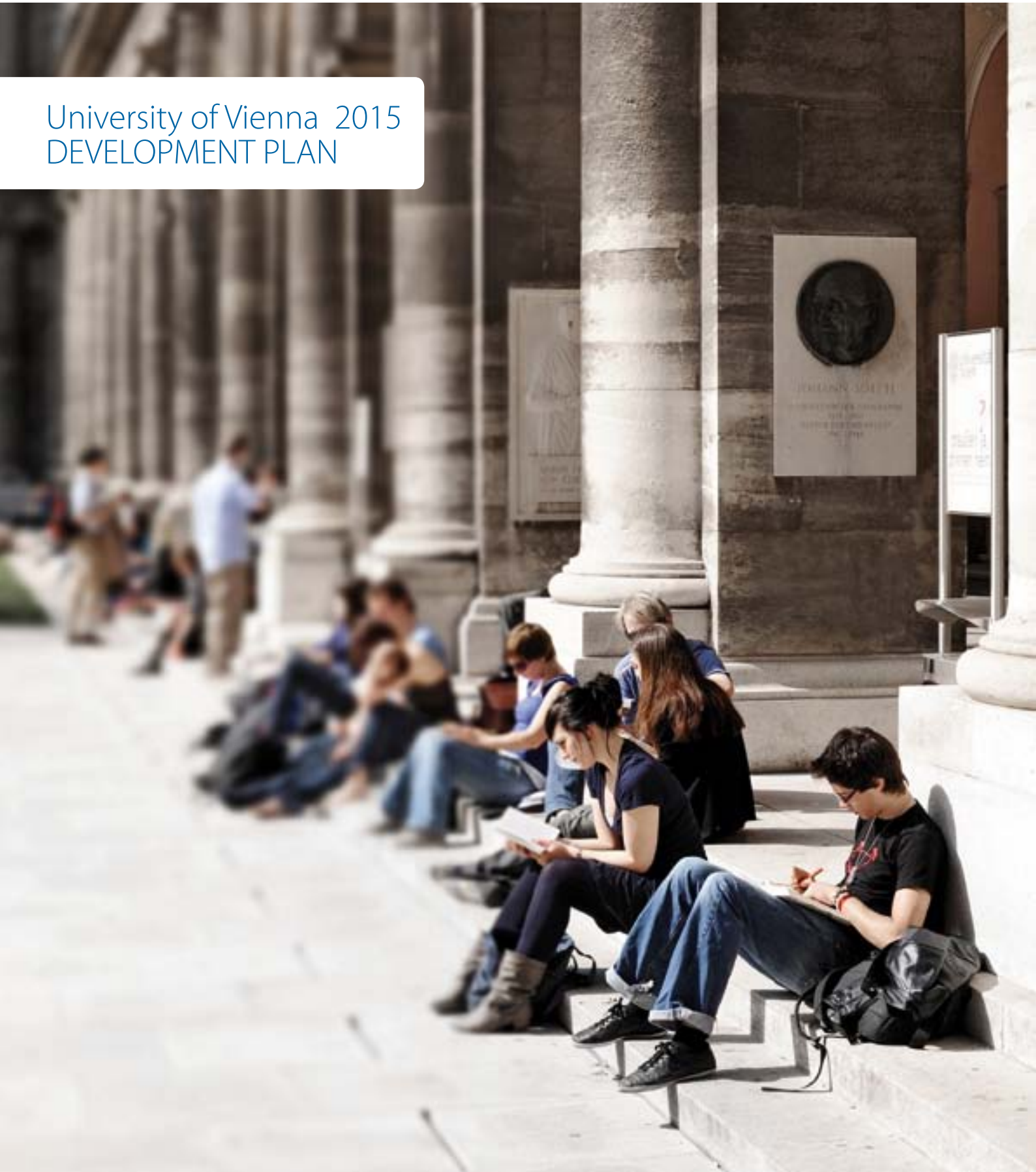
universität wien

University of Vienna 2015
DEVELOPMENT PLAN



University of Vienna 2015
Development Plan

Upon the Proposal of the Rectorate
Following Consent by the Senate of the University of Vienna on 19 January 2012
Unanimously Approved by the University Board of the University of Vienna on
27 January 2012

Contents

1. Preamble

In today's knowledge societies, universities are vital for the country's social, economic and cultural development. This applies in particular to the University of Vienna – it is, after all, by far the largest university in Austria providing the widest range of subject areas. The University makes its contribution by qualifying future academics for all spheres of society and by conducting internationally oriented and visible research activities. However, in its capacity as Austria's largest teacher education institution, the University of Vienna also exerts substantial influence on the secondary education of future generations.

Due to the autonomy it was granted by the 2002 Universities Act, the University of Vienna has been able to undergo many positive developments in recent years. The University has substantially increased the number and impact of its published research findings and also of the amount of third-party funds it has attracted and the research awards it has won. The number of students enrolled has grown considerably in many degree programmes. Despite these successes, the University is confronted with the difficulty of lacking the financial resources to adequately cope with the demands coming from the increasing number of students. This has led to an unsatisfactory situation regarding the student to teacher ratio in some degree programmes, but it has also affected the capacity of acquiring new equipment and infrastructure, especially for research. By comparing the financial situation of the University of Vienna with that of other universities abroad which have similar duties and responsibilities, this *Development Plan* will illustrate these two central problems. On this basis, it will argue that the next performance agreement period will be of decisive importance for Austria – and for the University of Vienna in particular – to stand up to those countries which are increasingly investing in the areas of research and tertiary education. As the basis of the performance agreement, this *Development Plan* explains how the University of Vienna will face this challenge.

This *Development Plan* puts down the guiding principles for further development and lists the basic measures which need to be taken. As the plan has been approved by all of the governance bodies of the University, it forms an important basis for the work of the University's decision-makers. With regard to research, the *Development Plan* defines a dynamically evolving profile which emphasises basic research open to application as well as interdisciplinarity as unique features of the University of Vienna. Following the principle of combining teaching and research, these features need to be primarily translated into interdisciplinary master's programmes. The Bologna framework will be used to ensure greater vertical and horizontal mobility. For bachelor's and diploma programmes, framework conditions need to be established that enable more satisfactory student-teacher ratios. At the same time, the University will continue to improve the quality of its doctoral programmes.

The University of Vienna has committed itself in all of its fields of activity to quality assurance. Competition plays a major role in this context. However, the University also aims to strike the right balance between competition and cooperation, both within the University and in its relationship with other educational and research institutions.

The success of the University is built on the loyalty and the commitment of all of its members. It is in this context that the University endorses a policy of equal opportunities and opposes any form of direct or indirect discrimination.

To reach these objectives it is necessary to maintain the legally guaranteed autonomy and boost cooperation between the different governance bodies and organisational levels of the University. Additionally, all members of the University need to be appropriately integrated into the decision-making process by making use of their expert knowledge. Above all, to achieve its objectives, the University needs sufficient and sustainable funding covering the full costs for the studies of all students and the research activities of the University.

2. Guiding Principles and Starting Point

2.1 Guiding Principles

2.1.1 The University's Social Responsibility

The University is the place where knowledge for the present and the future is developed, passed on and critically reflected upon in an atmosphere of freedom of research and teaching. In its research activities, the University contributes to acquiring and developing knowledge and to solving questions of societal relevance. In its teaching activities, it develops the students' ability to absorb academic knowledge about the material and immaterial worlds, to apply scientific methods to identify and solve problems, and to make discoveries and inventions beyond the current level of knowledge.

Universities are part and parcel of the basic institutional setting of modern knowledge societies, and they need to be provided with the means to fulfil their role. Political decisions about the funding and organisational framework conditions of universities are influenced by public opinion. Accordingly, communication about university-related topics with the non-university public is of particular importance in the difficult economic and political environment of our time. The history of the University of Vienna is riddled with examples of the significance of university-based research for a country's social, cultural and economic development. To raise interest in recent research and current study programmes and to deepen the understanding for the importance of universities, communication with the broader public is of vital importance.

The University of Vienna
… is committed to the principle of social responsibility in teaching and research and sets itself the goal of imparting academic, intellectual and profession-oriented qualifications to students so that they are able to make a contribution to the further development of society; in research, this is achieved by conducting high-level basic research open to application, which also helps enhance the country's economic competitiveness;
… is committed to contributing to the preservation of cultural heritage;
… is committed to intense communication with the general public;
… is committed to the highest international quality standards in all of its activities;
… is committed to the principle of optimising its in-house organisational structures and allocation mechanisms to ensure the responsible use of resources supplied by the state.

2.1.2 Competition and Cooperation as the University's Principles of Configuration

The emergence of the European Education Area as well as globalisation in education and research have increased the mobility of students as well as academics. Therefore universities are competing more than ever for the best students and excellent academic and administrative personnel at all levels.

Even though in some areas the University of Vienna currently has more students than its capacities allow, one of its major concerns is to attract Austrian and international students with a high level of motivation and commitment especially for its master's and doctoral programmes. Simultaneously, the University of Vienna strengthens its efforts to attract motivated bachelor's and diploma students by implementing an introductory and orientation period during the first semester of each bachelor's programme, with the aim of enhancing opportunities to complete the programme successfully within an appropriate period of time. Finally, the University of Vienna is highly interested to develop national and international teaching cooperation which is beneficial for all partners and clearly improve the quality of available study programmes.

The University of Vienna endeavours to offer its academic staff a sound academic environment, appropriate working conditions as well as the necessary resources, albeit complemented by third-party funds. This and appropriate remuneration are important for winning over and keeping academic employees.

The University of Vienna competes with the business sphere and the administration for committed administrative staff equipped with the competences required by an autonomous university in a difficult economic environment. In order to be able to meet this challenge good working conditions and better chances for career advancement are provided by the University.

In the future, research will depend on additional external funding even more than in the past. Due to the international peer review associated with this process, applying for external research funding also constitutes an element of quality assurance. The University of Vienna is already very successful in the competition for resources provided by the Austrian Science Fund (FWF) and is determined to secure this position. However, there is still potential for improvement in terms of applying for EU funds and particularly in the field of research projects in cooperation with the business sphere. Also within the University, the allocation of funds based on performance and success criteria has been tried and tested. It is now necessary to supplement the idea of competition by developing forms of cooperation which need to be identified in a dialogue based on mutual respect.

The University of Vienna
… is committed to competing for the best brains as well as to improving its position among national and international research universities and calls on policy-makers to support the University in this process;
… promotes the acquisition of competitive third-party funds as a necessary supplement to financial resources provided by the state but also as a stimulus to improve research: in this vain it will further develop in-house support structures to plan, attract, manage and bring third-party-funded projects to account;
… is committed to competition within the University as an instrument to adequately allocate its resources.
Due to the wide range of studies and research topics, the University of Vienna cooperates in research and teaching with universities and extra-university research institutions in the Vienna metropolitan area and beyond.

The University of Vienna
… cooperates with international and national educational institutions in the field of teaching with the objective of further improving the quality of its study programmes;
… will continue to develop successful cooperation schemes in research and the procurement of research infrastructure and will transfer these schemes to other suitable areas;
… is willing to cooperate with universities in Austria and abroad but also with non-university institutions, in particular with the Austrian Academy of Sciences.

2.1.3 The Profile of the University in Research and Teaching

To give the University a distinctive profile is an important precondition for attracting talented students as well as excellent employees and sufficient financial resources. As part of defining its profile, the University is obliged to reflect critically on its strengths and weaknesses so as to enhance its competitive capability. The profile of the University must adapt itself dynamically to changing conditions. This implies that the University has to open up new research and teaching areas, but also give up obsolete, outdated and no longer competitive sectors.

The profile of the University is the sum of the research achievements of all its members. It is the result of a discussion process aimed at developing the University as a discourse community and based on self-reflection and active dialogue with the international academic community. The university leadership fulfils the task of leading and moderating this discussion process so that the profile of the University can serve as object of identification for those from within and without the University.

As the largest institution of the tertiary sector in the German-speaking countries, the University of Vienna is committed to its historically grown diversity of disciplines and is regarding its breadth as a major resource for developing interdisciplinary and transdisciplinary research. However, its wide range of programmes must repeatedly stand the test of time. Reorientation may be necessary to facilitate the development of top achievements in research and teaching of various disciplines.

The University of Vienna is a research university which upholds the principle of combining teaching and research. University-based teaching is dedicated to opening up an avenue to academic thinking and scientific methods for students. In this way they acquire skills in their studies which go well beyond professional education in the common sense.

The University of Vienna
… is committed to its historically grown diversity and regards it as a resource for top-quality research and teaching;
… is committed to the principle of research-led teaching as a part of its profile;
… is committed to critically analysing its strengths and weaknesses as a prerequisite for quality in research, teaching and study;
… regards the development of its profile as an inherent process of renewal and adaptation to changing conditions which helps make the University's identity recognisable to the inside and outside.

2.1.4 The Internationality of the University

Research leads to insights which are international by definition. Traditionally, the University of Vienna regards itself as an internationally visible and attractive university. It is committed to its local roots as well as its international orientation. Accordingly, its academics publish in languages appropriate to their respective academic fields. The University's international orientation is propagated by its employees and students, and manifests itself by them participating in the international competition for resources. The internationality of the University is among others best reflected by the international composition of its staff and students. But it also participates successfully in international research programmes and boosts its students' international orientation. Finally, publications in internationally recognised journals and books as well as citations referring to research achievements published by scholars at the University of Vienna underline the international visibility and reputation of the University.

The University of Vienna
… regards its international orientation as a major resource for cooperation and competition;
… is committed to increasing the international visibility of its achievements in research and teaching;
… regards applying for international third-party funds as

an expression of its competitiveness;
… continues to strive for internationalisation in terms of personnel and students;
… is committed to linguistic diversity in academic communication as an expression of its open attitude towards the globalisation of science and education.

2.1.5 The University and Its Members

The University is a community of academic and general staff who guarantee by their joint efforts that the core tasks of the University in research and teaching are fulfilled.

This community is of vital importance for the University's success in research and teaching. The commitment and performance of its members represent decisive prerequisites for an attractive and competitive university, which is why their satisfaction with their immediate and institutional working environment is always to be taken into consideration. Without the extraordinary commitment of its employees, the University would not be able to fulfil its tasks under the current restricted financial possibilities. Their loyalty to 'their' University and 'their' academic discipline represents an indispensable success factor which cannot be valued highly enough. This identification with the University and its tasks is the basis of a participation which is aimed at jointly shaping the future of the University and characterised by dialogue as well as joint problem-solving.

The University has always been a place of lifelong learning. Its employees should be aware of the resulting opportunities, while the University should provide framework conditions which testify to its ability to adapt to the future also in this respect.

The University is an expert organisation. This implies that many of its staff are experts in solving internal problems as researchers in their specific fields. It also implies that the principles to be applied in the academic world should also be the guiding principles of running the University. This is what makes the University an extraordinary working place.

At the same time the University is an institution where knowledge is passed on to the students and where students contribute with their ideas to research and teaching. The study programmes of the University of Vienna are currently met with high demand which underlines their attractiveness. However, because of excessive student enrolment it is not possible to provide ideal study conditions in all fields of study. Study conditions and the administration of studies need to be improved. With only 15 % of the overall government budget provided for this sector for 30 % of all students in Austria this is a daunting task. To fulfil it, the University needs considerably more funding.

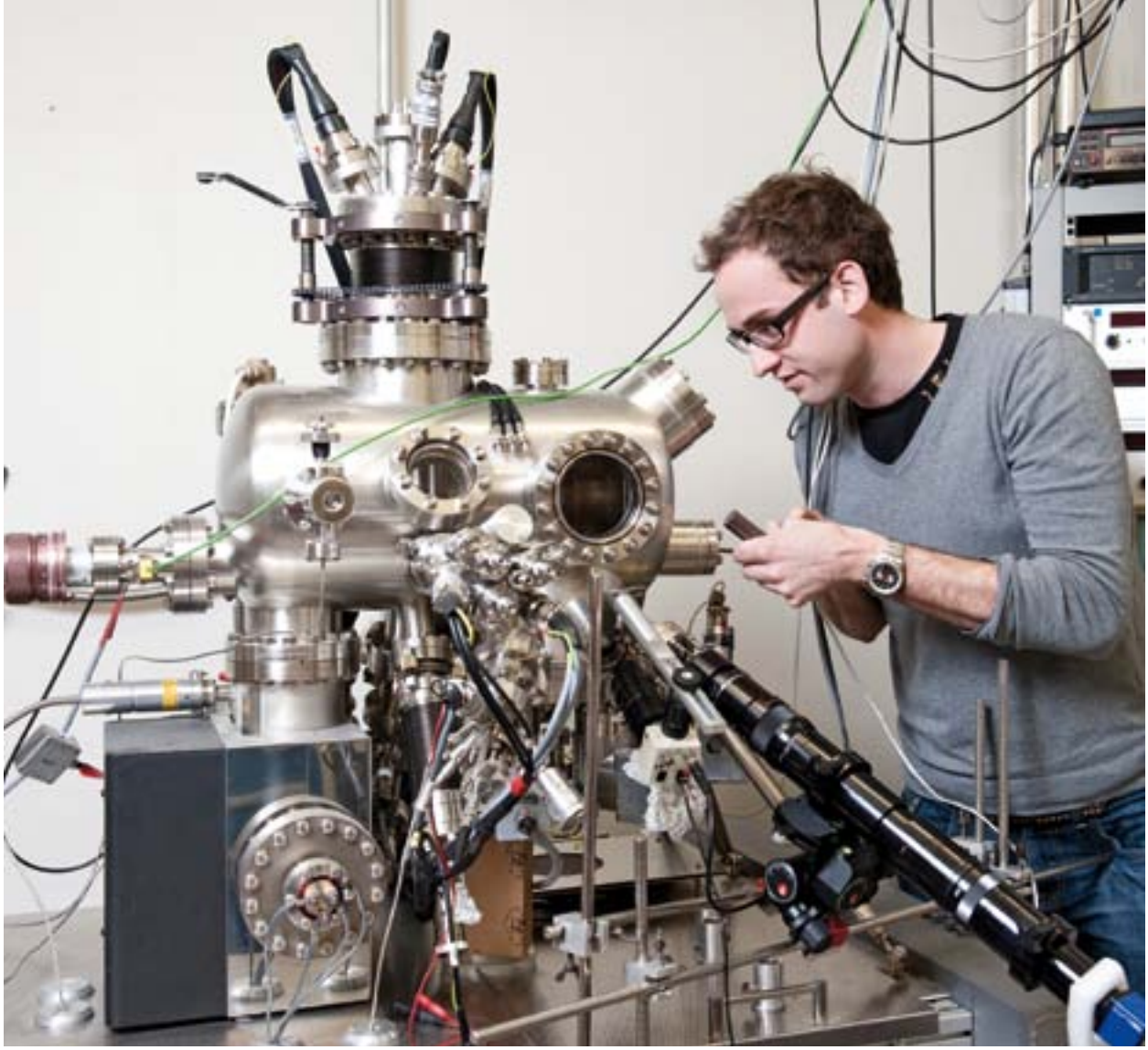
In teaching, the University's key objectives are to allow students to pursue their studies without delay and provide high-quality content. Furthermore the University seeks to position its graduates successfully on the national and international labour markets. Graduates who remain in contact with the University as alumni/alumnae are a good indicator for having successfully honoured these principles.

The University of Vienna
… regards the improvement of working conditions as a major objective that needs to be implemented progressively;
… aims to improve its teaching and study conditions so as to raise the level of satisfaction among the students and increase the chances of success in their studies. At the same time students are expected to be aware of their own responsibilities and use the available resources efficiently;
… is committed to the principle of lifelong learning for all university members;
… considers the establishment of an enduring relationship to its students and graduates as important for further development. This is one way to intensify the relationship between the University and our modern knowledge society;
… understands itself as an expert organisation striving to use scientific reasoning also as a means to solve problems not directly connected to science.

2.1.6 Equal Opportunities for All Members of the University

Students and employees of the University of Vienna form a community of individuals of different age and gender, as well as divergent social and geographic backgrounds. They come from different spheres of life and bring with them a myriad of experiences, world views and competences. This diversity represents a specific form of wealth, a source of creativity and a pillar of success. It needs to be cherished by unconditionally sticking to the principle of equal opportunities. University members treat one another with mutual respect and understanding for each other's differences. They avoid any behaviour which runs counter to this principle. This includes that bodies and committees at different levels of the University should be composed by taking the University's diversity into account.

In recent years, women have increasingly participated in many areas of research and teaching at the University. Nevertheless the objective of raising the share of women in many areas as well as ensuring a gender-sensitive approach in research, teaching and administration continues to be among the University's principles of configuration. Creating appropriate framework conditions so that professional careers or studies can better be reconciled with family-related tasks is an objective from which women and men can and should benefit equally.



The University of Vienna
… regards the diversity of staff and students as an opportunity and potential for the development of the University;
… is committed to the principle of equal opportunities;
… strives to guarantee a climate of respect for differences and diversity among all members of the University;
… strives to eliminate any objective disadvantages and to reduce subjective prejudices while taking active measures against any direct or indirect forms of discrimination;
… emphasises the importance of gender equality and the necessity to increase wherever necessary and possible the number of women in all spheres of the University;
… improves the opportunities of female academics to successfully pursue an academic career, particularly in the postdoc phase until their appointment as professors;
… is committed to the urgent task of creating proper working conditions for male and female employees with home care obligations.

2.1.7 Communication and Participation as Means of Jointly Shaping the University's Future

The 2002 Universities Act and its implementation have redefined decision-making structures and processes within the University of Vienna as well as between the University and the Federal Government. The University has developed from an institution governed by collective in-house responsibility combined with direct government control into an autonomous university with transparent in-house decision-making and responsibility structures defined by the autonomously designed *Organisation Plan*. The accumulated expert knowledge represented by the members of the University has to be taken into account when developing appropriate mechanisms of in-house communication while striking the right balance between broad participation in the preparatory phase and efficiency in the final stage of the decision-making processes. The focus is on taking evidence based and legitimised decisions rather than adhering to nonsensical formal procedures.

The University of Vienna
… benefits from the knowledge and commitment of its staff and students, and will strive to open up and create permeable communication channels, especially with the help of modern communication technologies;
… is committed to systematically improving communication between all levels of the institution based on decision-making structures laid down by the 2002 Universities Act;
… regards the participation of its members in evidence-based consultation processes as a necessary and welcome support of the decision-making by its governance bodies.

2.1.8 Quality Assurance

Research, teaching and administration as the three main tasks of the University have to prove their quality against international standards. It is in this vain that the quality assurance system of the University implements a number of evaluation procedures such as: the periodical evaluations of all faculties, centres and service units in the form of a comprehensive evaluation, feedback mechanisms for students, continuous improvement for the assessment of research and publication achievements, and, last but not least, quality assurance in the process of hiring new staff, especially with regard to the recruitment and appointment of academic staff.

Quality assurance is not an end in itself, but an inherent task of all university members, irrespective of whether or not special instruments are available for this purpose. The University should under all circumstances honour the principle of quality in research and teaching. This implies that its members are never content with mediocrity, always strive for the best solutions of scientific problems, and aspire success in competition. Quality assurance is to promote this attitude and improve the University as such.

The University of Vienna
… is committed to enhancing its existing quality assurance system, especially with regard to improving the balance between costs and benefits both in the material and immaterial sense of the word;
… regards the findings of quality assurance processes as the basis of its decision-making and allocation processes;
… will develop specific quality indicators for the administrative sector and use them to continuously improve processes;
… will subject its quality assurance system to an external audit.

2.2 Starting Point

2.2.1 The Financial Situation of the University of Vienna

The basic economic conditions of the University of Vienna are decisively influenced by the performance agreements that are concluded with the Federal Ministry of Science and Research: in 2010 federal revenues (including reimbursement of costs for the loss of tuition fees) accounted for some 80 % of total revenues. Although federal revenues have risen continuously in recent years, a comparison with the University of Vienna's performance in research and teaching reveals that the growth in federal revenues has neither kept pace with the increase in student figures nor with the growth in third-party funds.

Performance agreements – and the global budgets specified in them – do not take account of the continuous rise in student figures, resulting in a *de facto* decline in the funding contribution per student since 2004:

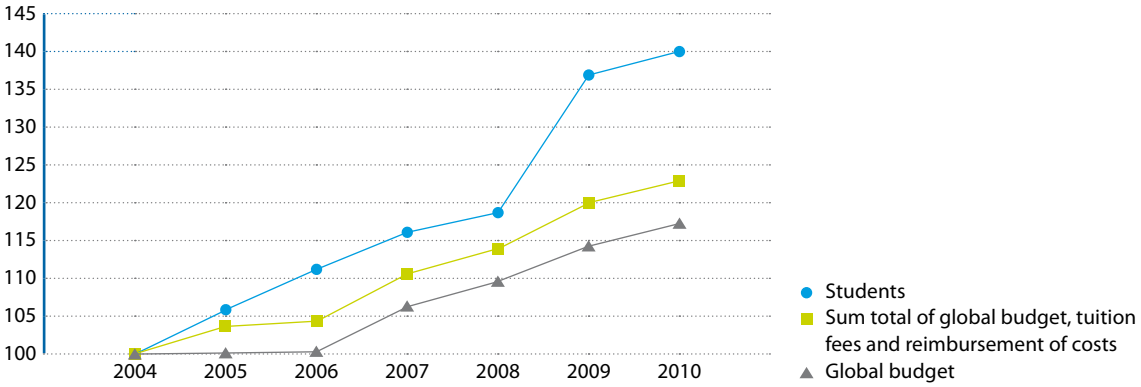


Diagram 1: Change in student figures and change in global budget (2004 = 100).

A similarly problematic development can be observed in the field of third-party-funded research: by 2010 revenues from third-party funds successfully applied for by the researchers of the University increased by 43 % in comparison to the year 2007. However, the global budget provided by the Federal Government only increased by roughly 10 % during the same period. This development is alarming in so far as basic equipment in research definitely has to be funded from the global budget because these costs are usually not reimbursed by third-party funders. Stronger growth of third-party funding compared to the growth of the global budget therefore causes the full cost coverage of third-party-funded projects to increasingly strain the global budget.

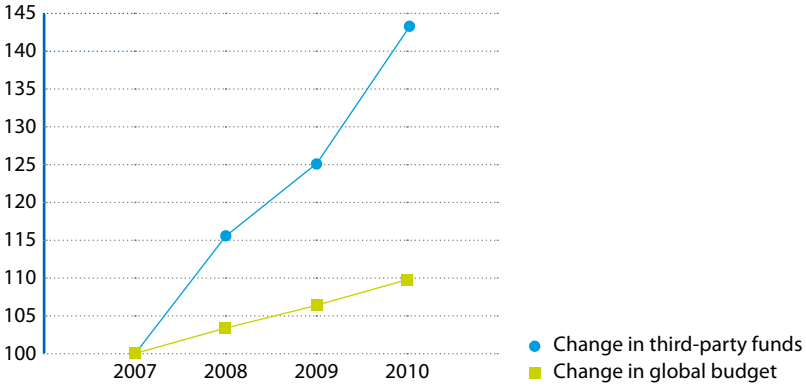


Diagram 2: Change in third-party funds according to the *Wissensbilanz* and change in the global budget from federal funds excluding cost reimbursement for tuition fees (2007 = 100).

Despite these alarming developments, the University of Vienna has considerably expanded its activities in teaching and research in recent years. The above-mentioned increase in federal revenues has been used particularly for increasing the number of full professor positions and for enhancing the investment capacity of the University.

With regard to the financial capacity of the University of Vienna the objective must be to create sustainable financial framework conditions to guarantee the quality of teaching and research. Since it gained full legal capacity in 2004, the University of Vienna has achieved slight surpluses and thus shows sufficient financial capacity to continue its investment activities and largely meet its statutory obligations in the field of occupational health and safety, for example. Nevertheless the financial capacity of the University of Vienna can only be maintained if it receives sufficient federal funding. It is indispensable, in particular, to relate the amount of federal funding for the University of Vienna to the development of student figures and research achievements.

In terms of its size, the University of Vienna cannot be compared to other institutions at the national level. The University aims to be one of Europe's top research universities. Therefore its financial framework conditions can only be analysed by comparing it to institutions abroad of similar standing and size, such as the Ludwig Maximilians University of Munich (LMU Munich) and the University of Zurich. These three universities are comparable insofar as they are the largest universities in their respective countries, regard themselves as top-level research universities and provide a wide range of subjects. Due to these similarities, the structure of their budgets is quite similar.[1]

The three universities, however, show considerable disparities with regard to the total amount of their financial resources and resulting possibilities.

There are significant differences in terms of student-teacher ratios between the analysed universities: at the University of Vienna, the student-teacher ratio is 266:1, whereas the LMU Munich and the University of Zurich boast ratios which are in line with international standards. The disparity in student-teacher ratios is also reflected in the budget per student: the LMU Munich and the University of Zurich both have a higher budget available per student by factors of 1.7 and 4.4 respectively.

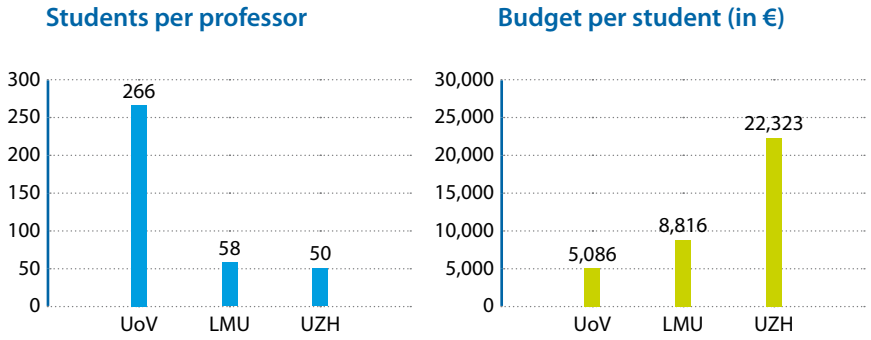


Diagram 3:
UoV (University of Vienna): *Leistungsbericht 2010* (reference: professors according to section 98 of the Universities Act)

UZH (University of Zurich): *Jahresbericht 2010* (conversion ratio EUR/CHF=1.3823, i.e. Δ 2010) figures excluding students of medicine/veterinary medicine

LMU (LMU Munich): Facts and Figures at http://www.uni-muenchen.de, the 2010 budget does not include the clinical facilities, figures excluding the Faculty of Medicine/Faculty of Veterinary Medicine (cf. *LMU auf einen Blick 2010/2011*).

[1] To enhance comparability of the data for the Universities of Munich and Zurich, the Faculties of Medicine and Veterinary Medicine were excluded in both cases.

Despite this high degree of pressure in terms of student-teacher ratio, professors at the University of Vienna are remarkably active in the field of third-party funded research.

Still, the respective share of third-party funding in the overall budget is higher at the University of Zurich and the LMU Munich than at the University of Vienna. This is also to be attributed to the fact that, taking the country's size into account, Austrian Science Fund (FWF) funding is significantly lower than funding provided to the German Research Foundation (DFG) and the Swiss National Science Foundation (SNF). This fact is also corroborated by the expert report of Loprieno, Menzel and Schenker-Wicki, in which the FWF budget is rated as much too low compared with the SNF budget (cf. Loprieno, Menzel, Schenker-Wicki: *Zur Entwicklung und Dynamisierung der österreichischen Hochschullandschaft*, July/August 2011). Furthermore, the respective economic environment and resulting additional funding options play a major role.

2.2.2 Research at the University of Vienna

The University of Vienna is a highly visible and strong research university which has to cope with the special challenge of delivering top research achievements under enormous budget constraints. The comparison with other internationally renowned universities makes this sufficiently clear. On the top of that, the University also has to face the fact that in some disciplines it is a mass university with all the consequences for its research and teaching resulting from this situation.

The improvement in research performance is evidenced amongst others by the continuously increasing number of publications of the University of Vienna in the Web of Science (Thomson Reuters). The academic reputation of the University of Vienna's researchers is also emphasised by the large number of highly cited joint publications with renowned institutions such as the Massachusetts Institute of Technology, Harvard University or the institutes of the Max Planck Society.

In this context it needs to be considered that – although the Web of Science covers a high share of articles published in the sciences (including mathematics, statistics and computer science), medicine, psychology, parts of the social sciences, business and economics – it covers areas only incompletely where the publication culture is dominated by book publications and contribution to edited volumes. Consequently these figures reflect only a part of the research performance of the University of Vienna. Scientometric analyses can never provide more than an indication as to the standing of a university or a discipline. They must not replace a thorough examination focused on the quality and content of achievements.

Publications in the Web of Science

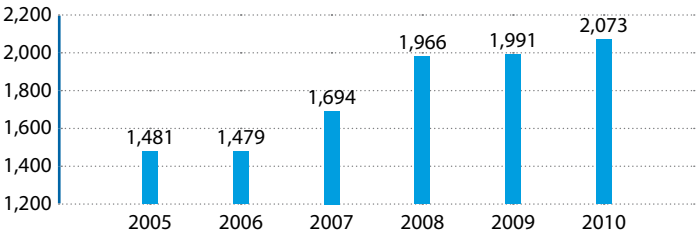


Diagram 4: Number of publications in the Web of Science with affiliation to the University of Vienna. Source: Web of Science (Thomson Reuters).

Cooperation projects ranked by citations per publication

(top 20 institutions with at least 20 joint publications)

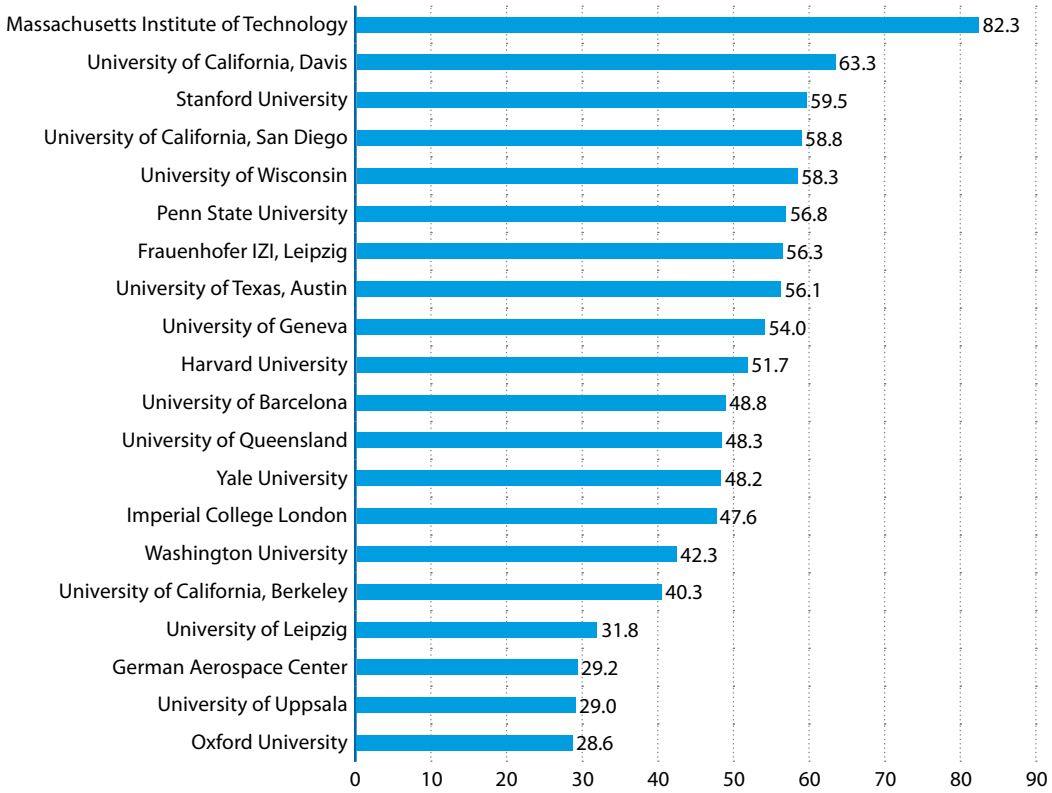


Diagram 5: Cooperation of the University of Vienna with other institutions ranked by the average number of citations of joint publications ('average cites per document') in the Web of Science for the period 2005 to 2010. The top 20 institutions with at least 20 joint publications were ranked. Source: Web of Science, as of October 2011.

