Lobsien, E. (2003). *Die unsichtbare Imagination: Literarisches Denken im 16. Jahrhundert.* Munich: Fink.

Lobsien, V.O. (1999). *Skeptische Phantasie: Eine andere Geschichte der frühneuzeitlichen Literatur*. Munich: Fink.

Lobsien, V.O. (1994). *Subjektivität als Dialog: Philosophische Dimensionen der Phantasie.* Munich: Fink.

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|---|---|
| **Name** | Prof. Dr. Richard Lucius |
| **Date of birth** | 22 August 1951 |
| **Year appointed** | 1995 |

### Academic career

Professor of parasitology at HU since 1995

Coordinator of GSC Robert Koch Graduate School Berlin (initial proposal)

1970-1977 Studied biology, chemistry and physics at Universität Hohenheim and Universität Heidelberg

1982 PhD (Dr. rer. nat.) at Universität Hohenheim

1991-1995 Professor of parasitology at Universität Hohenheim

### Main areas of research

Mechanisms of immunomodulation exerted by parasitic nematodes; protective immune responses directed against apicomplexan parasites (Eimeria); functional genomics of Eimeria and Toxoplasma; parasitology; immunology; cell biology

### Major academic achievements

1990 Behring Bilharz Prize for Parasitology

1994 Teaching Award of the Federal State of Baden-Württemberg

### Selected publications

Blume, M. & Hliscs, M. & Rodriguez-Contreras, D. & Sanchez, M. & Landfear, S. & Lucius, R. & Matuschewski, K. & Gupta, N. (2011). A constitutive pan-hexose permease for the Plasmodium life cycle and transgenic models for screening of antimalarial sugar analogs. In: *The FASEB Journal*, Vol. 25, 4, pp. 1218-1229.

Klotz, C. & Ziegler, T. & Figueiredo, A.S. & Rausch, S. & Hepworth, M.R. & Obsivac, N. & Sers, C. & Lang, R. & Hammerstein, P. & Lucius, R. & Hartmann, S. (2011). A helminth immunomodulator exploits host signaling events to regulate cytokine production in macrophages. In: *PLoS Pathogens*, Vol. 7, 1, e1001248.

Rausch, S. & Held, J. & Stange, J. & Lendner, M. & Hepworth, M.R. & Klotz, C. & Lucius, R. & Pogonka, T. & Hartmann, S. (2010). A matter of timing: early, not chronic phase intestinal nematode infection restrains control of a concurrent enteric protozoan infection. In: *European Journal of Immunology*, Vol. 40, 10, pp. 2804-2815.

Rausch, S. & Huehn, J. & Loddenkemper, C. & Hepworth, M.R. & Klotz, C. & Sparwasser, T. & Hamann, A. & Lucius, R. & Hartmann, S. (2009). Establishment of nematode infection despite increased Th2 responses and immunopathology after selective depletion of Foxp3+ cells. In: *European Journal of Immunology*, Vol. 39, 11, pp. 3066-3077.

Hartmann, S. & Schnoeller, C. & Dahten, A. & Avagyan, A. & Rausch, S. & Lendner, M. & Bocian, C. & Pillai, S. & Loddenkemper, C. & Lucius, R. & Worm, M. & Hamelmann, E. (2009). Gastrointestinal nematode infection interferes with experimental allergic airway inflammation but not atopic dermatitis. In: *Clinical & Experimental Allergy*, Vol. 39, 10, pp. 1585-1596.

Figueiredo, A.S. & Höfer, T. & Klotz, C. & Sers, C. & Hartmann, S. & Lucius, R. & Hammerstein, P. (2009). Modelling and simulating interleukin-10 production and regulation by macrophages after stimulation with an immunomodulator of parasitic nematodes. In: *The FEBS Journal*, Vol. 276, 13, pp. 3454-3469.

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|---|---|
| **Name** | Prof. Dr. Dr. h.c. Christoph Markschies |
| **Date of birth** | 3 October 1962 |
| **Year of appointment** | 2004 |

### Academic career

Professor of ancient christianity and patristics at HU since 2004

1981-1987 Studied protestant theology, classical philology and philology in Marburg, Jerusalem, Munich and Tübingen

1991 PhD at the Eberhard Karls Universität Tübingen

1994 Habilitation for church history

1994-2000 Professor of church history at Friedrich-Schiller-Universität Jena

2000-2004 Professor of historical theology in Heidelberg

### Main areas of research

Religious and theological history of ancient Christianity; editing ancient Christian texts (with a focus on documents that have become apocryphal)

### Major academic achievements

2001 Gottfried Wilhelm Leibniz Prize from DFG

2007 Honorary doctorate from the Faculty of Orthodox Theology, Sibiu

2011 Honorary doctorate from the Faculty of Theology, Oslo

### Selected publications

Markschies, Ch. (2011). *Does It Make Sense to Speak about a 'Hellenization of Christianity' in Antiquity?* Leiden: Brill.

Markschies, Ch. (2010). *Die Gnosis* (3rd edition). Munich: Beck.

Markschies, Ch. (2009). *Kaiserzeitliche antike christliche Theologie und ihre Institutionen* (2nd edition). Tübingen: Mohr-Siebeck.

Markschies, Ch. (2009). *Gnosis und Christentum*. Berlin: Berlin University Press.

Markschies, Ch. (2008). *Antike ohne Ende.* Berlin: Berlin University Press.

Markschies, Ch. (2007). *Origenes und sein Erbe: Gesammelte Studien (Texte und Untersuchungen 160)*. Berlin: De Gruyter.

Markschies, Ch. (2000). *Alta Trinità Beata: Gesammelte Studien zur altkirchlichen Trinitätstheologie*. Tübingen: Mohr-Siebeck.

Markschies, Ch. (1995). *Ambrosius von Mailand und die Trinitätstheologie (Beiträge zur Historischen Theologie 90)*. Tübingen: Mohr-Siebeck.

Markschies, Ch. (1992). *Valentinus Gnosticus? (Wissenschaftliche Untersuchungen zum Neuen Testament I/65)*. Tübingen: Mohr-Siebeck.

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|---|---|
| **Name** | Prof. Dr. Herfried Münkler |
| **Date of birth** | 15 August 1951 |
| **Year appointed** | 1992 |

**Academic career**

Professor of political theory at HU since 1992

1972-1978 Studied politics, German studies and philosophy at Johann Wolfgang Goethe-Universität Frankfurt am Main

1981 PhD at Johann Wolfgang Goethe-Universität Frankfurt am Main

1987 Habilitation for politics at Johann Wolfgang Goethe-Universität Frankfurt am Main

**Main areas of research**

History of political ideas, in particular during the early modern period; political cultural research; theory of war; security policy

**Major academic achievements**

1995 Hans Reimer Award of the Aby-Warburg-Haus, Hamburg

2005 Philip Morris Research Prize

2009 Meyer-Struckmann Prize for research in humanities and social sciences

**Selected publications**

Münkler, H. (2010). *Mitte und Maß. Der Kampf um die richtige Ordnung*. Berlin: Rowohlt.

Münkler, H. (2009). *Die Deutschen und ihre Mythen*. Berlin: Rowohlt.

Münkler, H. (2006). *Der Wandel des Krieges. Von der Symmetrie zur Asymmetrie*. Weilerswist: Velbrück Wissenschaft Verlag.

Münkler, H. (2005). *Imperien. Die Logik der Weltherrschaft – Vom Alten Rom bis zu den Vereinigten Staaten*. Berlin: Rowohlt.

Münkler, H. (2002). *Über den Krieg. Stationen der Kriegsgeschichte im Spiegel ihrer theoretischen Reflexion*. Weilerswist: Velbrück Wissenschaft Verlag.

Münkler, H. (2002). *Die neuen Kriege*. Reinbek: Rowohlt.

Münkler, H. & Grünberger, H. & Mayer, K. (1998). *Nationenbildung. Die Nationalisierung Europas im Diskurs humanistischer Intellektueller: Italien und Deutschland*. Berlin: Akademie Verlag.

Münkler, H. (1996). *Reich, Nation, Europa. Modelle der politischen Ordnung*. Weinheim: Beltz-Athenäum.

Münkler, H. (1987). *Im Namen des Staates. Die Begründung der Staatsraison in der Frühen Neuzeit*. Frankfurt am Main: Fischer.

Münkler, H. (1982). *Machiavelli. Die Begründung des politischen Denkens der Neuzeit aus der Krise der Republik Florenz*. Frankfurt am Main: Europäische Verlagsanstalt.

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|---|---|
| **Name** | Prof. Dr. Stefan Mundlos |
| **Date of birth** | 9 June 1958 |
| **Year appointed** | 2000 |

### Academic career

Professor of human genetics at Charité since 2000

Head of the research group Development & Disease at MPI for Molecular Genetics since 2000

Coordinator of the EXC GenoRare (initial proposal)

1978-1981 Studied medicine at Georg-August-Universität Göttingen

1984 Studied medicine at Philipps-Universität Marburg

1985 MD at Universität Heidelberg

1987 PhD (Dr. med.) at Philipps-Universität Marburg

1997 Habilitation at Johannes Gutenberg-Universität Mainz

### Main areas of research

Molecular genetics of disease; genetics of developments; pathogenesis of skeletal dysplasia

### Major academic achievements

1997 Adalbert Czerny Prize of the German Society of Pediatrics and Adolescent Medicine

### Selected publications

Krawitz, P. & Mundlos, S. (2010). Identity-by-Descent Filtering of Exome Sequence Data identifies *PIGV* mutations in Hyperphosphatasia Mental Retardation (HPMR) syndrome. In: *nature genetics*, Vol. 42, No. 10, pp. 827-829.

Reversade, B. & Mundlos, S. (2009). Mutations in PYCR1 cause cutis laxa with progeroid features. In: *nature genetics*, Vol. 41, No. 9, pp. 1016-1021.

Kurth, I. & Mundlos, S. (2009). Duplications of noncoding elements 5‘ of SOX9 are associated with brachydactyly-anonychia. In: *nature genetics*, Vol. 41, No. 8, pp. 862-863.

Kuss, P. & Mundlos, S. (2009). Mutant Hoxd13 induces extra digits in a mouse model of synpolydactyly directly and by decreasing retinoic acid synthesis. In: *The Journal of Clinical Investigation*, Vol. 119, No. 1, pp. 146-156.

Seemann, P. & Mundlos, S. (2009). Mutations in GDF5 reveal a key residue mediating BMP inhibition by NOGGIN. In: *PLoS Genetics*, Vol. 5, No. 11, e1000747.

Hennies, H.C. & Mundlos, S. (2008). Gerodermia osteodysplastica is caused by mutations in SCYL1BP1, a Rab-6 interacting golgin. In: *nature genetics*, Vol. 40, No. 12, pp. 1410-1412.

Kornak, U. & Mundlos, S. (2008). Impaired glycosylation and cutis laxa caused by mutations in the vesicular H+-ATPase subunit ATP6V0A2. In: *nature genetics*, Vol. 40, No. 1, pp. 32-34.

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|---|---|
| **Name** | Prof. Dr. Ernst Osterkamp |
| **Date of birth** | 24 May 1950 |
| **Year appointed** | 1992 |

**Academic career**

Professor for modern German literature at HU since 1992

Degree in German studies, social studies and philosophy at Westfälische Wilhelms-Universität Münster

1977 PhD at Westfälische Wilhelms-Universität Münster

1988 Habilitation for German philology at Universität Regensburg

**Main areas of research**

German literature of the early Enlightenment, of the classical and the classical modern eras; Goethe philology; interrelations between the arts (poetry and fine arts, opera)

**Major academic achievements**

1999-2000 Getty scholar at the Getty Research Institute, Los Angeles, USA

2003-2004 Fellow of the Carl Friedrich von Siemens Foundation, Munich

2010 Aby Warburg professorship from the Aby Warburg Foundation, Hamburg

since 2010 Member of the Deutsche Akademie für Sprache und Dichtung

**Selected publications**

Beyer, A. & Osterkamp, E. (2011). *Goethe Handbuch. (Supplemente Vol. 3: Kunst).* Stuttgart: Metzler.

Osterkamp, E. (2010). *Poesie der leeren Mitte. Stefan Georges Neues Reich*. Munich: Hanser.

Osterkamp, E. (2007). *Gewalt und Gestalt. Die Antike im Spätwerk Goethes*. Basel: Schwabe.

Osterkamp, E. (1991). *Im Buchstabenbilde. Studien zum Verfahren Goethescher Bildbeschreibungen*. Stuttgart: Metzler.

Osterkamp, E. (1979). *Lucifer. Stationen eines Motivs* (Komparatistische Studien Vol. 9). Berlin: De Gruyter.

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|---|---|
| **Name** | Prof. Dr. Ulrich Panne |
| **Date of birth** | 17 June 1964 |
| **Year appointed** | 2004 |

### Academic career

Professor of instrumental analytical chemistry at HU since 2004

Head of Department Analytical Chemistry, Reference Materials at the Federal Institute for Materials Researching and Testing since 2004

1983-1989 Diplom degree in chemistry at Technische Universität Dortmund

1989-1993 PhD at Technische Universität München

1993-1995 PostDoc at European Commission Joint Research Centre in Ispra

1995-2001 Head of Group Applied Laser Spectroscopy and Habilitation at Technische Universität München

### Main areas of research

Instrumental analytical chemistry; optical spectroscopy; microfluidics; chemometrics

### Major academic achievements

2002 Adolf Martens Award of the German Chemical Society

2009 Fresenius Prize of the German Chemical Society

### Selected publications

Bahlmann, A. & Falkenhagen, J. & Weller, M.G. & Panne, U. & Schneider, R.J. (2011). Cetirizine as pH-dependent cross-reactant in a carbamazepine-specific immunoassay. In: *Analyst*, Vol. 136, pp. 1357-1364.

Raju, C.S.K. & Cossmer, A. & Scharf, H. & Panne, U. & Lueck, D. (2010). Speciation of gadolinium based MRI contrast agents in environmental water samples using hydrophilic interaction chromatography hyphenated with inductively coupled plasma mass spectrometry. In: *Journal of Analytical Atomic Spectrometry*, Vol. 25, pp. 55-61.

Carvalho, J.J. & Weller, M.G. & Panne, U. & Schneider, R.J. (2010). A highly sensitive caffeine immunoassay based on a monoclonal antibody. In: *Analytical and Bioanalytical Chemistry*, Vol. 396, pp. 2617-2628.

Hoehse, M. & Mory, D. & Florek, S. & Weritz, F. & Gornushkin, I. & Panne, U. (2009). A combined laser-induced breakdown and Raman spectroscopy Echelle system for elemental and molecular microanalysis. In: *Spectrochimica Acta Part B*, Vol. 64, pp. 1219-1227.

