Elke Krystufek Cover design incorporating **Silent Scream** from the eponymous series, c-print on plastic, 70 x 50 cm, 2003.

Artists need prizes – in both the tangible and intangible sense; art awards serve as a form of appreciation and recognition which a democratic society is obliged to give to free contemporary art.

The fact that the FWF Art Award was given to Elke Krystufek in 2011 represents a distinction for an outstanding artistic personality. Her works have made – and are still making – Austrian art history on par with international standards. The work selected, *Silent Scream* (2003), is exemplary of her overall position as an artist: uncompromising in execution, complex and visionary in content. Krystufek's text on this series of works reveals her eloquence, coupled with a well-grounded knowledge of history.

Stefan Bidner (freelance curator, Vienna)

The FWF Art Award is a distinction conferred upon recognised artists and artist collectives. The work of art chosen each year is purchased by the FWF and placed on permanent loan in a renowned public institution devoted to cultivating contemporary art.

An Arabic Walk in Vienna with an English Accent

by Elke Krystufek

Silent Scream was inspired by Günter Brus' performance piece Walk in Vienna (1965). In my look back at Viennese Actionism, my main interest as an artist is the way in which male and female roles are distributed.

However, once removed from its European context, *Silent Scream* took on a different form as a performance in New York in 2002, when I painted my face and body white and asked the audience to use me as a canvas to write or draw on; in the New York context, this was understood as racist because the "white face" was obviously close to the idea of a "black face," thus opening up interpretations other than the body as a substitute for a canvas.

The use of English on the subject's face clearly places the work in a context which did not arise in Austria until around the 1990s, when text in pictures was no longer predominantly in the national language, but a flood of artists began working in English.

I am primarily interested in works of art across centuries and in comparison across all geographies; in this way, body painting is also an expression of "primitive" cultures and tribal art. The face as a mask stands in dialog with the general function of masks on faces, which can depersonalise as well as exaggerate or neutralise a person by allowing him or her to take on a different function, possibly a more general one.

In doing further research, I came across the works of Italian artist Ketty La Rocca in the late 1960s and 1970s; even back then, La Rocca used writing on faces and bodies in her photographs. Among them, what I found particularly interesting was her work with X-ray images of her own skull. I acquired one of the skull photos around 2003, and it is now part of my art collection. It is also depicted in the Naked and Mobile catalogue for the eponymous exhibition at the Essl Museum, where several collages of nudes with scarves as well as various versions of my face painted in white and other colours are combined. At the moment, I am also fascinated by a wooden sculpture of a skull by Elisabeth Von Samsonow; the sculpture is a sort of portrait of her brain, with the inner part of the skull painted in blue and filled with artists' names written in white (on display at the group exhibition "Wiener Innen Aussen" at the Wonderloch Kellerland in Berlin, March 3 to 19, 2011).

However, the scarf covering the small head in the large head in my work is also an extremely simple form of union where linen as a fabric and the artist's body begin to resemble each other. The uncut cloth suggests a desire to envelop the body in it, as a close link between life and art. Apart from its Arab/Muslim connotations, the scarf is also quite familiar as a clothing element in rural areas. It protects your hair from falling into your face while working, which also makes it an article of work clothing.

A theorist once criticised the Vienna Actionists by saying that their art originated from the discomfort felt by people who moved from rural areas to urban areas, people who did not know the behavioural norms in the city and thus developed "non-urban" forms on that basis. In this sense, an urban body would have never equated itself to a material in the same way or violated the defined boundaries between private and public spaces.

In this context, what fascinates me about the Arab world is the even stricter separation of public and private spaces, especially the attachment of women and the family to the location of the home, which, given the continued advancement of globalisation, can now only be found in one's own mobile body (apart from communication machines).

Thus, one's own naked body finds a sort of home in the larger global body, which mainly communicates using images and text; in *Silent Scream*, this is seen in the open mouth, a vagina symbol linked to creation and the Greek mythological figure Kronos, who devoured his own children. The open mouth on the neutralised white face is, as the title suggests, also borrowed from the infinitely long silent scream of Edvard Munch.



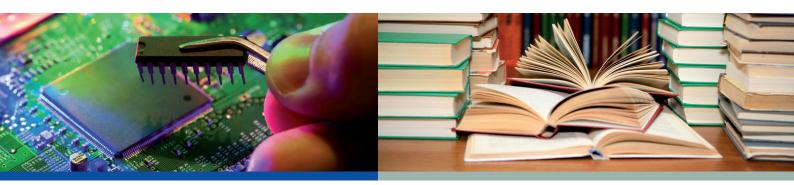
Annual Report 2010

We strengthen science and the humanities in Austria.