Particularly in view of implications for the budget, the number of third-party funds acquired in competition with other Austrian and foreign universities and research institutions as well as the number of renowned academic prizes and grants for outstanding young scholars in recent years testify to the University's success and international competitiveness. In the field of third-party funds, research funding competitively acquired in FWF and EU programmes in particular was clearly increased. Successfully acquired EU projects in which up to 30 international partner institutions are involved also constitute good benchmarks for the integration of the University of Vienna's researchers into networks in the European Research Area.

Development of third-party funding (in € m)

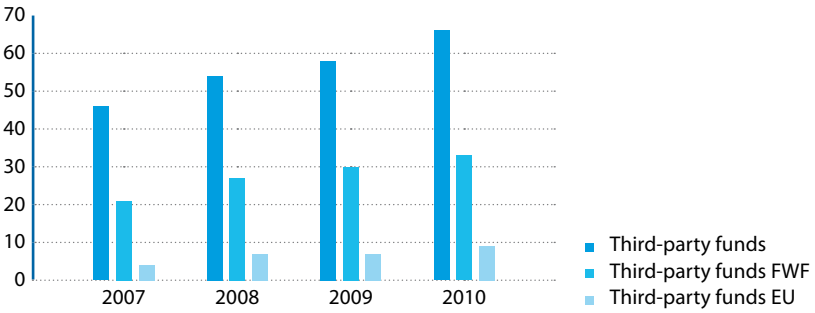


Diagram 6: Development of third-party funding according to the *Wissensbilanz* in € m.

Academic prizes and grants for young scholars

ERC grants	17
START Prizes	14
Wittgenstein Awards	3
Elise Richter Programme	29
Hertha Firnberg Programme	31

Table 1: Number of academic prizes conferred to academics of the University of Vienna and highly competitive grants for young scholars acquired between 2005 and 2011. ERC grants are a programme category that was newly introduced under the 7th EU Framework Programme with the objective of promoting outstanding and pioneering basic research. Due to their selection procedure and high funding volume, ERC grants are considered the most distinguished academic prizes of the EU. The Wittgenstein Award is Austria's highest science award. With the START Programme, the FWF helps top young researchers of all disciplines set up a working group. The Elise Richter and Hertha Firnberg Programmes are career development programmes for female academics with excellent qualifications.

The high research output of the University's academics also has a significant impact on its position in international rankings designed for institutions of higher education. According to the rankings that are published in the British magazine Times Higher Education Supplement (THES) on a yearly basis, the University of Vienna is ranked among the top 200 best universities in the world. In the latest THES rankings for the period 2011–2012, the University of Vienna was ranked at 139th position. Nevertheless, while good rankings obviously add to the international visibility of the University, they also have to be scrutinised[2]. First of all, they reduce the University and its wide range of activities to sheer numbers. While this is a questionable procedure to begin with, it is especially inadequate in so far as the result of the ranking can change enormously as a consequence of changing the indicators selected for the ranking procedure by the respective editors. This does not do justice to a university which boasts

[2] cf. relevant specialist literature on the topic of rankings, such as: *Rankings and the Reshaping of Higher Education* (Hazelkorn, 2011); *Too much noise in the Times Higher Education rankings* (Bookstein et al., 2010).

a wide range of subjects, and it creates a distorted picture in the public. In addition, it must be borne in mind that quantitative assessments alone do not allow any statements about the quality of research.

In summary it can be said that despite difficult framework conditions the University of Vienna has been able to improve its position in the international research landscape. To be able to maintain its position in the international competition, the University of Vienna does require funding that stands up to international comparison. Only in this way will the University be able to attract excellent researchers and unfold its full potential in research also in the future.

2.2.3 Study and Teaching at the University of Vienna

In the winter semester 2011/12 more than 90,000 students were admitted to the University of Vienna. This makes it not just the largest educational institution in Austria, but in all German-speaking countries: at the largest German university, the LMU Munich, 38,062 students[3] are enrolled; at the largest Swiss university, the University of Zurich, 22,691[4].

Since the academic year 2004/05 the number of students has increased from 62,602 (in the winter semester 2004/05) to 91,362 in the winter semester 2011/12 (as of 15 Dec. 2011). The resources made available by the Federal Government, however, have grown to a much lesser extent, as is shown in Diagram 1: Change in student figures and change in global budget in chapter 2.2.1.

The higher education forecast issued by the Federal Ministry of Science and Research provides information about the long-term development of student figures.[5] Despite the unpredictable nature of political framework conditions and information deficits of the forecast due to incomplete data, it presents a plausible and differentiated result. It comes to light that student figures can be expected to continue to grow in Austria and therefore definitely also at the University of Vienna. In contrast to the sometimes reported expectation that – due to the demographic development and the long-term decline in birth rates – student figures will also decline in the foreseeable future, the study emphasises that they will grow. This growth is the result of a long-term increase in the number of foreign students and of graduates from upper secondary schools per age group.

With currently 56 bachelor's, 117 master's, 4 diploma and 11 doctoral programmes, the University of Vienna offers the most comprehensive range of studies in Austria in terms of numbers and subjects. The following diagram demonstrates the distribution of students to individual study programmes. Almost 40 % of students are concentrated in only five study programmes.

[3] Students excluding medicine/veterinary medicine. Figure as of the winter semester 2008/09 (cf. *LMU auf einen Blick 2010/2011*).
[4] Students excluding medicine/veterinary medicine. Figure as of the autumn semester 2009 (cf. *Studierendenstatistik der Universität Zürich*: www.uzh.ch).
[5] Frank Landler (2010): *Tertiäres Bildungssystem – quo vadis? Studierende, belegte Studien und Absolventen – Quantitative Entwicklungstendenzen der österreichischen Universitäten und Fachhochschulen 1973–2030.* Vienna: Austrian Academy of Sciences Press.

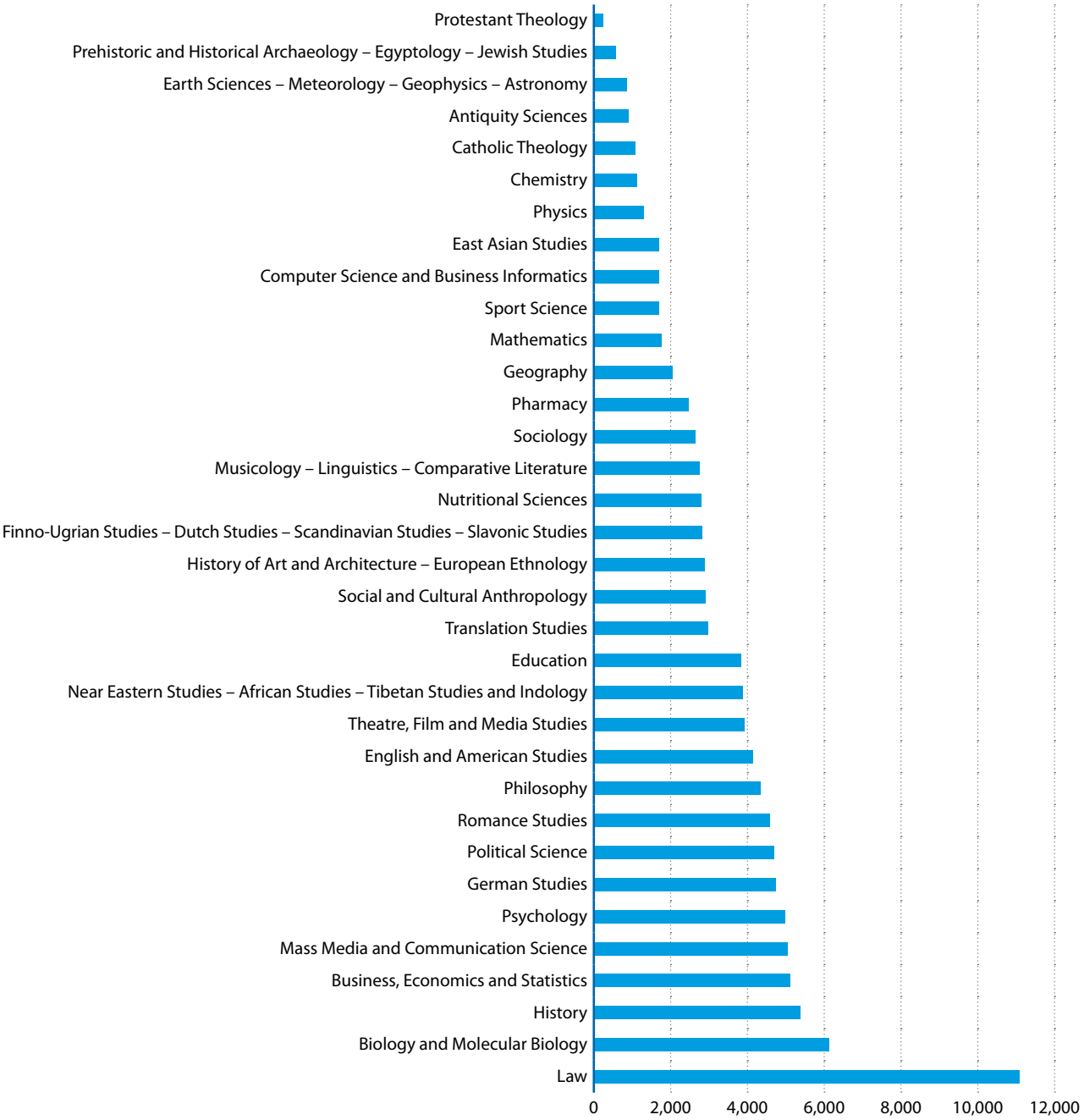


Diagram 7: Current number of students in winter semester 2011/12 (a total of 7,380 students in teacher education programmes are included under the respective directorates of studies).

Despite the prevailing framework conditions – above all student-teacher ratios particularly unfavourable in an international comparison (see Diagram 3 in chapter 2.2.1) – it has been possible to increase graduate figures in recent academic years. In the same period, the share of women has remained constant at more than 65 %.

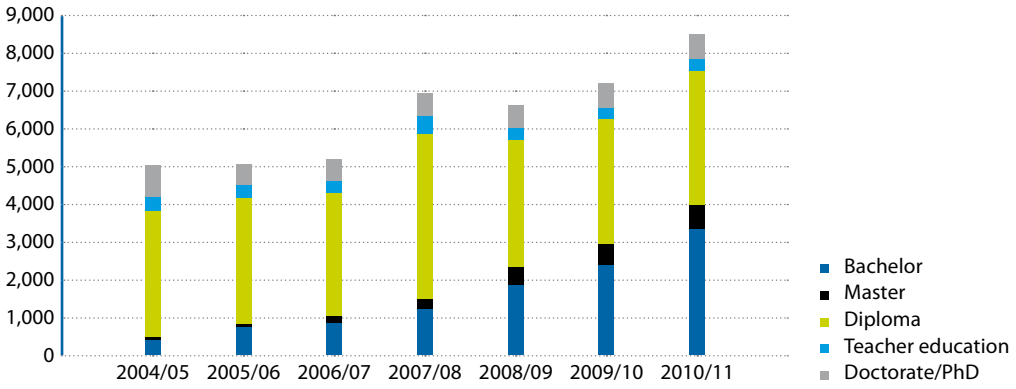


Diagram 8: Development of graduate figures by academic grade. Academic years 2004/05 to 2010/11.

2.2.4 Full Cost Recovery for Teaching and Research

The Austrian government programme for the XXIV legislative period envisages the careful step by step introduction of a new funding system for the universities. As a step towards raising budgets, it will cover both teaching and research, as funding components. Parallel to this, the improvement of student-teacher ratios according to international standards was enshrined as a legal objective in the 2009 Amendment to the Universities Act.
In the future, the funding of teaching will be based on teaching capacity, which means that the Federal Government will provide funds for every student admitted to a study programme who has taken a certain number of exams. These funds will be defined according to international student-teacher ratios and infrastructural requirements.

The University of Vienna is committed to the principles of teaching-capacity-based funding, particularly to an improvement of student-teacher ratios based on international standards. Although the University of Vienna already boasts appropriate student-teacher ratios in some disciplines in natural sciences, these subjects also require substantial financing for personnel and investment-related resources. In some subjects of the social sciences and humanities there is a need to catch up, in particular regarding the improvement of student-teacher ratios. In some areas of the life sciences both problems can be observed at the same time.

The introduction of a new teaching-capacity-based funding scheme should not imply that the improvement in student-teacher ratios in some fields will cause deterioration in other subjects. In view of the scarcity of public resources it therefore seems reasonable to combine the system of teaching-capacity-based funding to the possibility of student access regulations. Otherwise it would be impossible to achieve a sustainable improvement in student-teacher ratios in subjects with high or increasing student figures. In this context it will be important to pay attention to the outcomes of the evaluation of the introductory and orientation period.

In research, the funding of universities should be based on several pillars in the future: on the one hand, in view of the principle of research-led teaching, a part of the funding will have to be derived from the new teaching-capacity-based scheme, on the other hand quality indicators such as competitively acquired third-party funds should be the basis of defining research funding for universities. More resources for the FWF and a gradual transition to full cost funding of its projects would constitute an additional objective.


HÖRSAALZENTRUM
UNI CAMPUS

3. Implementation of Core Tasks

The core tasks of the University of Vienna are research and teaching. Joining these two areas is the major characteristic of a scientific university. Therefore it is vital to promote and develop both research and teaching equally. In addition to profile development and the formation of special focuses, which are indispensable, it is necessary to ensure that top-level research is also conducted in all specialisations which are offered in the various study programmes.

3.1 Implementation of the Core Task of Research

3.1.1 Guiding Principles

The University of Vienna is a research university with a high international visibility. It is conscious of its roots in particular local traditions and at the same time understands research as a global challenge. Consequently, it attempts to hold up its tradition where it has proven successful and at the same time ventures into new, risky and innovative research fields. The academic staff affiliated with the University of Vienna at all career levels (professors, habilitated staff members and young academics) play a decisive role in creating the University's unmistakable profile both in research and teaching.

Research at the University of Vienna is primarily aimed at contributing to the state of the art of academic knowledge. By orienting itself towards this principle, research conducted at the University contributes to solving research issues that emerge from the necessities of the research process and to solving societal problems. Special attention is being paid to basic research, however, applied research and the conversion of basic research into application-oriented research are equally appreciated as contributing to the research profile of the University. For all of its research activities, the University of Vienna is aware of the necessity to strongly encourage its academic staff to observe ethical principles and to commit to the principles of good academic practice.

3.1.2 The Position of the University of Vienna

The University of Vienna is a research university which enjoys a high international reputation in many areas. At the same time, however, it is in some sub-disciplines a mass university which despite difficult financial framework conditions, demonstrates top achievements in research compared to other internationally highly recognised institutions. To strengthen the international position of the University of Vienna it is necessary to create a working environment for researchers which prevents their research potential to be suppressed by their other tasks. Only in this way will the University be able to win over excellent researchers and attract outstanding students in the future.

3.1.3 The Research Profile of the University of Vienna

The research profile of the University of Vienna is marked by interdisciplinary cooperation within faculties, between faculties, and with different universities and universities of applied sciences. Interdisciplinarity only has high innovation potential where it is based on excellent disciplinary research and at the same time goes beyond and newly defines the boundaries of the involved fields and disciplines.

The research profile of the University of Vienna is also characterised by researchers facing the great challenges of our time. These problems can only be identified and solved by interdisciplinary cooperation as described above. It is especially when facing problems of high societal relevance that the University needs to prove its unconditional commitment to science as such and deliberately put itself in a position to critically reflect on itself and the society to which it belongs. Only in this way can research make a relevant contribution to solving the great challenges of our time.

The research profile of the University of Vienna is inseparably linked to the courage and confidence of its academic staff to strive for making an extraordinary contribution to the development of academic knowledge and venture into risky research areas that are not universally recognised. This kind of non-mainstream research can only prosper in a pluralistic environment and cannot be planned in advance. Researchers at the University of Vienna work in an environment where they have the opportunity to propose original and distinct approaches of risky research for discussion and where they have the chance to implement their plans after undergoing close scrutinisation.

Research at the University of Vienna is pursued by a community of internationally renowned researchers who contribute by their participation in international networks to the worldwide dissemination and international visibility of their research achievements.

3.1.4 The Further Development of the University's Research Profile

The University of Vienna will focus on the following issues in defining the future development of its research activities: to promote research cooperation at the University; to identify cross-sectional topics that can be worked on beyond the boundaries of disciplines and faculties; and as part of this process, to bridge the historically grown gap between the humanities and social sciences on the one hand and the natural and life sciences on the other. Inno-

vation frequently emerges at the boundaries of existing research fields where methods and theories overlap and issues need to be treated from different angles. The goal is to have new key research areas emerge from these cooperation projects as future mainstream activities in research, and to consequently develop a distinctive research profile for the University which is perceived as such from the inside as well as by outside observers. For this purpose the University has created the instrument of the research platform which has proven its validity so far. It should be continued and adapted flexibly to new research needs.

The advancement of research at the University builds on its ability to identify and to develop existing strengths by taking appropriate measures to strengthen its strengths. In this context, the appointment to professorships and tenure track positions are of key importance. Measures in this field will be supplemented by the establishment of especially funded and equipped postdoc positions for academics who will be invited to Vienna for a period of four to six years and will work on developing existing strengths and give new impetus to the further development of their respective fields.

The future development of research at the University of Vienna requires special attention to the creative and innovative potential of young researchers at the predoc level. Their contribution to the development of research is highly respected which is why an appropriate highly competitive form of promoting young scholars has to be designed which provides research opportunities to them on the basis of an assessment of their research potential and performance.

3.1.5 Promotion of Doctoral Students

Doctoral students are of vital importance for the development of research at the University of Vienna. Graduate students who are working on a doctoral project with the aim of qualifying for a research career are therefore given special support. The objective is to promote independent-minded and innovative researchers who enter the academic profession with research results that make a substantial contribution to developing academic knowledge. In addition, the Centre for Doctoral Studies provides programmes to help doctoral students prove themselves as young academics in the international arena, put their competences in research and teaching to the test and develop their ability to disseminate their findings.

The University of Vienna supports doctoral students in various ways. This includes predoc positions which enable doctoral students to become familiar with the institution in its entirety at an early stage of their development by familiarising with all aspects of university life. When doctoral students participate in projects, often funded by third parties, they have the opportunity to be integrated with their individual research in a research group. Thematic doctoral programmes, which are funded by the Austrian Science Fund (FWF), and the currently existing initiative groups, which are financed by the University of Vienna, both underline the importance of doctoral students creating networks and focusing jointly on a topic under the guidance of several supervisors. Last but not least, individual doctoral grants which are awarded on a competitive basis aim to support the implementation of individual projects. The variety of options reflects the cultural diversity of different research areas, which underlines the need to set up multiple forms of promoting young academics and oppose the trend towards homogenisation.

3.1.6 The Third-Party Funds Strategy and the Innovation Strategy

The third-party funds strategy

The University of Vienna regards the successful acquisition of third-party funds as a sign of its competitiveness. Based on on-going, often individual research projects, the application of third-party funds is aimed at acquiring additional resources as a basis for conducting research on a specific topic, facilitating cooperation schemes within the University and beyond, and carrying out topic-oriented guidance for young academics. In this context, the University of Vienna mainly attempts to acquire national and international funds which are granted as the result of an international peer review process. But it is also supportive to acquiring third-party funds which foster cooperation with the business sphere, with public authorities and with international organisations. Researchers at the University have to work up to the challenge of taking part in a competitive peer review process by which they have their competences permanently examined. Without continuous basic financing of university-based research, however, third-party funds cannot be raised successfully.

The large number of approved individual FWF projects and ERC grants the University has been awarded at the European level testifies to the successful acquisition of third-party funds which the University of Vienna has been able to achieve in recent years. Many researchers at the University are involved in or have initiated EU programmes. In the future, it will be even more important to raise international third-party funds. Success in this field will boost reputation for the researchers involved and for the University of Vienna. Additionally, it helps to improve the visibility of research conducted at the University of Vienna. The focus of third-party funded projects should be more on interdisciplinary research and consequently on combining several disciplines and developing research clusters which focus on certain issues or topics.

Overheads coming with third-party funding are divided fairly between the project leader, the respective department and the Rectorate according to fixed rules.

On the one hand, the overheads of the University are used to cover the management and co-financing costs, on the other hand, to initiate new applications. Third-party-funded projects create research opportunities for young academics. Furthermore, the proven success in the acquisition of third-party funds forms part of the requirement profile in applications for postdoc positions, junior group leaders and professorships today. That is why the acquisition of third-party funding is instrumental in the career development of young researchers. An obstacle in this context is the regulation prohibiting consecutive short-term employment contracts which makes it impossible for the University to continue to employ successful young academics based on contracts of limited duration after six years.

The innovation strategy

The University regards itself as a laboratory of innovation stimulating the development of society and economy. It is by this capacity that the University fulfils its responsibility towards society. Its innovation strategy therefore aims to strengthen the links between the University on the one hand and business and society on the other to ensure that innovative ideas find their way from the University to business and society. At the same time, the University is willing to cooperate with the business world and societal organisations offering its research capacities to test innovative ideas for their suitability and open a dialogue on the possibilities to further develop them. Only if University and society embark on a process of open dialogue will solutions to the major challenges of our time be found. Only if University and business cooperate, is it possible to merge the competence pooled at the University and in business for mutual benefit.

The University owns the rights to inventions of its employees and is entitled to exploit these rights in the best possible way. It pursues the goal of pooling exploitation activities in cooperation with other universities. At the same time it strives to take the inventors' interests into account and create a climate which is beneficial for the appreciation of invention achievements as a special form of scientific excellence. The University's share in the proceeds generated by inventions is used, first and foremost, to finance additional exploitation projects (such as the initiation of cooperative research projects, support to bridge financing for projects with the specific prospect of exploitation or prototype development) and to establish an exploitation agency in cooperation with other Austrian universities.

Patents are not an end in themselves. The increasing number of registered or issued patents is not a parameter of success. But they are a criterion for the willingness of the University to cooperate with society and business and should be appreciated as such. Except for the exploitation of patents, intellectual property generated at the University should be used for follow-up projects in the researcher groups, whether with or without external partners. Start-ups are being supported as part of a joint programme together with other universities by providing external funding. The transfer of academic knowledge generated from research at the University to the process of exploitation should be appreciated as much as the generation of knowledge itself.

3.1.7 Promotion of Interdisciplinarity

To promote interdisciplinary research, the University of Vienna has created the instrument of the research platform, which has proven its success in many respects. Research platforms aim to enhance cooperation beyond the boundaries of faculties and departments. They counteract the demarcation of institutional borders between the faculties. Research platforms are set up at the initiative of individual researchers or research groups. They are advertised by the university leadership and established as a result of an external peer review process on the decision of the Rectorate. Their task is to pursue research on issues which can only be explored in an interdisciplinary manner. They are supported by the University for a maximum duration of six years to a degree that needs to be corroborated according to the subject matter. They meet their task particularly by initiating and preparing clusters of excellence and projects which demonstrate their sustainability and success by acquiring third-party funds, thus becoming increasingly independent from financial support of the University. Research platforms are expected to have successfully acquired competitive third-party funding after three years at the latest. After six years, successful research platforms should either be integrated into one of the participating faculties as a sub-unit or institutionalised between the participating faculties.

Since 2008, the Forum for Interdisciplinary Dialogue (ID) at the University has brought together researchers with the objective of promoting the still underdeveloped cooperation between the humanities, the social and the natural sciences. It is particularly important that related initiatives not only involve those University of Vienna researchers who are already experienced and established but also provide a platform where young researchers are able to try out, organise and implement interdisciplinarity at an early stage in their academic career.

3.2 Implementation of the Core Task of Teaching

3.2.1 Framework Conditions

Being the country's largest educational institution, the University of Vienna bears responsibility for 91,362 students (as of 15 Dec. 2011) who are currently enrolled in 56 bachelor's, 117 master's, 4 diploma and 11 doctoral programmes. It offers the most comprehensive range of study programmes in Austria in terms of numbers and subjects. In view of the number of students, it faces the challenge of further developing a future-oriented range of studies, offering its students good student-teacher ratios and thus making it possible for them to achieve a high-quality qualification.

In recent years the University of Vienna has reached its limits in terms of funding of study programmes. In some cases continuously increasing student figures have had the result that student-teacher ratios are unfavourable for students while putting great pressure on teachers. Those study areas of the University of Vienna which boast an especially high number of students fall well short of the international standards in the quantitative measurement of student-teacher ratios. Being faced with large increases in student figures in recent years, universities have drawn attention to this development. As long as no fundamental decisions are taken at the political level, any improvement measures within the University can only be implemented to a limited extent and where so, they can merely be provisional.

On the assumption that the current legal framework governing access to university studies is maintained and the influx of students continues, additional long-term funding will be needed to make a lasting improvement in student-teacher ratios in fields of study which are in great demand. In the future the quality of education can be guaranteed only by employing additional qualified staff at all levels and improving the situation regarding availability of rooms and technical equipment.

Unless the financial resources for universities are adjusted in the near future, measures will have to be taken which specify, for the individual study areas, those capacities within which high-quality education can be offered using the existing staff and resources. Under these conditions, procedures need to be established which aim to regulate admission to universities also with a view to capacities, whereby they are applied before the beginning of a study programme or after an initial phase in the form of performance assessments in the first part of the study programme.

The University of Vienna's starting point in study and teaching (cf. chapter 2.2) requires the introduction of new financing and planning instruments, such as teaching-capacity-based funding and mutual commitment in the relationship between students and the University. This would help make the Government's requirements for universities clearer and more transparent than they have been in the past, which would then be reflected in the corresponding available resources.

3.2.2 Objective: Using the Opportunities Offered by the Bologna Framework

The University is committed to the objectives of the Bologna framework and will use the next years to energetically pursue and fulfil them as well as to create a shift in the studying, learning and teaching culture (from teaching to learning).

By implementing the Bologna framework, the University of Vienna has accepted the challenge of positioning itself in the international educational area as an attractive academic establishment in cooperation and competition with other Austrian and foreign universities.

Recent years have been characterised by the conversion of diploma studies to bachelor's and master's programmes in line with the Bologna framework in order to implement associated objectives such as student- and learner-centred teaching, mobility and individual educational pathways, and a higher number of tertiary degrees. Meanwhile the benefits of the changes have become tangible in practice. A more conscious approach to learning, for example, has proven a major reference point for improving teaching. In addition, the advantages of a larger choice for students after the bachelor's degree are coming to light. After all, students who do not want to meet the requirements of autonomous academic work are also provided with a basic academic education and a first academic degree. Likewise, it must be noted that not all the structuring possibilities associated with the objectives of the Bologna framework have already been taken up and used in the first round. Diploma studies, which are expiring at the same time, are currently also tying up resources to structure the University's range of studies. In the foreseeable future it will be possible to direct these resources entirely into new study programmes. Therefore, with the initial curricular conversion phase having been largely completed and the first student age groups having gone through a curriculum, further enhancements of curricula and their implementation are expected to be achieved in the next years incorporating these experiences.

Research-led teaching

The University of Vienna will continue to pursue the objective of structuring its programmes in a way that students and teachers become partners in a joint learning process on the basis of research-led teaching. Key ele-

ments of teaching are the latest research findings as well as participation in research processes which lead to these findings. From the viewpoint of the University of Vienna, the close link between research and teaching constitutes the major characteristic of university-based studies.

The University of Vienna is committed to practising research-led teaching from the beginning onwards, i.e. including in bachelor's programmes. It is true that the initial stage of an academic study is marked by the teaching of shared bases and well-founded knowledge, but exemplary learning, for instance, offers the possibility to integrate the latest research from the beginning onwards. The intensity of the students' contact with research and their own involvement in it increase progressively from one study level to the next. With their ideas and input, students contribute to further developing research, especially in master's and doctoral programmes by researching new topics and formulating innovative knowledge.

Pre-professional education

By offering high-quality study programmes, the University of Vienna aims to enhance the students' opportunities to secure themselves an appropriate position in national and international labour markets. Therefore it is necessary to specifically focus the development of studies on the graduates' ability to manage and design their professional life and (continuing) education and training. As a rule, universities do not offer any specific programmes in the narrower sense that are geared towards certain professions, but aim to educate well-qualified, methodically adept graduates who are able to think independently and adjust themselves to the requirements of the world of work and the labour market.

When developing curricula, pre-professional education means to focus on the future graduates' potential labour market, to obtain information and data of relevance of the labour market, and to accept feedback from graduates and human resources managers.

For teachers, the basic principle of pre-professional education is to present academic knowledge in a subject-related context in conjunction with possible professional fields and areas of practice. The selection of teachers needs to include people from the non-university environment with relevant professional experience who introduce their professional practice into the study programme.

Feasibility of study curricula

The focus of the study programmes should be on the students, for whom content, outcomes and requirements as well as forms of teaching and learning should be defined. With its study programmes, the University of Vienna wants to help students discover the world of academia and research and also aims to teach them to become a part of this process themselves. When setting up new programmes and adapting existing ones, the prime objective is to specify what outcomes a study programme pursues and what knowledge and skills graduates should have.

When further developing its curricula, the University of Vienna ensures that these are formulated clearly and concisely for students and teachers and furthermore that

the outcomes of the study programmes can be achieved with appropriate learning input and efforts. The University itself expects students to pursue their studies autonomously while observing a culture of mutual commitment and supports them in this process through the teachers' instruction and with advisory and service units such as the Student Point and decentralised StudiesServiceCentres. Mentoring programmes, in which students in more advanced semesters support new entrants, play a central role particularly in the initial stage of studies.

The development of curricula needs to take into account that employed students have the option to complete study programmes on a part-time basis. The organisation of teaching should take into account the students' different life situations and also allow for teaching at times of the day, week and/or semester which are outside usual teaching hours insofar as this is necessary, demanded and affordable financially and in terms of staff.

Study feasibility is also improved by presenting curricular regulations and the individual measures related to the organisation of studies in as simple a form as possible and communicating them in a transparent manner. Central information and communication platforms aim to ensure that students obtain all the information of relevance for their studies in a timely and reliable manner.

Modularisation and individual development opportunities

The bachelor's and master's programmes at the University of Vienna have a modular design. By combining lectures into modules with module outcomes, contents are brought more into line with their context. It is necessary to specify the outcomes which graduates of the individual module should achieve. In this connection, ECTS credits represent the parameter for the input required by students to complete the module successfully.

For teachers, modularisation is tantamount to gearing their lectures towards the outcomes of the module they teach. Teaching aims to help students achieve these programme outcomes. At the same time, the components of a module need to be aligned between teachers to develop standards, avoid repetitions and teach as wide a range of topics as possible. Feedback provided by students in evaluations aims to support teachers in this process.

The University of Vienna strives to continue to provide as much scope as possible for the students to individually plan their studies. Therefore every curriculum specifies clearly which modules comprise a subject's obligatory foundation and which modules need to be completed as options.

Modularisation is not an obstacle for the recognition of credits from other studies or educational institutions in Austria and abroad. Proof of attainment of the learning outcome is decisive for recognition. Students are not generally required always to complete all compulsory module elements.

Equality of opportunity and accessibility for people with disabilities

The University of Vienna regards the differences between students as an opportunity and strives to create a framework so that students with disabilities and chronically ill students in particular can take part in studies on an equal basis and existing barriers can be removed. The University will take steps against any discriminatory measures or behaviour towards students with disabilities and chronically ill students.

Improved equality of opportunity and accessibility for people with disabilities are realised, for example, by awareness-raising measures for teaching staff, by providing information about the right to alternative assessment methods for students with disabilities and by expanding the range of services and the available information for students with disabilities and chronically ill students.

The Student Advisory Board 'Accessible Studying' will be continued in the next semesters with the goal of further improving attendance of students with disabilities and chronically ill students and obtaining direct feedback about the planned measures and suggestions for improvement.

Mobility

Education is international. Therefore it is a major goal of the University of Vienna to intensify the mobility of students and teachers. As far as financially possible, the University of Vienna facilitates and supports periods of study at partner universities, for example as part of the Lifelong Learning Programme of the European Union, stays abroad for the purpose of writing a master's or doctoral thesis, presentations given by doctoral students at international conferences or research stays of young academics at the world's best research institutions in the respective research area.

The range of studies provided by the University of Vienna must be designed in such a way that stays at international educational institutions as part of a mobility programme can be integrated into every study programme (horizontal mobility). The practice of recognising achievements rendered at other educational institutions should serve to meet this objective.

With the content of its bachelor's and master's programmes the University of Vienna aims to make it possible for its students to prepare themselves successfully for acquiring further degrees also at international educational institutions. Similarly the master's and doctoral programmes of the University of Vienna need to be attractive

particularly for students who have acquired their first qualification abroad (vertical mobility).

Expansion of the multilingual range of courses

The University of Vienna strives to further expand its multilingual range of courses, particularly also to set up master's programmes which are held entirely in one foreign language or several languages. This development is boosted in particular in areas which are highly attractive to international students and where students and researchers have already created or are planning international networks. To ensure that more and more courses can be held in foreign languages it is also necessary that teachers have linguistic competence, which is promoted by their participation in further and continuing education as well as by appointments of professors from non-German-speaking countries.

Cooperation projects in study and teaching

One goal in study programmes which are also provided by any other university in the Vienna area and characterised by high operating and material costs (equipment, laboratory facilities, operating resources) or relatively low student and/or graduate figures is to continue and intensify cooperation projects between these research and educational institutions. In areas with high demand for equipment or where subject-related synergies exist due to respective special focuses – such as in the master's programmes Chemistry and Materials Technology on the one hand and Bioinformatics on the other – the range of studies benefits if the University of Vienna offers this programme from the beginning onwards in cooperation with other universities in the Vienna area.