Schulte, F. & Lingott, J. & Panne, U. & Kneipp, J. (2008). Chemical Characterization and Classification of Pollen. In: *Analytical Chemistry*, Vol. 80, pp. 9551-9556.

Leiterer, J. & Emmerling, F. & Panne, U. & Christen, W. & Rademann, K. (2008). Tracing coffee tabletop traces. In: *Langmuir*, Vol. 24, pp. 7970-7978.

Leiterer, J. & Delissen, F. & Emmerling, F. & Thunemann, A.F. & Panne, U. (2008). Structure analysis using acoustically levitated droplets. In: *Analytical and Bioanalytical Chemistry*, Vol. 391, pp. 1221-1228.

Mueller, M. & Gornushkin, I.B. & Florek, S. & Mory, D. & Panne, U. (2007). Approach to detection in laser-induced breakdown spectroscopy. In: *Analytical Chemistry*, Vol. 79, pp. 4419-4426.

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|---|---|
| **Name** | Prof. Dr. Michael Pauen |
| **Date of birth** | 19 February 1956 |
| **Year appointed** | 2007 |

**Academic career**

Professor of philosophy at HU since 2007

Coordinator of GSC Berlin School of Mind and Brain since 2006

1982 MA in philosophy at Philipps-Universität Marburg

1989 PhD in philosophy at Philipps-Universität Marburg

1993 Assistant Adjunct Professor at University of Massachusetts Amherst, MA

1994 Fellow at Cornell University, Ithaca, NY

1994 Habilitation for philosophy at Philipps-Universität Marburg

2001 Professor at Otto-von-Guericke-Universität Magdeburg

**Main areas of research**

Philosophy of mind; freedom of will; mind-body problem

**Major academic achievements**

1997 Ernst Bloch Prize

**Selected publications**

Pauen, M. (2011). Materialism, Metaphysics, and the Intuition of Distinctness. In: *Journal of Consciousness* Studies, Vol. 18, No. 7-8, pp. 71-98.

Pauen, M. (2010). How Privileged is First Person Privileged Access. In: *American Philosophical Quarterly*, Vol. 47, No. 1, pp. 1-15.

Pauen, M. (2010). Spinoza and the Theory of Identity (2P1-2P13). In: Hampe, M. & Schnepf, R. & Renz, U. (Hg.). *Spinoza*. Leiden: Brill.

Pauen, M. & Roth, G. (2009). *Freiheit, Schuld und Verantwortung*. Frankfurt: Suhrkamp.

Herrmann, C.S. & Pauen, M. & Min, B.K. & Busch, N.A. & Rieger, J. (2008). Analysis of a choice-reaction task yields a new interpretation of Libet‘s experiments. In: *International Journal of* Psychophysiology, Vol. 67, No. 2, pp. 151-157.

Pauen, M. (2007). *Was ist der Mensch?* München: DVA.

Pauen, M. (2006). Feeling Causes. In: *Journal of Consciousness Studies*, Vol. 13, No. 1-2, pp. 129-152.

Pauen, M. (2004). *Illusion Freiheit?* Frankfurt: Fischer.

Pauen, M. (2003). Is Type Identity Incompatible With Multiple Realization? In: *Grazer Philosophische Studien*, Vol. 65, No. 1, pp. 37-49.

Pauen, M. (2000). Painless Pain. In: *American Philosophical Quarterly*, 37, No. 1, pp. 51-64.

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|---|---|
| **Name** | Prof. Dr. Dominik Perler |
| **Date of birth** | 17 March 1965 |
| **Year appointed** | 2003 |

### Academic career

Professor of theoretical philosophy at HU since 2003

1984-91 Studied philosophy and Russian literature at Université de Fribourg, University of Bern and the Georg-August-Universität Göttingen

1991 PhD at Université de Fribourg

1991-1996 Research Scholar at Cornell University, University of California, Los Angeles, CA and Georg-August-Universität Göttingen

1996 Habilitation for philosophy at Georg-August-Universität Göttingen

1996-97 University Lecturer and Fellow of All Souls at the University of Oxford

1997-2003 Professor of philosophy at the University of Basel

2004 Visiting professorship at Saint Louis University, MO

2004-05 Fellow of the Institute for Advanced Study Berlin

2009 Visiting professorship at Tel Aviv University

2010 Visiting professorship at University of Wisconsin-Madison, WI

### Main areas of research

History of medieval and early-modern philosophy; philosophy of mind; epistemology; ontology

### Major academic achievements

1991 Vigener Prize of the Albert-Ludwigs-Universität Freiburg

1996 Culture Prize of Fürst Franz Joseph von Liechtenstein

2006 Gottfried Wilhelm Leibniz Prize of the DFG

### Selected publications

Perler, D. (2011). *Transformationen der Gefühle. Philosophische Emotionstheorien 1270-1670*. Frankfurt am Main: Fischer.

Perler, D. & Haag, J. (ed.) (2010). *Ideen. Repräsentationalismus in der Frühen Neuzeit*. Berlin: De Gruyter.

Perler, D. (2002). *Theorien der Intentionalität im Mittelalter*. Frankfurt am Main: Klostermann.

Perler, D. (ed.) (2001). *Theories of Intentionality in Ancient and Medieval Philosophy.* Leiden: Brill.

Perler, D. (1996). *Zweifel und Gewissheit. Skeptische Debatten im Mittelalter*. Frankfurt am Main: Klostermann.

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|---|---|
| **Name** | Prof. Dr. Jürgen P. Rabe |
| **Date of birth** | 20 November 1955 |
| **Year appointed** | 1994 |

### Academic career

Professor of experimental physics at HU since 1994

Coordinator of IRIS Adlershof since 2010

1981 Diplom degree in physics at the Rheinisch-Westfälische Technische Hochschule Aachen

1984 PhD (Dr. rer. nat.) in physics at Technische Universität München

1992-1994 Professor of Physical Chemistry at Johannes Gutenberg-Universität Mainz

### Main areas of research

Molecular systems at interfaces; information processing

### Major academic achievements

Scientific Member of the Max Planck Society

### Selected publications

Severin, N. & Dorn, M. & Kalachev, A. & Rabe, J.P. (2011). Replication of single macromolecules with graphene. In: *Nano Letters*, Vol. 11, pp. 2436-2439.

Eisele, D.M. & Knoester, J. & Kirstein, S. & Rabe, J.P. & Vanden Bout, D.A. (2009). Uniform exciton fluorescence from individual molecular nanotubes immobilized on solid substrates. In: *Nature Nanotechnology*, Vol. 4, pp. 658-663.

Hough, L.E. & Jung, H.T. & Krüerke, D. & Heberling, M.S. & Nakata, M. & Jones, C.D. & Chen, D. & Link, D.R. & Zasadzinski, J. & Heppke, G. & Rabe, J.P. & Stocker, W. & Körblova, E. & Walba, D.M. & Glaser, M.A. & Clark, V. (2009). Helical Nanofilament Phases. In: *Science*, Vol. 325, pp. 456-460.

Duhm, S. & Heimel, G. & Salzmann, I. & Glowatzki, H. & Johnson, R. L. & Vollmer, A. & Rabe, J.P. & Koch, N. (2008). Orientation-dependent ionization energies and interface dipoles in ordered molecular assemblies. In: *Nature Materials*, Vol. 7, pp. 326-332.

Müllen, K. & Rabe, J.P. (2008). Nanographenes as active components of single-molecule electronics and how a scanning tunneling microscope puts them to work. In: *Accounts of Chemical Research*, Vol. 41, pp. 511-520.

Koch, N. & Vollmer, A. & Salzmann, I. & Nickel, B. & Weiss, H. & Rabe, J.P. (2006). Evidence for temperature-dependent electron band dispersion in pentacene. In: *Physical Review Letters*, Vol. 96, p. 156803.

Jäckel, F. & Watson, M.D. & Müllen, K. & Rabe, J.P. (2004). Prototypical single molecule chemical field effect transistor with nanometer-sized gates. In: *Physical Review Letters*, Vol. 92, p. 188303.

Cacialli, F. & Wilson, J.S. & Michels, J.J. & Daniel, C. & Silva, C. & Friend, R.H. & Severin, N. & Samorì, P. & Rabe, J.P. & O'Connell, M.J., & Taylor, P.N., & Anderson, H.L. (2002). Cyclodextrin-threaded conjugated polyrotaxanes as insulated molecular wires with reduced interstrand interactions. In: *Nature Materials*, Vol. 1, pp. 160-164.

Rabe, J.P. & Buchholz, S. (1991). Commensurability and Mobility in Two-Dimensional Molecular Patterns on Graphite. In: *Science*, Vol. 253, pp. 424-427.

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|---|---|
| **Name** | Prof. Dr. Joachim Sauer |
| **Date of birth** | 19 April 1949 |
| **Year appointed** | 1993 |

### Academic career

Professor of physical and theoretical chemistry at HU since 1993

1972 Diploma in chemistry at HU

1974 PhD (Dr. rer. nat.) at HU

1985 PhD (Dr. sc. nat.) at the Academy of Sciences, Berlin

1990-1991 Deputy Technical Director at BIOSYM Technologies, San Diego, CA

### Main areas of research

Computational quantum chemistry; heterogeneous catalysis; metaloxides; zeolites

### Major academic achievements

1982 Friedrich Wöhler Prize of the Chemical Society of the GDR

1991 Chemistry Award of the Academy of Sciences of Göttingen

1998 Alexander-von-Humboldt-Award of the Belgian National Fund for Scientific Research

2009 Kolos Medal and Lecture Award of the University of Warsaw and the Polish Chemical Society

2010 Liebig-Denkmünze of the Gesellschaft Deutscher Naturforscher und Ärzte

### Selected publications

Ganduglia-Pirovano, M.V. & Popa, C. & Sauer, J. & Abbott, H. & Uhl, A. & Baron, M. & Stacchiola, D. & Bondarchuk, O. & Shaikhutdinov, S. & Freund, H.-J. (2010). The Role of Ceria in Oxidative Dehydrogenation on Supported Vanadia Catalysts. In: *Journal of the American Chemical Society*, Vol. 132, pp. 2345-2349.

Svelle, S. & Tuma, C. & Rozanska, X. & Kerber, T. & Sauer, J. (2009). Quantum Chemical Modeling of Zeolite-Catalyzed Methylation Reactions: Toward Chemical Accuracy for Barriers. In: *Journal of the American Chemical Society*, Vol. 131, pp. 816-825.

Feyel, S. & Döbler, J. & Höckendorf, R. & Beyer, M.K. & Sauer, J. & Schwarz, H. (2008). Activation of Methane by Oligomeric (Al2O3)x+ (x = 3, 4, 5): The Role of Oxygen-Centered Radicals in Thermal Hydrogen-Atom Abstraction. In: *Angewandte Chemie International Edition*, Vol. 47, pp. 1946-1950; *Angewandte Chemie*, Vol. 120, pp. 1972-1976.

Tuma, C. & Sauer, J. (2006). Treating Dispersion Effects in Extended Systems by Hybrid MP2:DFT Calculations-Protonation of Isobutene in Zeolite Ferrierite. In: *Physical Chemisty Chemal Physics*, Vol. 8, pp. 3955-3965.

Weissenrieder, J. & Kaya, S. & Lu, J.-L. & Gao, H.-J. & Shaikhutdinov, S. & Freund, H.-J. & Sierka, M. & Todorova, T.K. & Sauer, J. (2005). Atomic Structure of a Thin Silica Film on a Mo(112) Substrate: A Two-Dimensional Network of SiO4 Tetrahedra. In: *Physical Review Letters*, Vol. 95, pp. 076103-1 - 076103-4.

Döbler, J. & Pritzsche, M. & Sauer, J. (2005). Oxidation of Methanol to Formaldehyde on Supported Vanadium Oxide Catalysts Compared to Gas Phase Molecules. In: *Journal of the American Chemical Society*, Vol. 127, pp. 10861-10868.

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| **Name** | Prof. Dr. Wolfgang Schäffner |
| **Date of birth** | 23 April 1961 |
| **Year appointed** | 2009 |

### Academic career

Professor of history of knowledge and culture at HU since 2009

Coordinator of the EXC Image Knowledge Gestaltung. An Interdisciplinary Laboratory (initial proposal)

1980-1993 Studied German and Spanish literature, philosophy and history of medicine in Munich, Paris and Madrid

1993 PhD in literary studies at Ludwig-Maximilians-Universität München

1996-2003 Researcher at the Centre for Literary and Cultural Research, Berlin

1998 Visiting scholar at the Department of History of Science at Harvard University, Cambridge, MA

2003-2009 Walter Gropius Chair at the Faculty of Architecture, Design and Urbanism at the University of Buenos Aires, Argentina

### Main areas of research

History and theory of structures and analogue code; interdisciplinary design; material epistemology; transatlantic knowledge transfer

### Major academic achievements

since 2005 Honorary full professor of University of Buenos Aires

### Selected publications

Schäffner, W. (forthcoming 2012). *Punkt 0.1. Zur Genese des analogen Codes in der Frühen Neuzeit*. Berlin/Zürich: Diaphanes.

Schäffner, W. (2011). The Telefonic Revolution of the Digital Image. In: *Grey Room*, Vol. 47, pp. 144-155.

Schäffner, W. (2010). The Design Turn. Eine wissenschaftliche Revolution im Geiste der Gestaltung. In: Mareis, C. et al. (ed.). *Entwerfen – Wissen – Produzieren. Designforschung im Anwendungskontext* (pp. 33-46). Bielefeld: transcript.

Schäffner, W. & Podgorny, I. (ed.) (2009). *Un Colón para los Datos. Humboldt y el Diseño del Saber*. Buenos Aires: Redes.

Schäffner, W. (2008). Ein neuer Strukturalismus – zur Gestaltung des Wissens in einem interdisziplinären Strukturen-Labor. In: Krausse, J. & Pinkau, S. (ed.). *The Intelligence of Structures. Bauhaus Lectures* (pp. 118-129). Dessau.

Schäffner, W. et al. (ed.) (2008). *Dossier Caminhos, Comunicações e Ciencia. Suplemento: História, Ciência, Saúde-Manguinhos, Casa de Oswaldo Cruz*. Rio de Janeiro.

Schäffner, W. et al. (ed.) (2003). *Electric Laokoon. Zeichen und Medien von der Lochkarte zur Grammatologie*. Berlin: Akademie Verlag.