Annual report submitted to the Austrian Federal Ministry of Science and Research in accordance with Art. 4 para. 1 of the Austrian Research and Technology Funding Act (FTFG). Vienna, March 2011.





4 Forewords

6 INTRODUCTION

- 6 FWF portraits
- 8 The FWF's corporate policy
- 10 Bodies of the FWF
- 11 The FWF application and decision process

12 REPORT OF THE MANAGEMENT

On the state of scientific research in Austria

A pause at the crossroads

20 GENERAL ACTIVITY REPORT

20 Development of funding activities

Ambivalence as a constant companion

28 International activities

The FWF as an active partner

30 Services

The FWF as a partner organisation and service provider

32 Public relations and science communication

Building new confidence after the crisis

36 Sources of FWF funds

Stabilising the FWF's funding sources

38 Secretariat

The Secretariat: First point of contact and support at the FWF

39 Application of FWF funds

Universities successfully acquire FWF funds for basic research

41 PROGRAMMES TO STRENGTHEN AUSTRIA'S SCIENCE SYSTEM

Exploring new frontiers – Funding top-quality research

42 Support for stand-alone projects

Stand-Alone Projects

44 Priority research programmes

Special Research Programmes (SFBs), National Research Networks (NFNs)

48 Awards and prizes

START Programme, Wittgenstein Award

52 International programmes

Multilateral project funding, bilateral project funding, networks and infrastructure

Cultivating talents – Development of human resources

54 Doctoral programmes

Doctoral Programmes (DKs)

56 International mobility

Schrödinger Programme, Meitner Programme, Translational Brainpower Programme

62 Career development for female scientists

Firnberg Programme, Richter Programme

FШF



Realising new ideas – Interactive effects between science and society

- **66 Funding for application-oriented basic research**Translational Research Programme (TRP),
 Clinical Research Programme (KLIF)
- **70 Support for artistic research**Programme for Arts-Based Research (PEEK)
- 72 Support for scientific publications and for science communication
 Support for Scientific Publications

74 APPENDIX – OVERVIEW

- 75 Tables
- 86 Bodies of the FWF
 Supervisory Board, FWF Management,
 FWF Board, Assembly of Delegates,
 International START/Wittgenstein Jury,
 PEEK Board
- 90 FWF Secretariat
- 92 Balance sheet and annual accounts
- 96 Index of illustrations and tables

Research is our future

"Cutting-edge research, made in Austria" and the Austrian Science Fund (FWF) are inextricably linked to one another. The FWF makes an indispensable contribution to increasing the capacity and output of Austria's science and research system, and helps to strengthen the country as a location for science and research by implementing innovative approaches to funding.

In this context, one of the objectives I consider most important is the promotion of junior scientists and researchers. The Federal Ministry of Science and Research as well as the FWF make great efforts to support young talents: Some 80% of the funding approved by the FWF is used to finance the salaries of young scientists and researchers. Another major priority is the targeted promotion of women in science and research, in particular through the FWF's dedicated programmes for women. For example, a total of 28 topnotch women scientists received Hertha Firnberg and Elise Richter grants in 2010.

Despite significant budgetary constraints, we have (once again) been able to send a clear message with regard to strengthening university research from 2011 onward: The FWF has resumed its coverage of overhead costs in stand-alone projects and in projects funded under the PEEK Programme for Arts-Based Research. In this way, universities have regained an effective and efficient means of strengthening their research infrastructure in the interest of enhancing quality.

Education is our raw material, science represents our great opportunity, and research is our future. As Austria's main funding agency for basic research, the FWF – along with our universities, which conduct basic research at

the highest level – will play an important role in shaping the future.

In outlining Austria's path to becoming an innovation leader, the federal government's strategy for research, technology and innovation (RTI) also makes a strong statement on the significance of basic research. This strategy focuses on fostering the innovation capabilities of Austrian institutions of higher education and promoting excellence. Austria's institutions of higher education can only reinforce their important role in the country's system of innovation if we all succeed in improving the general conditions for science and research. Deliberately strengthening these fields will also lend support to economic recovery, as well as securing growth and high-quality jobs in Austria.

The year 2010 was highly challenging in many ways, but ultimately it was successful, and 2011 is bound to be no less challenging. Key upcoming initiatives include the creation of a development plan for higher education in Austria as well as implementation of the government's RTI strategy. In order to succeed in these efforts, we will also need to ensure the strength and high performance of the Austrian Science Fund. Given Austria's excellent scientists and researchers, I am fully convinced that the Ministry and the FWF will together succeed in creating even greater added value and strengthening Austria as a science and research location.