In the coming years, the University of Vienna will continue its cooperation in teaching with partner universities. This relates to study programmes at master's level where new profiles can be opened thanks to international cooperation in teaching (joint programmes or cooperation projects). Pooling the core content competences of the involved partner universities aims to result in new, innovative study programmes that are unique across Europe and contribute to developing the European Higher Education Area and internationalising the range of studies.

3.2.3 Implementation of Objectives

Curriculum development

The development of curricula is among the major tasks of a university. These form the decisive framework for studying and teaching and the common point of reference for students and teachers. Therefore curricula need to be examined at regular intervals to check their quality and that they are up to date. Curriculum development is a process which needs to be initiated repeatedly. Since curricula are of central importance, developing them must also be one of the key organisational processes at the University of Vienna, and here the Senate and the Rectorate both play a role, in close cooperation with the faculties.

The University of Vienna is committed to establishing more of a culture of quality in curricula. In the process of curriculum development, special attention needs to be paid to the initial phase, in which the framework conditions for developing or changing curricula are laid down. Before curricula are completely formulated, the objectives of their development and revision, their content focuses, the personnel-related and budgetary framework to guarantee appropriate student-teacher ratios and the capacities required for this are specified. This is already done at an early stage and leads to joint written specifications by the Senate and Rectorate to ensure that a higher degree of planning certainty is created for all parties involved in the curriculum development process.

External experts' opinions (such as from related disciplines and alumni/alumnae, potential employers) also need to be incorporated in the curriculum development process.

Any decisions about phasing out existing study programmes also need to be taken according to the mentioned criteria. The possibility of setting up new study programmes depends on the development of the budgetary framework conditions. These framework conditions are largely influenced by the Federal Government in the form of performance agreements and legal provisions. The quality of the available studies can no longer be maintained if the number of students rises while the budget remains constant or declines. Such a development damages Austria as an academic, scientific and business location. It is necessary to ensure that the financial resources are available to develop and offer innovative new studies as well.

It is envisaged to conclude a cooperation agreement for studies set up jointly with other educational institutions before starting with curriculum development. This agreement must set out the cornerstones of cooperation which also need to be considered in the course of curriculum development. During the term it is possible to specify provisions of the cooperation agreement in greater detail. This requires approval by the respective rectorates of the universities, however.

Bachelor's programmes

The bachelor's programmes of the University of Vienna aim to provide students with academic core and basic competences as well as with the competence to solve problems by applying academic methods. Another objective of bachelor's programmes is to familiarise students with the basic content and methods of a subject. Exemplary learn-

ing enables the implementation of research-led teaching in a form that is specific for the respective subject.

On the one hand, bachelor's programmes provide pre-professional qualifications as well as professional qualifications, on the other hand they aim to lead students either towards subject-specific in-depth or interdisciplinary master's programmes, both at the University of Vienna and at other educational institutions. With a view to graduates of bachelor's programmes who enter the labour market, the development of curricula requires a thorough analysis of the labour market and of the demands graduates have to face.

The University of Vienna pursues the objective of safeguarding appropriate student-teacher ratios in bachelor's programmes. Particularly at the beginning of studies, however, the situation is very tense for students in some fields of study which are in great demand. This puts much pressure on students and teachers alike. To tackle these difficult framework conditions, the University of Vienna is developing various measures that help students and teachers cope with this situation more easily. The University supports new entrants by offering mentoring and tutoring programmes in many study areas. In these programmes, students in more advanced semesters pass on their knowledge and experience to new entrants as mentors and tutors, who in this way learn to communicate about the major content of their subjects. In addition, the University transmits lectures to other lecture halls and learning platforms. Teachers are also supported in the preparation of demanding multiple-choice examinations which are appropriate for the respective subject. The use of e-learning/blended learning methods has meanwhile become standard in many areas of the University of Vienna and is continually developed both technically and didactically.

All bachelor's programmes of the University of Vienna include an introductory and orientation period (according to section 66 of the Universities Act) for first-semester students. This period aims to give students an insight into their respective programme and help them assess if the course contents meet their personal expectations and whether they can meet the programme requirements.

By providing 'extension curricula' (comprising 15 or 30 ECTS credits each) the University of Vienna implements its task of imparting to students introductory basic knowledge in an additional subject area. Extension curricula meet the students' educational interests and serve to develop pre-professional education by facilitating the acquisition of competences which are not directly associated with the selected subject (in thematic areas such as business, law, communication, globalisation, new media, computer science, psychology). In addition, extension curricula can be used with a view to subsequent enrolment in a master's programme to enhance vertical mobility and provide students with the fundamentals of a master's programme which is not directly connected in terms of subject area. When designing extension curricula the differences in background between students from different disciplines need to be considered. If necessary, the profile of existing extension curricula needs therefore to be enhanced. The introduction of extension curricula is limited to three years, with decisions about renewal taken on the basis of an evaluation for every individual case.

With 'alternative extensions', students have the possibility to independently compile their own study contents from available subjects. In bachelor's programmes that feature extension curricula, this option comprises a total of 15 ECTS credits and it is open as part of the existing courses and as long as places are available.

Master's programmes

Master's programmes are developed in accordance with the University's research profile. They already integrate students actively in ongoing research projects and therefore constitute greater specialisation than bachelor's programmes. Depending on the requirements of the subject and the expected outcomes of the study, they can either have a more in-depth disciplinary or also an interdisciplinary design. Based on their profile and the quality of their content and structure, master's programmes aim to be attractive particularly to international students as well.

The University of Vienna aims to take advantage of the opportunities of the Bologna framework here by promoting topic-centred master's programmes with an interdisciplinary orientation, thus improving permeability for students. Accordingly, it is possible to set up an interdisciplinary master's programme to follow several disciplinary bachelor's programmes. This enables studying where students who come from different disciplines (if necessary, supported by extension curricula) are familiarised with a range of themes in a multidisciplinary way and acquire more in-depth knowledge with expert representatives from different disciplines. Even in a financially difficult situation the University of Vienna intends to enable new, above all interdisciplinary master's programmes to be set up, which in times of budgetary bottlenecks will be financed by reducing the other available study programmes.

Graduates of master's programmes are expected to be able to work on academic topics independently. Therefore master's theses should clearly reveal that candidates meet these requirements; at the same time it is within the scope of responsibility of their supervisors to define the selected topic in a way that the theses can be prepared within a framework of some 30 ECTS credits or six months of full-time study.

Teacher education programmes – the Centre for Teacher Education

In the next few years it will be of utmost priority for the University of Vienna to further develop its teacher education programmes. Well-qualified teachers are of decisive importance for the next generation's school-based education because, with their teaching, the course is set for the future of these young people and consequently for society on the whole. Teachers also have the task of inspiring enthusiasm for lifelong learning and preparing future students as well as possible for university entry. Therefore top-quality teacher education based on academic foundations is of key importance.

The University of Vienna is the largest institution for teacher education in Austria. It offers a wide range of 26 subjects. The fundamental prerequisite for the acquisition of the teaching diploma is that teachers are optimally qualified in the subjects' contents and methods in line with academic standards. The University ensures that high-quality academic education is provided to students in the different subjects by its academics while the diversity of subjects entails the possibility of creating stronger networks between them.

In addition, students need to acquire academic-level educational competences as preparation for work at schools; these competences are imparted by in-house academics based on current research in university-based studies.

Other required competences include an appropriate teaching style for pupils in the subjects' contents and methods which are developed in subject-specific didactics. By setting up a cross-faculty platform named Theory and Practice of Subject Didactics, the University of Vienna has created a prerequisite for intensifying research and teaching of subject-specific didactics across disciplines, as this is only possible at a university that offers a wide range of subjects.

This makes the University of Vienna an institution where it is possible to offer and further develop all of the various pillars on which teacher education rests in research and teaching.

The University of Vienna is committed to further developing university-based teacher education in terms of content, didactics and organisation. To implement these plans efficiently it is planned to establish an organisational unit with emphasis on teacher education. Even though basic political decisions in favour of comprehensively restructuring teacher education programmes have not yet

been made, the University itself can and will take steps to improve the organisation of teacher education and set up a Centre for Teacher Education.

Furthermore it is an objective of the University of Vienna to offer teacher education programmes according to the Bologna framework and it expects policy-makers to create the legal framework for curricular changes. Teacher education will be provided at the top academic level. In any case, the entire education of (lower and upper) secondary school teachers until the master's degree will be covered by the University. To enhance permeability, academically oriented graduates will be given the option to qualify for teacher education programmes by acquiring qualifications in subject-specific didactics, and educational and practical training at school. In addition, the University of Vienna supports teachers at school who are enrolled in doctoral programmes in line with the lifelong learning principle, to update teaching and learning methods as well as the status of their academic knowledge.

In addition to imparting to students a theoretical foundation, provisions need to be made for their contact with pupils and their use of the acquired competence at school on a trial basis. The previous separation of teaching practice from university-based academic pre-professional education will be replaced by a new cooperation scheme between the University, the school sector and other institutions of teacher education.

The University is both willing and interested in cooperating – or continuing cooperation – in teacher education with other educational institutions if the objective of improving the quality of initial and continuing education and training can be achieved. This cooperation refers particularly to university colleges of teacher education and schools. With their expert knowledge, teachers make a major contribution to the University's available programmes in subject-specific didactics and practical training at school.

In line with the lifelong learning principle, the continuing education of teachers will be developed into an element of university-based education and study programmes as universities have the related competences in all required areas and there is the possibility to pass on new academic knowledge directly from scholars to teachers. But the realisation of this objective will be dependent on the implementation of changes to the structure and organisation of the current form of continuing teacher education to ensure that universities can act as provider institutions for continuing education and training.

Doctoral programmes

As the University of Vienna aims to strengthen its role as an internationally attractive centre for young, innovative academics, particularly from Central Europe, one of its major objectives is to boost doctoral programmes. As part of the implementation of the three-cycle Bologna framework, doctoral programmes have new significance in that they not only contribute to the profile development of the University but also act as the interface between the European Higher Education Area and the European Research Area.

With their conversion in the academic year 2009/10, doctoral programmes underwent a comprehensive curricular and organisational reform, with university-wide foundations created for a further development of doctoral programmes. Curricula which apply to all faculties and centres have some aspects of institutional quality assurance in common. These common features include that doctoral students submit their dissertation project based on a proposal, present the project publicly in front of a Doctoral Advisory Board comprising subject representatives and that a dissertation agreement is concluded in which the rights and obligations of all parties involved are laid down.

While introducing new doctoral programmes more focus was put on improving the quality of supervision of doctoral students. The formerly bilateral relationship between supervisor and doctoral candidate (one-on-one supervision) has been replaced, wherever appropriate in terms of the subject and as far as possible, with the student's integration into a team comprising several academics. In this context, more attention should be paid to interdisciplinary networking possibilities and the establishment of interuniversity and international supervisory teams. In the course of their study, doctoral students prove their abilities as independently researching academics.

The Centre for Doctoral Studies has been set up at the University of Vienna to provide support, jointly with the directorates of doctoral studies, to help doctoral students pursue and complete their dissertation projects successfully. As well as subject-specific education, doctoral students are also given the option to acquire abilities and additional qualifications which are of relevance both for the profession as an academic and in other functions outside the world of higher education and research, thus enhancing the opportunities of graduates in the European and international labour markets (such as foreign language skills required for subject-related academic work, time management, presentation techniques for research findings, and skills in the fields of project, research and knowledge management, preparation of project proposals, higher education didactics).

Continuing education and training

Alongside research and teaching, continuing education and training comes increasingly into the focus of university tasks. In connection with lifelong learning and con-

version to the three-cycle study system there will be increasing demand for academic continuing education and training among people who, after many years of professional activity, see the need to deepen and expand their competences. Close links with the professional fields of future graduates are regarded as a central building block of a modern university and will increasingly be developed strategically at the University of Vienna.

In society, universities are carriers of research-led and state-of-the-art knowledge. Continuing education and training programmes form an interface between theory and practice. Above all in the continuing education and training sector, the University of Vienna maintains cooperation ventures with partner institutions from various fields to make this interface a productive source both for the University and for partner institutions from the field of practice. For the teachers of the University of Vienna, its commitment in continuing education and training programmes also serves as a form of active knowledge transfer: contact with practitioners who provide insights into different areas of practice from their perspective can be of added value for academics as this gives them impetus for teaching and research activities.

By expanding its range of educational programmes based on demand, the University of Vienna will be able to meet the growing need for university-based continuing education and training. Therefore the University of Vienna will pay special attention to developing university-based continuing education and training courses which are based on research-led curricula tailored to the world of work and the graduates of which are awarded top-quality, internationally comparable master's degrees. In addition, the University of Vienna is developing subject-specific continuing education and training modules of shorter duration (certificate courses). In this way, the University of Vienna's continuing education and training events can be integrated by participants as modules into a self-directed process of lifelong learning.

The range of continuing education and training programmes of the University of Vienna needs to build on its strengths and differs significantly from other providers. In this way, the University is able to incorporate its international networks by involving international experts and to make its programmes offered attractive.

According to legal provisions, continuing education and training programmes need to be budgeted so they cover their own costs. Here the indirect costs of the University of Vienna need to be considered as well. The Postgraduate Center of the University of Vienna supports academics in the different stages of the establishment and implementation of postgraduate/continuing education and training programmes (such as in the development of these programmes, the setting-up of the organisation, in administration and advertising). The goal is to provide professional services which relieve academics of the burden of organisational and administrative tasks, which need particular attention especially in this area.

Alumni/alumnae

The University of Vienna considers it important to establish a relationship with its graduates which extends beyond their period of studies. It wants to integrate the graduates' ideas and abilities, experiences and knowledge into discussions and processes at university level.

To maintain contact with them after graduation, together with faculties and fields of study the Alumni Association develops various initiatives and programmes that enable the exchange of knowledge and experience between the University and its graduates. With their practical experience, graduates are able to open up perspectives for the professional future of students. This knowledge transfer is incorporated into study and teaching practice. Graduates are also able to introduce their experiences into curriculum development.

As part of its alumni/alumnae activities, the University provides first-hand information about academic developments to its graduates, thus helping them introduce their expert knowledge into public discourses and enhancing visibility of the significance of academic findings that have been developed at the University for questions and issues related to society.

Consequently, the University and alumni/alumnae enter into a dialogue that is valuable for both sides. The University makes it possible for graduates to take part in academic developments. The graduates are the 'ambassadors' of the University who are interested in it and actively support it even after completing their studies.

3.3 Quality Assurance

Means and instruments of quality assurance

Quality assurance at the University of Vienna pursues the objective of making its continual orientation towards quality and international standards a practical reality. One element of quality assurance is the periodical implementation of evaluations and the integration of results into planning processes. In a more comprehensive sense, quality assurance elements are integrated or need to be integrated into many aspects of the entire discourse within the University: relevant examples include the appraisal of research achievements, personnel-related decisions, particularly in appointment procedures, in curriculum development processes and the continuous improvement of service quality.

3.3.1 Periodical Evaluations

The periodical evaluation of faculties, centres, service units and other administrative institutions is conducted in line with the comprehensive evaluation approach according to which the entire performance combined is subject to a peer review procedure. Based on the experience gathered in recent years, the process will partly be adapted with the objective of improving the relationship between efforts and returns. This need for improvement exists particularly in the evaluation of larger organisational units. Whereas the current process (self-evaluation report, site visits of peers, evaluation report with the possibility of expressing opinions) can be maintained for service units and smaller faculties/centres, an adjustment of the process should be considered in the evaluation of larger faculties/centres: in the course of a five-year evaluation cycle, individual research groups are subject to annual written evaluations by peers from closely related subject areas. The resulting reports are introduced into the planning activities of the respective dean's office and into conclusion of target agreements between the dean's office and the Rectorate. The comprehensive evaluation, which is done every five years, is conducted by subject experts with management experience and is used in particular to globally assess the strategic leadership of the faculty and its research and teaching profile. Special attention is paid to whether the results of evaluations of different research groups have been included appropriately into the planning processes of the faculties and the University.

3.3.2 Quality Assurance in Appointment and Recruitment Procedures for Tenure Track Positions

One of the key elements of the University of Vienna's path towards becoming a leading European research university is the outstanding quality of newly appointed professors. Therefore the organisation of appointment procedures is of utmost importance. The focus is not only on transparent, efficient and quality-controlled procedures but also on the potential of the University of Vienna to recruit the best academics in international competition with other institutions.

As an alternative to appointing a single professor, a special development opportunity may arise if more than one position needs to be filled in a subject area or closely related subject areas at the same time. In this case, the aim is to formulate one single vacancy notice with the respective requested complementary profiles and conduct the appointment procedure in one coordinated process.

A major component of appointment procedures is an active search for candidates. The appointment committee, which is appointed by the Senate, can either search actively for candidates who have not submitted any application and request them to apply or the committee is supported by recruitment officials who must be appointed by the Rector in consultation with the respective dean who should suggest candidates.

The appointment committee is obliged to draw up the appointment proposal based on expert opinions and taking into account the assessment of the various candidates' lectures, subsequent talks and submitted opinions. The decision-making process of the appointment committee needs to be transparent and well-documented.

The Rector is legally obliged to decide which candidate is selected based on the appointment proposal or reject the appointment proposal if it does not contain the most suitable candidates. The Rector's decision is based on a comparative analysis of the candidates' quality with regard to the advertised criteria and on an assessment according to international quality standards which are typically used for the subject, if necessary also involving additional external expert opinions.

Quality assurance elements also play a vital role when tenure track positions are filled and qualification agreements are concluded and assessed. Tenure track positions are usually advertised internationally. The appointment proposal submitted to the member of the Rectorate who

is responsible for personnel issues is prepared by a panel which is chaired by the member of the Rectorate who is responsible for research and comprises the (vice-)dean as well as professors from related subjects. The appointment proposal is based on a comparative international appraisal.

3.3.3 Quality Development in Teaching

Quality development in teaching is a joint task in which students, teachers and decision-makers cooperate in their different fields and which focuses on various levels. In periodical evaluations of organisational units, the range of programmes in the respective field is put up for discussion and, in case curricula are changed, statements are obtained from external subject representatives if necessary.

The graduates' viewpoint needs to be taken into account when curricula are developed and also when the organisation of studies is improved. For this purpose, feedback obtained immediately after graduation is used and efforts are made to also carry out surveys at a later date by maintaining contact with graduates.

In the daily practice of the organisation of teaching, importance is attached to feedback by students and staff members, which, for example, is also expressed in the bodies designated for this purpose. At the level of individual lectures, students carry out regular evaluations in a three- or five-semester cycle.

3.3.4 Further Development of Processes to Assess Research and Publication Achievements

Regarding the assessment of research and publication output there is demand for internationally recognised standards which can be applied to the University's various disciplines in addition to the peer review procedure.

A university-wide collection of data is indispensable for documenting research at the University. On this basis a university-wide and faculty-specific qualitative and quantitative analysis is conducted.

Uniform publication standards and plausible achievement parameters need to be further developed for the University's academic disciplines against the background of the respective subject culture, methodology and school of thought. By taking advantage of these standards, research and publication strategies can be used to build on strengths and enhance the international visibility of subjects.

3.4 Staff Structure and Human Resources Development

The University of Vienna lives on the talents, ambitions and qualifications of all individuals who are active in it. This comprises teachers and researchers equally as well as the general university staff and students. All of them are responsible for its functioning and further development, considering the necessary differentiation of functions which is the result of a system of division of labour.

The recruitment of new staff, the higher and further qualification of existing staff, the workload- and performance-oriented distribution of staff positions within the University and the development of professional careers for the academic as well as the general university staff are key human resources policy measures which are of major importance for a strong university. The University of Vienna employs more than 9,000 people or over 5,000 calculated as full-time equivalents. The University of Vienna therefore counts among the largest employers in Vienna. If only on account of this size, human resources policy measures always need to be generally applicable and examined carefully for their financial effects due to the number of people concerned.

3.4.1 Strategic Human Resources Planning

Strategic human resources planning constitutes a central element of the University of Vienna's further development in the next few years. Strategic human resources planning includes the anticipatory, needs-oriented conception that serves research and teaching objectives and concerns the filling of staff posts that have become vacant or are newly created. The employee categories enshrined in the collective agreement for university staff, their function profiles and tasks form the basis of human resources planning. Experience has shown that professorial posts are discussed in detail and much attention is paid to them in the course of strategic planning within the University. The goal is now to intensify strategic human resources planning of all the other positions of the academic and general university staff.

Specific target staff appointment plans are discussed jointly with the academic and administrative organisational units and agreements are concluded with the Rectorate about medium- and short-term strategic human resources planning. Selected aspects which are of relevance in this strategic human resources planning include the following:

- Expansion of tenure track positions: The goal is to create tenure track positions where existing staff positions become vacant, particularly in organisational units (faculties and centres) which reveal particular research

potential and where the share of permanent staff is below average. Tenure track positions will be filled gradually to avoid a cohort effect, which would bring about the result that the majority of tenure track positions of an organisational unit will not become available for reappointment for several decades. At the same time, fixed-term predoc and postdoc positions aim to ensure that flexibility in human resources policy is maintained or established.

- Task-oriented employment of the general university staff: The collective agreement has created a number of task-specific profiles for the general university staff (administrative staff by category). The implementation of the collective agreement needs to be continued in this field, while the planning of employment of the general university staff is to become more task-oriented and, traditional organisation principles (linking with professorships) must be questioned. The future work requirements also need to be met (laboratories with high-tech equipment, increased application of IT, further professionalisation in the services for students). The objective must be to ensure higher qualification of the general university staff.
- Strategic planning of lecturers and senior lecturers: It is necessary to implement strategic planning that aims to employ lecturers and senior lecturers in line with the functions required. This planning is subject to a formalised exchange of views between the persons responsible and the Rectorate.
- An objective must be to employ students, including doctoral candidates, to an increasing extent as part of formalised collaboration by students to support teaching and research.

3.4.2 Human Resources Development

Human resources development comprises all measures to raise the staff's potential and enhance their qualifications. Due to the continually changing tasks in jobs, work organisation and work equipment, this requires a continuous renewal process for skills and knowledge. The target-group-oriented and topic-specific seminar programme of university-based human resources development with over 200 events and an in-house reach of some 1,600 employees per year will increasingly be used for this.

In the coming years, special activities are expected in the following areas:

- Further and higher qualification of the general and academic university staff: The University supports the employees of the University of Vienna by organising initial and continuing education and training as part of a comprehensive human resources development policy which is geared towards current demands. The objective is to professionalise staff members and therefore qualify them for a wider range of tasks within the University as well as to renew work- and workplace-specific qualifications with lasting effect. The following can be named as examples for such special activities: development of support programmes for young scholars; further qualification of teachers; enhancement of foreign language competence; optimisation of apprenticeship training; and accompanying measures for holders of tenure track positions.
- Welcome seminars for newly appointed professors: Executives take on major responsibility for the development of their organisational units but also for individual employees. The goal is to prepare them for their task in a targeted manner. It is planned to organise events for newly appointed professors, the attendance and completion of which is advised by the leadership of the University. In the form of modules, such events aim to inform about research funding in Austria or about labour law, study law, important procedures and work flows within the University or fundamental management skills.
- Quality-oriented enhancement of recruitment processes: Improvements to recruitment processes comprise, on the one hand, the further development and far-reaching standardisation of the texts of vacancy notices for the national and international candidate markets and, on the other, the establishment of quality-oriented procedures to select applicants at all levels.

3.4.3 Gender Equality

At the University of Vienna, gender equality is not merely a statutory obligation but also a key component of the profile of the University's culture. For the University of Vienna, the promotion of gender equality between women and men is a key concern. Objectives include a balanced ratio between women and men at all levels; lasting integration of gender equality as a guiding principle of the University's culture; and equal starting conditions and access opportunities for women and men. The objective of gender equality is integrated in all of the University's activities and enshrined as a universal guiding principle.

Special measures planned until 2015 include the following:

- Bridging potential career breaks: Experience of recent years has revealed that female academics have been catching up in the predoc sector and are falling behind in the postdoc sector. This drop is frequently connected with biographical events (birth of children but also care for other family members) that make it difficult for them to return to the University or continue their ca-

reers. Therefore it is necessary to evaluate the back-to-research grant, which was introduced in 2011, and improve the organisation of care provided to children of preschool age and, in addition, when a parent is unable to fulfil care obligations for a short time (participation in conferences, research trip, stay abroad). The Berta Karlik Programme to improve the appointment opportunities of highly qualified female academics needs to be further developed based on experiences from the first round.
- Awareness-raising: The regular and statistically sound examination of women's shares at the different levels of the University of Vienna and analyses of gender pay gaps aim to enhance awareness-raising about existing barriers and disadvantages. In addition, existing procedures against discrimination, bullying and also sexual harassment will be evaluated and improved if necessary.

3.4.4 Human Resources Administration and Human Resources Reporting

A characteristic of the University's staff structure is its pronounced legal and functional differentiation. The University employs civil servants, transferred non-tenured civil servants, white-collar employees, apprentices, professors, assistants on tenure track positions, assistants with fixed-term contracts, tenured assistants, technicians, administrative personnel and many other people who can be distinguished by legal and functional categories. All of them need to be 'administered' in a legally correct, efficient and service-oriented manner.

In the period until 2015 the following special focuses need to be considered in the field of human resources administration:

- Intensification of quality management: Apart from short-term increased quality control, both the effectiveness and the efficiency of business processes and work flows are examined in the medium and long term. One particular goal is to enhance IT support for business processes and the standardisation of work flows while maintaining service orientation.
- Further development of special business processes: The goal is to improve IT-assisted recruitment both for applicants and the employees of the University of Vienna. Similarly, reporting needs to be further developed to provide on-demand target group-oriented and topic-specific information about the staff structure and human resources development.
- Support in the acceleration of proceedings related to work and residence permits: Experience shows that issues related to work and residence permits (visa, residence permits of third-country nationals, etc.) often take a long time, which on the one hand is due to the complex legal matter, but on the other hand also to inadequate interfaces between public authorities in Austria and abroad. The University of Vienna lobbies for accelerating and simplifying administrative procedures in cooperation with the public authority which is responsible for work and residence issues in Vienna.

3.5 International and National Cooperation

From the tradition and self-conception of the University of Vienna comes the objective of being an internationally visible and attractive university which can stand its ground in the international competition for staff, students and research funds while being seen as a stable, attractive partner in research networks. Here the internationalisation of research is not an end in itself, but a part of a comprehensively conceived quality assurance policy. Research findings need to be communicated to the outside and researchers need to face up to the criticism of international forums. It is the university leadership's task to support personal interactions between researchers and teachers which go beyond national borders, exist in large numbers and are based on initiatives by the university members, to put these interactions into an institutional framework and secure them in the longer term.

In addition, internationalisation also needs to be further developed in the field of teaching. On the one hand, this means creating possibilities for students to complete parts of their studies at a university abroad. On the other hand, internationalisation also comprises the admission of students and teachers from abroad to the teaching practice of the University of Vienna. In both cases, internationalisation has the result that students learn new educational content and views and are thus encouraged to reflect on the relativity and cultural features of the knowledge they have been taught. The university leadership and the competent service units again face the task of promoting internationalisation processes, supporting them organisationally and, if necessary, securing them on a contractual basis.

However, cooperation ventures should also be promoted in the national context to make better use of infrastructures and replace overlaps in research and teaching which have been identified or can be anticipated, by entering into cooperation schemes, thus achieving a wider perspective and quality improvement. Here it is the university leadership's task to secure existing cooperation ventures at the level of researchers and teachers by putting them into

an institutional framework, but also to open up new cooperation projects.

3.5.1 International Cooperation in Research

In recent years, the University of Vienna has entered into cooperation agreements which apply to the entire University with a large number of renowned universities. At present, 54 university-wide partnerships are in force and are secured on a contractual basis. Furthermore there exist numerous individual partnerships of varying intensity between researchers.

The following special measures can be expected to be taken in the field of research cooperation in the coming development planning period:

- Individual internationalisation by way of funds allocation: The promotion of international cooperation projects at the level of researchers needs to be secured by the provision of financial resources by faculties and centres. This task has been taken into consideration in the new budgeting model of faculties and centres.
- Institutional internationalisation: The goal is to increase the number and intensity of the university-wide cooperation ventures with leading research universities in Europe and beyond.
- Improved documentation: International cooperation ventures at both university and faculty level are entered in a central database to be able to document the geographic links of the University of Vienna. Similarly procedural guidelines have been elaborated which aim to present and explain the individual steps leading to the conclusion of cooperation agreements. Public visibility of both needs to be enhanced.
- Provision of services: It is planned to expand services for academics who come to the University of Vienna within the framework of cooperation schemes but also for guest researchers outside of cooperation agreements. The support granted includes general and specific information; the establishment of connections within the University; advice on visa issues and the search for accommodation.

3.5.2 Promotion of Student and Teacher Mobility

One major objective is to increase the share of students who have completed a part of their studies at a university abroad to complement their studies, improve their command of languages and develop a view that looks beyond Austria's national borders.

The University has entered into some 1,250 ERASMUS agreements relating to a total of 2,500 places (incoming and outgoing). Furthermore there are 50, mostly bilateral individual agreements with some 260 places for students who come to the University of Vienna or study at a partner university. In the winter semester 2011/12, students at the University of Vienna came from 135 countries, the share of foreign students is 24 %, which is a clearly high value also by international comparison, and the share of lectures held in a language other than German increased to almost 20 % in 2011.

In terms of internationalisation in teaching, the following special measures are planned:

- Consolidation of existing ERASMUS partnerships: Consolidation and focussing are envisaged rather than significant expansion of the existing ERASMUS partnerships. New agreements or contractual supplements are planned to be introduced if the treated topics and the compatibility of curricula support them and the observable or expected capacity is or will be high. Any contracts which no longer account for mobility projects will expire.
- Expansion of university-wide bilateral exchange programmes in teaching: The goal is to expand these programmes jointly with renowned universities following discussions with faculties and the persons responsible for teaching organisation if there is interest in several study programmes and there are staff- or content-related interfaces.
- Mobility windows in study programmes: It is necessary to create the option of staying at a foreign university in the curricular design of study programmes. In the fields of master's programmes and doctorate/PhD programmes it is mainly planned to increase (incoming and outgoing) vertical mobility.
- Students with an immigration background: Another goal is to increase the share of students with a background of immigration. This will be pursued, on the one hand, based on a superordinate socio-political perspective, on the other hand, however, to import new knowledge and other worlds of experiences into the everyday life of students. The intended expansion, above all, focuses on teacher education programmes, in which intercultural competence needs to be enhanced, because an increase in the number of holders of the upper secondary school-leaving certificate with a background of immigration is the prerequisite for a growth of university graduates in this group.

3.5.3 Institutionalisation of National Cooperation

Universities have become autonomous and, despite the traditionally good relations at the staff level, are in institutional competition with other universities or non-university research institutions. On account of its scarce resources but also to enhance potential synergies, there is

increasing need to enter into national cooperation ventures for strategic reasons and lay them down at the institutional level.

The following activities need to be intensified specifically:

- Adoption of a cooperation strategy: Development of a strategic programme on further embedding the University of Vienna in cooperation ventures at the national level, including institutional cooperation ventures with other university-based and non-university research and educational institutions while also integrating the recommendations of the experts' report on the Austrian university plan.
- Further development of existing cooperation: Existing cooperation schemes, particularly in fields such as bioinformatics or computational science, high-performance computing, quantum physics and selected fields of the humanities and the social sciences must be further developed. These need to be secured on a contractual basis. Existing examples include the WasserCluster Lunz; participation in FH Campus Wien, the Diplomatic Academy Vienna, membership in the Climate Change Center Austria (CCCA), and the Vienna Center for Quantum Science and Technology (VCQ).
- Cooperation with the Medical University of Vienna (beyond the very successful, jointly operated Max F. Perutz Laboratories) will be strengthened in particular by conducting joint research projects which connect basic and clinical research.

3.6 Infrastructure Planning, Facility Management

The University is undergoing dynamic changes in its studies as well as in its operation. This fact leads to increasing demand for more flexibility in the planning of infrastructure while maintaining uniform high standards. One major target is that the various locations should be organised and equipped in a way to encourage communication and cooperation between experts and to strengthen their research and development activities. The challenge for the University is to combine different areas of expertise so that they achieve the best possible results.

In the next years, the University of Vienna will consistently continue to consolidate its locations. The planning of its infrastructure and locations needs to be ensured,

so that the strengths of the University are increased, the achievement of strategic objectives is consequently supported and the profile of the University is enhanced.

Systems and processes are standardised to increase efficiency, where possible. Services for academics and students, mainly in the areas University Library and information management, are being improved and expanded.

The University is committed to environmental protection and the sustainable use of resources. New buildings and altered buildings are being evaluated by external experts in this respect. In existing buildings, investments are being made in additional equipment to measure and control the consumption of resources to be able to deduce and pursue environmentally relevant indicators. Targeted initiatives aim to encourage university members to think and act with environmental awareness. The objective is to draw up a sustainability report.

3.6.1 Facility and Resources Management

The major objective in the field of facility and resources management is to consolidate the University of Vienna's locations, which currently total around 60. Related planning activities are influenced both by the economic advantages of a geographical concentration and by the conviction that the co-location of related or complementary disciplines is favourable for the further development of academic work.

Isolation of the locations of individual departments and faculties contradicts the idea of a university. It will therefore be gradually reduced as far as possible to facilitate interdisciplinary cooperation by creating larger units and locations. This basic philosophy relates to all disciplines of the University of Vienna, changes in work procedures due to team research also need to be considered in the fields of humanities and social sciences as well as in the natural and life sciences.

As the University of Vienna defines itself as an urban university with locations mainly in the inner districts, the goal is to be concentrated in these districts above all. With the realisation of the new building projects Sensengasse (co-location of the Department of Education, the Department of Linguistics and the Section Comparative Literature; start of teaching and research activities in the winter semester 2010/11) and Währinger Strasse 29–31 (co-location of the Faculty of Computer Science and the Department of Communication of the Faculty of Social Sciences; start of teaching and research activities in the winter semester 2012/13), major steps towards the consolidation of locations have already been taken.

One key project in this connection is the Uni Wien Rossau project, which was launched in the autumn of 2011:

From the winter semester 2013/14 onwards, the building at Rossauer Lände 3 will house the Faculty of Mathematics and the Faculty of Business, Economics and Statistics as well as thematic doctoral programmes and larger third-party-funded research projects, all of which will be able to use rooms there. Modern work and communication spaces for students, academics and administrative staff as well as an optimised and state-of-the-art library infrastructure will be established. The new areas will be designed to ensure there is enough room for expansion and development. In line with this, modern technologies help to minimise operating and maintenance costs.

Sustainable solutions to problems associated with the location Universitätszentrum Althanstrasse I and the rehabilitation of the Faculty of Chemistry buildings have been introduced with priority into the infrastructure road map of the Federal Ministry of Science and Research (BMWF).

Particular attention is paid to modern, multifunctional service and communication areas for students, which means that the University of Vienna is thus consistently pursuing its Student Space project. The key objective of this project is to jointly shape the University as a living space with the involvement of students, further improve the places of learning and research and create more space for communication.