Schäffner, W. et al. (ed.) (2003). *"Der liebe Gott steckt im Detail". Mikrostrukturen des Wissens*. Munich: Fink.

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|---|---|
| **Name** | Prof. Dr. Clemens A. Schmitt |
| **Date of birth** | 11 July 1967 |
| **Year appointed** | 2004 |

**Academic career**

Professor of tumour biology and hematology at Charité since 2004

Senior Physician at the Medical Department, Division of Hematology, Oncology and Tumour Immunology at the Charité since 2009

Coordinator of the GSC BSIO – Berlin School of Integrative Oncology (initial proposal)

1986-1993 Studied medicine at Johannes Gutenberg-Universität Mainz

1995 MD at Johannes Gutenberg-Universität Mainz

2003 Habilitation and board certification in internal medicine

**Main areas of research**

Cellular stress responses – i.e. apoptosis, senescence and autophagy – and metabolic deregulation in tumour (particularly lymphoma) development and treatment resistance; new concepts for cancer therapies

**Major academic achievements**

2003 Kind Philipp Award for Leukemia Research

2005 Artur Pappenheim Award of the German Society of Hematology and Oncology

2006 Curt Meyer Memorial Prize of the Berlin Cancer Society

**Selected publications**

Reimann, M. & Lee, S. & Loddenkemper, C. & Dörr, J.R. & Tabor, V. & Aichele, P. & Stein, H. & Dörken, B. & Jenuwein, T. & Schmitt, C.A. (2010). Tumor stroma-derived TGF-b limits Myc-driven lymphomagenesis via Suv39h1-dependent senescence. In: *Cancer Cell*, Vol. 17, pp. 262-272.

Bouchard, C. & Lee, S. & Paulus-Hock, V. & Loddenkemper, C. & Eilers, M.& Schmitt, C.A. (2007). FoxO transcription factors suppress Myc-driven lymphomagenesis via direct activation of Arf. In: *Genes & Development*, Vol. 21, pp. 2775-2787.

Braig, M. & Lee, S. & Loddenkemper, C. & Rudolph, C. & Peters, A.H.F.M. & Schlegelberger, B. & Stein, H. & Dörken, B. & Jenuwein T. & Schmitt, C.A. (2005). Oncogene-induced senescence as an initial barrier in lymphoma development. In: *Nature*, Vol. 436, pp. 660-665.

Schmitt, C.A. (2003). Senescence, apoptosis and therapy – cutting the lifelines of cancer. In: *Nature Reviews Cancer*, Vol. 3, pp. 286-295.

Schmitt, C.A. & Fridman, J.S. & Yang, M. & Baranov, E. & Hoffman, R.M. & Lowe, S.W. (2002). Dissecting p53 tumor suppressor functions in vivo. In: *Cancer Cell*, Vol. 1, pp. 289-298.

Schmitt, C.A. & Fridman, J.S. & Yang, M. & Lee, S. & Baranov, E. & Hoffman R.M. & Lowe, S.W. (2002). A senescence program controlled by p53 and p16INK4a contributes to the outcome of cancer therapy. In: *Cell*, Vol. 109, pp. 335-346.

Schmitt, C.A. & Rosenthal, C.T. & Lowe, S.W. (2000). Genetic analysis of chemoresistance in primary murine lymphomas. In: *Nature Medicine*, Vol. 6, pp. 1029-1035.

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| **Name** | Prof. Dr. Dietmar Schmitz |
| **Date of birth** | 4 November 1968 |
| **Year appointed** | 2002 |

### Academic career

Professor of cellular and molecular neurosciences at Charité since 2005

Coordinator of EXC NeuroCure since 2006

1990-1997 Studied medicine at Universität zu Köln and the Charité

1992-1997 PhD at Universität zu Köln and the Charité

2002-2005 Assistant Professor of neurophysiology

### Main areas of research

Cellular and molecular mechanisms of synaptic plasticity; modulation and development of synaptic transmission, plasticity and neuronal networks; homeostatic plasticity, hyperexcitability, epilepsy; “synaptopathy” in neurological-psychiatric disorders

### Major academic achievements

2005 Schilling Research Award of the German Neuroscience Society

2006 Sir Bernard Katz Award of the Israel Society of Neurosciences

### Selected publications

Heisler, F.F. & Loebrich, S. & Pechmann, Y. & Maier, N. & Zivkovic, A.R. & Tokito, M. & Hausrat, T.J. & Schweizer, M. & Bahring, R. & Holzbaur, E.L. & Schmitz, D. & Kneussel, M. (2011). Muskelin Regulates Actin Filament- and Microtubule-Based GABA(A) Receptor Transport in Neurons. In: *Neuron*, Vol. 70, pp. 66-81.

Beed, P. & Bendels, M.H. & Wiegand, H.F. & Leibold, C. & Johenning, F.W. & Schmitz, D. (2010). Analysis of excitatory microcircuitry in the medial entorhinal cortex reveals cell-type-specific differences. In: *Neuron*, Vol. 68, pp. 1059-1066.

Trimbuch, T. & Beed, P. & Vogt, J. & Schuchmann, S. & Maier, N. & Kintscher, M. & Breustedt, J. & Schuelke, M. & Streu, N. & Kieselmann, O. & Brunk, I. & Laube, G. & Strauss, U. & Battefeld, A. & Wende, H. & Birchmeier, C. & Wiese, S. & Sendtner, M. & Kawabe, H. & Kishimoto-Suga, M. & Brose, N. & Baumgart, J. & Geist, B. & Aoki, J. & Savaskan, N.E. & Brauer, A.U. & Chun, J. & Ninnemann, O. & Schmitz, D. & Nitsch, R. (2009). Synaptic PRG-1 modulates excitatory transmission via lipid phosphate-mediated signaling. In: *Cell*, Vol. 138, pp. 1222-1235.

Harmeier, A. & Wozny, C. & Rost, B.R. & Munter, L.M. & Hua, H. & Georgiev, O. & Beyermann, M. & Hildebrand, P.W. & Weise, C. & Schaffner, W. & Schmitz, D. & Multhaup, G. (2009). Role of amyloid-beta glycine 33 in oligomerization, toxicity, and neuronal plasticity. In: *The Journal of Neuroscience*, Vol. 29, pp. 7582-7590.

Leibold, C. & Gundlfinger, A. & Schmidt, R. & Thurley, K. & Schmitz, D. & Kempter, R. (2008). Temporal compression mediated by short-term synaptic plasticity. In: *Proceedings of the National Academies of Sciences of the United States of America*, Vol. 105, pp. 4417-4422.

Nicoll, R.A. & Schmitz, D. (2005). Synaptic plasticity at hippocampal mossy fibre synapses. In: *Nature Reviews Neuroscience*, Vol. 6, pp. 863-876.

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|---|---|
| **Name** | Prof. Petra Stanat PhD |
| **Date of birth** | 7 May 1964 |
| **Year appointed** | 2010 |

### Academic career

Professor and Director of IQB at HU since 2010

1992 Diplom degree in psychology at FU

1998 PhD in psychology at University of Massachusetts Amherst, MA

2005 Habilitation for educational science at FU

### Main areas of research

Conditions of immigrant students' educational success; equity issues in education; second-language teaching and learning; determinants and promotion of reading literacy; determinants of student performance in international comparisons

### Selected publications

Eksner, J. & Stanat, P. (forthcoming). Effects of ethnically segregated learning settings. In: Gallagher, K. S. & Brewer, D. & Goodyear, R. & Bensimon, E. (ed.). *Introduction to Urban Education.* New York: Routledge.

Marx, A.E. & Stanat, P. (forthcoming). Reading comprehension of immigrant students in Germany: Research evidence on determinants and target points for intervention. In: *Reading and Writing: An Interdisciplinary Journal*.

Stanat, P. & Rauch, D. & Segeritz, M. (2010). Schülerinnen und Schüler mit Migrationshintergrund. In: Klieme, E. & Artelt, C. & Hartig, J. & Jude, N. & Köller, O. & Prenzel, N. & Schneider, W. & Stanat, P. (ed.). *PISA 2009. Bilanz nach einem Jahrzehnt* (pp. 200-230). Münster: Waxmann.

Stanat, P. & Schwippert, K. & Gröhlich, C. (2010). Der Einfluss des Migrantenanteils in Schulklassen auf den Kompetenzerwerb: Längsschnittliche Überprüfung eines umstrittenen Effekts. In: Allemann-Ghionda, C.P. & Stanat, P. & Göbel, K. & Röhner, C. (ed.). *Migration, Sprache, Identität. 55. Beiheft der Zeitschrift für Pädagogik*, pp. 147-164.

Becker, M. & Stanat, P. & Baumert, J. & Lehmann, R. (2008). Effekte der Rückkehr in differenzielle Lebensverhältnisse während der Sommerferien auf die Leseleistungen von Kindern mit und ohne Migrationshintergrund. In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Special Issue 48, pp. 252-276.

Stanat, P. (2008). Heranwachsende mit Migrationshintergrund im deutschen Bildungswesen. In: Cortina, K.S. & Baumert, J. & Leschinsky, A. & Mayer, K.U. & Trommer, L. (ed.). *Das Bildungswesen in der Bundesrepublik Deutschland* (pp. 683-743). Reinbek: Rowohlt.

Stanat, P. & Lüdtke, O. (2008). Multilevel issues in international large-scale assessment studies on student performance. In: Van de Vijver, F.J.R. & Van Hemert, D.A. & Poortinga, Y.H. (ed.). *Individuals and cultures in multilevel analysis* (pp. 315-344). Hillsdale, NJ: Erlbaum.

Stanat, P. & Lüdtke, O. (2007). Internationale Schulleistungsvergleiche. In: Trommsdorff, G. & Kornadt, H.-J. (ed.). *Enzyklopädie der Psychologie: Kulturvergleichende Psychologie Vol. 3: Kulturelle Determinanten des Erlebens und Verhaltens* (pp. 279-347). Göttingen: Hogrefe.

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|---|---|
| **Name** | Prof. Dr. Philippus Johannes van der Eijk |
| **Date of birth** | 24 July 1962 |
| **Year appointed** | 2010 |

### Academic career

Alexander von Humboldt Professor for Ancient Studies and History of Science at HU since 2010

1980-1986 Studied classics at Leiden University

1991 PhD at Leiden University

1998 Professor of Greek at Newcastle University

2005 Research Professor of Greek at Newcastle University

2011 Correspondant étranger of the Académie des Inscriptions et Belles-Lettres, Institut de France, Paris

### Main areas of research

Ancient medicine and science; ancient philosophy

### Major academic achievements

2006 Ausonius Prize of the Universität Trier

2009 Member of the Institute for Advanced Study, Princeton, NJ

2010 Alexander von Humboldt Professorship at HU

### Selected publications

Sharples, R.W. & Van der Eijk, P.J. (2008). *Nemesius of Emesa. On the Nature of Man.* Liverpool: Liverpool University Press.

Van der Eijk, P.J. (2007). Körper, Seele, Geist. Ansichten über psychosomatische Wechselwirkung im griechischen philosophischen und medizinischen Denken. In: *Reden an der Universität*. Trier: Universität Trier.

Van der Eijk, P.J. (2005-6). *Philoponus On Aristotle On the Soul, Vols. 1.1-2 and 1.3-5* (2 vols). London: Duckworth.

Van der Eijk, P.J. (2005). *Hippocrates in Context.* Leiden: Brill.

Van der Eijk, P.J. (2005). *Medicine and Philosophy in Classical Antiquity. Doctors and Philosophers on Nature, Soul, Health and Disease.* Cambridge: Cambridge University Press.

Van der Eijk, P.J. (2000-1). *Diocles of Carystus. A Collection of the Fragments with Translation and Commentary* (2 vols). Leiden: Brill.

Van der Eijk, P.J. (1999*). Ancient Histories of Medicine. Essays in Medical Doxography and Historiography in Classical Antiquity.* Leiden: Brill.

Van der Eijk, P.J. (1997). Towards a rhetoric of ancient scientific discourse: Some formal characteristics of Greek medical and philosophical texts (Hippocratic Corpus, Aristotle). In: Bakker, E.J. (ed.). *Grammar as Interpretation. Greek Literature in its Linguistic Contexts, Mnemosyne Supplement 171* (pp. 77–129). Leiden: Brill.

Horstmanshoff, H.F.J. & Schrijvers, P.H. & Van der Eijk, P.J. (1995). *Ancient Medicine in its Socio-Cultural Context* (2 vols). Amsterdam/Atlanta: Rodopi.

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|---|---|
| **Name** | Prof. Dr. Arno Villringer |
| **Date of birth** | 30 October 1958 |
| **Year appointed** | 1996 |

### Academic career

Professor of neurology at Charité since 1997

Coordinator of GSC Berlin School of Mind and Brain since 2006

Director of the MPI for Human Cognitive and Brain Sciences in Leipzig since 2007

1977-1984 Studied medicine at Albert-Ludwigs-Universität Freiburg

1984 PhD at Albert-Ludwigs-Universität Freiburg

1994 Habilitation for neurology at the Ludwig-Maximilians-Universität München

### Main areas of research

Cognitive neuroscience

### Major academic achievements

1993 Gerhard Hess Award from DFG

2005 Pater Leander Fischer Prize of the German Society for Laser Medicine

### Selected publications

Koch, S.P. & Steinbrink, J. & Villringer, A. & Obrig, H. (2006). Synchronization between background activity and visually evoked potential is not mirrored by focal hyperoxygenation. Implications for the interpretation of vascular brain imaging. In: *Journal of Neuroscience*, Vol. 26, No. 18, pp. 4940-4948.

Preuschhof, C. & Heekeren, H.R. & Taskin, B. & Schubert, T. & Villringer, A. (2006). Neural correlates of vibrotactile working memory in the human brain. In: *Journal of Neuroscience*, Vol. 26, No. 51, pp. 13231-13239.

Taskin, B. & Jungehulsing, G.J. & Ruben, J. & Brunecker, P. & Krause, T. & Blankenburg, F. et al. (2006). Preserved responsiveness of secondary somatosensory cortex in patients with thalamic stroke. In: *Cerebral Cortex*, Vol. 16, No. 10, pp. 1431-1439.

Blankenburg, F. & Taskin, B. & Ruben, J. & Moosmann, M. & Ritter, P. & Curio, G. et al. (2003). Imperceptible stimuli and sensory processing impediment. In: *Science*, Vol. 299, No. 5614, p. 1864.

Müller, N. G. & Bartelt, O. & Donner, T.H. & Villringer, A. & Brandt, S.A. (2003). A physiological correlate of the “zoom lens” of visual attention. In: *Journal of Neuroscience*, Vol. 23, No. 9, pp. 3561-3565.

Wartenburger, I. & Heekeren, H. R. & Abutalebi, J. & Cappa, S.F. & Villringer, A. & Perani, D. (2003). Early setting of grammatical processing in the bilingual brain. In: *Neuron*, Vol. 37, No. 1, pp. 159-170.

Villringer, A. & Chance, B. (1997). Noninvasive optical spectroscopy and imaging of human brain function. In: *Trends in Neuroscience*, Vol. 20, No. 10, pp. 435-442.

Einhaeupl, K.M. & Villringer, A. & Meister, W. & Mehraein, S. & Garner, C. & Pellkofer, M. et al. (1991). Heparin treatment in sinus venous thrombosis. In: *Lancet*, Vol. 338, No. 8767, pp. 597-600.

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|---|---|
| **Name** | Prof. Dr. Joseph Vogl |
| **Date of birth** | 5 October 1957 |
| **Year appointed** | 2006 |

**Academic career**

Professor of literature and cultural theory at HU since 2006

1984 Magister degree in modern German literature, philosophy and linguistics at Ludwig-Maximilians-Universität München

1990 PhD in modern German literature at Ludwig-Maximilians-Universität München

1998 Professor of theory and history of artificial worlds at the Bauhaus-Universität Weimar

2001 Habilitation for modern German literature at Ludwig-Maximilians-Universität München

**Main areas of research**

18-20th century literary and media history; literary and media theory; poetology of knowledge; history of economic knowledge; history of risk and danger

**Major academic achievements**

1991 Research Fellow at Maison des Sciences de l'Homme, Paris

2007 Permanent Visiting Professor at Princeton University, NJ

**Selected publications**

Vogl, J. (2010). *Das Gespenst des Kapitals*. Berlin/Zurich: Diaphanes.

Schimma, S. & Vogl, J. (ed.) (2009). *Versuchsanordnungen 1800*. Berlin/Zurich: Diaphanes.

Von der Heiden, A. & Vogl, J. (ed.) (2007). *Politische Zoologie*. Berlin/Zurich: Diaphanes.

Vogl, J. (2007). *Über das Zaudern*. Berlin/Zurich: Diaphanes.

Siegert, B. & Vogl, J. (ed.) (2003). *Europa: Kultur der Sekretäre*. Berlin/Zurich: Diaphanes.

Vogl, J. (2002). *Kalkül und Leidenschaft: Poetik des ökonomischen Menschen*. Munich: Sequenzia.

Vogl, J. (ed.) (1999). *Poetologien des Wissens um 1800*. Munich: Fink.

Balke, F. & Vogl, J. (ed.) (1996). *Gilles Deleuze: Fluchtlinien der Philosophie*. Munich: Fink.

Vogl, J. (ed.) (1994). *Gemeinschaften: Positionen zu einer Philosophie des Politischen*. Frankfurt am Main: Suhrkamp.

Vogl, J. (1990). *Ort der Gewalt: Kafkas literarische Ethik*. Munich: Fink.

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|---|---|
| **Name** | Prof. Dr. Hans-Dieter Volk |
| **Date of birth** | 13 May 1953 |
| **Year appointed** | 1980 |

### Academic career

Professor of Immunology and Regeneration at Charité since 2008

Deputy Coordinator of the GSC Berlin-Brandenburg School for Regenerative Therapies since 2008

Director of the Berlin-Brandenburg Center for Regenerative Therapies since 2006

Director of the Institute of Medical Immunology at Charité since 1994

1980-1987 Studied medicine at Charité

1987 Habilitation on Immunology

1987-1993 Head Division Clinical Immunology at the Institute of Medical Immunology at Charité

### Main areas of research

Immune monitoring; biomarkers; immunology of transplantation and severe infections; immune- and stem-cell therapy

### Major academic achievements

2002-2010 Board Member of the German Society of Immunology (DGfI)

### Selected publications

Babel, N. & Volk, H.D. & Reinke, P. (forthcoming 2011). BK polyomavirus infection and nephropathy: the virus-immune system interplay. In: *Nature Reviews Nephrology*.

Sagoo, P. & Perucha, E. & Sawitzki, B. et al. (2010). Development of a cross-platform biomarker signature to detect renal transplant tolerance in humans. In: *The Journal of Clinical Investigation*, Vol. 120, No. 6, pp. 1848-1861.

Meisel, C. & Schefold, J.C. & Pschowski, R. et al. (2009). Granulocyte-macrophage colony-stimulating factor to reverse sepsis-associated immunosuppression: a double-blind, randomized, placebo-controlled multicenter trial. In: *American Journal of Respiratory and Critical Care Medicine*, Vol. 180, No. 7, pp. 640-648.

Brestrich, G. & Zwinger, S. & Fischer, A. et al. (2009). Adoptive therapy of a lung transplant patient with severe CMV disease and resistance to antiviral therapy. In: *American Journal of Transplantation*, Vol. 9, No. 7, pp. 1679-1684.

Bunde, T. & Kirchner, A. & Hoffmeister, B. et al. (2005). Protection from cytomegalovirus after transplantation is correlated with immediate early 1-specific CD8 T cells. In: *The Journal of Experimental Medicine*, Vol. 201, No. 7, pp. 1031-1036.

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| **Name** | Prof. Dr. Christine Windbichler, LLM |
| **Date of birth** | 8 December 1950 |
| **Year appointed** | 1992 |

### Academic career

Professor of private law at HU since 1992

Vice president of the DFG since 2008

1974-1977 1st and 2nd state examination in law at Ludwig-Maximilians-Universität München

1976 PhD at Ludwig-Maximilians-Universität München

1979 Master of Laws (LLM) at University of California, Berkeley, CA

1988 Habilitation for private law, commercial, labour and employment law, comparative law at Ludwig-Maximilians-Universität München

1989-1992 Full professor at Albert-Ludwigs-Universität Freiburg

### Main areas of research

Corporate governance; relations between capital, management and labour; comparative law; incomplete and relational contracts; corporate groups; law of accounting and auditing

### Major academic achievements

1988 Schunk Prize for Economics of Justus-Liebig-Universität Gießen

1988 Incentive Award of the Münchener Universitätsgesellschaft

### Selected publications

Windbichler, C. (2010). Sunlight For a Healthy Body Corporate. In: Grundmann, S. & Haar, B. & Merkt, H. & Mülbert, P. & Wellenhofer, M. (ed.). *Unternehmen, Markt und Verantwortung: Festschrift für Klaus Hopt* (Vol. 1, pp. 1505-1519). Berlin: De Gruyter.

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# Annex 7
## Glossary

| Deutsch | English |
|---|---|
| **Advanced Investigator Grant**<br>Förderprogramm des Europäischen Forschungsrats für Forscherinnen und Forscher, die bereits umfangreiche Projektleitererfahrung vorweisen können | **Advanced Investigator Grant**<br>funding scheme of the ERC targeting researchers who have already established themselves as independent researchers in their own right |
| **Akademischer Senat**<br>höchstes Gremium der akademischen Selbstverwaltung in deutschen Universitäten | **Academic Senate**<br>supreme board of academic self-government in German universities |
| **Alexander von Humboldt-Stiftung**<br>*www.humboldt-foundation.de* | **Alexander von Humboldt Foundation** |
| **Alexander von Humboldt-Professur**<br>Förderprogramm der Alexander von Humboldt-Stiftung zur Gewinnung von Spitzenwissenschaftlerinnen und -wissenschaftlern aus dem Ausland an deutsche Hochschulen, dotiert mit bis zu 1 Mio. €/Jahr | **Alexander von Humboldt Professorship**<br>funding programme of Alexander von Humboldt Foundation aimed at attracting top-level researchers from abroad to German universities; awardees qualify for funding of up to € 1 million per year. |
| **An-Institut**<br>organisatorisch und rechtlich eigenständige Forschungseinrichtung, die einer deutschen Hochschule angegliedert ist | **Associated Institute**<br>organisationally and legally independent research institute affiliated with a university through a specific contract |
| **Berliner Zentrum für Hochschullehre (BZHL)**<br>gemeinsame Einrichtung aller staatlichen Berliner Hochschulen zur beruflichen Weiterbildung von Hochschullehrerinnen und -lehrern, finanziert vom Land Berlin<br>*www.bzhl.tu-berlin.de* | **Berlin Centre for University Teaching (BZHL)**<br>joint facility for all public higher education institutions in Berlin to provide faculty with advanced professional training, funded by the State of Berlin |
| **Bernstein Zentrum für Computational Neuroscience Berlin (BCCN)**<br>Forschungszentrum des Instituts für Biologie der HU und der Charité, gefördert vom BMBF<br>*www.bccn-berlin.de* | **Bernstein Center for Computational Neuroscience Berlin (BCCN)**<br>research centre funded by the BMBF and hosted by the HU Department of Biology and the Charité |
| **Berlin Institute for Medical Systems Biology (BIMSB)**<br>neues Teilinstitut des MDC, im Aufbau mit Mitteln des Landes Berlin und des BMBF<br>*www.mdc-berlin.de/en/bimsb* | **Berlin Institute for Medical Systems Biology (BIMSB)**<br>new department of the MDC, currently being developed with funds from the State of Berlin and the BMBF |
| **Bologna-Reform**<br>europaweite Studienreform mit dem Hauptziel der Schaffung international einheitlicher Hochschulabschlüsse | **Bologna reform**<br>pan-European reform process in higher education aiming at establishing internationally standardized degrees |
| **Bundesministerium für Bildung und Forschung** (BMBF)<br>*www.bmbf.de* | **Federal Ministry of Education and Research** (BMBF) |
| **Brückenprofessur**<br>Professur mit institutionellen Bindungen an zwei verschiedene Disziplinen oder Einrichtungen | **Bridging Professorship**<br>professorship linking two different disciplines or institutions |
| **C (C2, C3, C4)**<br>Kategorien der früheren Besoldungsordnung für Professorinnen und Professoren (C4 entspricht einem Lehrstuhl) | Categories of the former German remuneration system for professors (C4 corresponds to a full professorship) |

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| **Caroline von Humboldt-Preis**<br>jährlich an exzellente Nachwuchswissenschaftlerinnen der HU für herausragende Forschung verliehene Auszeichnung und höchstdotierter Forschungspreis seiner Art in Deutschland | **Caroline von Humboldt Prize**<br>annual award by HU to excellent young female researchers, highest award in this category in Germany |
| **Centrum für Hochschulentwicklung (CHE)**<br>*www.che.de* | **Centre for Higher Education (CHE)** |
| **Centrum für Schlaganfallforschung Berlin (CSB)**<br>vom BMBF geförderte Forschungseinrichtung der Charité<br>*www.schlaganfallcentrum.de* | **Center for Stroke Research Berlin (CSB)**<br>Charité research unit, funded by the BMBF |
| **Charité – Universitätsmedizin Berlin**<br>Zusammenschluss der medizinischen Fakultäten von HU und FU sowie der Berliner Universitätskliniken in einer Einrichtung per Landesgesetz seit 2005<br>*www.charite.de* | merger of all university hospitals in Berlin, as well as the FU and HU medical faculties into a single organisation by federal state law, realised in 2005 |
| **Concilium Decanale**<br>Beratungsorgan der Dekaninnen und Dekane der HU mit dem Präsidium | Council of Deans; consultative body of the Deans and the Executive Committee of HU |
| **Deutscher Akademischer Austausch Dienst (DAAD)**<br>*www.daad.de* | **German Academic Exchange Service (DAAD)** |
| **Deutsches Rheuma-Forschungszentrum Berlin (DRFZ)**<br>*www.drfz.de* | **German Rheumatology Research Centre (DRFZ)** |
| **Deutsche Telekom Stiftung**<br>*www.telekom-stiftung.de* | Foundation set up by Deutsche Telekom |
| **Deutsche Forschungsgemeinschaft (DFG)**<br>zentrale Einrichtung zur Förderung der Wissenschaft und Forschung in Deutschland | **German Research Foundation (DFG)**<br>most important German research funding organisation |
| **Dual Career Netzwerk Berlin**<br>übergreifendes Netzwerk zur beruflichen Unterstützung von Partnerinnen und Partnern von Neuberufenen und Nachwuchsführungskräften in Wissenschaft und Forschung<br>*www.dualcareer-berlin.de* | joint organisation of Berlin higher education istitutions and public administration aiming to support dual career couples in higher education and research wishing to settle in Berlin |
| **E 9, E 13**<br>Kategorien des deutschen Tarifsystems für den öffentlichen Dienst (E 9 ist für Technikerinnen und Techniker oder Sachbearbeiterinnen und Sachbearbeiter, E 13 die Eingangsstufe für Akademikerinnen und Akademiker in der Verwaltung oder promovierte Wissenschaftlerinnen und Wissenschaftler) | categories of the German civil service remuneration system (E9 is for technicians and administrators, E13 is the entry level for academics working in administration or for postdoctoral researchers) |
| **„Eigene Stelle“**<br>Förderangebot der DFG | **“Temporary position for principal investigators”**<br>module in the DFG funding portfolio |
| **Einstein Stiftung Berlin**<br>2009 vom Land Berlin zur Unterstützung der Spitzenforschung gegründet<br>*www.einsteinfoundation.de* | **Einstein Foundation Berlin**<br>established by the State of Berlin in 2009, the foundation’s mission is to support Berlin’s excellent research. |
| **Emmy Noether-Programm**<br>Förderprogramm der DFG für hochqualifizierte PostDocs | **Emmy Noether Programme**<br>DFG funding programme for highly qualified postdoctoral researchers |
| **Europäischer Forschungsrat (ERC)**<br>*http://erc.europa.eu* | **European Research Council (ERC)** |