3.6.2 Information Management

Supplying academics, students and administrative staff with the best possible ICT infrastructure (including support) represents a considerable challenge in view of the size of the University of Vienna and the differences in user requirements. In the medium term this will lead to further tightening of existing rules, structures and processes in this field.

In the administrative IT infrastructure, process and system standardisation is being driven forward in terms of hardware and software. The aim is to standardise processes in the central administration across the different service units. Should this standardisation of processes prove successful in service units, the experience will be transferred to faculties. Furthermore, work is ongoing on continuously improving the user friendliness of IT systems.

The intensified standardisation has already been implemented successfully, for example, in the central purchase of IT equipment for service units. This shows that use can be made of economies of scale and best-practice models can be established.

One major point is the further development and expansion of services for students. In this context, successful existing services (such as the u:book sale) are planned to be continued and new services are developed by integrating the users' views and living realities.

In the field of academic IT infrastructure, the key project is the high-performance computer of the Vienna Sci-

entific Cluster (VSC), which is operated jointly with the Vienna University of Technology with the participation of the University of Natural Resources and Life Sciences, Vienna. To remain competitive in the area of supercomputing at the academic level and continue to be able to provide the academics of the University of Vienna with the required computing capacities, it will be necessary to make regular follow-up investments.

In addition, possibilities are being examined of how to make the high-performance computing infrastructure (HPC cluster) accessible to other universities/institutions and students as part of a shared-service centre model, so that in return researchers of the University of Vienna will also get access to the HPC cluster of the Universities of Linz and Innsbruck, which is being set up, on analogous conditions; joint planning of the HPC infrastructure ensures that Austria's researchers have access to different architectures of supercomputing.

3.6.3 University Library

It needs to be ensured in the long term that academics and students are supplied with the academic literature they need as well as media which are of relevance for research, teaching and studies. This also requires the expansion of the digital library. In the e-journal sector, an increased use of on-demand/pay-per-view solutions needs to be examined in order to be economically efficient.

The University of Vienna supports the call by policy-makers for open access to academic publications. It co-operates with national and international institutions and plays an active part in related discussions.

The consistent consolidation of locations, the reduction of locations by merging them into larger library units makes it possible to offer more services to academics and students (such as to prolong the opening hours).

The new service-style tasks for the entire University which have already been set up at the University Library (such as bibliometrics and scientometrics) are being developed consistently and used within the framework of quality assurance.

4. Study Programmes at the University of Vienna

The existing study programmes of the academic year 2011/12 will be modified in the following way (for further details and procedures see chapter 3.2).

4.1 Theology

Study programmes as of 1 October 2011		Modifications planned
Diploma programmes		
Catholic Theology		No date for conversion of the diploma programme in line with the Bologna framework has yet been scheduled.
Bachelor's programmes	**Master's programmes**	**Modifications planned**
Protestant Theology	Protestant Theology	
Catholic Religious Education	Catholic Religious Education	The master's programme in Catholic Religious Education will be expanded to include Orthodox Religious Education and will then be run as a master's programme in Religious Education. The name of the bachelor's programme will also be changed.
		A new master's programme in Advanced Theological Studies will be established, the aim of which is to enable students who have completed external study programmes not oriented towards research to qualify for doctoral programmes in Catholic Theology.

4.2 Law

Study programmes as of 1 October 2011	Modifications planned
Diploma programmes	
Law	No date for conversion of the diploma programme in line with the Bologna framework has yet been scheduled.

4.3 Social Sciences, Business and Economics

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	**Master's programmes**	
Mass Media and Communication Science	Mass Media and Communication Science	A foreign-language master's programme in Communication Science has been planned, but no date for its establishment has yet been scheduled.
Political Science	Political Science	
Social and Cultural Anthropology	Social and Cultural Anthropology Cultural Differences and Transnational Processes (CREOLE; cooperation with international educational institutions)	
Sociology	Sociology Science – Technology – Society	
	Nursing Science (teaching cooperation with FH Campus Wien)	
Business Administration	Business Administration	
International Business Administration	International Business Administration	
Statistics	Statistics	
Economics	Economics	
	Quantitative Economics, Management and Finance	

4.4 Engineering Sciences

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	**Master's programmes**	
Computer Science Business Informatics	Didactics of Computer Science (teaching cooperation with the Vienna University of Technology) Master of International Business Informatics (BIN-NET; cooperation with international educational institutions) Media Informatics Scientific Computing Business Informatics	In the context of establishing the master's programme in Computational Science, the master's programme in Scientific Computing will be reviewed. The joint programme Master of International Business Informatics will be phased out.

4.5 Arts and Humanities

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	**Master's programmes**	
Prehistoric and Historical Archaeology	Prehistoric and Historical Archaeology	
Egyptology	Egyptology	
Jewish Studies	Jewish Studies	
History	History (with alternative focuses) European Master in Women's and Gender History (MATILDA; cooperation with international educational institutions) Women's and Gender History Historical Research, Auxiliary Sciences of History and Archival Studies Global History and Global Studies (cooperation with international educational institutions; ERASMUS MUNDUS) European History and Culture East European History Economic and Social History Contemporary History	In the master's programme in History, specialisation will be possible, for instance, in contemporary history, economic and social history, women's and gender history, global history and global studies, European history and East European history. The programmes in Women's and Gender History, European History and Culture, East European History, Economic and Social History as well as Contemporary History will be phased out. The master's programmes in Global History and Global Studies as well as in Women's and Gender History (MATILDA) will be continued as joint study programmes run in cooperation with international educational institutions. The master's programme in Historical Research, Auxiliary Sciences of History and Archival Studies will be continued.
History of Art and Architecture	History of Art and Architecture	
European Ethnology	European Ethnology	
Classical Archaeology	Classical Archaeology	
Ancient History and Studies in Classical Antiquity	Ancient History and Studies in Classical Antiquity	
Byzantine Studies and Modern Greek Studies	Byzantine Studies and Modern Greek Studies	
Classical Philology (bachelor's programme with internal specialisation: Greek, Latin)	Classical Philology (Greek) Classical Philology (Latin) Latin Philology of the Middle Ages and Modern Period	
German Studies	German Studies German as a Foreign and Second Language	
Dutch Studies Dutch Language, Literature and Culture in a Central European Context (DCC); cooperation with international educational institutions)	Dutch Studies	It is intended to replace the joint bachelor's programme in Dutch Language, Literature and Culture in a Central European Context with a joint master's programme. No date for this modification has yet been scheduled.

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	**Master's programmes**	
Romance Studies (bachelor's programme with internal specialisation: French, Italian, Spanish, Portuguese, Romanian)	Romance Language and Communication Romance Literature and Media Studies Languages and Cultures of Francophone Areas Languages and Cultures of Iberoromania Languages and Cultures of Italoromania Languages and Cultures of South-East Romania	As of the winter semester 2012/13, a master's programme in Romance Studies will replace the current six master's programmes.
English and American Studies	Anglophone Literatures and Cultures English Language and Linguistics	
Scandinavian Studies	Scandinavian Studies	
Slavonic Studies (bachelor's programme with internal specialisation: Russian, Bosnian/Croatian/Serbian, Polish, Slovakian, Czech, Slovene, Ukrainian, Bulgarian)	General Slavonic Studies Bosnian/Croatian/Serbian Bulgarian Czech Polish Russian Slovakian Slovene Ukrainian	
Hungarian Studies	Hungarian Studies	
Finnish Studies	Finno-Ugrian Studies	
African Studies	African Studies	
Near Eastern Studies	Ancient Near Eastern Languages and Archaeology Arabic Studies Islamic Studies Turkish Studies	
Languages and Cultures of South Asia and Tibet	Philosophies and Religions of South Asia Languages and Literatures of South Asia Culture and Society of Modern South Asia *) Buddhist Studies Tibetan Studies	The master's programmes in Philosophies and Religions of South Asia as well as Languages and Literatures of South Asia will be combined to form the master's programme in Languages and Cultures of South Asia. The master's programmes in Tibetan Studies and in Buddhist Studies will be combined to form a master's programme in Tibetan Studies and Buddhist Studies *) For details on the future development of this study programme see the section on interdisciplinary master's programmes subject to availability of funds, below.
Japanese Studies	Japanese Studies	
Korean Studies	Korean Studies	
Chinese Studies	Chinese Studies	
Musicology	Musicology	

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	**Master's programmes**	
Linguistics	General Linguistics: Theory of Grammar and Cognitive Linguistics Applied Linguistics Comparative Indo-European Linguistics and Celtic Studies	The master's programme in Comparative Indo-European Linguistics and Celtic Studies will be run as a master's programme in Indo-European and Historical Linguistics.
Comparative Literature	Comparative Literature	
Theatre, Film and Media Studies	History of Theatre, Film and Media Theory of Theatre, Film and Media	
Philosophy	Philosophy	
Education	Education	
	Islamic Religious Education	
Transcultural Communication	Interpreting Translation	

4.6 Natural Sciences

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	**Master's programmes**	
Mathematics	Mathematics	
Chemistry	Chemistry	
	Biological Chemistry	
	Chemistry and Materials Technology (teaching cooperation with the Vienna University of Technology)	
Physics	Physics	
Meteorology	Meteorology	
Astronomy	Astronomy	
Geography	Geography Cartography and Geoinformation Regional Research and Regional Planning Urban Studies (cooperation with international educational institutions)	
Earth Sciences	Earth Sciences (teaching cooperation with the Vienna University of Technology and the University of Natural Resources and Life Sciences, Vienna	
		A master's programme in Geophysics can only be established in cooperation with other universities. No date for its establishment has yet been scheduled.
Biology	Anthropology Evolutionary Biology Genetics and Developmental Biology Molecular Biology Molecular Microbiology and Immunobiology Conservation Biology and Biodiversity Management Ecology Palaeobiology Plant Sciences Behaviour, Neurobiology and Cognition Zoology	A merger of the master's programmes in Evolutionary Biology and Palaeobiology has been planned. The question of a possible inclusion of Anthropology in the master's programme has not yet been decided.
Nutritional Sciences	Nutritional Sciences	
Psychology		The master's programme in Psychology will be established as of the beginning of the academic year 2012/13.
Sport Science	Sport Science European Master in Health and Physical Activity (cooperation with international educational institutions)	

Study programmes as of 1 October 2011 Diploma programmes	Modifications planned
Pharmacy	The diploma programme in Pharmacy will be converted in line with the Bologna framework. At the master's level, one programme will be oriented towards the profession of pharmacist and the other towards a career in pharmaceutical research.

4.7 Interdisciplinary Programmes

Study programmes as of 1 October 2011		Modifications planned
Bachelor's programmes	Master's programmes	
	Austrian Studies – Cultures, Literatures, Languages	
	Environmental Sciences	
	Gender Studies	
	Middle European interdisciplinary master's programme in Cognitive Science (cooperation with international educational institutions)	
	Study of Religions	
	East Asian Economy and Society	
	History and Philosophy of Science – HPS	
Development Studies		The establishment of the interdisciplinary master's programme in Development Studies has been scheduled for the winter semester 2012/13, which will be paralleled by phasing out the current bachelor's programme. Extension curricula will be available to permit access to the master's programme for students from different bachelor's programmes.
		A curriculum for the master's programme in Computational Science is under preparation.
		Interdisciplinary master's programmes subject to availability of funds
		Master's programme in Eastern and South Eastern European Studies Master's programme in Culture and Society of Modern South Asia, interdisciplinary further development of the master's programme in Culture and Society of Modern South Asia Master's programme in Medieval Studies Master's programme in Ethics/Applied Ethics Master's programme in Bioinformatics (teaching cooperation with the Medical University of Vienna and the University of Natural Resources and Life Sciences, Vienna, and cooperation with the University of Veterinary Medicine, Vienna)

4.8 Teacher Education and Studies Related to Teaching

Study programmes as of 1 October 2011	Modifications planned
Compulsory combination of teaching subjects (students enrolled in teacher education programmes have to choose two out of 26 subjects): Sports and Physical Education; Biology and Environmental Studies; Bosnian/Croatian/Serbian; Chemistry; German; English; Protestant Religion; French; Geography and Economics; History, Social and Political Studies; Greek; Home Economics and Nutrition; Computer Science; Italian; Catholic Religion; Latin; Mathematics; Physics; Polish; Psychology – Philosophy; Russian; Slovakian; Slovene; Spanish; Czech; Hungarian. In addition, the following programmes without compulsory combination of subjects also relate to teacher education: bachelor's and master's programmes in Catholic Religious Education master's programme in Chinese Studies with special emphasis on teaching Chinese master's programme in Islamic Religious Education	Change in study programmes is subject to the future organisation of teacher education. For details see chapter 3.2.3.

4.9 Doctoral Programmes

Study programmes as of 1 October 2011	Modifications planned
Doctoral programme in Catholic Theology Doctoral programme in Protestant Theology Doctoral programme in Law PhD programme/doctoral programme in the area of Business, Economics and Statistics Doctoral programme in Social Sciences Doctoral programme: Humanities, Philosophy and Education Doctoral programme in Natural Sciences and in Technical Sciences in the field of Natural Sciences PhD programme/doctoral programme in Life Sciences	The two doctoral programmes in Theology will be complemented by a joint PhD programme in Interdisciplinary Religious Research. In addition, this PhD programme and the doctoral programmes in Theology will be integrated into a joint framework curriculum of Theology and Interdisciplinary Religious Research.


HÖRSAALZENTRUM
UNI CAMPUS

5. Key Research Areas of the Faculties and Subject Dedication of Future Professorships

5.1 Faculty of Catholic Theology

5.1.1 Objectives

Due to processes of secularisation and a profound change in religious environments, societies in Europe are facing a massive shift. While religion used to be a firm basis of society in the past and thus fundamentally contributed to social unity, today there are numerous alternatives that promote diverse types of social structure, religious orientation or world views. This pluralism, which has paralleled the process of European unity against a background of economic globalisation, is felt in all areas of life. The pressing question we are facing is what may the Christian faith contribute to the development of new perspectives of purpose and meaning as well as to the cohesion in modern society.

In this situation Catholic theology has two roles: on the one hand, it is a discipline of faith that critically reflects the beliefs of Christianity with a focus on the Western tradition represented by the Catholic Church, and it provides outcomes that contribute to a lively discourse on questions of faith. At the same time, it pursues cultural studies and methodically investigates an essential part of the cultural roots of European societies. Looking back on the cultural and historical outlines of faith is important in order to reaffirm and define present positions in the context of religious tradition. It is also crucial to understand key European concepts and ideas which – either directly or in a modified way – stem from Christianity and cannot be grasped in full without a Christian basis.

It is within this dual framework that Catholic theology performs its functions among other academic fields. On the one hand, it contributes to the interdisciplinary study of dimensions shaping Western cultures and their global influence on ways of thinking and social structures. On the other, it pursues the objective of bringing to light central principles of faith and their relevance to every individual's self-perception, providing orientation in view of the ethical challenges of our time. Catholic theology thus contributes to the academic discourse on the humane development of society. This undertaking has traditionally been characterised by a firm philosophical basis, lively exchange with related disciplines and recourse to a wide range of methodologies.

Within the University of Vienna, the Faculty of Catholic Theology cooperates closely with the Faculty of Protestant Theology, and together they issue the series *Theologie und Religionswissenschaft*. The Faculty also cooperates with numerous other fields and research platforms at the University of Vienna. The location of Vienna, characterised by religious plurality and situated in an area where influences of Western and Eastern as well as South-Eastern Europe are felt, is as crucial for both the profile of the Faculty and its research as well as its cooperation with outstanding research institutions in global contexts.

The fields where the Faculty of Catholic Theology may specifically contribute to social and academic matters include the following: the relevance of the existence of God in secular societies and of religion in the public sphere as well as associated processes of transformation; ethical forms of reasoning in multicultural, multireligious and secular contexts; reflection on the search for spiritual experience in modern societies and relationships to biblical and mystic source texts; ecclesiastical structures and paradigms of the Middle Ages in the context of theological history, as a heritage that is also felt in today's society and that contributes to the analysis and patterns of interpretation of recent conflicts.

A particular concern of the Faculty is to expand the supervision of doctoral students and promote a new generation of scholars, including the acquisition of third-party funding as well as early support of publications. One focus includes the support of a large number of doctoral students from abroad. In addition, the Faculty aims to encourage young academics to network and cooperate at an international level, and to do so at an early stage in order to enhance the attractiveness of the Faculty as a centre of research.

5.1.2 Thematic Areas and Key Research Areas

Ecumenism is one of the thematic areas investigated at the Faculty, in the sense of cross-sectional research. This thematic area combines well with Vienna's unique ecumenical situation in Europe, where both Eastern and Western Churches are of great social import. In addition to university-oriented activities, the Faculty cooperates with organisations in the field of ecumenism to develop new research perspectives.

The second thematic area is gender in religious, cultural and ethical contexts. It is essential, according to the philosophy of science and society, to research links between critically reflected gender theories, theology and religious studies, so as to advance the processes of change that are necessary for both the Church and society. The faculty members who focus on this thematic area cooperate with the Faculty of Protestant Theology and aim to build cross-faculty networks in the areas of teaching and research. At the level of teaching, the objectives of this thematic area are put into practice by organising regular optional modules on this subject.

Christology is a third relevant thematic area. In a society dominated by a plurality of religions and world views, the commitment to Jesus Christ as a central pillar of Christianity needs to be conveyed in a modern way that is appropriate to the present situation. For this purpose, the testimony of the Bible and the theological tradition are

faced with contemporary demands in an interdisciplinary discussion of exegetical, historical, systematic and practical aspects, so that they may become a fruitful resource for a modern understanding of Christian beliefs.

Key research areas of the Faculty

Philosophy of religion and empirical religious research

The complex nature of the changes in the religious landscape of today has brought about new challenges for society, politics, churches and religious communities. The objective of this key research area is multidisciplinary research on religions in the context of these changes, linking the discourses of the disciplines involved and sharing their expertise in this field. In order to analyse the present-day situation, it is necessary to employ expertise in the fields of hermeneutics, philosophy of religion and sociology of religion, as well as to provide the experience in empirical religious research that the Faculty of Catholic Theology has accumulated.

Ethics in religious and secular contexts

The strong political role that religious groups play in different world religions as well as secular societies requires new reflection on the relationship between ethics and religion. In view of this situation, the question today is in what way religious perspectives of purpose and meaning may be combined with ethical approaches (responses to fundamentalism, secularism, etc.). Regarding specific areas of action, problems in the relationship between religious and secular contexts are apparent in the fields of education (teaching of ethics and teaching of religion), in the business world, in medicine, in politics and scientific research. The objective of this key research area is to advance the discussion of fundamental questions about ethics in the context of pluralistic views of the world and to increase skills in ethical discourse. At a location such as Vienna, this discourse is not limited to local contexts but also includes exchange with Central European partners who are integrated in a global intercultural, interreligious and ecumenical discourse (especially with the Philippines, Latin America and the Middle East).

Scripture and mysticism

A central objective of this key research area relates to the interdisciplinary and interfaith study of the interactions between scriptures of different religious traditions and spiritual practices. This is in response to the shifts in religious approaches of modern societies, from institution-based to experience-related religiousness. The opportunities and ambivalence of this development are reflected theologically in an exchange with the mystical traditions of different religions. This research focuses primarily on the Bible, in particular the Old Testament, and the question of how to recover a spiritual understanding of scripture according to religious tradition in a reflective way. From a practical theological view, exegetic findings open up opportunities to investigate a specific thematic area concerning possibilities of a contemporary transformation of Christian spiritual practice in church contexts. Religious studies provide a perspective that permits a wider focus on this key research area to include non-Christian religious traditions as well, and thus to gain insight into the manifold ways of perceiving, identifying and scientifically reflecting on the relationship between scripture and mysticism.

Theological medieval studies

The key research area of theological medieval studies aims to research theological texts, ideas and figures from the Middle Ages, defined as the epoch extending from late antiquity to the early modern period. On the one hand, this research area addresses the fact that in the Middle Ages new questions arose that have had an impact not only on theological reflection but also on large areas of today's culture. For example, the theory and practice of medieval councils has influenced the development of modern political decision-making processes as well as church constitutions, which have been highly controversial issues right up until now. The efforts that medieval theologians made to find strategies for conflict resolution and for creating a world order may also contribute to the modern discourse on power, violence and tolerance. In-depth study of the history of medieval theology may therefore play both an inspirational and a critical role for modern theology and cultural analysis. On the other hand, the medieval studies as they have been conducted in recent years are a model of successful interdisciplinary research within the humanities. Theological medieval studies as a key research area is a unique feature of the Faculty of Catholic Theology, which makes it different from other theological faculties in German-speaking countries, where the history of theology tends to be focused on early Christianity (patristics) or the modern and contemporary periods.

5.1.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Biblical Studies (New Testament)
- Biblical Studies (Old Testament)
- Canon and Ecclesiastical Law
- Christian Philosophy
- Church History
- Dogmatics
- Ethics and Christian Social Teaching
- Fundamental Theology
- Liturgical Studies and Sacramental Theology
- Moral Theology
- Pastoral Theology
- Patrology and Studies of Eastern Churches
- Religious Education and Catechetics
- Study of Religions
- Theology of Spirituality

5.1.4 Subject Dedication of Future Professorships and Status of Implementation

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Religious Education and Catechetics
Time of appointment: following vacancy of the Professorship of Religious Education and Catechetics (not before 1 October 2013)

Subject dedication of professorship:
Study of Religions
Time of appointment: following vacancy of the Professorship of Study of Religions (not before 1 October 2013)

Further professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Sociology of Religion
(in cooperation with the Faculty of Protestant Theology and the Faculty of Social Sciences)

5.2 Faculty of Protestant Theology

5.2.1 Objectives

The Faculty of Protestant Theology of the University of Vienna is Austria's only research institution that focuses on Protestant theology at university level. It is integrated in academic networks in the region of Vienna, in Austria as well as at an international level and has continuously intensified academic cooperation. The Faculty makes a fundamental contribution to social discourse on religious and ethical orientation from a Protestant perspective. The Faculty plays a leading role in its research areas. Its research strategies are aimed at:

- continuing a clearly focused research profile in which the Faculty's resources and structures are allocated to existing research areas in the best possible way;
- performing high-quality research to enhance the international standing and attractiveness of the Faculty;
- maintaining the Protestant academic tradition in Austria, with a view to its public impact;
- intensifying cooperation with the Faculty of Catholic Theology (for instance by restructuring the doctoral programme) so that the University of Vienna may become an internationally attractive location for investigating the ecumenical dimension of theology.

5.2.2 Thematic Areas and Key Research Areas

The Faculty's objectives are focused on two thematic areas: the sources of Christianity on the one hand and religion and theology in a pluralistic society on the other. These two areas comprise six key research areas of equal importance.

The study of the sources of Christianity includes research on and interpretation of the sources of Christianity from the perspectives of exegesis and church history, as well as reconstructing the influence and reception history of the Bible as a fundamental element of how European culture understands itself and underpins its identity.

The thematic area of religion and theology in a pluralistic society relates to the perception and analysis of religion at the interface of internal and external perspectives in modern society. The goal of this area of research is to make the sophisticated expertise of Protestant theology in the analysis of religion available to modern society and the critical reflection on its self-understanding.

Interpretation of the sources of Christianity in the context of antiquity (sources of Christianity)

The Bible is the main source of Christianity and one of the central documents of Western culture and intellectual history. Therefore the historical-critical and literary study of the Old and New Testaments, the conditions of their

origins and hermeneutics is of great significance for Protestant theology. For this purpose the Faculty cooperates with other academic disciplines within theology and the University.

Effects and reception of the sources of Christianity (sources of Christianity)

In Protestant theology the disciplines of biblical studies and church history have critical recourse to the sources of Christianity, the reception history and influence of which are researched from the beginnings to modernity. This takes place in the context of an interdisciplinary exchange with disciplines that focus on historical and cultural studies, Coptic studies, biblical and Christian archaeology, etc.

Differentiation and unity of theology: the example of creation and nature (religion and theology in a pluralistic society)

In theology, as in society in general, a process of increasing differentiation and specialisation is apparent. This gives rise to the following questions: In what way do theological sub-disciplines relate to disciplines outside theology? What is the theological and social relevance of these non-theological sources? In what way are the theological sub-disciplines informed by each other and do they enter into dialogue? In the Faculty these theological questions, which are of fundamental importance for Protestant theology, are studied in an interdisciplinary reflection of the relationship between creation faith and the understanding of nature.

Perception and communication of religion in a pluralistic society (religion and theology in a pluralistic society)

In a pluralistic society, religious issues have become increasingly important. In the present situation, it is only possible to analyse the complex phenomenon of religion appropriately by a confluence of methods at the interface of the tension between internal and external perspectives (from the vantage point of theology on the one hand and those of religious studies, psychology, sociology and philosophy on the other).
This results in two challenges:

From the internal perspective, the processes of communicating the Gospel as well as contemporary religious cultures are analysed, critiqued and shaped on the basis of Protestant theology.

From the non-theological perspective, religions and their encounters are presented descriptively and empirically, analysed and critiqued in the context of modern civilisation.

To this end, the current cooperation with the Faculty of Catholic Theology and other faculties of the University of Vienna will be continued so that the full range of religious study options at the University of Vienna is made more visible and research cooperation is intensified.

Protestantism in Europe as well as in interdenominational and interfaith dialogue (religion and theology in a pluralistic society)

The examination of Protestantism in South-Eastern Europe, its history, development and importance is a specific focus of the Faculty in Vienna. Furthermore, the social aspect of interdenominational and interfaith dialogue and study is becoming increasingly important in Europe.

The potential for research in this field is enhanced by close cooperation between the Faculties of Protestant Theology and Catholic Theology as well as the educational studies, including Islamic Religious Education.

Theology and ethics in academic discourse (religion and theology in a pluralistic society)

Our world of modern pluralism sees a continuously increasing need for ethical dimensions in decision-making. We have therefore continued our cooperation, as equal partners, with the Faculty of Catholic Theology, the Faculty of Law and the Medical University of Vienna in the areas of ethics and law in medicine. The focus here lies on questions of anthropology, interfaith medical and nursing ethics as well as the study of ecclesiastical charity.

5.2.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. For information purposes, the research areas that are currently covered are provided in square brackets. The names outside the square brackets give the official designations. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Church History [Regional Church History]
- Church History, Christian Archaeology and Church Art
- New Testament Studies
- New Testament Studies, section 99, para. 3 of the Universities Act (temporary: for six years)
- Old Testament Studies and Biblical Archaeology
- Practical Theology
- Reformed Theology [Systematic Theology: Reformed Confession]
- Religious Education
- Study of Religions
- Systematic Theology: Lutheran Confession

5.2.4 Subject Dedication of Future Professorships and Status of Implementation

The dedication of professorships at the Faculty of Protestant Theology by the University of Vienna is subject to section 39, para. 2 of the 2002 Universities Act.

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
New Testament Studies
Time of appointment: following vacancy of the Professorship of New Testament Studies
(not before 1 October 2012)

Subject dedication of professorship:
Old Testament Studies
Time of appointment: following vacancy of the Professorship of Old Testament Studies and Biblical Archaeology (not before 1 October 2013)

Subject dedication of professorship:
Church History
Time of appointment: following vacancy of the Professorship of Church History, Christian Archaeology and Church Art (not before 1 October 2013)

Further professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period

Subject dedication of professorship:
Sociology of Religion
(in cooperation with the Faculty of Catholic Theology and the Faculty of Social Sciences).

5.3 Faculty of Law

5.3.1 Objectives

With regard to the number of students, the Faculty of Law of the University of Vienna is the largest law faculty in the German-speaking countries. This is reflected both in teaching and in the Faculty's orientation towards comprehensive research activities. In accordance with the Faculty's obligation towards society, it places a focus on students' academic preparation for future employment and training in the traditional law professions. The Faculty therefore aims to preserve comprehensive expertise in all subjects, which means pursuing a research strategy that covers a wide range of areas. All themes listed in the key research areas require good links among different fields of legal expertise. The Faculty of Law generally aims to intensify its exchange with practitioners in the field of law to contribute to applied research at national, European and international levels. The dominance of this Faculty in the output of law publications in Austria, including both leading law commentaries and the publication of academic journals in almost all of its subjects, is to be extended further. The Faculty intends to enhance its existing cooperation with numerous universities and research centres in other countries. To use the advantage of its location in Vienna, the Faculty will also focus on Central and Eastern Europe.

5.3.2 Thematic Areas and Key Research Areas

For the above reasons, the key research areas of the Faculty of Law of the University of Vienna have to be seen in the context of the need to preserve the broad approach to university-based research and teaching.

The existing areas of law that are currently covered by research at the Faculty have to be in line with statutory requirements. This essentially determines the areas on which research is concentrated. Both basic and applied research are deemed equally important.

A faculty of the size of the Faculty of Law at the University of Vienna has to maintain a comprehensive approach in the area of research also.

In its key research areas the Faculty of Law primarily investigates questions of European and international concern. In the individual areas of research, themes of international relevance play an important role. When researching questions of cross-border nature the Faculty has increasingly often cooperated with other universities.

Apart from continuing and intensifying its research activities across the entire field of law, the Faculty has defined the following key research areas and intends to build or use both interdisciplinary and intradisciplinary networks in this context.

Health and medical law, bioethics and biotechnology law

The problem of the provision of comprehensive health care is not restricted to Austria, but is an issue in all countries of the European Union, and international developments should also be taken into account. Research in this area is thus a particularly good example for international and interdisciplinary cooperation. This also includes discussing questions of legal ethics combined with demographic change in society. Cooperation in this area already exists and will be expanded further. The Medical University of Vienna is one of the Faculty's partners in this field.

Codes of private law

This key research area deals with the advancement of private law as a response to changes in the socio-political and economic framework as well as the influence of European Union regulations. A great need for revision and amendment is particularly felt with regard to the Austrian Civil Code (ABGB), which has been in force for 200 years. This code has also influenced a number of codes of special private law, which has fragmented the existing framework of regulations, and the relations between the Austrian Civil Code and special private law codes should thus be reviewed. It has been a long-standing tradition of the Faculty of Law of the University of Vienna to provide expert consultancy services to the legislator when comprehensive reform projects are embarked upon. Amending the Austrian Civil Code is a project that cannot focus on the Austrian Civil Code alone, but requires a comparative analysis of law and law history, also taking into account the legislation of the European Union. The corresponding research will therefore be carried out in an interdisciplinary way, by experts from the fields of civil law, comparative law, European law, history of law and labour law.

Today, the development of private law reflects European or even global influences and cannot adequately be grasped if this angle is neglected. At the same time, the profile of what is termed private law is not as clearly defined as in the past, and traditional delimitations have been questioned. This key research area thus studies both the interactions between European Union legislation and Austria's national law as well as relationships between Austrian law and the private law codes of other European countries, and also developments in private law at European level. The corresponding research will profit from international networks in the form of numerous contacts with institutions in other countries as well as cooperation with the European Law Institute (ELI), for example with regard to Common European Sales Law.

Europeanisation of commercial law and business law

The developments of law in Europe have brought about a considerable need for adaptation in particular regarding commercial law, in three main areas of activity: the first comprises company law, capital market law and competition law, law of intellectual property, e-commerce law including the entire field of IT law and law of technology-related intangible rights, taking into account recent technological developments. Another focus that is especially relevant in practical contexts includes the new commercial law, which is interrelated with general civil law in many respects. Furthermore, criminal business law is becoming increasingly important, which recent large-scale business-related criminal cases have illustrated. The third focus of research is interdisciplinary and comprises European components of business law and financial criminal law.

The dynamics of national and international law enforcement and settlement of disputes

Globalisation has brought about an increasing number of proceedings that include cross-border and other international aspects. As a response, this key research area focuses on the international dimension of proceedings, the Europeanisation of procedural law, comparative procedural law as well as the links between international private law and international law of civil procedure. Particular importance is to be attached to mechanisms of out-of-court settlement of conflicts with international aspects. This key research area also integrates the historical development of conflict resolution mechanisms.

However, in the changing society of the present, the traditional mechanisms of law enforcement (proceedings by authorities, followed by a decision and enforcement of this decision) have increasingly often turned out to be insufficient – and not only in international contexts. On the one hand, settlement of conflicts by public authorities, whether rightly or wrongly, is often regarded as an expression of the current political power relations and thus as not oriented towards the concrete situation of the people concerned, and consequently not just. On the other hand, in all but a few areas of society, decisions issued from above, by authorities, have increasingly often been deemed unsatisfactory and of limited constructive value with regard to future cases. This is one of the reasons why almost all areas of law, in addition to traditional instruments of law enforcement, have established new conflict-resolution procedures as well (e.g. diversion in criminal proceedings, conflict resolution in general).

These developments have had far-reaching effects on the entire fields of civil, administrative and criminal proceedings. There obviously is a need for finding new strategies of law enforcement so that compromise found in this way will also be accepted by society as a legally binding solution. Analysing the changes of recent years, identifying the risks and opportunities presented by new forms of conflict resolution and monitoring these developments on a critical academic basis is one of the major challenges that the Faculty of Law will be tackling in the near future.

The historical and philosophical basis of European legal culture

This key research area relates to fundamental subjects (philosophy of law, law of religion and culture, legal and constitutional history, Roman law and history of the law of classical antiquity) and aims at gaining further insight into European perspectives of legal development. Particu-

lar importance is attributed to aspects that can be understood as specific features of European legal culture in the context of European integration. This requires enhanced reflection and research on dimensions of legal culture in a wider European context. The instruments to meet this end primarily include longitudinal (historical) and cross-sectional (comparative law) comparison and analysis of modern regulations and institutions on the one hand, and of the specific historical conditions and developments in which they are rooted and from which they have evolved on the other. In this way common basic structures of European legal systems can be identified. This involves all fundamental subjects of law.

The fact that international contexts have increased in importance and the interaction of European regulations and national law has grown poses a great challenge also for methodology. The Faculty of Law at the University of Vienna has always attributed great significance to methodological questions. This tradition, which so far has been concentrated on public law (as represented by Hans Kelsen, Adolf J. Merkl, Alfred Verdross, Robert Walter and Günther Winkler, while in the field of civil law Franz Bydlinski deserves special mention), will be assessed critically and further advanced to meet the new challenges that have emerged.

Law in multicultural and intercultural contexts; law of migration and integration

This key research area investigates special challenges for the legal system that arise from the intensified interactions between different societies and cultures, which includes both the regulation of intercultural communication as well as the management of resulting intercultural conflicts. Recent issues regarding the laws of migration and integration further illustrate the significance of this area.

Anti-discrimination law and legal gender studies

Discrimination on the basis of gender is a central question of legal gender studies. Moreover, there are two EU directives that actually go beyond the prohibition of discrimination on grounds of gender: the directive on equal treatment irrespective of racial or ethnic origin, and the directive on equal treatment in employment and occupation irrespective of religion or belief, disability, age or sexual orientation. Analysing these different kinds of discrimination from a legal perspective is an ambitious task that requires basic research but also promises to yield application-oriented results.

Protection of fundamental rights and human rights by national and international courts

The theme of fundamental rights and human rights is of great relevance at the present time and particularly involves practical challenges that relate to both national and European or international levels. This subject matter is of a cross-disciplinary and interdisciplinary character and it is thus obvious that academic research here should be interdisciplinary in nature.

5.3.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any

future subject dedication of professorships, nor the ones dealt with in the following section.

- Austrian and European Legal History
- Austrian Private Law II
- Civil Court Procedure
- Civil Court Procedure I
- Civil Law
- Civil Law
- Commercial Law with Special Emphasis on Links with General Civil Law
- Company Law and Capital Market Law with Special Emphasis on Europeanisation
- Comparative Law in the European Area; in Particular in the Member States of the European Union with Regard to Material Civil Law and Private Business Law
- Comparative Private Law and International Private Law
- Constitutional Law and Administrative Law
- Constitutional Law and Administrative Law, section 99, para. 3 of the Universities Act (temporary: for six years)
- Criminal Law and Law of Criminal Procedure
- Criminal Law and Law of Criminal Procedure II
- Criminal Law and Law of Criminal Procedure III
- Criminal Law, Law of Criminal Procedure and Criminology
- Criminology and Criminalistics, section 99, para. 3 of the Universities Act (temporary: for six years)
- Ecclesiastical Law II
- European Law
- Financial Law
- Financial Law
- General Private Law
- General Private Law
- General Private Law III
- General Private Law, section 99, para. 3 of the Universities Act (temporary: for six years)
- International Law
- International Law
- International Law, section 99, para. 3 of the Universities Act (temporary: for six years)
- International Tax Law (50 % at present)
- Labour Law and Law of Social Security
- Labour Law and Law of Social Security
- Labour Law and Law of Social Security II
- Law of Civil Procedure
- Law of Commerce and Securities Law II
- Law of State and Constitution, and Administrative Law II
- Legal Philosophy and Methodology of Legal Studies
- Medical Law
- Public Law
- Public Law with Special Emphasis on Economic Administrative Law
- Roman Law
- Roman Law (with Special Emphasis on Comparison of the Development of Private Law)
- Roman Law and History of Law in Classical Antiquity

5.3.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- European Law
- History of Law
- Law of State and Constitution, and Administrative Law

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Law of Civil Procedure
Time of appointment: following vacancy of the Professorship of Civil Court Procedure I
(not before 1 October 2014)

Subject dedication of professorship:
Financial Law
Time of appointment: following vacancy of the Professorship of International Tax Law

Subject dedication of professorship:
Law of State and Constitution, and Administrative Law
Time of appointment: following vacancy of the Professorship of Law of State and Constitution, and Administrative Law II (not before 1 October 2014)

Subject dedication of professorship:
Legal Philosophy and Methodology of Legal Studies
Time of appointment: following vacancy of the Professorship of Legal Philosophy and Methodology of Legal Studies (not before 1 October 2012)

Subject dedication of professorship:
Civil Law
Time of appointment: following vacancy of the Professorship of General Private Law III
(not before 1 October 2013)

Subject dedication of professorship:
Theory of Law
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Further professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
National and European Competition Law

5.4 Faculty of Business, Economics and Statistics

5.4.1 Objectives

Research and teaching at the Faculty of Business, Economics and Statistics comprise the areas of business administration, finance and economics as well as statistics and other disciplines related to business and economics in the areas of law and sociology, with the latter pursued also in cooperation with other faculties. In other words, the Faculty is explicitly oriented towards a wide range of themes and places great emphasis on the integration into its activities of theoretical, empirical and applied aspects. In addition, the Faculty follows an analytical and quantitative approach in which methodological aspects play an important role. While it is not unusual for business or economics faculties and departments of a similar size to cover a heterogeneous range of themes, the analytical and quantitative orientation of the Faculty of Business, Economics and Statistics (in particular with regard to business administration) is a characteristic that has met with positive feedback at international level and distinguishes the Faculty from other institutions in this field that are run along the lines of business schools.

5.4.2 Thematic Areas and Key Research Areas

In accordance with the objectives described above, the Faculty of Business, Economics and Statistics focuses on the following thematic areas: business administration, finance, statistics and operations research as well as economics. The Faculty has established structured doctoral programmes in all thematic areas, some of which are run as separate programmes or in the context of cooperation with other research institutions (e.g. the University of Graz, the Institute for Advanced Studies, the Medical University of Vienna, the Austrian Academy of Sciences, the University of Veterinary Medicine, Vienna and the Vienna University of Economics and Business). This illustrates the great significance that the Faculty attaches to running PhD programmes of high quality.

Because of the size and heterogeneity of the Faculty as well as its orientation towards methodological aspects in its research activity, several key research areas have developed, some of which may overlap to considerable extents. For reasons of clarity, the research areas described below have been grouped according to methodological orientation and subject orientation. The first six key research areas focus on methods, followed by six key research areas that concentrate on different subject matters.

Computational and stochastic optimisation

This research area develops and investigates both exact and heuristic methods for solving large-scale problems of optimisation (which usually are combinatorial and/or stochastic in nature). This ranges from developing innovative problem-solving approaches to the theoretical analysis of the characteristics of different algorithms and concrete application. Many aspects of this area overlap with the areas of decision-making under uncertainty and risk management; financial markets, financial institutions and corporate finance; as well as logistics and operations management.

Empirical analysis of macroeconomic data

Analysing macroeconomic aggregates is of relevance with regard to the links between academic research and scientific policy advice. The data that are available worldwide in the form of time series and panels permit conclusions on causal cross-relations, dynamic structures, cycles and predictability. The Faculty has gathered expertise in forecasting methods and time series analysis in both applied econometrics and the development of econometric procedures and evaluation of methods. This area overlaps with the research area of statistical inference and model selection as well as financial markets, financial institutions and corporate finance because macroeconomic data and data on financial markets often require use of the corresponding statistical methods.

Decision-making under uncertainty and risk management

This research area investigates questions of decision-making (e.g. with regard to investment and financing) by means of information theory. In addition, it develops methodological approaches to modelling, measurement and management of risks. Such approaches are applied in diverse fields (for instance, by insurance funds, in the finance sector and energy markets as well as for transport and logistics management). There are overlaps with the methodological research areas of computational and stochastic optimisation as well as several subject-oriented areas such as financial markets, financial institutions and corporate finance.

Experimental economics

This research area includes performing and analysing laboratory experiments as well as field experiments and internet-based experiments. At present, the majority of experiments focuses on economics or business administration. However, in the future, experiments in the fields of finance and economic sociology will also be included, so that overlaps will occur with almost all subject-oriented key research areas. The new Vienna Centre for Experimental Economics is equipped with a modern experimental laboratory for conducting the required experiments.

Statistical inference and model selection

This research area studies the statistical properties of processes of model selection and related processes of regularisation such as penalising maximum-likelihood estimations or Stein estimators. One focus of this research is the question how both exact and asymptotically valid statistical inference should be carried out after model selection. Another focus has been placed on inference in time series, which relates this area to the research area of empirical analysis of macroeconomic data.

Game theory

Game theory is the most important instrument for modelling and analysing strategic interactions between economic units and therefore plays a central role in business administration and economics. Game theory approaches have also been of increasing importance for finance. The Faculty has acquired much expertise in the methodological advancement of game theory as well as its application. On the one hand, questions of traditional game theory are studied, and on the other, alternative approaches are also pursued (for example, evolutionary game theory, differential games and game theory experiments). Game theory overlaps with several subject-oriented areas.

Incentive mechanisms

This area focuses on economic models of efficient incentive-setting as well as measuring performance based on assumptions of asymmetric information and/or imperfect enforcement of agreements. Research in this area studies both decision-making situations in hierarchical principal-agent relationships and between equal stakeholders, for example, in organisational networks or during negotiations. On the other hand, it analyses the possible extensions of such models by taking into account preference structures based on behavioural science which do not correspond to the criteria of rationality that are typically applied in economic contexts. This research area combines theoretical modelling and experimental research as well as microeconometric data analysis.

Labour markets

This research area uses empirical approaches and theoretical models to investigate questions relating to labour markets. On the one hand, macroeconomic aspects are studied, for instance, aggregation problems in heterogeneous labour markets, and on the other, microeconomic aspects such as the effects that incentive systems have on productivity or labour supply decisions in multi-person households. Finally, the interactions between labour markets and financial markets are also analysed. This key research area is linked to the areas of financial markets, financial institutions and corporate finance as well as incentive mechanisms.

Financial markets, financial institutions and corporate finance

This research area describes different financing instruments as well as their pricing structures and aggregation of information under market conditions. Corporate finance examines the specific forms of contract of financing instruments and the influence that regulatory frameworks have on investment and financing. The methods applied include approaches of information theory and game theory, mathematical models for the assessment of derivatives and loan risks as well as methods for analysing finance-related time series. Overlaps are found with all method-oriented research areas as well as the area of industrial economics.

Industrial economics

This key research area includes questions of regulation, market segmentation and price differentiation, which are primarily investigated by means of theoretical modelling and analyses but also empirical or experimental studies. Obvious overlaps exist with the method-oriented key research areas of game theory and experimental economics but also with the subject-oriented area of financial markets, financial institutions and corporate finance.

Consumer behaviour

The objective of this research area is to contribute to a better understanding of patterns of consumer behaviour, which is imperative for developing effective marketing strategies. Special attention is paid to the physical and social environments of buyers as well as their perception of country-of-origin effects. The methods that are primarily used to this end include structural equation models, econometric and statistical methods as well as methods of integrated analysis of quantitative and qualitative data.

Logistics and operations management

The research activities in this area focus on transport optimisation, operative production planning (lot sizes,

sequencing), inventory optimisation and the formation of global value networks under conditions of uncertainty. Regarding methods, this key research area focuses on developing and analysing meta-heuristic calculation procedures as well as stochastic dynamic optimisation. This means pronounced overlaps with the key research area of computational and stochastic optimisation.

5.4.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Applied Mathematics and Computer Science, section 99, para. 3 of the Universities Act (temporary: for six years)
- Applied Mathematics and Statistics
- Applied Statistics
- Business Administration – Finance
- Business Administration – Personnel Management
- Business Administration – Production and Logistics (with International Focus)
- Business Administration I
- Business Administration III
- Business Administration IX
- Business Administration V
- Business Administration VI
- Business Administration XI
- Business Administration XII
- Business Administration XV
- Computer Processes
- Development Economics
- Economics
- Economics – Applied Economics in the Area of Macroeconomics (Applied Macroeconomics)
- Economics – Applied Economics in the Area of Microeconomics (Applied Microeconomics)
- Economics – Public Finance
- Economics and Public Finance
- Economics II
- Economics IV
- Economics with a Microeconomic Orientation
- Finance
- Financial Law
- Marketing, Business Administration XIV
- Microeconomic Theory; Methods and Application to Specific Problems (e.g. Auctions, Foreign Trade, Governance, Regulation, Labour Market)
- Private Law with Special Emphasis on Business Law
- Statistics I

5.4.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Business Administration – Strategic Management
- Economic Sociology
- Finance and Mathematics (cooperation with the Faculty of Mathematics with regard to advertising and recruitment)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Microeconometrics

Subject dedication of professorship:
Operations Research/Operations Management

Subject dedication of professorship:
Experimental/Behavioural Research in Economic Sciences

5.5 Faculty of Computer Science

5.5.1 Objectives

The Faculty of Computer Science covers diverse subjects in the core areas of computer science including their application, in particular with regard to the wide range of subjects offered at the University of Vienna.

By interacting and establishing networks with different disciplines, the Faculty of Computer Science has thus been able to develop a unique profile with regard to its areas of expertise. For instance, in the area of business informatics, interdisciplinary links have been established with business and economics; and in the area of media informatics, with communication as well as theatre, film and media studies. In the area of scientific computing, links exist to several disciplines that contribute to the focus of computational science, in particular to mathematics, chemistry and biology. Chemistry and biology are cooperating partners also with regard to bioinformatics, and in the field of medical informatics, a network has been established with medicine

(Medical University of Vienna). Further cooperation networks include links with law (legal informatics), nursing science, psychology and education.

This interaction with other disciplines is what distinguishes the Faculty of Computer Science at the University of Vienna from other departments or faculties of computer science in Austria, in particular in Vienna. The key research areas that the Faculty is pursuing (see thematic areas and key research areas listed below) are either non-existent in other universities in Vienna or not given priority to the same extent. The research activity of the Faculty follows an international approach, and active cooperation structures have been established with other universities and research institutions at national and international levels.

5.5.2 Thematic Areas and Key Research Areas

In its strategic orientation, research at the Faculty of Computer Science is focused on three thematic areas, which have become core areas of great relevance.

Computing: The principles, methods and technologies of computer science are applied in conjunction with those of information and communication technology (ICT) to resolve problems in other academic disciplines. High-performance computer systems are used for modelling, simulating and optimising complex processes that are found in nature, industry and in scientific experiments, as well as for managing and analysing large dynamic data volumes. This makes a considerable contribution to solving application-related problems that involve large quantities of data and thus significant computational capacities. This approach can best be described as an interaction of ICT systems with the physical world.

Knowledge: The field of knowledge comprises all structures and processes of computer science that make it possible to collect, organise, process, analyse, make available and distribute knowledge in all its shapes and forms, and also permits the generation of new knowledge through processes of learning and cooperation. This is relevant specifically for all applications of computer science in business and economics, administration and education, always focusing on the development of goal-oriented ICT solutions through aspects of informatics-oriented processing and use of institutional knowledge.

Systems: In computer science the term systems refers to the integrated interconnection of objects or processes that depend on each other, interact or interlink, i.e. relate to one another in some way. At the Faculty of Computer Science, the focus is placed on distributed, multimedia, and business-oriented systems. They form the technological basis for a wide range of IT applications, primarily oriented towards coordinated use, design and analysis of heterogeneous systems architectures with partly autonomous components.

Within these three thematic areas, the following key research areas have recently been established at the Faculty of Computer Science, each of which has potential to be developed further in the medium run.

Distributed and multimedia systems

A high degree of distribution and the expected ubiquity of elements of information and communication in everyday life are becoming increasingly important as central features of information-processing systems. Knowledge management in such distributed environments increasingly involves handling of multimedia data. Aspects of quality, architectures, data models and the security of distributed and multimedia systems have become crucial factors not only in IT research but also in its application. The convergence of media and networking technologies, which is expected to increase considerably in the future, requires a comprehensive, system-oriented view that takes into account all aspects involved, with human-machine interaction as well as media perception playing a particularly relevant role. Apart from technology-oriented research issues in future generation Internet, service-oriented systems, grid computing, digital memory engineering, entertainment and digital library systems, the application of these systems promises high development potential, which is already becoming apparent in strategic European R&D projects in the areas of distributed and multimedia systems.

Algorithms, software and computing technologies

This key research area studies basic algorithm and software technologies in computer science and areas in which computer sciences overlap with research activities in the field of computational science at university level. The goal of this research area is to develop and apply new technologies for the computer-aided simulation and optimisation of complex processes that are found in nature, science and technology and also in industrial processes. The corresponding research activities primarily focus on three interlinked sub-areas. In this context, great importance is attached to models, programming paradigms, programming languages, compilers, runtime systems and programming environments for a wide range of computer architectures, from workstations to parallel computers and from supercomputers to heterogeneous distributed systems. In addition, a methodological and algorithmic approach is pursued, which aims to develop and adapt new (numerical and non-numerical) algorithmic structures. The third focus comprises data mining and e-science analytics, in particular the development and application of new methods of data integration and data mining algorithms in bioinformatics, pharmacoinformatics and business informatics for classifying complex data structures and large data quantities.

Knowledge-based process management

This key research area deals with the concepts of knowledge and processes. While knowledge is primarily oriented towards the semantic aspects of information processing, the concept of processes represents the logical advancement of formalisation and structured division of tasks. Both areas support planning and control processes in business and administration as well as optimisation with regard to targets such as costs, time, compliance and governance in the context of a comprehensive engineering approach. Knowledge engineering serves as a basis for innovative approaches to semantic systems of information, in particular metadata and ontologies. A key aspect of forward-looking process technologies is smooth automated work flows, especially with regard to composing and orchestrating software components in service-oriented or event-driven architectures. The integration of knowledge and processes is part of methods-oriented business intelligence research. For knowledge-based process management, the key aspects of learning processes, coordination, cooperation and communication are also included.

5.5.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Applied Computer Science, section 99, para. 3 of the Universities Act (temporary: for six years)
- Biochemical Modelling (joint appointment: 50 %; 50 % at the Faculty of Chemistry)
- Bioinformatics (20 %; 80 % at the Max F. Perutz Laboratories)
- Business Informatics I
- Business Informatics II
- Computational Science – Algorithmics and Information and Communication Technology
- Computational Science – Mathematical Modelling and Algorithmics, with Applications (joint appointment: 50 %; 50 % at the Faculty of Mathematics)

- Computer Science
- Computer Science (Work Flow Systems)
- Scientific Computing – Parallel and Distributed Systems, section 99, para. 3 (temporary: for six years)
- Software Architectures
- Statistics

5.5.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Computer Science (Cooperative Systems)
- Future Communication
- (Scientific) Visualisation

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Data Mining
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Cognitive Computer Science
(in cooperation with the Faculty of Psychology)

Subject dedication of professorship:
Distributed Systems

Subject dedication of professorship:
Didactics of Computer Science

5.6 Faculty of Historical and Cultural Studies

5.6.1 Objectives

The Faculty of Historical and Cultural Studies is that part of the University of Vienna concerned with the research into and critical analysis of social memory. This forms the basis for a more sophisticated understanding of the present and for creative actions whose perspectives are based on more than the amassed experiences of an individual. The Faculty makes accessible to the public its work, and so brings its expertise into society: this takes place through schools, museums, libraries, archives, monument preservation and other cultural institutions.

The Faculty of Historical and Cultural Studies is among the largest and most diverse of its type – much as would be expected of a large university in a capital city. Research and teaching deal with all periods of human history. Geographically, the focus is on the European area and the Mediterranean. Apart from this geographical focus, questions of global history will play a more important role in the future. The basis for this new orientation has already been prepared. The Faculty's unique profile corresponds not only to the position of the University of Vienna in the Danube region – with its special place in Europe's past, present and future – but also to current trends in scholarship. These seek to view the world as a complex whole, which cannot be understood by reference to European culture and history alone – however important the consideration of Europe's particular role may be.

The Faculty offers a wide range of subjects for study and paths to knowledge: alongside texts, actions and ideas, there is research into the material heritage of mankind from all periods, and its contribution to the processes of history.

5.6.2 Thematic Areas and Key Research Areas

Places and regions

Places and regions are in fact complex structures, and as a focus of interest they specifically relate to Vienna as a historical place and a location of academic study. The places and regions that are the subjects of this research are seen as interrelated and as interacting in a historical and dynamic sense. The focus is placed on Austria's position against the geopolitical background of the former Habsburg monarchy as well as the history of Europe in its geographical and political transformations before and after 1989. The Mediterranean region is of special importance as well: Vienna has extraordinary resources for research in this area, and the region of Vienna, in contrast to other Central European regions, has always maintained close links with Mediterranean regions. Pursuing global approaches is a necessity for a modern university in a capital city, and the research focus on America permits the investigation of historical ties on the one hand and opens up new perspectives on the other.

The thematic area of places and regions has been divided into four key research areas: cultures of the Euro-Mediterranean region and antiquity studies; historical and cultural European studies; Austria and its environments; and global history and the history of the Americas.

Society
This thematic area investigates the social construction of reality, with four key research areas: approaches to community, identities and political integration; dictatorship, violence and genocide; economy and society; and women's and gender history.

The first key research area investigates the basis from which collective identities develop: collective identities are primarily seen as constructions that have actively been built as religious, political or other collective 'projects'. The second key research area examines explicit attempts to create uniform entities and identities: the authoritarian regimes of the 20th century are studied from a comparative angle. The key research area of economy and society investigates the interrelations between economy as one component of society and society as a whole. Economy is not seen as a separate area of universal validity, but one that has always been subject to social and cultural influences. The fourth focus, women's and gender history, examines the concept of women and gender, which, rather than being a universal biological category, is a construction that is defined differently depending on social position, time and place. Specific importance is attributed to the way in which women perceive themselves, to remembrance and to making women visible.

Knowledge
The emergence and transformation of knowledge societies and knowledge cultures is a central aspect of historical and theoretical approaches. The history of science, studied from the angle of general history, is one of the fields of expertise that characterise the Faculty. Knowledge is understood as a paradigm in political, social and cultural constellations. Different forms of knowledge (such as informal knowledge, tacit knowledge or formal knowledge) and their social status as well as cultural meaning are examined in this context.

This thematic area has defined three key research areas for studying the way in which knowledge is formed, where it gains influence, how it is used and what forms of knowledge are given priority. Each research focus analyses different dimensions of reference and relevance of knowledge. History of science – knowledge cultures – knowledge societies; teacher education and subject-specific didactics; and e-research on and e-teaching of history and cultural studies. In this way it is possible to track the generation of knowledge, its stabilisation and the process of development from uncertain to academic knowledge, to analyse different forms of knowledge as didactics and teaching and to reflect on and prepare the transfer of knowledge to new media.

Media
One of the characteristics of the Faculty is research on the mediality of relics from an interdisciplinary and comparative angle. These relics are of different type and origin. Some of them are (still) in their original place or underground, while others are preserved in museums, collections, archives or libraries. Work in this area is essential as it forms the basis for any research in the fields of cultural studies and/or history. In certain cases, material is also obtained that permits a critical, alternative or complementary view on the grand narratives about history and culture. In other cases, research focuses on cultural phenomena as such ('art'). However, these phenomena can be integrated in the discourse on history. They may convey meaning and, when viewed against the background of history, may be understood in more detail. And in the present day, the cultural history of communication, illustrated by its relics, is a subject of immediate relevance.

This thematic area is treated in three key research areas: text and edition; material culture; and history of visual culture: cultures and media of the visual.

5.6.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Ancient History and Papyrology
- Austrian History
- Austrian History – History of the Habsburg Monarchy since the 16th Century
- Baroque Art and Architecture
- Byzantine Art History
- Byzantine Studies
- Byzantine Studies – Ancillary Disciplines for Byzantine and Modern Greek Studies
- Classical Archaeology
- Classical Archaeology
- Contemporary History
- Contemporary History
- Contemporary History
- Contemporary History – Dictatorships – Violence – Genocides
- Early Christian Archaeology
- Economic and Social History
- Economic and Social History, section 99, para. 3 of the Universities Act (temporary: for six years)
- Egyptology (with a Focus on Archaeology)

- European Ethnology
- Greek History, Antiquity Studies and Epigraphics
- Historical Ancillary Disciplines with a Focus on the Middle Ages
- History and Philosophy of Science (History, Philosophy and Theory of Science) (joint appointment: 50 %; 50 % at the Faculty of Philosophy and Education)
- History and Theory of Media Cultures (18th to 20th Centuries)
- History of Art I
- History of East Central Europe/'Nation-Building'
- History of South-Eastern Europe
- History of the High and Late Middle Ages
- International Economic History with a Focus on Global History
- Jewish History, Religion and Literature in Rabbinic Times (70–1000 AD)
- Jewish Studies
- Jewish Studies, section 99, para. 3 of the Universities Act (temporary: for six years)
- Medieval and Early Modern Art History
- Medieval Art History
- Medieval Economic and Social History
- Medieval History and Ancillary Disciplines
- Medieval History and Ancillary Disciplines
- Modern Greek Studies
- Modern History – Women's and Gender History
- Modern History II
- Modern History III
- Numismatics and the History of Money
- Prehistoric and Protohistoric Archaeology
- Prehistoric and Protohistoric Archaeology, and Landscape and Environmental Archaeology
- Roman History, Antiquity Studies and Epigraphics

5.6.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Economic and Social History with a Focus on the History of the World Economy in the 19th and 20th Centuries
- Etruscology and Italian Antiquity
- History of Eastern Europe/'Russia as an Imperial System'
- Human Prehistory
- Islamic Art History
- Modern History with a Focus on the Early Modern Period
- Societies and Cultures of Memory in Eastern Europe

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Modern Art History
Time of appointment: following vacancy of the Professorship of History of Art I (not before 1 October 2013)

Subject dedication of professorship:
Asian Art History
Time of appointment: following vacancy of the Professorship of Non-European Art History and after appointing the Professor of Islamic Art History
(not before 1 January 2013)

Subject dedication of professorship:
Austrian History of the 19th and 20th Centuries
Time of appointment: following vacancy of the Professorship of Medieval History and Ancillary Disciplines (not before 1 October 2012)

Subject dedication of professorship:
Latin American History in a Transnational and Global History Perspective (Global South)/Historia de América Latina desde una perspectiva transnacional y global
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Subject dedication of professorship:
Didactics of History
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Subject dedication of professorship:
Everyday Cultures in their Historical Contexts
Time of appointment: funding via vacant academic positions at the Faculty (not before 1 June 2015)

Further professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Yiddish Studies
(joint appointment with the Faculty of Philological and Cultural Studies)

5.7 Faculty of Philological and Cultural Studies

5.7.1 Objectives

As part of the humanities, philological and cultural studies investigate the world's cultures in their linguistic and historical dimensions as well as the differences among regions, nations, ethnicities, societies, denominations and gender, and also with regard to supraregional and global contexts. The Faculty's research and teaching activities cover a wide range of areas. They specialise in Europe and all other regions of the world, aiming to develop competencies in political, cultural and economic relationships with other cultures. The question of responding to a globalised world that requires links between all philological and cultural subjects is of particular importance and an outstanding feature among the Faculty's profiles and programmes.

The present range and orientation of the subjects at the Faculty of Philological and Cultural Studies provide a wealth of cooperation structures in research and teaching. Most disciplines, while taking into account historical dimensions, use those methods of linguistics, literature studies, theatre, film and media studies, musicology and cultural studies that have specifically been developed for decoding aesthetic communication. In addition, the Faculty covers a number of subjects that focus, besides the cultural aspects, on socio-economic developments in Asia and Africa.

With regard to the range of study programmes at bachelor's, master's and doctoral level, the Faculty is the largest faculty of its kind in Austria. That the Faculty integrates a great number of different disciplines provides opportunities for shaping its future based on dynamic interdisciplinarity and transdisciplinarity. At the Faculty of Philological and Cultural Studies, this is achieved by intensive research in networks of high international prestige, high quality of research-led teaching, critical reflection and communication of knowledge.

5.7.2 Thematic Areas and Key Research Areas

The activities of the Faculty of Philological and Cultural Studies are grouped in four thematic areas. Thematic area refers to research and teaching that concentrate on a particular theme that spans the activities of many, albeit not necessarily all, disciplines of the Faculty. The following thematic areas have been defined.

Cultures and identities in Europe
The theme of culture and identity in Europe plays an important role in all European philologies as well as in musicology, theatre studies and linguistics. Research and teaching in this area contributes to promoting processes of reflection on European identities and cultures in Europe. In addition, philologies are among the disciplines that respond to the process of globalisation by refining their self-understanding oriented towards national borders and integrating into their research and teaching also the worldwide influence of European culture and the way in which it is represented outside Europe. The methods applied span the boundaries of linguistics, literature studies and cultural studies, and cooperation between different approaches has become increasingly important.

Cultures and identities outside Europe
With regard to the range and orientation of disciplines that study the world outside Europe, the Faculty is among the best locations in Europe. Vienna has made good pro-

gress with regard to integrating into the research and teaching network of the remaining humanities and cultural studies those disciplines that used to be regarded as exotic and of little practical value. It should also be mentioned that subjects that were exclusively oriented towards European contexts have increasingly come to include also non-European themes. This particularly applies to American studies and Canadian studies as well as to the research on Latin America and Africa (English studies, Romance studies and Dutch studies).

Communication
in its systemic and functional dimensions: Several academics of the Faculty are investigating linguistic questions in their respective individual philologies. Here linguistics is represented in its three fundamental aspects: socio-historical perspectives, systemic-functional linguistics and applied studies of human language. In the future, the Department of Linguistics will specifically aim to pool diverse activities in linguistic research and to promote joint research activities across departments and subjects.

Aesthetic communication
Aesthetic communication is an integral part of all disciplines in the Faculty. Within the philologies, this especially applies to literature studies. In this field the Faculty provides an opportunity to investigate aesthetic communication of different channels (music, theatre, literature, film, new media) as well as of different forms of cultural and linguistic expression. The Department of European and Comparative Literature and Language Studies will take over the coordinating functions. As an important step in this direction, an initiative has been started at the Faculty to enhance the cooperation between literature and cultural studies in diverse areas by combining their research in joint projects.

The Faculty concentrates on three key research areas in order to support existing activities that have already shown good results: contemporary Asia, aesthetic communication of the modern period, and language acquisition, language development, language contact. These key research areas also address pressing social issues and reflect current developments in research, and they enhance the Faculty's profile. In addition, they take into account that the Faculty should increasingly focus on international contexts without neglecting the special characteristics of the location of Vienna.

Within the key research areas, specific development focuses are promoted. They define the Faculty's profile as the Faculty's expansion plans are aimed in this direction, and will be implemented by acquiring third-party funds, reallocating budget of the Faculty and by using funds that are available through the performance agreement.

Contemporary Asia

The Faculty has defined contemporary Asia as a key research area, in which two areas will be established as development focuses to be expanded further in the next few years: modern Turkish studies as well as Iranian studies. Expanding the research area contemporary Asia will enhance the Faculty's research orientation towards modern Asian studies while responding to societal demand for research on modern Turkey and Iran.

Aesthetic communication of the modern period

In the context of the key research area of aesthetic communication of the modern period, which has been covered for several years already, the areas of theatre, film and media studies will continue to be promoted. This research area has developed very positively in recent years, and in spite of a great teaching workload, has been able to enhance its research profile. Consequently, it has entered a second stage of development, which no longer concentrates on issues such as improving student-teacher ratios, but has reached a point where the research profile of the Faculty can be complemented in a sensible way. For this reason, the Faculty plans to create a new Professorship of Cultural History of Cinema.

In order to promote the key research area of aesthetic communication of the modern period, the Faculty aims to establish a Professorship of Hungarian Literature Studies. Although Finno-Ugric studies already play a prominent role at the University of Vienna, so far no Professorship of Hungarian Studies has existed. As this field has become a relevant centre of research and teaching outside Hungary in recent years, the Faculty plans to consolidate the position of Hungarian studies by establishing a Professorship of Hungarian Literature Studies.

Language acquisition, language development, language contact

The key research area of language acquisition, language development and language contact will receive special support in the next development stage as a Professorship of Psycholinguistics will be created at the Department of Linguistics. This professorship will contribute to the research potential of the Department and enhance the integration of linguistics into the current Cognitive Science Research Platform.

Each of the three key research areas would benefit from a Professorship of Yiddish Studies, which is planned as a joint professorship at the Faculties of Philological and Cultural Studies, and Historical and Cultural Studies.

5.7.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Ancient Semitic Philology and Oriental Archaeology
- Applied Linguistics
- Arabic Studies
- Assyriology (Focus on Akkadian Studies)
- Chinese Studies (80 %; 20 % at the Centre for Translation Studies)
- Classical Philology (Greek)
- Classical Philology (Latin)
- Classical Philology (Latin) and Medieval Latin, section 99, para. 3 of the Universities Act (temporary: for six years)
- Comparative Literature
- Comparative Literature, section 99, para. 3 of the Universities Act (temporary: for six years)
- Comparative Musicology
- Cultural and Intellectual History of Modern South Asia
- Dutch Studies
- East Asian Economy and Society
- Eastern Slavic Literature
- English and American Language and Literature
- English and American Language and Literature
- English and American Language and Literature (Linguistics)
- English and American Language and Literature with Special Emphasis on Literature Studies
- English Linguistics: Variation and Cognition
- English Linguistics; section 99, para. 3 of the Universities Act (temporary: for six years)
- Film Theory
- Finno-Ugric Studies
- French and Spanish Literature Studies with Special Emphasis on Francophonia in French Studies
- General Linguistics
- German as a Second Language
- German Linguistics (History of German Language and Linguistics of Varieties)
- Historical Linguistics of English
- Ibero-Romance Studies
- Indology
- Intermediality
- Islamic Studies
- Japanese Studies
- Korean Studies
- Late and Medieval Latin Philology
- Medieval and Early German Language and Literature
- Medieval and Early German Literature with Special Emphasis on the Late Middle Ages and Including the Early Modern Period
- Modern German Literature
- Modern German Literature
- Modern German Literature
- Modern German Literature (Theory of Literature)
- Modern German Literature with Special Emphasis on Austrian Literature
- Modern Historical Musicology
- Musicology with Special Emphasis on Medieval Historical Musicology
- Romance Philology (Linguistics)
- Romance Philology I (80 %; 20 % at the Centre for Translation Studies)
- Romance Philology II
- Romance Philology III (with Special Emphasis on Hispanic Studies)
- Russian Philology and Eastern Slavic Linguistics
- Scandinavian Studies
- Slavic Literature
- Slavic Philology
- Slavic Studies
- Subject-Specific Didactics (Language Teaching and Language Learning Research)
- Systematic Musicology
- Theatre and Media Cultures of the Modern Period
- Theatre Studies and Cultural Studies
- Tibetan Studies and Buddhist Studies
- Turkish Studies and Islamic Studies
- Western Slavic Linguistics

5.7.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- African Languages and Literature
- American Studies
- Chinese Studies with Emphasis on Social Studies
- Comparative Indo-European Linguistics
- German as a Foreign Language
- German Linguistics (Contemporary German)
- History and Society of Africa
- Japanese Studies with Emphasis on Cultural Studies
- Japanese Studies with Emphasis on Social Studies
- Modern Latin Philology and Classical Latin Studies
- Romance Studies (Linguistics)
- Scandinavian Studies

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Romance Linguistics and Communication Science
Time of appointment: following vacancy of the Professorship of Romance Philology I
(not before 1 October 2012)

Subject dedication of professorship:
Romance Linguistics: Interculturality and Multilingualism
Time of appointment: following vacancy of the Professorship of Romance Studies (Linguistics)
(not before 1 October 2013)

Subject dedication of professorship:
Applied Linguistics
Time of appointment: following vacancy of the Professorship of Applied Linguistics (not before 2013)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Cultural History of Cinema

Subject dedication of professorship:
Hungarian Studies

Subject dedication of professorship:
Psycholinguistics

Subject dedication of professorship:
Turkish Studies with a Contemporary Focus

Subject dedication of professorship:
Yiddish Studies
(joint appointment with the Faculty of Historical and Cultural Studies)

5.8 Faculty of Philosophy and Education

5.8.1 Objectives

The mission of the Faculty of Philosophy and Education is to address and discuss fundamental questions pertaining to a university in the sense of *universitas literarum*, from the perspectives of philosophy and education.