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| **audit familiengerechte hochschule**<br>von berufundfamilie gGmbH, einer Organisation, die Gleichstellungspolitik in öffentlichen und privaten Einrichtungen fördert, verliehenes Zertifikat<br>*www.beruf-und-familie.de* | **audit family friendly university**<br>certificate awarded by berufundfamilie gGmbH, an organisation promoting gender equality policies in the private and public sectors |
| **Forschungsorientierte Gleichstellungsstandards**<br>Regeln der DFG von 2008 für die Bemühungen ihrer Mitgliedseinrichtungen um Gleichstellung | **Research-Oriented Standards on Gender Equality**<br>regulations passed in 2008 by DFG that commit its member institutions to promoting gender equality in research |
| **Forum Transregionale Studien**<br>vom Land Berlin gefördertes Forum zur Unterstützung von Forschungen in Berlin, die systematische und regionenspezifische Fragestellungen verbinden und in transregionaler Sicht verfolgen<br>*www.forum-transregionale-studien.de* | **Forum Transregional Studies**<br>forum funded by the State of Berlin aiming at the promotion of research in Berlin that links systematic and region-specific questions, and explores them from a transregional perspective |
| **Freie Universität Berlin (FU)**<br>1948 in Westberlin mit internationaler Unterstützung gegründet<br>*www.fu-berlin.de* | was founded in 1948 in West Berlin with international support |
| **Fritz-Haber-Institut der Max-Planck-Gesellschaft**<br>*www.fhi-berlin.mpg.de* | **Fritz Haber Institute of the Max Planck Society** |
| **Gemeinsame Berufung**<br>Berufung leitender Wissenschaftlerinnen und Wissenschaftler außeruniversitärer Forschungseinrichtungen auf Universitätsprofessuren | **Joint appointment**<br>appointment of leading academics of non-university research institutions as university professors |
| **Graduiertenkolleg**<br>befristetes, systematisch angelegtes Studien- und Forschungsprogramm der DFG für Promovierende | **Research Training Group**<br>DFG-funded structured doctoral programme |
| **Harnack-Programm zur Förderung vorgezogener Nachberufungen von Professorinnen**<br>ursprünglich von der HU entwickeltes Förderprogramm, das später vom Land Berlin und vom Bund aufgegriffen wurde | incentive programme to advance female professors through appointments ahead of schedule to succeed chair holders on their upcoming retirement. Originally an internal HU initiative, it was later taken up by the State of Berlin and by the German Federal Government. |
| **Heisenberg-Stipendium**<br>DFG-Förderprogramm zur Unterstützung von fortgeschrittenen Nachwuchswissenschaftlerinnen und -wissenschaftlern | **Heisenberg Award**<br>DFG funding programme providing fellowships for advanced independent researchers |
| **Helmholtz-Gemeinschaft Deutscher Forschungszentren (HGF)**<br>*www.helmholtz.de* | **Helmholtz Association (HGF)**<br>umbrella organisation of 17 national research centres |
| **Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)**<br>großes Forschungszentrum, betreibt u.a. eine Neutronenquelle und ein Elektronensynchrotron<br>*www.helmholtz-berlin.de* | a major Berlin research centre, which runs a neutron source and an electron synchrotron |
| **Hermann von Helmholtz-Zentrum für Kulturtechnik**<br>Interdisziplinäres Zentrum (IZ) der HU, betreibt Forschung zu den Wechselwirkungen zwischen wissenschaftlichen oder kulturellen Umbrüchen und technischen Neuerungen<br>*www.kulturtechnik.hu-berlin.de* | Interdisciplinary Centre (IC) of the HU that performs research into the relationship between technical innovations and major changes in culture and science |

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| **Hertie School of Governance**<br>private Hochschule für Wirtschafts- und Staatswissenschaften in Berlin<br>*www.hertie-school.org* | a private professional school for public policy in Berlin |
| **Hochschulpakt 2020**<br>Abkommen zwischen Bund und Ländern, mit dem bis 2020 rund 275.000 neue Studienplätze geschaffen werden sollen<br>*www.bmbf.de/en/6142.php* | **Higher Education Pact 2020**<br>agreement between the federal and state governments, designed to create around 275,000 additional university places by 2020 |
| **Hochschulrektorenkonferenz (HRK)**<br>*www.hrk.de* | **German Rectors' Conference (HRK)** |
| **HRK-Audit „Internationalisierung der Hochschulen"**<br>*www.hrk.de/eng/hrk_international/2407.php* | **HRK Audit "Internationalisation of Universities"**<br>project of the German Rectors' Conference launched in 2009 to assist German universities with their internationalisation process through independent advisory services |
| **Humboldt-Forum**<br>großes Projekt der Entwicklung von Ausstellungen und öffentlicher Vermittlung von Kultur und Wissenschaft für das künftig wieder aufzubauende Berliner Schloss | major project for developing exhibitions and events to bring culture and science to the public; intended to be housed in the reconstructed Berlin Palace |
| **Humboldt Graduate School (HGS)**<br>Dachorganisation für die strukturierten Promotionsprogramme der HU<br>*http://humboldt-graduate-school.de* | umbrella organisation for HU's structured doctoral programmes |
| **Humboldt-Innovation GmbH (HI)**<br>Wissens- und Technologietransfergesellschaft der HU<br>*www.humboldt-innovation.de* | HU's company for knowledge and technology transfer |
| **Humboldt-ProMINT-Kolleg**<br>Zentrum der HU zur Entwicklung neuer Lehr- und Studienkonzepte für Mathematik und Naturwissenschaften, gefördert von der Deutschen Telekom Stiftung | HU centre for developing new concepts for teaching and studying mathematics and the natural sciences, funded by Deutsche Telekom Stiftung |
| **Humboldt-Universität zu Berlin (HU)**<br>*www.hu-berlin.de* | |
| **Humboldt-Universitäts-Gesellschaft**<br>Verein der Alumni, Freunde und Förderer der HU<br>*www.hug-berlin.de* | association of HU alumni, friends and sponsors |
| **Institute for Advanced Sustainability Studies e.V. (IASS)**<br>*www.iass-potsdam.de* | |
| **Institut für Forschungsinformation und Qualitätssicherung (iFQ)**<br>*www.forschungsinfo.de* | **Institute for Research Information and Quality Assurance (iFQ)** |
| **Institut für Theoretische Biologie**<br>gemeinsames Institut von HU und Charité<br>*www.itb.biologie.hu-berlin.de* | **Institute for Theoretical Biology**<br>an institute of HU and the Charité |
| **Institut zur Qualitätsentwicklung im Bildungswesen (IQB)**<br>Einrichtung der Länder, Institut an der HU<br>*www.iqb.hu-berlin.de* | **Institute for Quality Management in Education (IQB)**<br>a federal-state institute, affiliated to HU |
| **Internationales Geisteswissenschaftliches Kolleg (IGK) „Arbeit und Lebenslauf in globalgeschichtlicher Perspektive"**<br>*http://rework.hu-berlin.de* | **International Research Center (IRC) "Work and Human Lifecycle in Global History"** |

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| **Juniorprofessorinnen-Programm**<br>Mentoring-Programm zur Förderung von Juniorprofessorinnen | dedicated programme of mentoring for female junior professors |
| **Juniorprofessur**<br>im Jahr 2002 eingeführte neue Personalkategorie für Hochschulen, korporationsrechtlich der Professur gleichgestellt, mit Zeitverträgen für maximal sechs Jahre und Aussichten auf eine tenure track-Option | **Junior Professorship**<br>new staff category for universities, introduced in 2002. Junior professors have a fixed term contract for up to six years, full corporate rights as professors, and prospects for a tenure track option. |
| **Kolleg-Forschergruppe Bildakt und Verkörperung**<br>Forschergruppe am Institut für Kunstgeschichte der HU, gefördert von der DFG<br>*http://bildakt-verkoerperung.de* | **Collegium for the Advanced Study of Picture Act and Embodiment**<br>research collegium at the HU Department of Art and Visual History, funded by the DFG |
| **Kompetenzzentrum Frauen in Wissenschaft und Forschung (CEWS)**<br>am gesis, Leibniz-Institut für Sozialwissenschaften<br>*www.gesis.org/cews* | **Center of Excellence Women and Science (CEWS)**<br>at gesis – Leibniz Institute for the Social Sciences |
| **Konzil**<br>höchstes beschlussfassendes Gremium der HU, es wählt das Präsidium und empfängt dessen Rechenschaftsbericht. | **Council**<br>supreme decision-making board of HU electing the Executive Committee and receiving its reports |
| **Kuratorium**<br>Aufsichts- und Beratungsgremium der HU gemäß deren Verfassung, beschließt Strukturplan und Haushalt. | **Board of Trustees**<br>statutory supervisory and advisory board of HU, decides upon structural plan and budget. |
| **Leibniz-Gemeinschaft**<br>(Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz)<br>*www.leibniz-gemeinschaft.de* | **Leibniz Association**<br>(Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz) |
| **Leibniz-Preis**<br>jährlich von der DFG an in Deutschland arbeitende Wissenschaftlerinnen und Wissenschaftler aller Disziplinen verliehener Preis | **Leibniz Prize**<br>annual award by DFG to researchers in all scientific fields working in Germany |
| **Leibniz-Humboldt-Professuren**<br>zwischen der HU und der Leibniz-Gemeinschaft vereinbarte, gemeinsam zu besetzende Professuren für den wissenschaftlichen Nachwuchs | **Leibniz Humboldt Professorships**<br>professorships jointly agreed and appointed by HU and the Leibniz Association to promote the development of young researchers |
| **Masterplan des Berliner Senats**<br>Initiative des Senats von Berlin zugunsten von Bildung und Wissenschaft für die Jahre 2008-2011<br>*www.Berlin.de/sen/bwf* | **Master Plan of the Berlin Senate**<br>initiative of the Berlin Senate to provide targeted supplementary funding for education and research between 2008 and 2011 |
| **MATHEON**<br>von den drei großen Berliner Universitäten getragenes DFG-Forschungszentrum für Mathematik<br>*www.matheon.de* | **MATHEON**<br>DFG mathematics research centre run by Berlin's three major universities |
| **Max-Delbrück-Centrum für Molekulare Medizin (MDC)**<br>*www.mdc-berlin.de* | **Max Delbrück Center for Molecular Medicine (MDC)** |
| **Max-Planck-Gesellschaft zur Förderung der Wissenschaften (MPG)**<br>*www.mpg.de* | **Max Planck Society for the Advancement of Science (MPG)** |
| **Max-Planck-Institut für Bildungsforschung**<br>*www.mpib-berlin.mpg.de* | **Max Planck Institute for Human Development** |
| **Max-Planck-Institut für evolutionäre Anthropologie**<br>*www.eva.mpg.de* | **Max Planck Institute for Evolutionary Anthropology** |

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| **Max-Planck-Institut für Infektionsbiologie**<br>*www.mpiib-berlin.mpg.de* | **Max Planck Institute for Infection Biology** |
| **Max-Planck-Institut für Kognitions- und Neurowissenschaften**<br>*www.cbs.mpg.de* | **Max Planck Institute for Human Cognitive and Brain Sciences** |
| **Max-Planck-Institut für Wissenschaftsgeschichte**<br>*www.mpiwg-berlin.mpg.de* | **Max Planck Institute for the History of Science** |
| **Monofakultäten**<br>Fakultäten der HU ohne eigenständige Institute | **Mono-Faculties**<br>HU faculties without independent departments |
| **Multifakultäten**<br>Fakultäten der HU mit Instituten für verschiedene Disziplinen | **Multi-Faculties**<br>HU faculties comprising several departments in different disciplines |
| **Museum für Naturkunde**<br>Das Museum für Naturkunde Berlin, lange Zeit Teil der HU, ist heute als Forschungsmuseum und An-Imstitut der HU Mitglied der Leibniz-Gemeinschaft.<br>*www.naturkundemuseum-berlin.de* | for many years the Berlin Natural History Museum was part of HU. Now it is a member of the Leibniz Association and affiliated to the university. |
| **Nationales Zentrum für Lehrerbildung Mathematik (NZLM)**<br>von der Deutschen Telekom Stiftung gefördertes Gemeinschaftsprojekt von sechs Universitäten in Berlin und NRW unter Federführung der HU | **National Centre for Teacher Training in Mathematics (NZLM)**<br>joint initiative of six universities in Berlin and North Rhine-Westphalia, headed by HU and funded by Deutsche Telekom Stiftung |
| **OPen Access Laboratory (OPAL)**<br>• for Advanced Materials<br>• for Analytical Sciences<br>neues Konzept zur Förderung der Naturwissenschaften der HU mit Partnern aus Wissenschaft und Wirtschaft. Diese erhalten die Möglichkeit, eigene Mitarbeiter in das OPAL zu entsenden oder Personal für Gemeinschaftsprojekte einzubringen. | new concept for the promotion of the collaboration between the natural sciences of HU and innovative high-tech enterprises and research institutes. These have the possibility to delegate staff to the OPAL or into joint projects. |
| **Potsdam-Institut für Klimafolgenforschung (PIK)**<br>*www.pik-potsdam.de* | **Potsdam Institute for Climate Impact Research (PIK)** |
| **Präsidium**<br>Das Präsidium der HU besteht aus der Präsidentin bzw. dem Präsidenten und den Vizepräsidentinnen bzw. Vizepräsidenten, die für die Bereiche Forschung, Studium und Internationales sowie Haushalt, Personal und Technik zuständig sind. | **Executive Committee**<br>HU's Executive Committee comprises the President and the Vice-Presidents, who are responsible for Research, for Academic and International Affairs, for Finance, Personnel and Technical Matters. |
| **Profilbereiche**<br>zentrale, die Zukunft der Forschung an einer Universität prägende Wissenschaftsgebiete | **High-profile areas**<br>scientific areas vital for a university's future as a research university |
| **Qualitätspakt Lehre**<br>Im Rahmen dieser Bund-Länder-Vereinbarung zur Ergänzung des Hochschulpakts 2020 investieren Bund und Länder zusätzliche Mittel zur Verbesserung der Lehre an den Hochschulen. | **Quality Pact for Teaching**<br>agreement between the federal and state governments to supplement the Higher Education Pact 2020 with additional funds to improve teaching quality and study conditions in higher education institutions |
| **Senatsverwaltung für Bildung, Wissenschaft und Forschung des Landes Berlin**<br>*http://www.berlin.de/sen/bwf/* | government department of the State of Berlin for educational, academic and research affairs |
| **Servicezentrum Lehramt**<br>*http://studium.hu-berlin.de/lust/lehrer/szl* | **HU Service Centre for Teacher Training** |
| **Sonderforschungsbereich (SFB)**<br>langfristige, DFG-geförderte Grundlagen-Forschungsprojekte, die Wissenschaftlerinnen und Wissenschaftler aus mehreren Disziplinen einer oder mehrerer Universitäten zusammenbringen | **Collaborative Research Centres**<br>long-term projects of fundamental research funded by DFG bringing together researchers from different disciplines of one or several universities |

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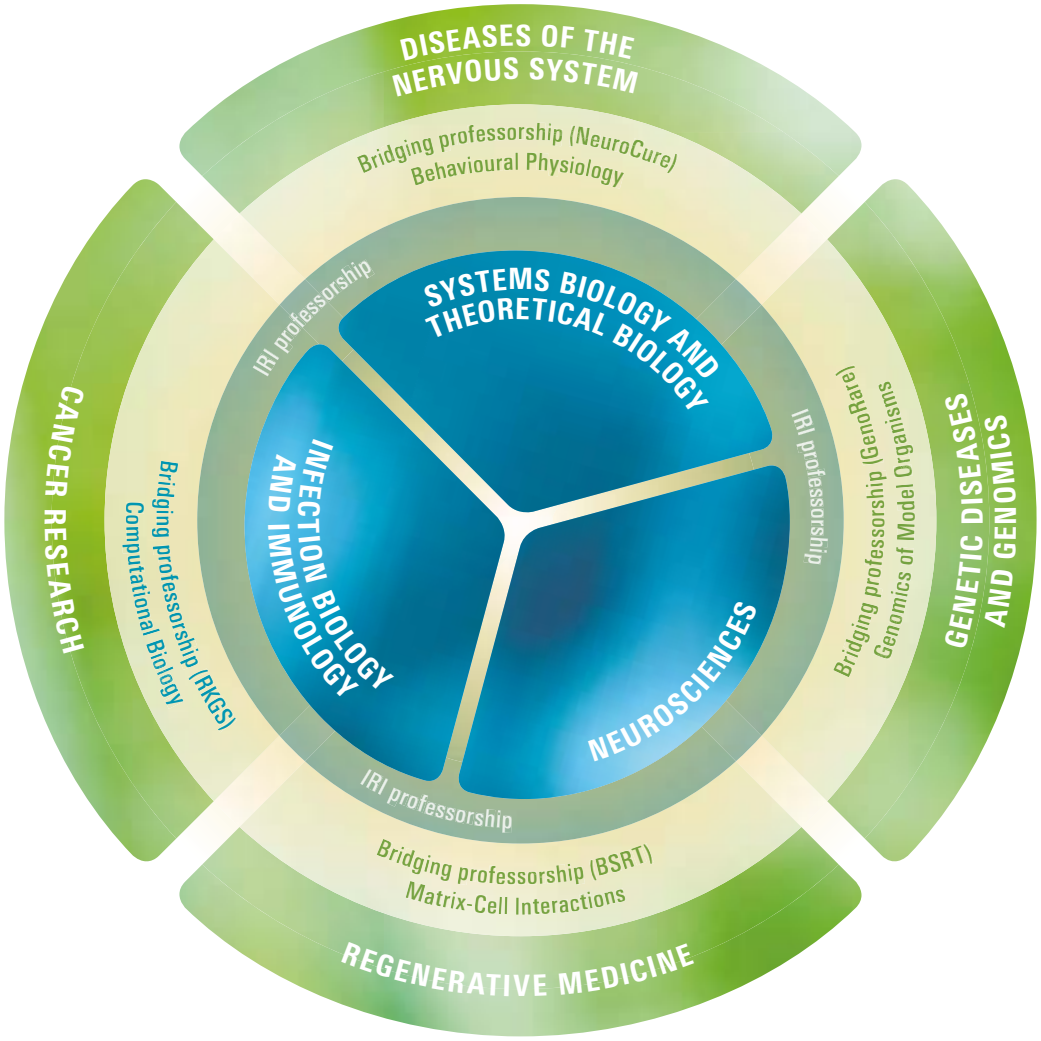
| **Sonder-Professor/in (S-Professor/in)**<br>leitende Wissenschaftlerin/leitender Wissenschaftler an einer außeruniversitären Forschungseinrichtung mit Professur an einer Universität | **Special Professor (S Professor)**<br>leading researcher at a non-university research institution, appointed as a professor at a university |
| **Staatliche Museen zu Berlin (SMB) der Stiftung Preußischer Kulturbesitz (SPK)**<br>*www.smb-berlin.de* | **National Museums in Berlin (SMB) of the Prussian Cultural Heritage Foundation (SPK)** |
| **Statistisches Bundesamt**<br>*www.destatis.de* | **German Federal Statistical Office** |
| **Stiftung Humboldt-Universität**<br>2007 gegründete private Stiftung zur Förderung von Exzellenz an der HU<br>*www.hu-berlin.de/foerdern/partner/stiftung* | a private foundation established in 2007 to promote excellence at HU |
| **Stiftung Preußischer Kulturbesitz (SPK)**<br>*www.spk-berlin.de* | **Prussian Cultural Heritage Foundation (SPK)** |
| **Strukturierte Doktorandenausbildung**<br>Förderprogramme für strukturierte Promotionen werden von verschiedenen Einrichtungen angeboten; das bekannteste sind seit den 1990er Jahren die Graduiertenkollegs der DFG. | **Structured Programmes for research training**<br>Various facilities offer funding programmes for structured PhDs; the best-known of these are the Research Training Groups that the DFG has been funding since the 1990s. |
| **Strukturplan**<br>mehrjährige Grundlage für die Haushaltspläne der HU mit Zuordnung von Haushaltsstellen zu Fakultäten, wird vom Kuratorium auf Empfehlung des Akademischen Senats beschlossen. | **Structural Plan**<br>multi-annual basis for HU budget plans that includes allocation of budget positions to faculties; approved by the Board of Trustees on the recommendation of the Academic Senate |
| **Technische Universität Berlin (TU)**<br>*www.tu-berlin.de* | the Berlin University for technical disciplines |
| **Technologiepark Berlin Adlershof**<br>Deutschlands größter Wissenschafts- und Technologiepark; dort sind u.a. etwa 400 Technologiefirmen, viele außeruniversitäre Forschungseinrichtungen und die naturwissenschaftlichen Fakultäten der HU angesiedelt. | **Science and Technology Park Berlin Adlershof**<br>Germany's largest science and technology park, where some 400 firms are located, along with HU's natural science faculties and a large number of non-university research institutions |
| **Versäulung des deutschen Hochschul- und Wissenschaftssystems**<br>institutionelle Trennung der Forschungsaktivitäten in Deutschland durch Aufteilung auf Universitäten und außeruniversitäre Forschungseinrichtungen | **Pillarisation in the German academic and science system**<br>institutional disjunction of German research activities between universities and non-university research institutions |
| **Wissenschaftskolleg zu Berlin**<br>*www.wiko-berlin.de* | **Wissenschaftskolleg zu Berlin – Institute for Advanced Study** |
| **Wissenschaftszentrum Berlin für Sozialforschung (WZB)**<br>*www.wzb.eu* | **Social Science Research Center Berlin (WZB)** |
| **W (W1, W2, W3)**<br>Kategorien der deutschen Besoldungsordnung für Professorinnen und Professoren – W1 entspricht der Juniorprofessur, W3 einem Lehrstuhl | categories of the German remuneration system for professors (W1 corresponds to a junior professor, W3 to a full professor) |

| Fakultäten der Humboldt-Universität | Faculties of Humboldt-Universität |
|---|---|
| **Juristische Fakultät** | **Faculty of Law** |
| **Landwirtschaftlich-Gärtnerische Fakultät** | **Faculty of Agriculture and Horticulture** |
| **Mathematisch-Naturwissenschaftliche Fakultät I**<br>• Institut für Biologie<br>• Institut für Chemie<br>• Institut für Physik | **Faculty of Mathematics and Natural Sciences I**<br>• Department of Biology<br>• Department of Chemistry<br>• Department of Physics |
| **Mathematisch-Naturwissenschaftliche Fakultät II**<br>• Institut für Mathematik<br>• Geographisches Institut<br>• Institut für Informatik<br>• Institut für Psychologie | **Faculty of Mathematics and Natural Sciences II**<br>• Department of Mathematics<br>• Department of Geography<br>• Department of Computer Science<br>• Department of Psychology |
| **Philosophische Fakultät I**<br>• Institut für Bibliotheks- und Informationswissenschaft<br>• Institut für Europäische Ethnologie<br>• Institut für Geschichtswissenschaften<br>• Institut für Philosophie | **Faculty of Arts and Humanities I**<br>• Department of Library and Information Sciences<br>• Department of European Ethnology<br>• Department of History<br>• Department of Philosophy |
| **Philosophische Fakultät II**<br>• Institut für deutsche Literatur<br>• Institut für deutsche Sprache und Linguistik<br>• Nordeuropa-Institut<br>• Institut für Anglistik und Amerikanistik<br>• Institut für Romanistik<br>• Institut für Slawistik<br>• Institut für Klassische Philologie | **Faculty of Arts and Humanities II**<br>• Department of German Literature<br>• Department of German Studies and Linguistics<br>• Department of Scandinavian Studies<br>• Department of English and American Studies<br>• Department of Romance Literature and Linguistics<br>• Department of Slavic Studies<br>• Department of Classical Philology |
| **Philosophische Fakultät III**<br>• Institut für Archäologie<br>• Institut für Asien- und Afrikawissenschaften<br>• Institut für Kulturwissenschaft<br>• Institut für Kunst- und Bildgeschichte<br>• Institut für Musikwissenschaft und Medienwissenschaften<br>• Institut für Sozialwissenschaften | **Faculty of Arts and Humanities III**<br>• Department of Archaeology<br>• Department of Asian/African Studies<br>• Department of Cultural History and Theory<br>• Department of Art and Visual History<br>• Department of Musicology and Media Studies<br>• Department of Social Sciences |
| **Philosophische Fakultät IV**<br>• Institut für Erziehungswissenschaften<br>• Institut für Rehabilitationswissenschaften<br>• Institut für Sportwissenschaft | **Faculty of Arts and Humanities IV**<br>• Department of Education Studies<br>• Department of Rehabilitation Studies<br>• Department of Sport Science |
| **Theologische Fakultät** | **Faculty of Theology** |
| **Wirtschaftswissenschaftliche Fakultät** | **Faculty of Economics and Business Administration** |

# Annex 8
## Research Profile of HU

# Annex 9
## Integrative Research Institutes

### a) IRI for the Life Sciences



## b) Campus Nord of HU and Campus Charié Mitte planned location for the IRI for the Life Sciences


**Campus Nord of HU**

① Institute for Theoretical Biology (ITB)

② Bernstein Center for Computational Neuroscience (BCCN)

③ Center for Infection Biology and Immunity (ZIBI)

④ Robert Koch Graduate School Berlin (RKGS)

⑤ new HU Biology building

⑥ Center for Sports Science and Sports Medicine Berlin (CSSB)

⑦ Junior Research Groups of HU in systems biology and optogenetics

⑧ Berlin Institute for Medical Systems Biology (BIMSB)

⑨ Research Sports Hall

⑩ Centre for Biophysics and Bioinformatics (BPI)

⑪ Berlin School of Mind and Brain, Center Mind and Brain Research

**Campus Charité Mitte**

⑫ Cluster of Excellence NeuroCure

⑬ German Rheumatology Research Centre (DRFZ)

⑭ Max Planck Institute for Infection Biology

⑮ Centre for Stroke Research Berlin

**Campus Virchow-Klinikum**

⑯ Cluster of Excellence GenoRare – Medical Genomics of Rare Disease

⑰ Berlin School of Integrative Oncology (BSIO)

⑱ Berlin-Brandenburg Center for Regenerative Therapies (BCRT)

⑲ Berlin-Brandenburg School for Regenerative Therapies (BSRT)

Campus Nord of HU

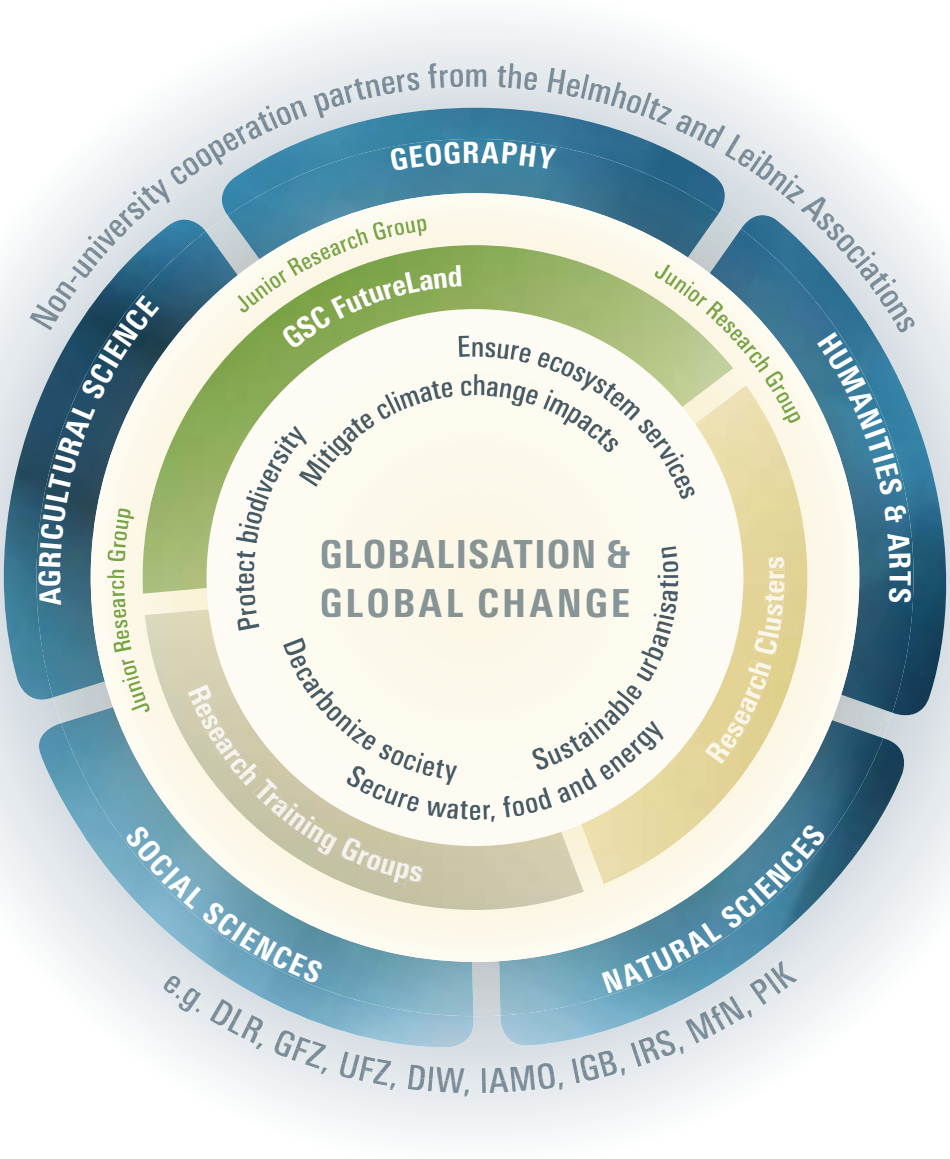
Campus Charité Mitte

Research buildings planned or under construction

Campus Virchow-Klinikum – located outside of this map (Berlin-Wedding)

Some of the institutions are located in more than one building.