Philosophy and education have been closely linked throughout the history of Western civilisation. The central questions of philosophy, such as those connected with human beings' position in the world, their ability to acquire knowledge and the meaning of and reasons for their actions, are related to, and interrelated with, the question of the objectives of education. As reflection-oriented disciplines, philosophy and education are particularly committed to the purpose of universities as places of critical intellectual encounter in society. The question of the acquisition, structure, assessment and communication of information in a knowledge society is of particular relevance. In view of the accelerated processes of transformation that characterise research, technology and society, staff and students consider the study of knowledge acquisition and dissemination from changing thematic angles based on innovative methodologies. At the University of Vienna, the Faculty of Philosophy and Education employs an approach that is integrated into ethical, educational and epistemological reflections. In this manner the University accepts its obligation of generating knowledge that is founded on reason and accountability. Against the background of structural self-reflection, the Faculty is open to structural changes in teacher education and will face its new tasks with great interest and commitment.

Philosophy responds to the increasing need for orientational knowledge and critical reflection not only in modern life but also in the academic world and in the areas where science, technology, business and society interact. The goal of education as a discipline is to perform and critically advance the dual function of the university with regard to education and training. The Faculty provides education for teachers in different areas of practice, and it studies central questions of education and training for all age groups. It develops educational theories and pursues educational research and participates in the public discourse on questions of education and reform of education so as to meet its essential obligations towards society. Interdisciplinary focuses are at the core of current and future research and teaching activities in this and other faculties. Development planning is therefore oriented towards securing the necessary core areas on the one hand and permitting specialisation as well as enabling cooperation within the Faculty, between different faculties and at university level on the other.

5.8.2 Thematic Areas and Key Research Areas

In this section, the thematic areas in which research and research-led teaching have continuously been advanced are referred to as research areas. These areas comprise both research and teaching, and they encourage cooperation between different professorships, and hence the building of research clusters.

European philosophy
This research area focuses on theoretical approaches in the Western European tradition of philosophy from its beginnings to the present, from systematic and historical angles. Research and teaching are thus important for reconstructing theoretical concepts of metaphysics, ontology, epistemology and overarching connections between these disciplinary systems. In this sense, historical and philosophical ideas are not merely part of the past to be learned by rote, but rather of contemporary relevance. For this reason, researchers and students work with the ideas of Kant and German idealism, the philosophy of the 19th century, pragmatism, phenomenology, hermeneutics and deconstruction, neo-Kantianism, ancient and medieval philosophy, rationalism and, of course, empiricism before Kant.

Additionally, the Faculty emphasises the aesthetics of modernity and the modern period as well as its history since antiquity as important aspects of European philosophical tradition, and of intrafaculty as well as interdisciplinary perspectives.

Philosophy of science
This research area deals with general philosophy of science and its history, with the philosophy of individual sciences as well as of natural and social sciences, cultural studies, epistemology, philosophy of technology, and ethical and political aspects of science and technology. Research in this area often includes related fields such as history of science, history of technology and sociology, cognitive science, logic, feminist philosophy, social and political theory as well as the fundamentals of innovation research and knowledge management. In the next few years, members of this research area will examine the above themes in the form of projects, events and publications, as well as in the context of interdisciplinary and interfaculty cooperation with other research areas.

Language, symbols and media
This research area focuses on current transformations with regard to the philosophy of language, of symbols and of media, while integrating logic and the philosophy of mathematics. Technology and media will be of increasing importance in the academic world, and the need will arise for philosophical articulation and reflection on the fundamental questions of the relations between meaning, information and understanding in the context of the philosophy of language. A clear understanding of digital technologies in the context of general media and communication theories is thus of utmost importance for this field, as well as an awareness of the relationship between academic study, theory and technology from the point of view of the history of science and its attendant scholarship.

Practical philosophy
Research and teaching in this area are primarily focused on the following topics: ethics (general ethics, ethics of specific areas, in particular medical ethics, environmental ethics, animal ethics and business ethics), political philosophy and social philosophy (transformation of normative rules, social theories), philosophy of law, action theory and philosophical anthropology. Basic research is conducted in each of the above areas, and in many areas, applied research as well. This research area is characterised by a high degree of interdisciplinarity as well as the study of themes of socio-political relevance.

Philosophy in a global world
Research in this area follows from previous research in the areas of intercultural philosophy and non-European philosophies, and aims to promote an understanding of philosophy on a global scale by constructively communicating fundamental positions of Western philosophy. Here, methodological, systematic and historical questions, primarily with regard to phenomenological, hermeneutic, ontological and epistemological approaches, predominate. The corresponding key research areas are philosophy of culture and culture theory, social philosophy and political philosophy, aesthetics, philosophy of language, philosophical anthropology, metaphysics and critique of metaphysics, as well as ethics.

The global problems that are researched in the context of the key research areas at faculty, interfaculty and university levels include the development of human rights and democracy, responses to diversity in post-colonial and gender studies, approaches to foreign experience, concepts of difference and pluralism, as well as aisthetic-ethical perspectives.

The key research areas in the non-European traditions include East Asian, Latin American, Arabic-Islamic and African philosophy.

Philosophy and the public
This new research area will focus on an in-depth examination of the intersection between philosophy and the public. The question of the extent to which philosophical research is of general public interest, and whether philosophy is fundamental for European approaches to education is itself a central theme of philosophy – one that has rarely

been systematically investigated. The significance and role of philosophy and ethics for political, cultural and social discourse will be examined along with the question of forms, methods and content of teaching philosophy and ethics at upper secondary schools. Consequently, this research area will cooperate closely with the Didactics Centre for Psychology and Philosophy and will endeavour to contribute to the current discussion on education and reform of teacher education in Austria.

Vienna Circle research
This interdisciplinary research area aims to reconstruct and develop 'scientific' philosophy following the tradition of logical empiricism, critical rationalism and analytic epistemology as well as philosophy of language. Here, research and teaching focus on subject-related philosophy in the context of the history of science, sociology of science and philosophy of science. Cooperative links with the Department of Philosophy have been established at the level of personnel and theoretical research fields.

Educational theory and research
This research area investigates fundamental matters of educational philosophy and fundamental questions of this discipline. A typical feature of theoretical educational studies, namely a critical, reflective approach to questions of teaching, is a central question in the research on the relationship between social transformation and the constitution of the discipline. The consequences that social transformation has for the constitution of the discipline itself, therefore, are viewed from a theoretical background based on historical contexts. This relationship is investigated from the angle of educational studies including questioning current societal issues such as demographic change, migration, heterogeneity, ruptures with local and global traditions, medialisation and changing socio-cultural values. In a narrower sense, this research area focuses on the question of the relationship between empirical educational research and educational theory, at both meta-theoretical and research-oriented levels. Research activity in this specific area thus addresses questions of empirical educational research against the background of a systematic delimitation of current educational questions. Examples of research projects include religious competence as a subject-specific competence; the connectivity of the discourse on pupils' achievements in subjects of instruction which have not been included in PISA (Programme for International Student Assessment, sponsored by the OECD) contexts, such as ethics and religion; analyses of notes taken during lessons; or the consequences of new assessment and control mechanisms in the system of education.

Research on school and (systems of) education
Recently, in part a result of international discussions (from PISA to the Bologna Process), research on school and education has played an important role as regards social and educational developments. An objective here is to thus establish research on school and education as a discipline that is firmly grounded in educational theory and based on historical and comparative knowledge, and which places the focus on the consequences that the resulting transformation of school and education will have for society at the micro and macro levels. This approach requires both basic research (e.g. on historical, social and media-related conditions of the change in teaching and learning) and current empirical studies (e.g. regarding effects of international regulations on national developments, evaluation of pilot projects of new school and teaching models and school careers). The methodology of these studies typically combines quantitative and qualitative approaches (mixed methods). This research area enjoys an international reputation in comparative school

and curriculum research, not least because of its cooperation across national borders in projects and publications, such as the peer-reviewed *Journal of Curriculum Studies*.

Education in the life course
This research area addresses questions of education in the theoretical framework of a biographical perspective over a lifetime. It aims to intensify links between extant research at the Faculty and approaches that are discussed at international levels, and focuses on appropriate structures of education and learning in life courses. The relevant conceptual framework (education, socialisation, media, development, biography and lifelong learning) is studied from a theoretical basis and will be further developed in connection with empirical phenomena and practical issues of professional education and counselling. The present research activities focus on education- and media-related biographies in the context of social change, as well as learning at different stages in life, biographical transitions in the system of education (from kindergarten to school, university and working life), the relevance that social difference and category (in terms of generation, age, gender, background of immigration, poverty, social environment, etc.) may have for educational opportunities and careers, processes of education and development in infancy and possible questions regarding the professionalisation of education and counselling practices. Research in this field employs biographical research from the perspective of social and educational studies, media education, humanistic and psychoanalytic education, gender, migration and inequality research, as well as approaches of interactionist and educational theory.

Inclusive education
In this research area, approaches to education and development are studied that focus on the rights of vulnerable and marginalised persons, in particular individuals with special needs. The practical aim of this research is to support their social inclusion in all spheres of life and to bring about structural changes in regular institutions in order to take into account the diverse situations and needs of all users of these institutions. The Faculty's activities in this area work within a larger academic community and amongst experts in this field. The international networks that have been built in the last few years will be expanded further. The challenges to be faced in the future include enhancing scientific excellence in third-party-funded research, and to contribute academic expertise to the field, so that Austria may meet the obligations assumed by ratifying the United Nations Convention on the Rights of Persons with Disabilities.

Teaching, learning and the professionalisation of teachers
The research area of school education and teacher education and professionalisation ensures students' academic preparation for employment as teachers (so far, primarily at the secondary school) and provides further academic education and training and professionalisation. The focuses of school education, teacher education and professionalisation are thus integrated into the international discourse on education (through symposiums, publications and projects) as well as networks in the areas of school policy and (subject-specific) didactics. The Faculty thus meets the academic prerequisites for teacher education based on highest quality standards. Cooperation with schools in projects that combine academic and practical views also contributes to this objective.

Islamic religious education
The master's programme in Islamic Religious Education at the University of Vienna offers education for teachers of Islamic religion at upper secondary schools in Austria. The programme also allows educators to address current themes and issues of religious and ethical education in research and teaching. As the number of Muslim pupils at government-funded schools increases, it has become necessary to establish religious education as a dialogue-oriented and context-oriented academic discipline. This is the first degree programme in Islamic Religious Education in Europe, and aims at close cooperation with related subjects and research at the University of Vienna and other research institutions and individuals in Europe.

The Faculty identifies the following key research areas.

Philosophy and education in a global world

The disciplines at the Faculty increasingly integrate questions of development perspectives with regard to democracy, human rights, social diversity and mobility as well as issues of justice in global contexts. The effects that multiculturalism and migration have on education in its various forms are studied in the context of theoretical and empirical research, as well as in international networks, including by cooperating with other universities in Europe, Asia, Africa and Latin America. A philosophy of education in a global world also includes a critical reflection of socio-political norms. Interdisciplinary research on systems of education and global ethical and humanitarian issues requires intercultural patterns of thinking. By studying different schools of thought within and outside Europe, new approaches to reflection may be developed that integrate different cultures, thereby bringing about educational models that point towards the future.

Ethics

Ethics, as a traditional discipline of philosophy, has to reconcile a wide range of theories in ethics (from classical theories such as normative ethics to questions of meta-ethics and new reflective theories on moral courses of action and the individual domains of applied ethics) and their interdisciplinary links to law, economics and business, humanities, social sciences and life sciences and the resulting questions relating to the life-world. The complex expectations to ethics from within and outside the academic world are focused in the Faculty of Philosophy and Education and comprehensively studied as a key research area. For instance, the transformation of normative bodies of rules is discussed at the intersection with moral philosophy, political philosophy and philosophy of law. In the area of applied ethics, interdisciplinary contacts with other faculties and universities are established to study questions of individual and social responsibility and approaches to solutions of current problems and challenges.

Wittgenstein research

The focus on Wittgenstein research aims to pool and study the respective research fields that concentrate on the Austrian philosopher Ludwig Wittgenstein under one research cluster, conducted in the thematic areas of European philosophy, philosophy of science, practical philosophy and in the thematic areas of language, symbols and media, from a historical-systematic perspective on the one hand and a methodological perspective on the other.

A focus shared by these many approaches is the processing of Wittgenstein's estate (digitalisation) and, therefore, further research on questions of ethics that relate to philosophy, logic, philosophy of language and of science, as well at the intersection between philosophy and mathematics on the one hand and philosophy and linguistics on the other.

Aesthetics in connection with developments in media and cultural studies

The key research area of aesthetics in connection with developments in media and cultural studies examines the diversity of aesthetic sensations, phenomena of sensual perception and the phenomenon of art *sui generis*, at the intersection between philosophy and art, art and everyday life, fashion and design as well as media and technology. Research projects include traditional investigations into classical philosophy of art, such as the aesthetics of German idealism, Friedrich Nietzsche's philosophy of art or fin de siècle aesthetics, as well as new research subjects. For instance, the question of the performative character of philosophy and education is one area of interest. With regard to a world of articles of daily use, discussions of technological progress, industrialisation, production and consumption are related to sensual perception and aesthetic sensation.

Education in a society in transformation

Research in the area of education in a society in transformation examines the theoretical basis of education as well as questions that relate to teaching and educational studies. Key areas of study include theories of education as the basis of educational practice, guiding principles of education, institutional and theoretical frameworks and educational systems. These topics are investigated with regard to interactions with the academic world and society in general, including the phenomena of education in societies in transformation, questions of teacher education, adult education, continuing education and training, education through new media and religious education. The research also includes theoretical and empirical investigation within a historical framework, into the links between education and society, the transformation of society as a result of education, and the consequences that social transformation has for the fundamental issues of education and teaching.

Differential education and teaching

This key research area uses methods of psychoanalysis as well as mixed methods (primarily empirical) to study early childhood development, questions of age, job integration of people with special needs, as well as higher education as a means for improving people's living conditions. Here, research on development in early childhood is oriented towards the intersection between educational studies, teaching and psychoanalysis, with the aim of enhancing the quality of early childhood education and reconciling family duties, education and employment amidst social changes. The relationships between poverty and disabilities as well as vocational participation of people with special needs are studied from the angle of inclusive education, using qualitative and quantitative research methods.

5.8.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Applied Philosophy of Science and Epistemology
- Education in the Life Course
- Education with Special Emphasis on Psychoanalytical

Education, Special Needs and Inclusive Education as well as Social Education; section 99, para. 3 of the Universities Act (temporary: for six years)
- Education/Philosophy of Education
- Empirical Educational Research and Theory of Education
- Ethics with Special Emphasis on Applied Ethics
- European Philosophy and Continental Philosophy
- Historical and Comparative Research on Education and Schooling
- History and Philosophy of Science (History, Philosophy and Theory of Science) (joint appointment: 50 %; 50 % at the Faculty of Historical and Cultural Studies)
- Islamic Religious Education
- Media Education with Special Emphasis on New Media
- Methods of Teaching Philosophy and Ethics
- Philosophy in a Global World
- Political Philosophy and Social Philosophy
- Research on Schooling with Special Emphasis on Upper Secondary Education
- Special Needs and Inclusive Education
- Theoretical Philosophy

5.8.4 Subject Dedication of Future Professorships and Status of Implementation

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Philosophy of Media and Technology
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Subject dedication of professorship:
Empirical Educational Research
Time of appointment: following vacancy of the Professorship of Empirical Educational Research (section 99 of the Universities Act, not before 1 October 2013)

Subject dedication of professorship:
Education/Philosophy of Education
Time of appointment: following vacancy of the Professorship of Education/Philosophy of Education (not before 1 October 2014)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Analytical Philosophy with Special Emphasis on Philosophy of Language

Subject dedication of professorship:
Diversity in Education and Learning

Subject dedication of professorship:
History of Ancient and Medieval Philosophy

5.9 Faculty of Psychology

5.9.1 Objectives

Research at the Faculty of Psychology focuses on three thematic areas: 1) mind and brain: cognition, emotion and methods of research; 2) applied psychology: work, education and economy; 3) resilience: prevention and promotion of mental health. The key research areas that have been defined in these thematic areas have either been confirmed by the results of evaluation of this research, or they relate to perspectives of research from which evaluation-based research areas will be derived in the future.

5.9.2 Thematic Areas and Key Research Areas

Mind and brain: cognition, emotion and methods of research

In this thematic area, several research teams from the areas of general and cognitive psychology, biological psychology and methods of psychological research cooperate to conduct basic research on human mental processes, their physiological and neural correlates. The teams involved employ a wide range of (mostly, but not only, empirical) methods, including laboratory research. Research activities focus on perception and attention (with special emphasis on image perception and impression formation), on empathy and decision making as well as on emotion and cognition. Another focus is on methods of research, with an emphasis on developing (further) innovative methods, on applying certain methods (in particular research synthesis and research integration, such as meta-analyses and systematic reviews), and on the analysis of implicit attitudes and orientations.

Future activities will intensify cooperation within the teams as well as the combination of methods. The close cooperation with the Cognitive Science Research Platform as well as the Medical University of Vienna will ensure interdisciplinary research activities. The integration and advancement of methods of cognitive science as well as research on emotion and neurocognition will be fur-

ther enhanced, also with respect to its application, e.g. in ergonomics or clinical psychology. The thematic area also includes one key research area, i.e. psychology of aesthetics.

Applied psychology: work, education, economy
The thematic area of applied psychology: work, education, economy examines the psychological basis of experience and behaviour regarding work, education, and economy. A specific goal of this thematic area is to identify processes of regulation and self-regulation in the above areas, to derive possibilities of prevention and intervention and to evaluate measures taken. The key areas studied are work and organisational psychology, educational psychology and evaluation, economic psychology as well as applied social psychology. This thematic area integrates two key research areas: promotion of lifelong learning in educational institutions from a psychological perspective; and the psychological basis of decisions and changes in economic contexts: work, organisation, consumption and economics. The teams in this thematic area include experts in work and organisational psychology, educational psychology and evaluation, economic psychology and social psychology.

Resilience: prevention and mental health promotion and empowerment
This thematic area pools the research activities of the previous work areas Developmental Psychology, Psychological Assessment, Clinical Psychology and Health Psychology and the field of Differential Psychology together. This is the first step for a gradual coordination of coherent research initiatives in this thematic area, aiming at a consistent definition of research initiatives, in connection with future recruitment strategies in this area.

The research area deals with psychological resilience as well as vulnerability of people in all areas of life and over the lifespan. Models of cognitive, motivational and emotional responses of man will be examined within the increasingly complex environments of the present. The basis of these research activities will rely on recent advancements in developmental psychology, clinical and health psychology as well as psychological assessment. These approaches will be complemented by personality psychology, evolutionary biology and ecosystem-related issues.

This research perspective contributes to the basic understanding of psychological adaptation processes, risks and resources with respect to prevention and support or intervention. Using evidence-based knowledge and action structures will assure the research area's contribution to a successful development over the whole lifespan of the individual. Specific priority issues are currently: relationship and bonding, social cognitive and emotional skills, intercultural and educational competences, professional qualification, new technologies and media as well as regulatory processes in cases of impairment.

Psychology of aesthetics
This key research area conducts a research programme in empirical aesthetics and its grounding in human perception, cognition and emotion. Its conceptual and theoretical framework is provided by a model of aesthetic experience, as well as by approaches of general psychology, evolutionary and cultural psychology. The aim here is to study the specific nature and meaning of aesthetic experience, its consequences for behaviour and its physiological

correlates. Aesthetic processes are studied in order to contribute to a fundamental understanding of human experience, in particular regarding the interaction between cognition and emotion; this is done with a special emphasis on the visual domain. The questions addressed include the conditions of aesthetic experience, human consciousness, visual preferences, media-related and social determinants of aesthetic experience, the presumed biological basis of beauty and attractiveness as well as impression formation in various fields (art, images, patterns, music, architecture, design, film, bodies).

Promotion of lifelong learning in educational institutions from a psychological perspective
This key research area has two central objectives: on the one hand, the concept of lifelong learning, which originates in the socio-political sphere, is translated into theoretical concepts of educational psychology. The diverse findings in, and heterogeneous approaches to, lifelong learning (e.g. with regard to motivation and self-regulation) will be combined in a consistent framework. On the other hand, this key research area focuses on the promotion of lifelong learning in educational institutions. Theory-driven training programmes are developed for this field, implemented and scientifically evaluated with regard to their effectiveness. This includes preparatory analyses by means of laboratory tests and field studies. In this way, the theoretical advancement of lifelong learning is combined with consecutive research that, while based on fundamental findings, is oriented towards application. The ultimate goal of this work is to contribute to the transfer of academic findings to the fields of policy and practice.

The psychological basis of decisions and changes in economic contexts: work, organisation, consumption and economics
The objective of this key research area is to analyse and describe from the perspective of social psychology decisions and change at work, in organisations, markets and economics. The present focus of research has been placed on decisions regarding work processes and the way in which workers and employers experience work, on economic decisions by consumers in consumer markets and patterns of behaviour of tax payers. The research methods applied primarily include quantitative, cross-sectional and longitudinal surveys, observation and lab experiments but also qualitative approaches such as interviews, focus groups and association techniques.

5.9.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. For information purposes, the research areas that are currently covered are provided in square brackets. The names outside the square brackets give the official designations. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Applied Developmental Psychology with Special Emphasis on Learning [Developmental Psychology]
- Applied Social Psychology with Special Emphasis on Decision Research and/or Intergroup Research (Cultural Comparison) [Social Psychology and Research on Consumer Behaviour]
- Biological Psychology
- Clinical Psychology [Clinical Psychology of Adulthood]
- General Psychology
- General Psychology [Cognitive Psychology]
- Psychology [Economic Psychology]
- Psychology [Educational Psychology and Evaluation]
- Psychology with Special Emphasis on Assessment [Psychological Assessment]
- Psychology, section 99, para. 3 of the Universities Act (temporary: for six years) [Psychological Research on Education and Transfer]
- Work Psychology [Work and Organisational Psychology]

5.9.4 Subject Dedication of Future Professorships and Status of Implementation

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Psychological Assessment
Time of appointment: following vacancy of the Professorship of Psychology with Special Emphasis on Assessment (not before 1 October 2014)

Subject dedication of professorship:
Methods of Psychology
Time of appointment: following vacancy of the Professorship of Research Methods of Psychology (section 99 of the Universities Act, not before 16 July 2015)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Clinical Child and Adolescent Psychology

Subject dedication of professorship:
Clinical Neuropsychology

5.10 Faculty of Social Sciences

5.10.1 Objectives

The Faculty's research contributes significantly to finding answers to scientific questions of great social relevance, and thus to fulfilling the social function and responsibility of science and universities. To this end, the Faculty engages in proven intradisciplinary and interdisciplinary research areas as well as innovative interdisciplinary research, cooperating across different subjects within the Faculty, as well as with other faculties and international, national and local research institutions. The Faculty of Social Sciences focuses on theory-driven empirical social and cultural research. Its geographical position as a gateway to Eastern and South-Eastern Europe is a locational advantage in this respect. Pursuing a critical reflection on the structure and problems of present-day society is among the guiding principles of its research activities.

5.10.2 Thematic Areas and Key Research Areas

The thematic areas of the Faculty of Social Sciences reflect the wide range of academic disciplines represented at the Faculty. For an overview of this diversity, the thematic areas of each subject area of the Faculty are presented separately.

Social and cultural anthropology focuses on a comparative analysis of the processes relating to colonialism, post-colonialism, globalisation and the current socio-cultural developments. Geographically, the focus is on the world outside Europe, international comparison and transnational fields of research. The methodological approaches of historical anthropology are also represented. The new theoretical and methodological approaches pursued aim to analyse the questions of research from multiple perspectives in addition to the European or American perspectives. Social and cultural diversity is analysed in a global and non-Eurocentric perspective.

In **government and political science**, researchers study developments and changes in politics, states and modern democracies from empirical and theoretical perspectives. More specifically, they analyse the political and economic dimensions of globalisation and Europeanisation, political competition and the functioning of democratic institutions, public opinion and elections, migration from the perspective of social inclusion and exclusion, the transformation of gender relations, life science governance, questions of environment and natural resources, as well as the transformation of government policies and democracy, which brings about changes in policy processes and new structures of governance. Geographically, the focus of research is on the member states of the European Union with special emphasis on the Austrian political system and Eastern Europe both contemporarily and in a developmental perspective.

The discipline of **communication** investigates processes of public communication and communication through media as well as its infrastructural conditions. The following themes are examined from a comparative perspective: media systems, media organisation and media governance (stakeholders, processes and forms of interest representation), history of media and communication, information and entertainment through media and their use and impact, as well as communication in situations of crisis and conflict. A central thematic area takes into account how new communication technologies shape both the individualisation and globalisation of information, of advertising and media entertainment. The application and development of methods of empirical communication research also play a significant role.

The key research area of **sociology** follows the tradition of the Vienna School of Sociology, which is oriented towards social problems, pursues an empirical approach and attaches great importance to the societal relevance of its research. The Vienna School of Sociology has always stood for outstanding theoretical programmes as well, such as logical empiricism (the Vienna Circle) and social phenomenology (Alfred Schütz). Vienna has thus contributed in many ways to the development of sociology as a discipline in the past. The present key areas of research are topics such as social stratification and life course research, sociology of the family, health research, sociology of organisations, migration studies, cultural research, economic sociology, visual sociology as well as research on gender issues, equality and justice.

Social studies of science analyses the interactions between science, technology and society. Research focuses mainly on contemporary European societies, frequently from a comparative perspective, and is specialised in applying and developing methods of qualitative social science research.

Nursing science focuses on the questions of nursing in the general context of health studies. It covers the entire lifespan of humans and includes different levels from individuals to policies and extends over the entire chain of care services. The goal of nursing as an academic subject is understanding disease and the impact of disease on the individuals concerned as well as their families, the mode

of action and effectiveness of nursing interventions as well as influencing factors and prerequisites for 'good' nursing. In addition to basic research, great importance is also attached to applied research. Transfer processes and the sustainable implementation of academic findings in nursing practice play an important role, as does cooperation with research institutions at university level and outside university, including reference to practice at intra- and interdisciplinary levels.

In the area of **methods in the social sciences** researchers focus on advancing subject-related quantitative methods as well as social network analysis and methods of comparative ethnography. Apart from continuing and enhancing the existing areas of activity, the integration of different methodological approaches into the social sciences plays an important role. Developing and applying a wide range of social science methods in research and teaching is considered of great significance as well. Cooperation on methodological issues within the Faculty is a major focus so that joint research can be pursued. In the future, the range of methods in the social sciences will be expanded to include additional qualitative and quantitative methods.

Research in the individual subjects will be continued and intensified, and in addition, in the period up to 2015 the Faculty intends to concentrate on the following seven key research areas in order to enhance its research profile. These research areas address relevant social problems of the present day, across different subjects and departments. The Faculty's strong points and established research traditions will be continued and enhanced, and innovative future-oriented research areas will be intensified.

Families, generations and social security

Social sciences at the University of Vienna have always aimed at addressing social problems, studying them empirically and underpinning them theoretically. The focus on families, generations and social security continues this tradition. It identifies specific problems of socio-political relevance and studies them at an interdisciplinary level.

Within this area, sociology of the family is a focus of research. In particular relationships between generations are analysed, and the life situation of older people as well as the consequences of health problems due to old age, and resulting problems for individuals and families are studied from the perspective of social gerontology. The effects of nursing interventions as well as links to the welfare system are examined too.

The focus is on developments in social situations at the national level, including comparisons from European and international perspectives. For empirical analysis, both qualitative and quantitative methods are applied.

Migration, ethnicity and citizenship

Triggered by growing interdependence at the global level, forms and dynamics of migration and integration processes are also changing. This poses new challenges with regard to political processes and institutions, in particular to political parties, representation and civil society participation. The complex change in the processes and policies of migration and integration requires new approaches to research, extending beyond national and disciplinary, methodological and epistemological boundaries. It is an explicit goal of the key research area of migration, ethnicity and citizenship to conduct research based on such interdisciplinary perspectives.

Governance, statehood and democracy

This key research area investigates the change of governance in different policy fields, geographical regions and political spaces as well as the corresponding shift in the form and function of statehood and democracy. The research activities here aim to analyse new forms of policy regarding political responses to environmental and technological risks and hazards; processes of inclusion and exclusion; phenomena of crisis and crisis-resolving strategies as well as their repercussions on public and democratic institutions and processes.

Particular interest is paid to the connections between social conflicts, structures of governance, political institutions and policies. Problem-related mechanisms of governance are analysed while taking into account the interactions between citizens, civil society and the state on the one hand, and Europeanisation and 'glocalisation' on the other. The corresponding research projects combine empirical approaches and a plurality of methods with theory generation, taking into consideration the historical dimension of change.

This is a key research area of great social relevance oriented towards those political challenges that result from growing migration, new biopolitical constellations, ecological crisis, changes in work and generational situations, transformation in Eastern Europe, European integration and national/local as well as transnational/global changes with regard to the predominant role of media and communication.

The intention of this key research area is to build networks between research groups on governance questions from different fields and disciplines within the University of Vienna and at the international level.

Parties, elections and representation

This key research area analyses the interaction of political actors and citizens in liberal democracies, linking the perspectives of political science, communication science and sociology, and also social psychology. The focus is on at-

titudes, opinions, values and decisions of citizens, mechanisms of political representation and interactions of political parties with voters and social institutions (such as the media and advocacy groups). This key research area studies the effects that these processes have on social developments on the one hand, and the changes in central democratic processes of societies brought about by economic and social change on the other. Of central interest here is how interests and attitudes change over time, and the effect this has on the representation of citizens by political parties, the new interests and attitudes that new social groups (young voters, immigrants) introduce into the political sphere, and the social and political change this produces. The research area is also concerned with the important role of the media, particularly new media, in these processes. It studies Austria and conducts comparative analyses that place the Austrian case in the European or international context. The key research area is developing interdisciplinary perspectives, new methodological approaches, and generates new data sources at an interdisciplinary level.

Gender and transformation

This research area aims to develop gender-sensitive theories regarding the contemporary transformation of society, economy, politics and culture. Theory generation in this area is based on sound empirical research. It is oriented towards multidisciplinary approaches and grounded in the interdisciplinary gender paradigms of social sciences as well as women's and gender studies. This research area engages in an academic discourse on parallels and controversy between implicit knowledge about gender, constructions of gender in numerous areas of activity of gender experts (such as gender mainstreaming), and aims to advance gender-based approaches in social science.

The projects and research groups in this research area analyse processes of transformation of statehood and democracy (governance), gender dimensions of migration processes (regional/global) as well as forms of communication and culture, gendered processes within organisations, the role of mass media, the representation and visualisation of gender relations, processes of transformation of gender knowledge in different systems of social functions, the interactions between discourse on the body in different disciplines of natural and social sciences as well

as gender aspects of new (body-related) technologies. In these areas of research, the participant scholars jointly publish books and articles, organise joint conferences and workshops.

Visual studies in social science

In view of the extraordinary role that visual culture plays in the present discourse on social science and cultural studies (right through to the assumption of a paradigm shift in the context of an iconic turn), it has been an obvious necessity to establish this key research area in order to pool existing research across subjects, integrate young academics in research activities, and by cooperating in a joint research area, to enhance its profile and thus its international impact.

The common focus of research by this research group, in terms of content, aims at the relationships between visuality, knowledge and culture. With regard to the respective research, teaching and publication activities of the members, two research areas have been derived as common focuses: (1) theories and analyses of visual culture and (2) visual methods. The subjects of the first area include analyses of visuality, myths, media and rituals; image and art in conflicting global and local visual contexts; image-related policies and forms of political communication; and the relationship between image, knowledge, effect and reality. The second research area focuses on the innovative advancement of methods, in particular the use of film, video and photography as instruments of surveying, analysis and representation, as well as new approaches to the analysis of existing visual spheres.

The knowledge society in times of change: knowledge, science and democracy in the public sphere

The goal of this key research area is to undertake a critical analysis of the profound changes in the relationships between knowledge, science and democracy in contemporary knowledge societies. Underpinned by research in the areas of social studies of science, communication science as well as social and cultural anthropology, this thematic area will be examined in three different ways.

The first approach is to study how (techno)science and society have become ever closer intertwined and thus how certain problem areas and related societal futures are co-produced. This poses new challenges for science and democracy and demands a rethinking of the relationship between technosciences and different publics, and of the relationship between local and global knowledge cultures. This also calls for an intensified reflection on the cultures and practices of knowledge production, for an analysis of the societal implications of developments in science and technology, and for a discussion of value-related issues.

Secondly, we are facing a rapid sociotechnical change, especially with regard to information and communication technologies, which restructures the production and particularly the distribution of, and access to, knowledge. This requires a rethinking of the production and use of communication and the way in which knowledge is shared, as well as an inquiry whether and how the public sphere is restructured in response to these developments.

Finally, the interrelations between academic knowledge, institutional development and the political/ideological framework are analysed. In this context, the question of knowledge as both the result of and the basis for value systems is studied from a historical angle as well as with regard to the contemporary situation.

5.10.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Communication
- Communication
- Communication
- Communication
- Communication with a Focus on Advertising Research
- Comparative European Legal and Administrative Political Science
- Democratic Governance
- Ethnology I
- International Politics
- Journalism
- Methods of Social Sciences
- Nursing Science
- Political Science
- Political Science
- Political Science (Processes of Transformation in Central, Eastern and South-Eastern Europe)
- Political Science II
- Political Science/Governance and Gender
- Psychology
- Social and Cultural Anthropology
- Social and Cultural Anthropology
- Social Stratification Research and Quantitative Methods
- Social Studies of Science
- Sociology

5.10.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Communication with a Focus on Media Change and Media Innovation
- Communication with a Focus on Public Relations Research
- Development Sociology
- Empirical Social Research Methods: Social Network Analysis with Regard to Ethnographic Methods
- Material Culture and Consumption Studies
- Sociology

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Urban Sociology
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Subject dedication of professorship:
Sociology of Knowledge and Culture
Time of appointment: funding via a vacant professorship at the Faculty (not before 2013)

Subject dedication of professorship:
Methods of Empirical Social Science with a Focus on Text Analysis
Time of appointment: following vacancy of the Professorship of Psychology (not before 1 October 2012)

Subject dedication of professorship:
Political Theory
Time of appointment: following vacancy of the Professorship of Political Science (not before 1 October 2012)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Methods of Empirical Social Science (Qualitative Research)

Subject dedication of professorship:
Intervention Research

Subject dedication of professorship:
Sociology of Religion
(joint appointment with the Faculty of Catholic Theology and the Faculty of Protestant Theology)

Subject dedication of professorship:
Communication

5.11 Faculty of Mathematics

5.11.1 Objectives

Modern mathematics in its disciplinary character is distinguished by its wide spectrum of sub-areas. It is a central science covering the analysis of complex, abstract systems and constructions that are often inspired by heuristic observations, modelling and the development of efficient algorithms for the solution of mathematical problems, as well as applications. Mathematics is a discipline in its own right as well as the foundation for all quantitative sciences. One of the foremost goals of the Faculty of Mathematics is to represent this science at the highest international level and its wide breadth in research and teaching, and at the same time, to offer extensive services in research and teaching for other scientific disciplines.