## c) IRI THESys – The Great Transformations of Human-Environmental Systems



# Annex 10
## Memoranda of Understanding

## a) between the Humboldt-Universität zu Berlin, the Charité – Universitätsmedizin Berlin and the Max Delbrück Center for Molecular Medicine Berlin-Buch

CHARITÉ MDC MAX-DELBRÜCK-CENTRUM FÜR MOLEKULARE MEDIZIN BERLIN-BUCH

Memorandum of Understanding

on the collaboration
between

Humboldt-Universität zu Berlin
Unter den Linden 6, 10099 Berlin

- represented by the President -

- hereinafter referred to as "HU" -

and the

Charité - Universitätsmedizin Berlin
Charitéplatz 1, 10117 Berlin

- represented by the Dean of the Medical Faculty at the Charité -

- hereinafter referred to as "the Charité" -

and the

Max Delbrück Center for Molecular Medicine Berlin-Buch
Robert-Rössle-Straße 10, 13125 Berlin-Buch

- represented by the Scientific Director,
Chair of the Board of Directors of the MDC -

- hereinafter referred to as "the MDC" -

in the

Integrative Research Institute (IRI) for the Life Sciences

**Preamble**

In the interests of strengthening integrative, interdisciplinary and inter-institutional research in the life sciences, the management of Humboldt-Universität zu Berlin (HU), the Max Delbrück Center for Molecular Medicine (MDC) as a member of the Helmholtz Association (HGF), and the Charité - Universitätsmedizin Berlin (Charité) have agreed to collaborate in HU's Integrative Research Institute (IRI) for the Life Sciences. In doing so they also aim, as part of a campus concept, to make the boundaries between the academic institutions of excellent research and teaching more permeable.

The IRI will primarily serve as a centre for the initiation and coordination of inter-institutional and interdisciplinary research projects, for the joint promotion of young researchers, as a pool for modern infrastructure and technologies, and as the point of contact for cooperation with other universities and non-university research partners in the life sciences. By establishing professorships at the intersections of interdisciplinary collaboration, the partners aim to significantly contribute to strengthening the structures of the life sciences in Berlin. The IRI's flexible service-oriented infrastructure will open up space for projects in the life sciences that will be of great relevance in terms of their topics and methodology, and will have an international impact. This infrastructure will include the historical buildings of the former Royal Veterinary College and will help develop HU's Campus Nord into a modern science park in the centre of Berlin. Important steps in this regard include the construction projects planned for the next five years for a modern biology research centre for HU, and the relocation of the MDC's Berlin Institute for Medical Systems Biology (BIMSB) onto the campus. As a systems biology centre with over 20 working groups, it will further strengthen the links between the research institutions and fields of study based on Campus Nord.

**Section 1: Participating institutions and collaborations**

With the IRI for the Life Sciences, HU, the Charité and the MDC are continuing their long-standing successful collaboration in several scientific fields. The key institutions currently involved in this collaboration are:

- On behalf of HU: the Department of Biology, the Interdisciplinary Center of Infection Biology and Immunity (ZIBI) and the Interdisciplinary Centre for Biophysics and Bioinformatics (BPI), the Berlin School of Mind and Brain, the Mind and Brain Research Center (MBR) and the Bernstein Center for Computational Neurosciences (BCCN) Berlin
- On behalf of the Charité: the NeuroCure Cluster of Excellence, the Berlin-Brandenburg Center for Regenerative Therapies (BCRT) with the Berlin-Brandenburg School for Regenerative Therapies (BSRT) and the Center for Stroke Research Berlin (CSB)
- On behalf of HU and the Charité: the jointly run Institute for Theoretical Biology (ITB) and the Center for Sports Science and Sports Medicine Berlin (CSSB)
- On behalf of the MDC: the Berlin Institute for Medical Systems Biology (BIMSB)

The Max Planck Institute for Infection Biology (MPIIB) and the Deutsches Rheuma-Forschungszentrum (DRFZ), an institute of the Leibniz Association, are further non-university partners in the IRI for the Life Sciences.

Researchers from HU, the Charité, the MDC and other research institutions (e.g. from the Leibniz and Max Planck institutes, governmental research agencies, and the Helmholtz Association of German Research Centres) work closely together within numerous joint professorial appointments and collaborative research alliances. The IRI for the Life Sciences aims to strengthen these links and to expand collaborative research projects, particularly between HU's natural science institutes (Integrative Research Institute for the Sciences – IRIS Adlershof) and other facilities working in Berlin-Adlershof.

Collaboration in life-science projects run by HU and the Charité that are already funded or proposed as part of the Excellence Initiative are of particular importance to the IRI for the Life Sciences. Apart from the previously mentioned projects, these are the Robert Koch Graduate School Berlin (RKGS) and the Charité projects, GenoRare – Medical Genomics of Rare Disease (a Cluster of Excellence) and the Berlin School of Integrative Oncology (BSIO, a Graduate School).

## Section 2: The IRI's research areas

Collaboration in the IRI for the Life Sciences will use synergies in terms of content and methodology to efficiently facilitate integrative approaches ranging from the molecular to the systems-biological level, and from biological fundamentals to clinical research. With the aim of joint strategic development and the enhancement of the academic profile of HU's Campus Nord by the participating institutions, the IRI for the Life Sciences will strengthen the links between quantitative experimental and theoretical biology on the one hand and disease-oriented research on the other.

At its core, the IRI for the Life Sciences is defined by the research fields of **systems biology**, **theoretical biology**, **neurosciences** and **infection biology/immunology**. Taking the current life-science research areas at the participating institutions as its starting point, the IRI for the Life Sciences will also strengthen, in an open matrix structure, links between experimental and theoretical methods of these fields on the one hand and **disease-oriented application areas** on the other. This particularly applies to the transitions to **diseases of the nervous system**, **genetic disorders and genomics**, **cancer research** and **regenerative medicine, from functional detection to prevention**.

## Section 3: Establishing Bridging and IRI Professorships and Junior Research Groups

Establishing professorships will reinforce the areas of research focus supported by HU, the Charité and MDC at the IRI for the Life Sciences, and particularly the links to be strengthened between the areas mentioned in Section 2. To this end, the collaboration will involve the following:

3.1. **Bridging Professorships** will be established, which will link the experimental and theoretical fields with the disease-oriented application areas mentioned in Section 2. The professorships are to be set up in the framework of projects for which HU and the Charité are applying for funding in the first and second funding lines of the second phase of the Excellence Initiative:

- W3 Professorship for Genomics of Model Systems (GenoRare Cluster of Excellence project)
- W3 Professorship for Cell Interactions with Native and Artificial Materials (BSRT Graduate School)
- W3 Professorship for Behavioural Physiology (NeuroCure Cluster of Excellence)
- W1 Professorship for Computational Biology (RKGS Graduate School project) as a joint appointment between HU and the MDC/BIMSB.

3.2. Four **IRI Professorships** will be established and jointly supported by HU, the Charité and the MDC. They will aid the development of new areas of focus for academic work. The professorships will provide staff for new areas of life-science research on an international level and will be situated at points of intersection between focal areas in terms of content, topics, methodology and translational research. One IRI Professorship is to be funded by the Charité and two by HU. One IRI Professorship will be set up as a Special Professorship (S-professorship), jointly appointed by the MDC and HU, funded by the MDC, and located at the BIMSB and HU.

3.3. **IRI Junior Research Groups** will be set up. HU, the Charité and the MDC regard the promotion of young researchers in the phase after their PhD as a special task of the IRI. To this end, they plan to establish a joint programme of young researchers' groups within or alongside the subject areas of the IRI Professorships.

**Section 4: Infrastructure, technology**

Pooling technological and methodological resources in collaborative academic projects is a core task of the IRI. These resources could include: the Laboratory of Functional Genomics of the Charité (LFGC), which supplements the IRI infrastructure with technology for medical systems biology and expertise in high-throughput methods; the imaging facility at HU's Department of Biology, which is to be expanded as part of the IRI; and a planned joint bioinformatics resource at the BIMSB, which will provide quantitative and qualitative analytical techniques for DNA, RNA, proteins and metabolic products.

**Section 5: Governance and internal funding allocation**

The involvement of representatives from HU, the Charité and the MDC in the IRI's governance structure, which consists of a general assembly and a steering committee, allows for cooperative participation by the three partners in discussing important questions and making key decisions, particularly concerning the development of the collaboration. The main tasks of the IRI bodies are to define the areas of research focus, to initiate and monitor applications for third-party funding, and to support the development of HU's Campus Nord. An important element of the strategic planning that takes place here is the support provided to the management of the three partner institutions in a forward-looking appointment policy in the life sciences and in matters of structural planning in the disciplines involved at HU and the Charité.

- The General Assembly, which consists of all of the researchers involved in the IRI, discusses fundamental matters concerning the interdisciplinary collaboration in the participating research fields.

- The Steering Committee, whose composition will be defined on the basis of a future implementation agreement, makes operative decisions and guides processes. It decides on the allocation of research resources to members of the IRI within the framework of funds available to the IRI for that purpose.

**Section 6: Office, campus development and dialogue with the public**

As a service unit, the IRI Office will coordinate and organise the institute's work and link it to the Faculty of Mathematics and Natural Sciences I at HU and to the Charité and the MDC. Within the framework of the academic fields covered by the IRI, the Office's tasks will include providing guidance on applications and support for third-party-funded projects, organising academic events and coordinating campus development. An important task of the IRI will involve increasing the visibility of the social relevance of life-science research and enhancing academic dialogue with the public. This will be facilitated by factors such as the proximity of Campus Nord to political institutions in Berlin and to the Museum für Naturkunde, as well as its architectural quality as an historical academic campus in the centre of Berlin. The IRI Office will participate in providing information on life-science research to the public.

**Section 7: Fellow Programme**

A Fellow Programme will reinforce collaboration between the life sciences in Berlin and internationally renowned researchers. In terms of promoting young researchers, plans exist to agree a collaboration with the College for Life Sciences (Junior Fellows) that is being set up at the Wissenschaftskolleg zu Berlin – Institute for Advanced Study.

**Section 8: Implementation Agreement**

The regulations on the respective duties of the participating partners and on the equipment, funding, structure and governance of the IRI for the Life Sciences are to be laid down in a separate implementation agreement.

Berlin, 8 July 2011

| On behalf of Humboldt-Universität zu Berlin | On behalf of Charité - Universitätsmedizin Berlin | On behalf of the Max Delbrück Center for Molecular Medicine Berlin-Buch |
|---|---|---|
| Prof. Dr. Jan-Hendrik Olbertz | Prof. Dr. Annette Grüters-Kieslich | Prof. Dr. Walter Rosenthal |
| President, Humboldt-Universität zu Berlin | Dean of the Medical Faculty at the Charité | Board of Directors of the Max Delbrück Center |

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## b) between the Humboldt-Universität zu Berlin and the Helmholtz-Zentrum Berlin für Materialien und Energie

HZB Helmholtz Zentrum Berlin

HUMBOLDT-UNIVERSITÄT ZU BERLIN

**MEMORANDUM OF UNDERSTANDING**

**on Further Institutionalised Collaboration**

**between**

**Humboldt-Universität zu Berlin**
**Unter den Linden 6, 10099 Berlin**

**– hereinafter referred to as "HU" –**

**– represented by the President –**

**and the**

**Helmholtz-Zentrum Berlin für Materialien und Energie GmbH**
**Hahn-Meitner-Platz 1, 14109 Berlin**

**– hereinafter referred to as "HZB"–**

**– represented by the Board of Directors –**

**Preamble**

Excellence and collaboration between the universities and non-university research are the keystones on which Berlin is building as a location for science, industry and business. In order to combine the excellence fields of Humboldt-Universität zu Berlin (HU) and the Helmholtz-Zentrum Berlin für Materialien und Energie (HZB) even more closely and effectively, both partners intend to sign an Agreement on Further Institutionalised Collaboration in the field of natural-science research as a supplement to its Collaboration Agreements of 18 June 1992 (Berliner Elektronenspeicherring Gesellschaft für Synchrotronstrahlung mbH) and 1 November 2002 (Hahn-Meitner-Institut Berlin GmbH) and the respective Supplementary Agreements.

This collaboration should be open to other partners from the universities, non-university research institutions and commercial companies.

In particular, future collaboration between HU and HZB will include:

- joint structural and personnel planning
- joint research groups
- joint planning, implementation and use of resources and infrastructure
- joint training of junior researchers
- teaching collaboration
- collaboration in participation in German and international research programmes

The aim is to make both institutions more attractive in term of international competition for the best researchers. To this end, both partners agree the following collaboration instruments for their institutionalised collaboration:

**Section 1: Joint professorial appointments**

Joint professorial appointments help to retain senior HZB researchers at HU as special (S) professors (W2 and W3 pay bands) and to attract young researchers, particularly junior professors (W1 pay band). The procedure is laid down in the Collaboration Agreements of 1992 and 2002: a joint appointments commission, in which HU and HZB are equally represented, is set up to select suitable candidates for these S professorships. The professor is appointed in accordance with the Berlin or Jülich Model and heads an institute or department at HZB. At the same time, he or she is a member of a HU faculty and helps to extend the range of courses offered to students at all levels, including bachelor's degree courses. The joint appointment of S professors helps to set both partners' priorities in scientific and in research policy terms.

**Section 2: Joint research groups**

Joint research groups help to retain or attract renowned researchers as HU professors with high-profile tasks in HZB. In the interest of both contract parties, these researchers may lead a joint research group at HZB in addition to their work at HU; special infrastructure, personnel and resources are provided for the former task. As part of their activities at HZB, the researchers will participate in programme-oriented research at HZB. In cases of research involving large-scale facilities, the members of the joint research group participate in the user service of the BESSY II and BER II radiation sources and the operation of the BESSY II accelerator and of BERLinPro. The HU professor's activities as head of the joint research group at HZB are classed as a secondary office. In this capacity, he or she has the option of participating in internal committees at HZB. The procedures and regulations for setting up joint HU and HZB research groups are laid down in the First Supplementary Agreement to the Collaboration Agreement of 30 March 2010.

**Section 3: Joint Laboratories (Joint Labs)**

Joint laboratories serve to focus collaboration in specific, strategically selected areas, in which both partners are active, and thus enhance scientific excellence in this topic. This takes place in the form of joint provision and use of resources and special research infrastructure in joint laboratories (joint labs). Use of and access to these joint labs is regulated by contract. Joint laboratories may have further partners from universities and non-university institutions. Joint training of junior researchers on the scientific topics involved is a major feature of the institutionalised collaboration in joint labs. In general, this is also furthered by the joint appointment of a junior professor. The following joint labs currently exist:

- the Joint MX Lab for Protein Crystallography, as laid down in the agreement of 3 August 2009 with participation by HZB, HU, Freie Universität Berlin, Max Delbrück Center for Molecular Medicine Berlin-Buch (MDC) and the Leibniz-Institut für Molekulare Pharmakologie (FMP)
- the Joint Laboratory for Structural Research (JLSR), as laid down in the agreement of 4 July 2011 with participation by HZB, HU and Technische Universität Berlin
- the Joint Laboratory for Accelerator Physics (JLAP), as laid down in the Memorandum of Understanding of 31 August 2010 with participation by HZB and HU.

The contract parties intend to set up further joint labs in the course of their profile development.

**Section 4: Structured graduate training**

Structuring graduate training makes a major contribution to ensuring excellent PhD training. It makes both partners more attractive, particularly to young researchers from abroad who are interested in doing a PhD. The research training groups and graduate schools are based at HU. HZB participates in new and existing structured PhD programmes at HU and will lobby for a joint proposal for a research training group or graduate school in the Helmholtz Association's calls for proposals.

**Section 5: Teaching collaboration**

The contract parties agree on the aim of using the active involvement of HZB research fellows in the training of HU students to extend the range of courses offered at the University and facilitate the selection of highly qualified students at an early stage to conduct their own work in research projects. Participation in teaching is also in the interests of HZB staff. The contract parties will agree on teaching assignments in the joint Coordination Committee (section 7).

**Section 6: Joint third-party funded projects**

Joint third-party funded projects help to expand the research and training opportunities at HU and HZB. The involvement of both partners makes the projects more competitive. HU and HZB intend to intensify their collaboration on projects funded by the DFG, Federal Ministry of Education and Research (BMBF), EU and the Helmholtz President's Initiative and Networking Fund. This particularly includes projects that promote junior and female researchers.

**Section 7: Coordination Committee**

HU and HZB plan to set up a Coordination Committee to implement their agreements and further develop collaboration. This committee should regularly discuss the contract parties' medium and long-term personnel and resource planning, to the extent that this is in the interest of both partners, and topics of its choice related to planning. The committee can make recommendations to the boards of HU and HZB.

**Section 8: Final provision**

The contents, details and conditions for further collaboration between HU and HZB will be laid down in special agreements. The relevant financial regulations will be set out in these agreements.

**Berlin, 13 July 2011**

Helmholtz-Zentrum Berlin
für Materialien und Energie GmbH

**Prof. Dr.-Ing. Anke Kaysser-Pyzalla**
**Scientific Director**

Humboldt-Universität zu Berlin

**Prof. Dr. Jan-Hendrik Olbertz**
**President**

**Dr. Ulrich Breuer**
**Administrative Director**

Thomas Frederking
Hauptabteilung Administration
Prokurist

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# Annex 11
## Abbreviations

| | |
|---|---|
| **BAM** | Bundesanstalt für Materialforschung und -prüfung<br>Federal Institute for Materials Research and Testing |
| **BBAW** | Berlin-Brandenburgische Akademie der Wissenschaften<br>Berlin Brandenburg Academy of Sciences and Humanities |
| **BCCN** | Bernstein Zentrum für Computational Neuroscience Berlin<br>Bernstein Center for Computational Neuroscience Berlin |
| **BCRT** | Berlin-Brandenburger Centrum für Regenerative Therapien<br>Berlin-Brandenburg Center for Regenerative Therapies |
| **BESSY** | Berliner Elektronenspeicherring-Gesellschaft für Synchrotronstrahlung<br>Berlin Electron Storage Ring-Society for Synchrotron Radiation |
| **BGSS** | Berlin Graduate School of Social Sciences |
| **BIMSB** | Berlin Institute for Medical Systems Biology |
| **BMBF** | Bundesministerium für Bildung und Forschung<br>Federal Ministry of Education and Research |
| **BMS** | Berlin Mathematical School |
| **BPI** | Zentrum für Biophysik und Bioinformatik<br>Centre for Biophysics and Bioinformatics |
| **BSIO** | Berliner Graduiertenschule für Integrative Onkologie<br>Berlin School of Integrative Oncology |
| **BSRT** | Berlin-Brandenburger Schule für Regenerative Therapien<br>Berlin-Brandenburg School for Regenerative Therapies |
| **BZHL** | Berliner Zentrum für Hochschullehre<br>Berlin Centre for University Teaching |
| **C.A.S.E.** | Center for Applied Statistics and Economics |
| **CEWS** | Kompetenzzentrum Frauen in Wissenschaft und Forschung<br>Center of Excellence Women and Science |
| **Charité** | Charité – Universitätsmedizin Berlin |
| **CHE** | Centrum für Hochschulentwicklung<br>Centre for Higher Education |
| **CILS** | Centre for Integrative Life Sciences |
| **CSSB** | Centrum für Sportwissenschaft und Sportmedizin Berlin<br>Center for Sports Science and Sports Medicine Berlin |
| **DAAD** | Deutscher Akademischer Austausch Dienst<br>German Academic Exchange Service |
| **DAI** | Deutsches Archäologisches Institut<br>German Archaeological Institute |
| **DESY** | Deutsches Elektronen-Synchrotron<br>German Electron Synchrotron |
| **DFG** | Deutsche Forschungsgemeinschaft<br>German Research Foundation |
| **DIW** | Deutsches Institut für Wirtschaftsforschung<br>German Institute of Economic Research |
| **DLR** | Deutsches Zentrum für Luft- und Raumfahrt<br>German Aerospace Center |

| | |
|---|---|
| **DRFZ** | Deutsches Rheuma-Forschungszentrum Berlin<br>German Rheumatology Research Centre Berlin |
| **ERC** | Europäischer Forschungsrat<br>European Research Council |
| **EU** | Europäische Union<br>European Union |
| **FMP** | Leibniz-Institut für Molekulare Pharmakologie<br>Leibniz Institute for Molecular Pharmacology |
| **FOX** | Forum Exzellenzinitiative<br>Excellence Initiative Forum |
| **FU** | Freie Universität Berlin |
| **GenoRare** | Medizinische Genomik seltener Erkrankungen<br>Medical Genomics of Rare Disease |
| **GFZ** | Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum<br>Helmholtz Centre Potsdam German Research Centre for Geosciences |
| **HGS** | Humboldt Graduate School |
| **HI** | Humboldt-Innovation GmbH |
| **HIOS** | SFB 951 Hybrid Inorganic/Organic Systems for Opto-Electronics |
| **HRK** | Hochschulrektorenkonferenz<br>German Rectors' Conference |
| **HU** | Humboldt-Universität zu Berlin |
| **HZB** | Helmholtz-Zentrum Berlin für Materialien und Energie<br>Helmholtz Centre Berlin for Materials and Energy |
| **IAMO** | Leibniz-Institut für Agrarentwicklung in Mittel- und Osteuropa<br>Leibniz Institute of Agricultural Development in Central and Eastern Europe |
| **IASS** | Institute for Advanced Sustainability Studies |
| **IC / IZ** | Interdisziplinäres Zentrum<br>Interdisciplinary Centre |
| **iFQ** | Institut für Forschungsinformation und Qualitätssicherung<br>Institute for Research Information and Quality Assurance |
| **IGB** | Leibniz-Institut für Gewässerökologie und Binnenfischerei<br>Leibniz Institute of Freshwater Ecology and Inland Fisheries |
| **IKZ** | Leibniz-Institut für Kristallzüchtung<br>Leibniz Institute for Crystal Growth |
| **IQB** | Institut zur Qualitätsentwicklung im Bildungswesen<br>Institute for Quality Development in Education |
| **IRI** | Integratives Forschungsinstitut<br>Integrative Research Institute |
| **IRIS Adlershof** | Integrative Research Institute for the Sciences Adlershof |
| **IRS** | Leibniz-Institut für Regionalentwicklung und Strukturplanung<br>Leibniz Institute for Regional Development and Structural Planning |
| **ITB** | Institut für Theoretische Biologie<br>Institute for Theoretical Biology |
| **IZBF** | Interdisziplinäres Zentrum für Bildungsforschung<br>Interdisciplinary Centre for Educational Research |
| **JLSR** | Joint Laboratory for Structural Research |
| **KFF** | Kommission für Frauenförderung<br>Comission on the Advancement of Women |

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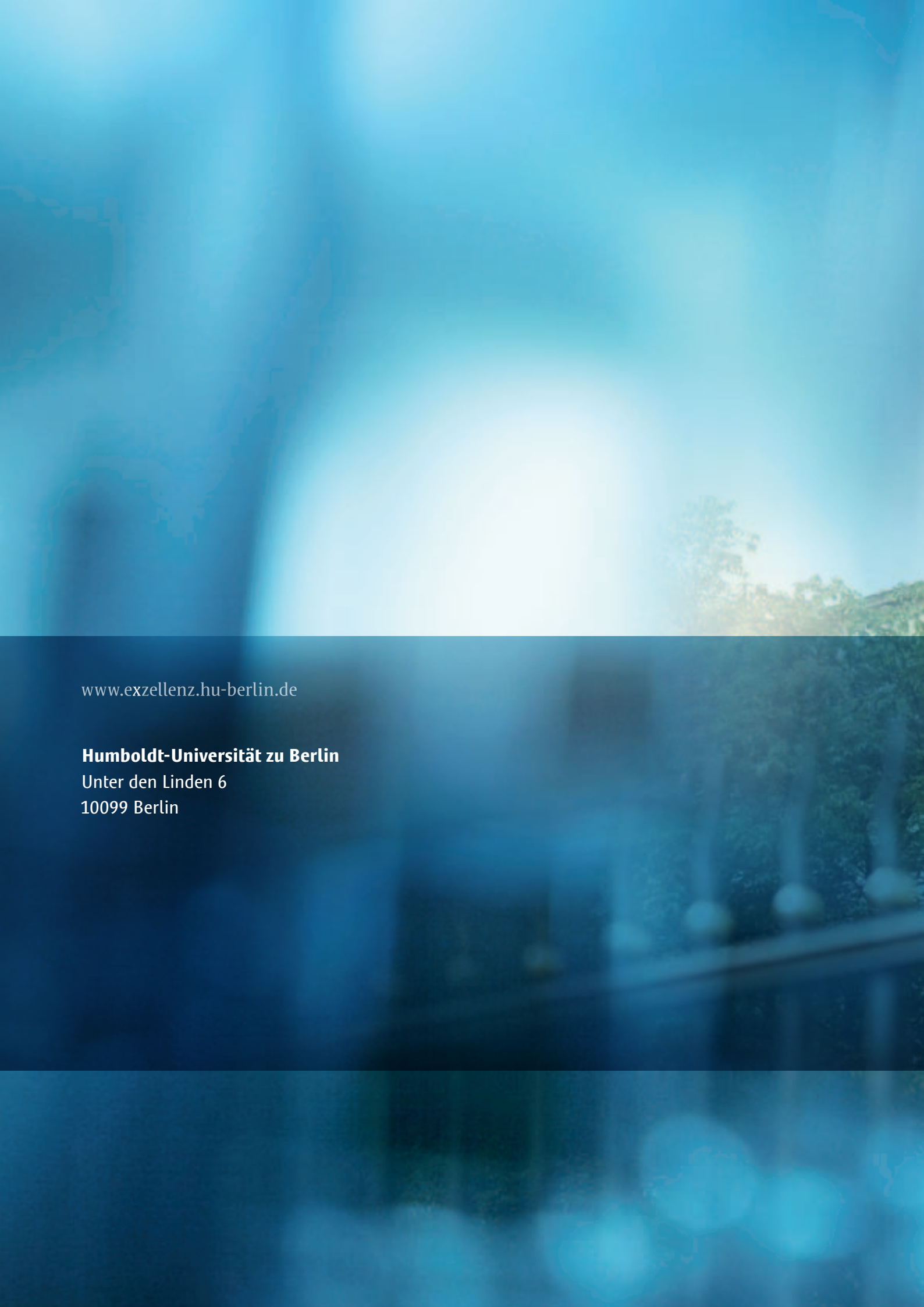
| **MBI** | Max-Born-Institut für nichtlineare Optik und Kurzzeitspektroskopie<br>Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy |
| **MBR** | Mind and Brain Research |
| **MDC** | Max-Delbrück-Centrum für Molekulare Medizin Berlin-Buch<br>Max Delbrück Center for Molecular Medicine Berlin-Buch |
| **MfN** | Museum für Naturkunde Berlin<br>– Leibniz-Institut für Evolutions- und Biodiversitätsforschung<br>Natural History Museum Berlin<br>– Leibniz Institute for Research on Evolution and Biodiversity |
| **MINT** | Mathematik, Informatik, Naturwissenschaften und Technik<br>mathematics, computer, natural and technical sciences |
| **MLS** | Metrology Light Source |
| **MPI** | Max-Planck-Institut<br>Max Planck Institute |
| **MPIWG** | Max-Planck-Institut für Wissenschaftsgeschichte<br>Max Planck Institute for the History of Science |
| **MX Laboratory** | Laboratorium für Röntgenkristallographie<br>Laboratory for X-ray crystallography |
| **NZLM** | Nationales Zentrum für Lehrerbildung Mathematik<br>National Centre for Teaching Training in Mathematics |
| **OPAL** | Open Access Laboratory |
| **Ph.D. / PhD** | Philosophiae Doctor |
| **PIK** | Potsdam-Institut für Klimafolgenforschung<br>Potsdam Institute for Climate Impact Research |
| **PSE** | Humboldt Professional School of Education |
| **RKGS** | Robert Koch Graduiertenschule Berlin<br>Robert Koch Graduate School Berlin |
| **S-Professuren** | Sonderprofessuren<br>Special professorships |
| **SALSA** | Graduiertenschule für Analytical Sciences Adlershof<br>School of Analytical Sciences Adlershof |
| **SFB** | Sonderforschungsbereich<br>Collaborative Research Centre |
| **SWOT** | Stärken, Schwächen, Chancen und Risiken<br>Strengths, Weaknesses, Opportunities and Threats |
| **THESys** | Transformationen von Mensch-Umwelt-Systemen<br>Transformations of Human-Environmental Systems |
| **TU** | Technische Universität Berlin |
| **UFZ** | Helmholtz-Zentrum für Umweltforschung<br>Helmholtz Centre for Environmental Research |
| **UNICA** | Netzwerk hauptstädtischer Universitäten in Europa<br>Network of Universities from the Capitals of Europe |
| **UniCat** | Unifying Concepts in Catalysis |

# Notes



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