Based on the key research areas that form part of strong international networks, the Faculty of Mathematics emphasises the importance of cooperation with applied sciences. The Faculty makes all possible efforts to further intensify the existing synergies with research groups in biology, physics, astronomy or engineering sciences, and to be an attractive partner for them. Among others this goal is supported by the participation in the Computational Science Centre of the University of Vienna.

The Faculty of Mathematics seeks the cooperation with other faculties of the University, and with departments at the Vienna University of Technology and the Austrian Academy of Sciences. Numerous cooperation agreements already exist, which utilise both synergy and complementary effects. It is one of the objectives of the Faculty to intensify these cooperation agreements, and to create new ones.

5.11.2 Thematic Areas and Key Research Areas

Starting from its traditional foci in analytic number theory, harmonic analysis, biomathematics and mathematical physics, the Faculty of Mathematics continuously develops its profile. On the one hand, traditional research areas are adapted in view of modern developments (for example, by a more algebraic orientation of number theory, or by a more applied orientation of harmonic analysis). On the

other hand, new research areas (e.g. differential equations including their numerical aspects, financial mathematics, or discrete mathematics) have been created. The seven key research areas (research foci) of the Faculty of Mathematics are:

Logic (Kurt Gödel Research Centre)

In the great tradition of one of the most important mathematicians of the 20th century, the research area of logic is concerned with the foundations of mathematics. Research focuses on axiomatic set theory, the field of logic to which Gödel dedicated most of his time during the later years of his life. A central objective lies in the identification of the correct axioms for the foundations of mathematics, axioms which are sufficient for the solution of all significant mathematical problems. The main methods include large cardinal theory and forcing. In theoretical computer science the characteristics of Turing machines, which run transfinitely, are clarified. This latter work has especially interesting links with both Gödel's theory of constructibility and with the philosophical theory of truth. Unexpected connections between the model-theoretic theory of stability and the set-theoretic theory of absoluteness have also been discovered. Homogeneous model theory is yet another important research topic.

The Kurt Gödel Research Centre is currently organised as a research platform.

Biomathematics and dynamical systems

This key research area comprises the analysis of dynamical systems and deterministic and stochastic modelling in biology and other fields of mathematics, natural and social sciences.

In the field of dynamical systems, the group works on systems from algebra and from number theory. Topological, measure theoretical and stochastic aspects of the dynamics are considered. The group in biomathematics addresses issues that originate from the life sciences, in particular from evolutionary biology, ecology, and from molecular cell biology. It works on models from population genetics and from game theory and uses methods from dynamical systems theory, from probability theory, and from the theory of partial differential equations.

Stochastics and financial mathematics

The theory of stochastic processes is applied in many areas of natural and social sciences. Recently, applications in the financial sector have also seen a significant increase. The University of Vienna has therefore defined a research focus that links these two areas.

With the mathematical theory of probability as a basis, basic research activities are pursued in this field, in which application has always provided a strong driving force for pure mathematical theory. Questions relating to physics are a typical case in point.

Applications of mathematics in the financial sector have often been driven by ideas that originate in physics, and in some cases, vice versa. Brownian motion is a good example of the latter case. Its mathematical modelling was developed by Louis Bachelier to respond to questions from financial mathematics, several years before Albert Einstein revealed its fundamental significance in the context of physics. Modern examples of applications in the world of finance include questions of portfolio management, as well as pricing and hedging of derivative instruments in terms of continuous time. The no-arbitrage principle is a central basis for research in the above fields.

Analysis, geometric structures and mathematical physics

The researchers working in this wide field of research view mathematics as an inseparable entity. This is underlined by diverse interrelations within this group as well as by extensive national and international cooperation.

Several research groups analyse partial differential equations, with applications in theoretical physics, mathematical biology and image processing. Apart from establishing existence and uniqueness of solutions, the emphasis here lies on a rigorous justification of model hierarchies that are generated with the help of asymptotic methods such as homogenisation, boundary layer theory and averaging methods.

Image processing and pattern recognition form areas of application of infinite-dimensional methods of differential geometry used for defining adequate metrical concepts for shape spaces. This is based upon 'convenient calculus' in infinite dimensions, a large part of which was developed in Vienna, as was parabolic geometry, a part of differential geometry with strong connections to representation theory.

In the field of linear elliptic partial differential equations of second order, properties of solutions (such as regularity) as well as spectral properties of the underlying operators are investigated, with special emphasis on Schrödinger operators of atoms and molecules. Here, the effects of the Coulomb singularities on the properties of solutions to such differential equations pose a central problem.

The use and further development of non-linear theories of generalised functions in differential geometry, analysis and partial differential equations has led to new insights into the structure and propagation of singularities and their microlocal properties. Current fields of application include mathematical seismology and general relativity.

This key research area has also provided the analytical basis for models and algorithms in computational sciences.

Computational sciences

This key research area of the Faculty is closely linked to the key research area computational sciences at the university level.

The group Computer-Oriented Mathematics and Optimisation deals with mathematical modelling and modelling languages and with (especially global) optimisation, with applications in the fields of operations research, robotics and protein folding, thus relating to topics of the life sciences.

Activities in the field of (partial) differential equations comprise modelling and (asymptotic) analysis as well as numerics/computer simulation, with the aim of intensifying the latter. The main applications currently investigated are in the fields of (quantum physics and astro-)physics, quantum chemistry, nano- and semiconductor technology, hydrodynamics, image processing and, increasingly, in biology.

At the Faculty of Mathematics harmonic analysis looks back on a long tradition, so that one could actually talk of a Viennese School of Harmonic Analysis. It is currently carried out in many different forms, from numeric harmonic analysis, applied in signal and image processing, to abstract harmonic analysis on locally compact groups. Current research issues particularly emphasise the connections between applications and fundamental theoretical insights.

Arithmetics, algebra and discrete mathematics

The theory of automorphic forms constitutes a fundamental area in mathematics, which concerns itself with the deep connections between number theory, representation theory (local as well as global) of groups and algebras, and arithmetic algebraic geometry. The interaction of various disciplines and methods, as for example in the investigation of arithmetic properties of automorphic forms or of the geometric structure of Shimura varieties, characterise this research area. This interaction gets its focus and direction from conjectures such as those in non-Abelian class field theory or the one of the Langlands' functoriality principle. A main focus of the investigations is the relation between the cohomology of arithmetic varieties, the automorphic spectrum and the theory of Galois representations.

In the area of discrete mathematics, a spectrum of combinatorial themes is investigated and developed that ranges from algebraic combinatorics, analytic combinatorics to graph theory. Consequently, there are strong interrelations with algebra, number theory and also with statistical mechanics.

Subject-specific didactics/school mathematics

Subject-specific didactic research provides a well-founded education in subject-specific didactics for future teachers according to modern teaching concepts. The public image of mathematics is strongly determined by teaching at school. Therefore it is essential to convey an appropriate image of mathematics to the student teachers in order to be able to pass it on to their future pupils in their later professional life.

More specifically, theoretical and practical questions concerning the use of computers in mathematics education are investigated and didactic analyses of parts of elementary mathematics are developed. Thereby the focus often lies on the mathematics education focusing on real-life applications.

5.11.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below does not predetermine any future subject dedication of professorships.

- Algebra
- Algebraic Geometry/Differential Geometry
- Applied Mathematics with Special Emphasis on Astrophysics – Numerics
- Biomathematics
- Computational Science – Mathematical Modelling and Algorithmics in Application Areas (joint appointment: 50 %; 50 % at the Faculty of Computer Science)
- Computer-Oriented Mathematics
- Differential Equations
- Discrete Mathematics with Special Emphasis on Combinatorics
- Financial Mathematics
- Harmonic Analysis
- Mathematical Logic with Special Emphasis on Fundamentals of Theoretical Computer Science
- Mathematics – Harmonic Analysis/Topological Groups with Applications in Ergodic Theory, Number Theory and Theory of Equidistribution
- Mathematics II – Measure Theory, C* Algebrae, Banach Algebrae
- Mathematics III – Biomathematics/Game Theory
- Mathematics IV – Algebra, Number Theory and Automorphic Forms
- Mathematics VI – Applied Analysis, Mathematical Physics
- Mathematics with Special Emphasis on the Didactics of Mathematics and Computer Science
- Mathematics, section 99, para. 3 of the Universities Act (temporary: for six years)

- Mathematics, section 99, para. 3 of the Universities Act (temporary: for six years)
- Mathematics, section 99, para. 3 of the Universities Act (temporary: for six years)
- Partial Differential Equations

5.11.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Applied Mathematics and Modelling
- Dynamical Systems
- Global Analysis/Differential Geometry
- Mathematics and Biology (80 %; 20 % at the Centre for Molecular Biology)
- Numerics with Special Emphasis on Partial Differential Equations
- Stochastics

5.12 Faculty of Physics

5.12.1 Objectives

The Faculty of Physics at the University of Vienna is oriented towards basic research and open to application as well. The main goal of the Faculty is to play a leading role at international level in the fields covered by its key research areas. In order to meet this goal, existing excellent groups are supported to the best possible extent, outstanding new professors are appointed and further cooperation will be sought. Students are integrated into current research activities so that they may develop their intellectual potential to the full. This is also a good starting point for a future career in science, business and industry. Based on the strong international and national networks into which the Faculty is integrated, cooperative links that support the Faculty's objectives will be expanded further. The existing contacts with other faculties and departments of physics at Austrian universities, in particular the University of Innsbruck, as well as with science institutions in and around Vienna, will be intensified. In addition, cooperation will be enhanced with the Vienna University of Technology and the Austrian Academy of Sciences, namely its Institute for Quantum Optics and Quantum Information, the Stefan Meyer Institute for Subatomic Physics, the Institute for High Energy Physics and the Erich Schmid Institute for Materials Science. The interinstitutional collaboration in the region of Vienna that has recently been established in the areas of quantum physics with the Vienna Center for Quantum Science and Technology (VCQ), and in computational materials science with the Center for Computational Material Science (CMS), will be given high priority. In the context of the Vienna Scientific Cluster (VSC) the Faculty will play an active role with regard to starting further inter- and intrauniversity cooperative links in the area of computational science. The present cooperation within the University of Vienna will continue to play an important role, for instance in the research platforms of the Erwin Schrödinger International Institute for Mathematical Physics (ESI) and the Austrian Educational Competence Centre (AECC), or in the context of informal and formal cooperation with the Faculty of Chemistry, the Faculty of Mathematics, the Faculty of Earth Sciences, Geography and Astronomy, the Faculty of Life Sciences and the Faculty of Computer Science. In addition, new cooperative links will also be initiated with other faculties. The Faculty of Physics is open to further joint cooperation initiatives within and outside the University of Vienna.

5.12.2 Thematic Areas and Key Research Areas

The Faculty of Physics always welcomes initiatives by its members that address interesting topics of research in addition to those investigated in the context of the key research areas. This flexibility, which makes it possible to

introduce new research areas that may be a basis for future key research areas, will be maintained in the future as well. However, the Faculty also emphasises that such topics of research that have been freely chosen have to yield a measurable output or attract third-party funding after an appropriate period of time.

The Faculty's key research areas are described below.

Quantum optics, quantum nanophysics and quantum information

This area includes research on the fundamentals of quantum physics as well as its practical application. The experiments in this area focus on preparing, manipulating and detecting individual quantum objects or quantum-correlated ensembles of photons, atoms, molecules, nanoparticles and micro-oscillators through to solids and organic systems. Applications include several quantum technologies such as quantum information processing, quantum-based sensors and structuring methods, as well as new technologies and mathematical models for complex Q-systems. Theoretical research is concerned with the fundamentals of quantum physics, quantum statistics of multi-particle systems, quantum optics and quantum information. Via the Vienna Center for Quantum Science (VCQ) this key research area is strategically linked with partner groups at the Vienna University of Technology and the Institute for Quantum Optics and Quantum Information of the Austrian Academy of Sciences (IQOQI) in Vienna and Innsbruck. A sustainable consolidation of the VCQ is envisaged. This key research area receives additional input from the Complex Quantum Systems (CoQuS) graduate programme and the FoQuS special research area. The links with the key research area of complex nanoscale matter will be intensified further.

Computational physics

Computational physics has become the third pillar of present-day physics, apart from experimental physics and theoretical physics. The corresponding research area primarily examines the development of algorithms for atomistic simulation regarding quantum mechanics and statistical mechanics, in particular aimed at questions of materials science. Its fields of application range from soft matter and nanomaterials to surface and semi-conductor physics and physics of metals. The key research area of computational physics maintains strong links with the key research area of complex nanoscale matter, and it cooperates with the Vienna University of Technology through the interuniversity Center for Computational Materials Science (CMS), the special research area of the Vienna Computational Materials Laboratory (ViCoM) and the Marie-Curie Initial Training Network Physics of Complex Colloids (COMPLOIDS). In the future, this key research area will be more firmly positioned in the European network of the Centre Européen de Calcul Atomique et Moléculaire (CECAM), and it aims to intensify its cooperation with experimental and computational science groups in the area of Vienna.

Particle physics, gravitational physics and mathematical physics

This key research area covers the wide range of the structure of matter, from elementary particles to the largest structures in the universe. In the context of mathematical physics, rigorous mathematical methods are used to study quantum systems with many degrees of freedom. This includes quantum field theory and quantum physics of highly correlated multi-particle systems, which will continue to be a focus of research in mathematical physics. In the field of theoretical elementary particle physics, the research focus is particularly on aspects of quantum field theory and phenomenology in particle and astroparticle physics, as well as theoretical neutrino and flavour physics. This key research area, in cooperation with the Vienna University of Technology and the Austrian Academy of Sciences, plays an active role in the European Organization for Nuclear Research (CERN), for instance in the context of experiments on the Large Hadron Collider (LHC). Gravitational physics studies the theory of black holes, cosmological singularities and the expansion of the universe, as well as mathematical and numeric examinations of Einstein's theory of gravitation. This research will face great challenges, particularly the experiments on gravitational waves that are running worldwide. Close contacts have been established with the Erwin Schrödinger International Institute for Mathematical Physics Research Platform (ESI), which plays an important role for the development and interaction between all research areas.

Complex nanoscale matter

This key research area primarily deals with fundamental physics of condensed matter, with the focus on analysing the nanostructure, dynamics and phase transitions of new 'intelligent' and functional materials, which include in particular soft matter, materials of very small dimensions such as nanotubes and nanowire, graphene, high-temperature superconductors, as well as nanocrystalline and amorphous materials. The Faculty Centre for Nanostructure Research constitutes an important resource in this key research area as it uses highly advanced and unique experimentation technologies, which is of great relevance for the experimental key research areas of the Faculties of Physics and Chemistry. The Centre is an important link to the science-oriented faculties of the University of Vienna, as well as to other universities and research institutions in and

around Vienna. A further intensification of existing cooperative links in specific fields has been planned with the key research areas of computational physics, and quantum physics and quantum information. A future focus will be on the complex structures of functional materials and their quantum-mechanical phenomena, which will be analysed using atomistic methods. The potential for application in nano- and biotechnology will be a further focus of activity.

Physics and the environment

In this key research area, experimental and theoretical research is conducted on those areas of physics that relate to the environment in a broad sense. The focus is on the formation and transformation of aerosol particles and their effects on health and the climate on the one hand, and on research at the Vienna Environmental Research Accelerator (VERA) on the other. In the latter field, measurement of long-lived radioisotopes by means of accelerator mass spectrometry plays an important role and can be applied in many areas. Regarding aerosols, in particular airborne aerosols and processes, as well as particles that are relevant in terms of health effects, will be given priority, and with VERA, research will be undertaken on the use of radioisotopes for identifying global processes of climatic relevance. In the future, this key research area will also serve as a platform for transdisciplinary cooperation. The existing cooperation links within the Faculty and with other faculties of the University of Vienna, as well as with research institutions in and around Vienna, such as the Austrian Academy of Sciences, will be intensified further and new cooperation will be sought.

5.12.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Computational Physics
- Computational Quantum Mechanics
- Didactics of Physics
- Experimental Physics with Special Emphasis on Experimental Solid-State Physics
- Experimental Physics with Special Emphasis on Training of Future Physics Teachers
- Gravitational Physics
- Hybrid Systems and Complex Materials
- Materials Physics, section 99, para. 3 of the Universities Act (temporary: for six years)
- Multi-Scale Computational Physics
- Particle Physics and Particle Astrophysics
- Quanta and Solids
- Quantum Information on the Nanoscale
- Quantum Nanophysics
- Theoretical Physics with Special Emphasis on Mathematical Physics
- Theory of Quantum Optics and Quantum Information

5.12.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Aerosol and Cluster Physics
- Isotope Physics (Isotope Research)
- Phenomena of Quantum Transport

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Mathematical Physics
Time of appointment: following vacancy of the Professorship of Theoretical Physics with Special Emphasis on Mathematical Physics (not before 1 October 2014)

Subject dedication of professorship:
Quantum Physics
Time of appointment: following vacancy of the Professorship of Experimental Physics with Special Emphasis on Experimental Solid-State Physics
(not before October 2013)

5.13 Faculty of Chemistry

5.13.1 Objectives

Chemistry is a core science, dealing with structure, synthesis and function of organic as well as inorganic nature, thereby reaching far into areas of life science, medicine, etc. Simultaneously, it is also involved in the development of innovative materials ensuring the availability of raw materials and energy resources based on sustainable processes for our future.

The Faculty commits itself to a comprehensive and general education in chemistry. Based on this education, emphasis is put on biological chemistry, computational chemistry and materials chemistry with the main focus on functional materials. Beyond that, chemistry is the prereq-

uisite for a profound understanding of other disciplines in natural and life sciences. In this context, the Faculty is responsible for the well-founded education of a big number of secondary subject students (e.g. teaching exports).

There is a basic difference between the study programme of the University of Vienna (curriculum Chemistry) and the one from the Vienna University of Technology (curriculum Technical Chemistry). According to this definition, the curriculum at the University of Vienna rather focuses on biological and molecular chemistry – experimentally as well as theoretically – whereas at the Vienna University of Technology technological subjects are of priority.

During the bachelor's programmes, it makes sense to keep the degree programmes at the University of Vienna and the Vienna University of Technology separated due to the total number of students, the different orientation and technical equipment. During the master's programmes, however, it is possible to use synergistic effects in a joint curriculum of Chemistry and Materials Technology. In this case the students of the University of Vienna benefit from the technologically orientated education at the Vienna University of Technology, whereas the students from the Vienna University of Technology benefit from the way topics are approached at the University of Vienna.

There is also cooperation in science and teaching with the University of Natural Resources and Life Sciences, Vienna. Nanobiotechnology and the technological aspects of food chemistry serve as examples in this context. In these cases the University of Vienna benefits from its cooperation partner and in turn provides profound know-how in the areas of laser applications, as well as synthetical and analytical expertise. Bioactive compounds, innovative tumour therapeutics and results obtained from nanomedicine-based developments at the University of Vienna show interesting applications in medicine, and have led to cooperation with the Medical University of Vienna, which will be further extended in the future. The scientific alignment between the University of Vienna, the Vienna University of Technology, the University of Natural Resources and Life Sciences, Vienna and the Medical University of Vienna creates a significant development potential.

5.13.2 Thematic Areas and Key Research Areas

The thematic areas of the Faculty are – apart from the fundamental subjects – biological chemistry, computational chemistry and materials chemistry.

Biological chemistry
The development of synthetic strategies for the preparation of bioactive compounds is a major target in the relevant areas of the Faculty.

Hereby, structure-function relationships of molecules and their corresponding metabolised products are studied with a special focus on peptide and protein chemistry and glycoconjugate and nucleic acid chemistry *in vitro* and *in vivo*. Other important topics are biological/medicinal questions on the development of tumour therapeutics and the elucidation of their modes of action including clinical studies on patients and mode of action trials *in vivo* and *in vitro*. For this purpose the entire range of spectroscopic and analytical methods is used. Further structural insights in biomolecules can be obtained by theoretical approaches applying computer simulations.

A possible toxicity of bioactive molecules which may restrict applications is recorded in a wide range of toxicological *in-vitro* test systems.

The biological-chemical orientation of the departments of the Faculty of Chemistry forms a bridge to the Centre for Molecular Biology (Max F. Perutz Laboratories).

This bridging function is intended to serve as synergistic effects and create a successful symbiosis between biologically-chemically oriented departments of the Faculty of Chemistry and the molecular-biological aspects of the Max F. Perutz Laboratories.

The cooperation with the Medical University of Vienna and the Research Center for Molecular Medicine of the Austrian Academy of Sciences (CeMM) is strongly developed.

Computational chemistry
One of the central tasks of this thematic area is the development of methods, algorithms and corresponding software packages in the area of the formation of chemical models and simulation of chemical processes and biological networks. As these methods and tools provide important information for specific experimental work, economic benefits in experimental work are to be expected. Computational chemistry is a profile subject for the Faculty of Chemistry. It generates important forecasts and interpretations for small molecules as well as for biopolymers and functional materials.

In this thematic area, there is a close cooperation with the Faculties of Computer Science and Mathematics. By using high-performance computing, the necessary high calculation performance can be achieved.

Materials chemistry
The thematic area materials chemistry focuses on the development of innovative materials with functional properties. A significant aspect is the interactions at the molecular or atomic level, which influence the structure and dynamics of materials. The microstructure of materials can then be designed in such a way that favoured properties of the material can be used in different technological

processes, like for the separation of substances, in energy storage and generation, and in the oil and gas production. This is also valid for chemical, magnetic, biological and mechanic material and surface properties. Experimental methods and modelling using computer simulations provide the basis for this research.

The development of materials which are designed to solve challenging tasks in the fields of energy and environmental research as well as medical problems connected with an ageing society are given priority. Examples for these research topics are materials for storage and transformation of energy, for oil and gas industry, and for catalysis or biomedical applications.

In order to achieve these goals, the application and further development of innovative methods for synthesis and characterisation (also via theoretical methods) and for specific modification of materials and surfaces are necessary. Thus the correlation between material properties and their corresponding functionalities can be utilised.

The following key research areas exist.

Bioactive molecules

Organic and inorganic chemistry are dealing with synthetic approaches towards small bioactive molecules. A class of derivatives is based on coordination compounds, which intervene in the tumour metabolism and induce precise changes in the protein biosynthesis. Very promising results on the application of these compounds on tumour patients already exist. Biological chemistry synthesises bioactive compounds on peptide and polymer basis, which can e.g. be used as artificial antibodies.

Antibiotic agents, microtubule-stabilising tumour therapeutics, anti-inflammatory drugs, bioactive carbohydrates and DNA-interacting compounds are also subject to synthetic efforts.

Furthermore, enzyme-substrate interactions are studied by using model compounds.

Bioanalytics

A central field in analytical chemistry is the quantitative determination of bioactive compounds up to whole cells in a complex matrix. In this context, emphasis is put on agent and toxin analysis, since enantioselectivity plays a significant pharmacological role. Other big challenges are inherent to proteomics, metabolomics, lipidomics, glycomics as well as to viruses and cells and their differentiation. All these analytes are also ingredients and contaminations of food products.

Nanotechnology of interfaces

Microcolloids, nowadays called nanostructures, constitute a link between individual molecules and the macroscopic world. They are of utmost significance in functional materials, catalysis, in the production of solar electricity and the storage of hydrogen. Medical applications appear in biomaterials and biomedical materials, drug delivery and in bioanalytics, the development of separation techniques and sensors. For information technology, the conductivity of nanostructures is of interest, whereby quantum effects, which can theoretically be described via computer simulations, play a central role.

Functional materials

Functional materials are the basis of our modern industrial society. This affects central areas such as energy, environment, mobility, information technology and medicine. Therefore the Faculty of Chemistry practices basic and applied research on polymers and composites as well as on metallic, ceramic and hybrid materials. Nanomaterials for medical and biotechnological application serve as examples for this research field. Further examples are in the diagnostic and therapeutic area, materials for optimised separation techniques and the chemosensors based on molecular recognition, conductive polymers and nanostructures for molecular electronics, materials for energy storage (super capacitors, Li-ion batteries) and energy transformation, novel materials for innovative environmentally friendly technologies, composite materials for technical and medicinal applications as well as for oil and gas production. Multifunctional materials with sensor, energy storage and self-healing properties have priority.

Biomolecular simulation

Here, efficient algorithms for simulation procedures of biopolymers are developed with special emphasis on contributions of the solvent. Not only the behaviour in the aqueous milieu is investigated, especially innovative solvents like ionic liquids are of central importance. The ultimate goals of the simulations are the analysis of the structure and dynamics of biomolecules, investigation of RNA-protein, protein-ligand and protein-protein interactions by calculating the relevant free energy differences.

Biochemical modelling

Here the main focus is put on the modelling of biomolecules, specifically of RNA, at the level of secondary and tertiary structures, by including experimental high-throughput data. Complementary to this, the design of functional RNA molecules with favoured properties is investigated. These approaches are among others used to analyse and manipulate (bio)chemical reaction networks. The development of new algorithms benefits from the close cooperation with the Faculty of Computer Science. The resulting high-quality software packages are accessible to the scientific community.

Theoretical chemistry

Theoretical chemistry contributes to the characterisation of material properties in the field of biological chemistry and materials chemistry, and also helps to gain insight into the photochemistry of organic and inorganic molecules.

In order to obtain an understanding for structures, spectroscopic data and reactivity of molecules, quantum chemical programme packages are applied. For the simulation and control of the dynamics of chemical processes, special programmes and methods are being developed. Finally, the photodynamics of biological systems can be successfully predicted and even manipulated by using these tools.

Food chemistry, physiological chemistry and biofunctionality of food

In the field of food chemistry, in particular regarding food safety and toxicological evaluation, new synergies may develop between the Vienna University of Technology, the University of Natural Resources and Life Sciences, Vienna and the Medical University of Vienna. This particularly applies to research areas of food chemistry, the interference of food and food ingredients with chemotherapeutics, the mycotoxin research as well as the emerging field of nanotoxicology.

With respect to food safety, cellular mechanisms of action of various ingredients (bioactive components, contaminants, nanoparticles) in human digestive systems are investigated, whereas a spectrum of biochemical, molecular-biological, toxicological and analytical techniques is used.

Physiological chemistry focuses on the identification and characterisation of bioactive food ingredients as isolated compounds and as compounds in food matrices with special consideration of food processing.

The proof of bioactivity is established via *in vitro* studies with synthesised pure substances of the target metabolite and with human intervention studies using various food matrices, whereby translational approaches are also used.

The applied techniques gather the bioavailability of the target compounds and their bioactivities at the gene-regulatory (DNA and RNA expression) and protein-regulatory level, and their impacts on the metabolic profile.

5.13.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below does not predetermine any future subject dedication of professorships.

- Analytical Chemistry
- Analytical Chemistry, section 99, para 3 of the Universities Act (temporary: for six years)
- Biochemical Modelling (joint appointment: 50 %; 50 % at the Faculty of Computer Science)
- Biofunctionality of Food
- Biological Chemistry
- Biophysical Chemistry
- Chemical Molecular Dynamics
- Computational Chemistry – Theoretical Chemistry/ Scientific Computing
- Computational Structural Biology, section 99, para. 3 of the Universities Act (temporary: for six years)
- Didactics of Chemistry
- Food Chemistry
- Inorganic Chemistry I
- Inorganic Chemistry II
- Organic Chemistry
- Organic Chemistry with Special Emphasis on Organic Synthetic Chemistry
- Physical Chemistry

5.13.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Chemical Catalysis
- Environmental Chemistry
- Organic Synthesis
- Separation Processes and Bioanalytics
- Synthetic Materials Chemistry

5.14 Faculty of Earth Sciences, Geography and Astronomy

5.14.1 Objectives

The disciplines covered in the Faculty of Earth Sciences, Geography and Astronomy encompass astronomy, astrophysics, geography, geophysics, crystallography, meteorology, mineralogy, palaeontology, geodynamics and sedimentology, lithospheric research as well as environmental geoscience. This wide range of subjects, combined with high academic standards and great expertise among staff, is unique among universities in Austria and an outstanding feature of the University of Vienna.

At the Faculty, vast expertise as well as a diversity of methods from many different subjects are available, enabling multidisciplinary and interdisciplinary research activities and innovative approaches to describing and interpreting nature at different scales in terms of both time and

space, from the universe to planet earth including the microstructure of its crystalline components and the manifold interactions between atmosphere, hydrosphere, biosphere and geosphere. By integrating into its research social processes of spatial and regional development, social sciences, business and economics as well as human ecology, the Faculty regards itself as a link between natural sciences on the one hand and human and social sciences as well as business and economics on the other.

The Faculty has defined the following institutional objectives.

Enhancing its academic profile in research and teaching in order to consolidate and further improve its unique position in the region of Vienna, as well as at national and international levels. While the Faculty endorses the principles of disciplinary uniqueness, it also intends to intensify its cooperation within the University and beyond. The Faculty's links with the Vienna University of Technology and the University of Natural Resources and Life Sciences, Vienna aim at coordinating research and teaching as well as undertaking joint research and teaching activities.

Internationalisation of research and teaching in order to benefit from joint research and teaching in the European Research Area. The Faculty will continue to intensify its international research projects, acquire funding from European sources (such as framework programmes) and take part in joint teaching programmes (joint master's programmes). Possibilities which have opened up since Austria's accession to the European Southern Observatory (ESO), besides the access to observations as contributions to and participation in top-level instrumentations, are a further focus of activities. The Faculty aims at increasingly taking over the role of coordinator or lead partner in international projects and consortia.

Promotion of young scientists in order to import new foci and approaches into the individual subjects. The Faculty will continue to integrate young scientists into research projects and, in addition, organise structured doctoral programmes as a specific step in this direction. It will also continue to attract young experts in order to open up, after a period of pronounced staff stability, young scientists, in particular women, chances to start a career.

5.14.2 Thematic Areas and Key Research Areas

The Faculty is committed to identifying and supporting the key research areas that focus on basic research while also taking into account application-oriented research and responding to current social questions. At university level, the Faculty will concentrate on three thematic areas.

Dynamics of the geosphere (Earth System Science Partnership with special emphasis on the geosphere). This thematic area focuses on geological processes with respect to their spatial and temporal interactions and their dynamics. These range from long-term processes that define conditions on earth (global geodynamic processes, weathering and sedimentation of rock, etc.) to short-term processes (meteorological extremes such as volcanism and earthquakes). In this context, there is a particular concentration on the interaction between geological and biological processes on earth (mass extinctions, climate change due to environmental impacts) as well as the synthesis and characterisation of minerals, solids and materials.

The thematic area of environment, society and risk (Earth System Science Partnership with special emphasis on the anthroposphere) concentrates on the scientific analysis of environment and society as well as their interactions. The corresponding research focuses on analysing and assessing the influence that societal structures and individual action have on spatial development and on geoscientific systems, as well as on the danger potential resulting from environmental change and nature itself. In this context, cycles of matter (water, pollutants, geochemistry), anthropospheric processes (population and society) and processes of the geo-ecosystem (soil, relief and climate) are studied from a perspective of basic research. This includes drawing up principles of planning, short-term and longer-term forecasts, and plans for the sustainable preservation of the natural habitat.

Stars and galaxies constitute a thematic area that focuses on the formation and evolution of galaxies, stars and planets, in particular physical processes of structure formation on the most different cosmic scales – from large-scale galaxy clusters to planetary systems. Insights are gained by means of computer models as well as by observation throughout the entire electromagnetic spectrum, using large telescopes of the European Southern Observatory (ESO) and high-performance satellites of ESA or NASA.

In addition, joint methodological initiatives across these thematic areas form an integral part of the Faculty's activities, and are advanced by specific research endeavours. Computational science links astronomy and meteorology, high-performance analysis under clean room conditions connects environmental geosciences and lithospheric research, as well as scanning-electron microscopy are used for palaeontology, mineralogy, petrology and environmental geosciences.

The subjects of the key research areas that relate to the thematic areas above are described below. The thematic area of dynamics of the geospheres (Earth System Science Partnership with special emphasis on the geosphere) relates to the first four key research areas listed. The thematic area of environment, society and risk (Earth System Science Partnership with special emphasis on the anthroposphere) is treated in the next five areas, and the thematic area of stars and galaxies is covered in the last two key research areas.

Reconstruction of geodynamic processes: continental drift, orogeny and deposit genesis

The processes that take place in earth's interior as well as other geodynamic processes such as earthquakes and volcanism or meteorite impacts are active over long geological time spans, but cannot be studied by direct observation. For reconstructing and understanding the underlying processes not only the integrations of geophysical present-day snapshots of large-scale structures (orogens, sedimentary basins, impact craters, volcanic provinces) is necessary but also observation of changes over time in geophysical fields and phenomena (geophysical monitoring) and exploration of geomaterials (phase contents, microstructures/textures and chemical action). For this purpose, geophysical methods, remote sensing, characterisation of geological materials right down to the nanometre range by means of high-resolution electron microscopy and microanalysis as well as high-precision isotope analysis for radiometric dating are combined with theoretical analyses and numerical model calculation (finite element methods). This approach permits orientation towards application in the areas of deposit research, earthquake risks, and the danger resulting from volcanic activity as well as long-lived radioactive waste management.

Real structures and behaviour of minerals and geomaterials

Properties of real structures contain ample information on the origin, transformation and alteration of minerals and raw materials as well as their interactions. With the aid of a wide range of methods microstructures at atomic level, mineral physics under extraordinary and extreme ambient conditions, as well as mineral-fluid interactions and the structural inclusion of volatile matter in crystalline phases are analysed. With regard to materials science, the focus is on sub-nanoporous materials, the behaviour of mineral phases used for immobilising contaminants, as well as the synthesis and material properties of mineral components for industrial purposes.

Minerals as substrates and products of microbial metabolism

Biomineralisation of sedimentary rocks, biogeochemical processes of weathering, and microbial transformation of contaminants are a few examples of exogenous geology that are controlled by the interactions between microorganisms and minerals. The corresponding analyses focus on the mechanisms and kinetics of such processes, in particular microbial physiology and the chemistry of the organisms and minerals involved. These investigations are essential for a deeper understanding of element cycles, development of the climate, spread of pollutants and deposit genesis.

Evolution of life and interactions in palaeoecosystems

This key research area focuses on documentation and analyses of the development of marine and terrestrial organisms and their environments. In the context of evolutionary palaeobiology the origin of organisms and the evolution of morphological diversity as well as complexes of properties are analysed and interpreted with the use of biological and statistical procedures. Associations of flora and fauna are examined in the context of their functionality and biogeographical distribution, which permits an analysis and reconstruction of palaeoecosystems.

Dynamics of surface processes in the context of global ecological change

The global ecological change is interrelated with various surface processes. In order to understand these complex systemic links, sub-components of the geosystem are quantified, modelled and interrelated. The main subjects examined include processes of geomorphology and vegetation ecology and their relationships with climate and soil properties in terms of temporal and geographical dynamics. Specific attention is paid to interactions with social processes of use of land and resources as well as to natural hazards and risk research.

Effects of environmental pollutants and nanotechnology on aquatic systems

Water resources suffer not only from quantitative reduction (due to climate change, population growth and irrigation) but are also qualitatively affected. Environmental pollutants, especially those resulting from anthropogenic action, may contaminate humankind's most essential natural resource. In view of conflict between the use of new technologies, such as nanotechnology and the protection of water resources, the behaviour and fate of pollutants (including potential pollutants or substances not yet known) in surface water, soil water and groundwater are examined from a process-oriented and fundamental perspective.

Numerical modelling and forecasting of meteorological processes

The further development of short- and long-term weather forecasting is based on the development of numerical models for representing meteorological processes at different scale levels. In particular, very short-term forecasts of temperature, wind and precipitation for a complex local environment (for instance, mountain regions and valleys) require high-resolution analyses and temporal extrapolation procedures (from kinematic extrapolation through to high-resolution forecasting models). For validating these models, field measurement programmes are carried out, typically by international cooperation. Numerical modelling and forecasting of meteorological processes are of great social relevance.

Developing new forms of digital print in cartography (e.g. digital globe)

This key research area focuses on the development of new forms of digital print and integration into multimedia communication systems, to be able to show processes taking place on the surface of the earth in near real-time, in an easily comprehensible and dynamic way. The results of this research will also be used in other areas in order to illustrate the results obtained, by improved visualisation methods.

Social development between globalisation and regionalisation

In the area of conflict between globalisation and regionalisation, and in the course of the transformation towards a post-modern era, society's need for space and the dynamics of locational development have seen a fundamental change. This applies to interactions between society and environment and increasingly heterogeneous risk arrangements on the one hand, and the development of settlement structures and systems of land use on the other. The main themes in this context are migration, urban and regional development, processes of segregation as well as changes in cultural and social conditions. Austria, Europe and South-East Asia have been defined as regional foci.

The formation and evolution of stars and planets

The formation of stars is essential for the formation of planets, the processing of the interstellar medium and the evolution of galaxies. The focus of research is on mechanisms in molecular clouds as well as modelling of the environment of young stars where planets will subsequently form. The questions that have not yet been settled include the role of magnetic fields, the origin of the mass distribution of stars, the causes of chemical processes in protoplanetary disks and the effects of high-energy radiation on stellar environments. The corresponding research will also

contribute to understanding the conditions under which life may develop on young planets. The later stages of stellar evolution are also investigated in this key research area because matter for new generations of stars is produced or recycled there, and the link to the formation and evolution of galaxies is strengthened.

The formation and evolution of galaxies

In the cosmological context of structure formation in the universe, the formation and evolution of different types of galaxies are examined, especially with regard to mass structuring, star formation and the dynamics of gas and stars. A central aspect here is the cycle of baryonic matter with its chemical elements as well as the interactions of galaxies both with each other and with their environments. Astrophysical observations of galaxies at all cosmological epochs from the early universe to the local environment including the Milky Way provide important parameters obtained through quantitative measurement.

5.14.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Applied Geography, Spatial Research and Spatial Planning
- Astronomy, Satellite Astronomy and Experimental Astronomy
- Environmental Geosciences and Sedimentary Petrology
- Galaxy Formation in the Early Universe
- General Meteorology
- Geodynamics and General Geology
- Geography and Cartography
- Geophysics
- Human Geography
- Impact Research and Planetary Geology
- Isotope Chemistry and Biogeochemistry
- Mineralogy and Crystallography
- Mineralogy and Spectroscopy
- Palaeobiology with Special Emphasis on Vertebrate Palaeontology
- Palaeontology, section 99, para. 3 of the Universities Act (temporary: for six years)
- Physical Geography
- Regional Geography
- Sedimentology and Stratigraphy
- Stellar Astrophysics
- Theoretical and Experimental Petrology
- Theoretical Astronomy
- Theoretical Meteorology

5.14.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Palaeoecosystems

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Social and Economic Geography
Time of appointment: following vacancy of the Professorship of Human Geography (not before 1 October 2012)

Subject dedication of professorship:
Population Geography and Demography
Time of appointment: following vacancy of the Professorship of Regional Geography
(not before 1 October 2014)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Geoecology (Landscape Ecology)

Subject dedication of professorship:
Didactics of Geography and Earth Sciences

Subject dedication of professorship:
Earth Systems Modelling

5.15 Faculty of Life Sciences

5.15.1 Objectives

The Faculty of Life Sciences at the University of Vienna is characterised by a great variety of disciplines, which include all aspects of life, its development, evolution and diversity, and its interaction with the environment. It is of central importance for the Faculty to pursue a fundamental systemic approach. The Faculty's structure reflects its thematic areas and key research areas, which range from microorganisms to humans and also include environment, health and nutrition. It embraces many different approaches ranging from genetic and (functional) genomic foci to structural analysis as well as physiology and ecology, and also biomathematics, *in-silico* approaches and theory formation.

Vision

The influence of life sciences extends beyond their own area of expertise: to many different disciplines in natural science, social science and humanities. For this reason all areas of life sciences have to be open to intensive interdisciplinary and transdisciplinary dialogue. It is of central importance to the Faculty to face the grand societal challenges of our time that the European Union has addressed. The Faculty aims to meet the pertinent goals by defining new key research areas across different subjects and by restructuring the foci of proven areas. In addition, new research cooperation is sought with other universities, which will contribute to a further enhancement of the Faculty's central position in Austria's research community as well as an intensification of research links at international level.

Another concern of the Faculty of Life Sciences is to improve the employability of its graduates with regard to both traditional careers in international research and preparation for work outside the academic world. The Faculty has therefore started to establish links in this area with business and industry.

5.15.2 Thematic Areas and Key Research Areas

The research activities at the Faculty are divided into five thematic areas: biodiversity, ecology, nutrition, organismal systems biology and pharmacy.

The thematic area of biodiversity examines the genesis of biodiversity, as well as the causes and consequences of its unequal distribution both geographically and over time. This takes place primarily in the context of two new key research areas: patterns and processes in plant evolution and ecology, and ecology and biodiversity of tropical forests, as a comparison of natural and anthropogenic processes (land use and climate change). The corresponding research is conducted at molecular, structural-morphological and genetic levels, including functions of selected systems of interactions as well as analyses of complex biological communities and landscape structures.

The thematic area of nutrition aims to study the biological processes that result from interactions between the organism and its nutrition. The planned focus on molecular nutritional research, oriented towards systems biology and using genomic, transcriptional, proteomic and metabolic strategies, will contribute to the analysis of cellular and molecular actions of nutrients and non-nutritive food components, to the development of biomarkers for predicting long-term, nutrition-related diseases and to the identification of gene variants that influence the develop-

ment of nutrition-related phenotypic expressions. Several aspects of this thematic area are covered by the key research area nutrition-associated molecular mechanisms of ageing.

The goal of the thematic area of ecology is to gain insight into the structures and functions of terrestrial, limnic and marine ecosystems and their microbial, floral and faunal communities. Specific importance is attached to research on microbial communities, their relations to the biotic and abiotic environment, as well as their implications for ecosystem functions in a rapidly changing environment. This thematic area uses approaches of systems biology and state-of-the-art methods of single-cell and stable-isotope analysis, genomics, proteomics, metabolomics and computational methods. The key research areas symbioses, and microbial ecology and ecosystems, are derived from the foci that have been defined within this thematic area.

The thematic area organismal systems biology aims to examine organisms as complex systems and to focus on an integrated analysis of their organisation in terms of time and structure, the dynamics of processes of physiology, developmental biology and evolution that take place in organisms, as well as related neural, mental, social and environmental flows of information. These thematic areas are represented in the key research areas cognition, brain and behaviour, and evolution of organismal complexity.

The thematic area pharmacy intends to characterise new biologically active natural products and synthetic active agents, and to understand their interaction with the human organism at molecular level in more complex systems including the use of computational models. This will help to develop new targets and delivery systems for pharmaceutical substances. Several aspects of this thematic area are integrated into the key research areas drug discovery from nature, computational life sciences and nutrition-associated molecular mechanisms of ageing, as well in the thematic doctoral programme in Molecular Drug Targets.

Computational methods play an important role in all the thematic areas of life sciences mentioned above. The Faculty has responded to this development by establishing the cross-sectional key research area of computational life sciences. Further significant cross-sectional subjects at the Faculty of Life Sciences are integrated into the key research areas of climate change biology, and ecology and biodiversity of tropical forests.

The current thematic doctoral programmes, ERC grants, special research areas or other high-profile research activities at the Faculty may result in new future key research areas and possibly new thematic areas as well.

Evolution of organismal complexity

Organismal evolution is driven by the interlinked relations of development, structure and function. The goal of this key research area is to examine the developmental basis of the evolutionary processes leading to the diversity of differentiated cells, organs and structures of organisms, hence of organismal complexity. As one example, the key research area examines the evolution, structure and function of the nervous systems in a wide range of selected organisms, 'from hydra to humans'. Methodologically, this key research area combines molecular, morphological and biomathematical approaches in combination with the development of novel imaging techniques. By integrating theoretical and experimental approaches to systems biology, it will be possible to gain a comprehensive understanding of complex forms of life in the context of evolutionary change.

Cognition, brain and behaviour

Behaviour is a characteristic element of living beings that is based on control of diverse mechanisms of information processing, from very simple forms of neural networks to the highly complex structure of the human mind. This key research area focuses on the evolution of cognitive processes, their sensory, neural and hormonal basis, as well as the interactions between internal factors and environmental influences. Specific importance is attached to the social context, for instance the evolution of social complexity, cooperation and communication, through to language and music. The diversity of the model systems in this area of research as well as comparative approaches of research, which may be implemented both in laboratory tests and in natural environments, permit a wide range of cooperative links within the University and between universities.

Patterns and processes in plant evolution and ecology

This key research area studies the evolutionary and ecological processes that have brought about the diversity of plant life, and how this diversity evolves and sustains itself under natural conditions. Also human influences play an essential role in this context, and lead to the question of how plant diversity may be preserved in the long term. The methodological basis of the corresponding research is provided by approaches of molecular genetics, metabolomics, proteomics, morphological analyses, vegetation ecology, population biology and studies of co-evolution. This key research area benefits from the collections and the infrastructure of the Botanical Garden of the University of Vienna.

Symbioses

Symbiosis, or living together of dissimilar organisms, is a basic principle of life. Plants, fungi and animals have evolved from symbiosis, and the majority of organisms continue to depend on symbiotic interactions. In this key research area, symbioses are examined, which range from mutualism to pathogenicity and involve prokaryotes that live in close relationship with other prokaryotes, protozoa, plants, animals and humans. The questions addressed in this context include the evolution of symbioses and mechanisms of interaction between host and symbionts. With regard to methodology, physiology and functional genomic approaches play an important role. This requires close cooperation with bioinformatics.

Microbial ecology and ecosystems

Microorganisms play a key role in nutritional networks and global biogeochemical cycles. In particular, the structure and function of microbial communities and the resulting flows of substances in terrestrial, aquatic and technological ecosystems are studied. An interdisciplinary approach addresses those questions that help deepen our understanding of microorganisms of functional importance. Research on ecology and the evolution of microorganisms is a prerequisite for understanding the functions of microbes in the ecosystem of an environment that is undergoing change and for optimising the use of microbial communities in technological systems. For this purpose, advanced methods of metagenomics, functional genomics, microbiology of unicellular organisms and isotope analysis are applied.

Climate change biology

Global climate change affects the structure, function and biodiversity of ecosystems. This key research area primarily studies the impact that climate change has on the evolution, physiology and ecology of biological systems, from cells to ecosystems including humans, and on feedback loops between these components. The Faculty's research activities in this area will be pooled, expanded along interdisciplinary lines, and integrated by means of mathematical modelling. This key research area constitutes a platform for cooperation with other faculties and contributes to the visibility of the University of Vienna in the area of research on climate change.

Ecology and biodiversity of tropical forests

Tropical forests are centres of global biodiversity and integral parts of global material cycles. These forests continue to be reduced due to land use and climate change, with significant impacts on the diversity of species and the functional integrity of these ecosystems. Subjects of research include evolutionary mechanisms that generate tropical species diversity as well as ecological processes that regulate this diversity. Aspects of specific interest regarding tropical forests include effects that global change has on biodiversity and ecosystem functions. The field station La Gamba in Costa Rica provides an excellent opportunity for advancing research on tropical ecology at the University of Vienna and achieving a top position at international level.

Nutrition-associated molecular mechanisms of ageing

The molecular mechanisms that trigger the ageing process are largely unknown, but diet obviously has a significant influence, especially via energy metabolism and its effects on the regulation of redox reactions. This key research area examines molecular processes at cellular level and in model organisms, with a focus on the modulation of oxidative phosphorylation and reactive oxygen species including genetic and epigenetic variations in chromosomal and mitochondrial DNA. This key research area provides the basis for innovative interdisciplinary cooperation within Austria and at the level of the European Union.

Drug discovery from nature

This key research area addresses natural products which, due to their evolutionary optimisation in relation to interactivity with other biological structures, are deemed to have great potential for serving as lead structures for the development of pharmaceutical substances (privileged structures). The objective of research in this area is to identify new active agents from nature (plants, microorganisms, etc.) and to understand their mechanisms of action in particular at the molecular level. This opens up manifold opportunities for cooperation within the Faculty and the University, far beyond the discipline of pharmacy.

Computational life sciences

This key research area pools numerous activities with regard to application and development of information technology in life sciences. Apart from creating subject-related clusters, a central aim is to establish new methods integrating different subjects (e.g. in pharmaco- and bioinformatics, structural and systems biology) and new technologies (such as grid computing or cloud technologies). This key research area cooperates closely with other faculties, the Austrian Academy of Sciences and the Max F. Perutz Laboratories. In addition, it intends to establish teaching links with the master's programme in Computational Science which is under preparation.

5.15.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry

of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. For information purposes, the research areas that are currently covered are provided in square brackets. The names outside the square brackets give the official designations. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Botany I [Systematic Botany]
- Chemical Physiology of Plants
- Developmental Biology of Animals
- Ecogenetics
- Evolutionary Cognitive Biology
- Human Biology [Anthropology]
- In-Silico Genomics [Computational Systems Biology]
- Limnology
- Marine Biology
- Microbial Ecology
- Microbial Symbioses
- Molecular and Cellular Neurobiology
- Molecular Physiology of Plants
- Morphology of Animals
- Morphometrics
- Nutrition and Food Quality, section 99, para. 3 of the Universities Act (temporary: for six years)
- Nutritional Sciences (Special Human Nutrition)
- Pharmaceutical Chemistry
- Pharmaceutical Technology
- Pharmacognosy
- Pharmacognosy [Pharmaceutical Molecular Biology]
- Pharmacoinformatics
- Pharmacology and Toxicology
- Physiology and Ecology of Plants, section 99, para. 3 of the Universities Act (temporary: for six years)
- Population Ecology
- Structural Botany
- Zoology [Theoretical Biology]
- Zoology and Marine Biology, section 99, para. 3 of the Universities Act (temporary: for six years)
- Zoology I [Evolutionary Biology]
- Zoology V with Special Emphasis on Ethology [Behavioural Biology]
- Zoology with Special Emphasis on Morphology, Ecology and Neurobiology, section 99, para. 3 of the Universities Act (temporary: for six years)

5.15.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Anthropology
- Cognitive Ethology
- Didactics of Biology
- Nutritional Physiology/Molecular Nutrition
- Pharmaceutical Biotechnology
- Pharmaceutical Chemistry
- Pharmaceutical Sciences
- Plant Systematics and Evolutionary Research
- Vegetation Science

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Pharmacognosy (Pharmaceutical Biology)
Time of appointment: following vacancy of the Professorship of Pharmacognosy (not before 1 October 2014)

Subject dedication of professorship:
Evolutionary Biology
Time of appointment: following vacancy of the Professorship of Zoology I (not before 1 October 2012)

Future professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Animal Physiology with Special Emphasis on Ornithology
(joint appointment of the University of Vienna and the University of Veterinary Medicine, Vienna)

Subject dedication of professorship:
Biopharmaceutical Imaging

Subject dedication of professorship:
Public Health Nutrition

Subject dedication of professorship:
Plant-Animal Interactions

Subject dedication of professorship:
Advanced Synthetic Methods in Medicinal Chemistry

5.Z1 Centre for Translation Studies

5.Z1.1 Objectives

Translation studies was established as a separate discipline in the 1980s and pursues interdisciplinary approaches. It examines all forms of translated communication across languages and cultural borders, in particular professional transcultural communication, and systematically examines and describes translational and transcultural phenomena at the levels of processes, products and functions. Process-oriented research in this context focuses on the cognitive and action-related processes of translation and transcultural communication, while product-oriented analyses compare, describe and evaluate translations, texts and discourses in transcultural contexts. Function-oriented studies investigate the role, function and reception of translations, translators and transcultural communication in certain cultures, eras, societies and organisations.

The Centre for Translation Studies therefore pursues an integrative approach that encompasses both basic and applied research. The comprehensive understanding that the Centre has of its function reflects both the complexity of its object, which provides links to numerous other disciplines, and the manifold components of the study programme, and it permits the integration into research and teaching of recent developments and practical professional demands in order to provide the best possible preparation of graduates for the requirements of different translating professions.

5.Z1.2 Thematic Areas and Key Research Areas

The term translation studies includes the thematic areas of translation studies in a narrower sense, interpreting studies, terminology studies and culture-related research on transcultural communication. It thus comprises both long-standing and newly emerging topics of translation studies with regard to both historical and contemporary aspects. Research on transcultural communication provides the basis for the entire discipline of translation. It examines linguistic and cultural diversity as well as the historical and current processes that aim to cross borders of knowledge. This involves the use of media to transfer texts, communication and knowledge to a defined target group, as well as diversity management and project management in the transcultural area.

The thematic area of translation studies encompasses translation of technical texts, localisation, literary translation and translation of films. The thematic area of interpreting studies focuses on international conference interpreting, media and video conference interpreting, interpreting at court and for public authorities, as well as language and cultural communication in the form of community interpreting in health care and social security agencies and other institutions. Terminology studies involves research on the generation and development of specialised terminologies and their use in technical communication, preparation and use of multilingual terminology and information systems, as well as formal infrastructures of knowledge in the form of ontologies and their use in all types of digital language resources.

The combination of translation, transculturality and diversity has meanwhile developed into a fundamental cross-sectional thematic area. Research in this area focuses on the expertise and complex processes of communication that have become increasingly relevant in view of globalisation on the one hand and the growing cultural diversity of modern societies on the other. It examines the basis for acquiring, communicating and further developing skills that permit communication between members of groups that are diverse in terms of language and culture. For this purpose, the methodology of translation studies is combined with approaches of diversity management and developed further, for application in areas such as knowledge management for defined target groups or transcultural project management. Methods and procedures are developed by which inter- and transcultural expertise can be identified, measured and learned, in order to provide a sustainable basis for continuing education and training and self-reflection in transcultural professions.

The following key research areas are investigated in several research projects.

Translation and multilingual cognitive and technological resources

This key research area focuses on the use of knowledge-based and language technologies and new technological media in acts of translation, such as computer-aided translation, or the preparation, use and processing of multilingual language resources and design of multilingual cognitive systems by means of terminologies and ontologies. Particular importance is attached to cognitive requirements for translators and their support by means of integrated systems.

Close cooperative links are maintained through the Cognitive Science Research Platform that has been established since 2010 with the Austrian Academy of Sciences and departments of other universities and research institutions in Austria, Europe and beyond.

Translation and reception

Research on reception in the context of translation is based on aspects of translation theory that result primarily from functional and culture-sensitive approaches, and in addition, numerous links and cross-relations can be es-

tablished with many other thematic areas and disciplines in cultural studies and natural sciences. With regard to translation, analysis of the ideological, cultural, social and gender-related effects of texts is of special importance. This is closely related to the position of translations in the target cultures in the past and at present, and their role in cultural production. In the area of interpreting, the focus is on the immediate reception of interpretations, especially the communicative effect that the target text has on the recipients, derived from assessments of quality and comprehension.

Research on the transfer of knowledge, oriented towards translation and cultural studies, is a substantial complement to this key research area. The central question here is transfer of knowledge by means of translating. The main focus is on identifying the share of translations in, and their influence on, the transfer of knowledge from one culture to another, and the discourse effects of translations on the discourse knowledge cultures of the target cultures. Based on modern networking theories and cultural transfer research, it is investigated how processes of translation shape existing bodies of knowledge. For this purpose, contextual factors in the act of translating as well as institutional aspects and aspects of translational sociology are taken into account, as is the historical and social role that has been attributed to the act of translation and translational habitus.

Translation – institution – society

This key research area focuses on processes of translation under the conditions defined by a specific organisational structure. Based on approaches of translation theory such as the change over time in standards and cultures of translation as well as the act of translation under changing socio-cultural conditions, this research particularly addresses sociological theories, aspects of discourse analysis and methods of social sciences in order to examine the positions, roles and functions of translators and translations as well as interpreters and interpretations in specific institutional contexts and in society in general.

The questions researched with regard to translating include processes of communication by means of translation in different social contexts, the conditions under which translation takes place, and processes in transcultural expert communication, as well as the role and position of literary translators in the context of the production and marketing of literature. In the area of interpreting, with its direct, practical integration in institutional and situational frameworks, it is increasingly relevant to study the communicative action of interpreting in public agencies and in health-care institutions in a society that is becoming increasingly multicultural. Due to the nature of the subject, research in this area is carried out in close cooperation with the relevant disciplines such as law, sociolinguistics and medicine, as well as interdisciplinary research projects.

5.Z1.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below does not predetermine any future subject dedication of professorships.

- Chinese Studies (20 %; 80 % at the Faculty of Philological and Cultural Studies)
- Interpreting Studies and Didactics of Translation, section 99, para. 3 of the Universities Act (temporary: for six years)
- Romance Philology I (20 %; 80 % at the Faculty of Philological and Cultural Studies)
- Transcultural Communication
- Translational Terminology Studies and Translation Technology

5.Z2 Centre for Sport Science and University Sports

5.Z2.1 Objectives

As sport has risen in social importance in recent decades and has become increasingly diversified, the number of sub-disciplines in sport science has also grown. This has resulted in a rise in new insights in sport science, which have often gained recognition by related academic disciplines and from which various practical fields of sport have benefited.

The Centre will attach specific importance to the joint use of existing resources and to enhanced cooperation with regard to acquisition of third-party funding, which has already been very successful, in order to further underpin the specific role of interdisciplinary research on exercise and sport. In addition, cooperation within the University and between universities, as well as international collaboration, will be expanded further.

5.Z2.2 Thematic Areas and Key Research Areas

Sport and exercise are of great significance in modern societies. While top-level professional sport also serves for national representation, sport and exercise among the general population aim at the education, integration and recreation of diverse social groups. In addition, sport is important as a means of prevention and rehabilitation.

Sport is an important topic in mass media and a key factor in business.

However, the fact that sport is such a diverse topic makes it imperative to engage in academic research, assistance and consulting in order to enhance the positive effects and minimise possible negative impacts. If practised in an inappropriate way, sport and exercise may involve manifold risks and dangers. For this reason, demand has grown for coaching based on sport science, for example in sports clubs, schools, the health-care system and the sports equipment industry.

Sport science encompasses several sub-disciplines that conduct research on sport as well as on the people, organisations and institutions involved in sport. It is a discipline characterised by many different theoretical and methodological approaches that are derived from the 'parent disciplines' of human, social, behavioural and natural sciences. History of sport, sport education and didactics, sports psychology and sociology, biomechanics, coaching and kinesiology, sport informatics as well as sports medicine and physiology of sport enable interdisciplinary, transdisciplinary and multidisciplinary insight into sport.

Sport science in the context of natural sciences and medicine

Academic examination of the biomechanical, motor, physiological, biological and medical aspects of human movement facilitates conclusions about health-promoting, performance-enhancing and coaching measures on the one hand, and these in turn provide the theoretical basis for advancements in computer science in sport and sports technology on the other. The results obtained in this thematic area may be of great relevance for all areas of sport activity such as top-level professional sport, sport practised by children and young people, as well as sport and exercise for fitness, health and rehabilitation. Cooperation within the Centre and beyond enables the study of the effects of movement on human health and mobility in the second half of life as well as the application of pervasive computing in sport.

Educational processes related to exercise and sport

Games, physical activity and sport have been the focus of systematic studies of educational processes for a long time already, and have gained official recognition through the inclusion of the subject of sports and physical education in the range of compulsory school subjects. In the disciplines of sport education and sport didactics, specific importance is attached to research on effective and efficient teaching strategies for sports and physical education as a school subject, as well as knowledge-based communication of didactic expertise at university level, for the target group of future sport teachers and coaches at school and outside schools. Aspects of gender and inclusion when teaching sport and physical activity or games are also of relevance in this context.

In recent years, the focus of research has increasingly been on educational processes based on sport and exercise over the entire lifespan. In this context, people in their second half of life, and research on adequate health-promoting exercise for this target group, have played an important role. In view of the demographic development, this aspect will become increasingly significant.

Sport science in the context of human and social sciences

Sport is a cultural and social phenomenon. The concept of sport became popular in the mid-19th century in several countries in Europe, and sport has meanwhile become established as a significant sub-system in modern societies

all over the world. At the present time, numerous types of sport and exercise exist, organised in many different ways, and business, media and politics have promoted sport and used it to pursue their own goals. These developments and facets of modern sport are analysed from the point of view of sport sociology, psychology and history. The transformation of cultures of sport and exercise in the process of modernisation in the context of social history is a specific focus of research.

The majority of research projects conducted at the Centre is interdisciplinary, transdisciplinary or multidisciplinary, and research typically covers several thematic areas simultaneously.

5.Z2.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 of the 2002 Universities Act) are listed here. The list below does not predetermine any future subject dedication of professorships.

- Kinesiology with Special Emphasis on Biomechanics and Sport Informatics
- Sports and Physical Activity
- Sports Physiology
- Sports Sociology

5.Z2.4 Subject Dedication of Future Professorships and Status of Implementation

Professorships dedicated as of 1 October 2011

- Coaching and Kinesiology (with Biological Orientation)

5.Z3 Centre for Molecular Biology

5.Z3.1 Objectives

The Centre for Molecular Biology and the Max F. Perutz Laboratories (MFPL) have set themselves the goal of creating an academic environment which demands and encourages outstanding scientific achievements. The MFPL and its partner institutions at the Campus Vienna Biocenter (CVBC), building on existing structures of academic cooperation, have created a centre of excellence of international standing. The Faculty's current strong points will be enhanced further by recruiting outstanding young researchers, establishing a structured doctoral programme at the CVBC campus and ensuring encouragement of women at all levels to pursue careers in science.

5.Z3.2 Thematic Areas and Key Research Areas

Molecular biology is the key thematic area researched at the Centre, which includes the analysis of the structure, biosynthesis and function of DNA, RNA and proteins, at molecular, cellular and organismal levels. Research at the MFPL comprises the seven areas of research described below, which the scientists involved pursue at an internationally competitive level. Many research and education programmes in these areas encourage cooperation of different working groups at the MFPL and related departments, at the University of Vienna and the Medical University of Vienna. The key research areas defined also contribute to providing the best possible education of doctoral and postdoctoral students in preparation for a successful career in science and science-related areas characterised by increasing competition.

The MFPL also emphasises the links rather than the differences between life sciences and other, traditionally separated disciplines. This trend started with mathematics and now includes physics and chemistry as well. Closely collaborating with the chemistry experts at the MFPL and the University of Vienna, the Centre exploits the chemical aspects of its disciplines so as to use the entire range of new materials and chemical reagents to answer fundamental and medical questions arising in molecular biology.

Infection biology

Having to cope with the world of pathogenic microbes is still part of human life, even in the modern era of antibiotics. New pathogens, 'superbugs' that are resistant to antibiotics, and fear of viral pandemics have all raised people's awareness of the danger of infectious diseases.

The working groups in the key research area of infection biology focus on pathogenic fungi, bacteria and viruses. They study molecules and molecular interactions that are relevant for the development of acute, chronic and lethal infections. Special attention is paid to those molecules that are involved in the identification of microbes, their absorption into host cells and the initiation of defence reactions. The researchers in this area use microbial genetics, patho-gene identification, proteomic studies of infected cells as well as biochemical and structural analyses of interactions between microbial molecules and those of the host cell, in order to investigate factors that determine the interaction between pathogenic agents and hosts which, so far, have been unknown or not fully understood.

RNA biology

RNA research has seen an enormous boom as hundreds (if not thousands) of new functional RNAs have been discovered in recent years. Transcriptome analyses suggest that genomes are completely transcribed into RNAs whose functions are still mostly unknown. The main roles of the

RNAs in cells include both gene expression and gene regulation. It has recently become obvious that RNAs are also relevant with regard to chromatin structure and epigenetic phenomena.

The goal of the research programme in RNA biology is to understand the mechanisms on which these phenomena are based.

In order to meet the goals set, interdisciplinary approaches are required, involving genetics, biochemistry, imaging, bioinformatics and structural biology. The model organisms used in this research range from *Escherichia coli* and pathogenic bacteria to yeasts and plants as well as mammals.

Cell signalling

Cells need to interpret external signals and translate them into biological processes in order to survive, proliferate and differentiate. If signal transduction fails, even in a limited number of cells, the whole organism is at risk.

The research groups in the key research area of cell signalling use advanced methods of biochemistry, molecular biology, cellular biology and genetics in order to examine the signal transduction in different experimental systems (from yeasts to mice).

A long-standing common point of interest is investigating the effects of post-translational protein modifications and formation of protein complexes on the biogenesis and regulation of signal-transmitting networks, as well as the positive and negative feedback loops which control the interaction of specific signalling pathways to ultimately generate different biological outputs.

Computational biology, biophysics and structural biology

This key research area aims to understand the structure, function and interaction of molecules that are important biologically at atomic, molecular and ultra-molecular levels. This area combines experimental and theoretical disciplines. The most important experimental research foci include X-ray crystallography and NMR, which supply high-resolution structures at the atomic and molecular levels, and which are combined with medium-resolution imaging procedures such as light microscopy.

The theoretical approach concentrates on computational biology, in which the entire range of bioinformatics is used. This key research area analyses processes of cell transformation and cell differentiation, ligand-receptor interactions, RNA and protein dynamics, interactions between proteins and nucleic acids, as well as molecules of vesicular transport and F-actin-based cytoskeletons.

Bioinformatics

Research in the area of bioinformatics focuses on the development of new methods of processing and analysing the rapidly growing volume of data generated by genome projects and related research. Bioinformatics benefits from close cooperation with the other key research areas, so that further intensification of cooperative links is among the objectives set for the future. In addition to bioinformatics research in a strict sense, future collaboration with the new Campus Science Support Facility (CSF) is expected to be of great benefit. The final goal here is to outsource routine applications in bioinformatics to the CSF.

Enhanced cooperation with institutes of the Austrian Academy of Sciences will intensify the inclusion of mathematical methods.

Chromosome biology

Proteins that are involved in forming eukaryotic chromosomes also influence the control of gene expression, DNA repair and the correct distribution of daughter chromatids during cell division. These connections are studied in the key research area of chromosome biology. A specific focus is on the behaviour of chromosomes during meiosis, a type of cell division that is essential for sexual reproduction, in which haploid cells are produced from the soma of diploid organisms, in the course of which genome sequences of the homologous chromosomes of the two parents are recombined. Such processes are essential for the fertility of eukaryotes that reproduce sexually, and in addition, they are an excellent model for studying recombination as it is generally activated during meiosis, while it is a very rare occurrence in other cells and processes. The study of the mechanism of meiosis has led to the discovery of important genes and the mechanisms of genome maintenance as well as the development of cancer.

The key research area of chromosome biology aims to expand our knowledge of chromosome structure, recombination, coupling and segregation by using different model organisms *(S. cerevisiae, S. pombe, C. elegans, A. thaliana and Tetrahymena thermophila)* in molecular biological studies, and to some extent in comparative studies.

Membranes and cytoskeleton

One of the most striking characteristics of eukaryotic cells is the division of cytoplasm by intracellular membranes, thus creating cellular compartments and organelles with specific cellular functions. These compartments are cell nuclei which are essential for DNA replication and gene expression, mitochondria that produce energy and peroxisomes that are involved in the breakdown of harmful molecules, as well as membrane compartments responsible for exo- and endocytotic processes.

Membrane-bound organelles are closely linked to elements of the cytoskeleton and nucleoskeleton which define their positions within the cell and are involved in performing specific functions of the organelles. Elements of the cytoskeleton determine and stabilise the shape of the cell, and they are essential for dynamic processes such as cell movement, division of chromosomes and the development of cell projections. During the process of proliferation and differentiation, many organelles are temporarily dissolved, or duplicated, often by means of a complex interaction with the cytoskeleton.

The participating groups conduct research on a series of proteins of the membrane, cytoskeleton and nucleus in order to gain better insight into basic mechanisms as well as defective processes in numerous diseases which result from protein defects or impaired interactions between membranes and the cytoskeleton.

5.Z3.3 Professorships as of 1 October 2011

For a better overview, all professorships (including any professorships initially financed by the Federal Ministry of Science and Research) existing as of 1 October 2011 (section 98 and section 99, para. 3 of the 2002 Universities Act) are listed here. The list below shows the situation at a certain point in time and does not predetermine any future subject dedication of professorships, nor the ones dealt with in the following section.

- Biochemistry II
- Bioinformatics
  (80 %; 20 % at the Faculty of Computer Science)
- Cell Signalling
- Crystallography of Biomolecules
- Genetics, section 99, para. 3 of the Universities Act
  (temporary: for six years)
- Immunobiology
- Immunobiology, section 99, para. 3 of the Universities Act (temporary: for six years)
- Microbiology
- Microbiology
- Molecular Biology
- Molecular Spectroscopy and Photochemistry
- Plant Genetics
- RNA Biochemistry

5.Z3.4 Subject Dedication of Future Professorships and Status of Implementation

Dedication of professorships in line with research profiles and with the need to teach fundamental subjects

Subject dedication of professorship:
Genetics and Developmental Biology
Time of appointment: following vacancy of the Professorship of Plant Genetics (not before 1 October 2013)

Further professorships subject to availability of funds

Establishing the following professorships is a goal for the next performance agreement period.

Subject dedication of professorship:
Molecular Biology
(in cooperation with the Medical University of Vienna)

Imprint

Publisher
University of Vienna
Universitätsring 1
1010 Vienna
Austria
www.univie.ac.at

Responsible for the content
Rectorate of the University of Vienna

Editor
Office of the Rectorate

Coordination and proofreading
Public Relations

Graphic design
Elisabeth Frischengruber

Layout concept
Egger & Lerch GmbH Corporate Publishing

Image editing
Tea Mina Jaramaz

Photo credits
ESO
Barbara Mair
Fotostudio Pfluegl
University of Vienna

Translation
Susanne Ofner
Michael Reiterer

Translation coordination and final translation editing
Barbara Heinisch-Obermoser

Printing
Friedrich VDV/Linz

This product is from sustainably managed forests and controlled sources.