Bealix Lail

Beatrix Karl Federal Minister of Science and Research



Beatrix Karl Austrian Federal Minister of Science and Research

Rising to new challenges

In our dynamically changing and increasingly complicated world, science and research have clearly gained in importance. In order to meet the challenges that lie ahead, we urgently need to ensure advances in knowledge - especially the kind of advances facilitated by basic research, which is predominantly supported by government funding.

As the FWF also combines this priority with various forms of support for junior scientists and researchers, the fund makes a decisive contribution to educating the researchers of tomorrow as well as Austria's future leaders in business, science and society.

In 2010, the FWF, its highly dedicated and competent employees, and its many volunteer reviewers were once again instrumental in ensuring that Austria will be able to meet the scientific and technological demands of the future. I would therefore like to express my gratitude and appreciation to all of the people involved in these activities.

In the coming years, continuing to enhance Austria's science and research capabilities according to international standards will remain one of the FWF's key objectives. These efforts will require all of our support, including skills, time, and not least, additional funding.



Willels Krull Wilhelm Krull

Chairman of the FWF Supervisory Board

A difficult ascent

According to Art. 4 para. 1 lit. c of the Austrian Research and Technology Funding Act (FTFG), the FWF is required to submit an "annual report on the fund's activities in the past calendar year and on the state of scientific research in Austria"; upon approval by the FWF's Assembly of Delegates, this report is to be presented to the Austrian Federal Minister of Science and Research. However, fulfilling our legal mandate is certainly not the only reason why we have prepared the FWF's 2010 Annual Report with great care and made every effort to paint as realistic a picture as possible of our activities in the reporting period as well as the current state of research in Austria.

Overall, the picture we present is a conflicting one: On the one hand, Austria is still home to outstanding scientists who conduct cutting-edge research by international standards in certain disciplines. After the turbulences of the previous year, the FWF has now undergone a process of consolidation and is carrying out its funding activities successfully. However, at least for basic research, the spectacular growth observed in the years prior to the crisis has been disrupted, giving way to a stage of real stagnation which is currently expected to last several years. Given the growing investments in basic research in neighbouring countries, Austria will have to decide whether it is still willing to settle for a spot in the middle ranks among developed nations, or whether the country truly wishes to pursue its objective of becoming an innovation leader as envisaged in the government's research strategy.

I sincerely hope that our annual report provides you with interesting and stimulating reading.



Christoph Kratky **FWF** President

Christoph Kratting



Wilhelm Krull
Chairman of the
FWF Supervisory Board

Wilhelm Krull studied German language and literature, philosophy, pedagogy and political science in Marburg, after which he served as a DAAD lecturer at Oxford University and held leading positions on the German Council of Sciences and Humanities and at the Administrative Headquarters of the Max Planck Society. He has been the Secretary General of the Volkswagen Foundation since 1996. In addition to his professional activities in science policy and research funding, he has also held numerous positions on committees at the national and international level. He has published extensively in English and German on issues related to foundations as well as higher education and research policy. In addition, he has been Chairman of the Board of Directors at the Association of German Foundations since 2008. Krull was a member of the FWF Supervisory Board from 2008 to 2009, and he was appointed Chairman in 2010.

Christoph Kratky has been a professor of physical chemistry at the University of Graz since 1995. After completing his doctorate in chemistry at ETH Zurich, Kratky worked as a postdoctoral fellow at Harvard University from 1976 to 1977. He then returned to the Institute of Physical Chemistry at the University of Graz, where he established and led a working group for structural biology. In 1985, he earned his *venia* in the field of physical chemistry, and he became a full member of the Austrian Academy of Sciences in 1998. His research interests lie in the borderland between chemistry and biology. From 2003 to 2005, Kratky served as a member of the FWF Board, where he was responsible for the disciplines of chemistry and biochemistry. In addition to numerous positions in international scientific committees, Kratky became President of the FWF in 2005 and is currently serving his third term of office.



Christoph Kratky
FWF President



Dorothea SturnManaging Director of the FWF

Dorothea Sturn became Managing Director in January 2011. From 1979 to 1985, she studied political science and economics at Heidelberg and Bremen University. She then joined the faculty as a research fellow at Bremen University, after which she moved to the University of Graz, where she worked as an assistant from 1988 and as an adjunct lecturer from 1991. In 1993, she received her doctorate in economics from Bremen University. From 1991 onward, Sturn worked at the Institute for Technology and Regional Policy at Joanneum Research in Graz, and in 1995 she established the Institute's office in Vienna. In the year 2000, she moved on to the Technologie Impulse Gesellschaft (later assimilated into the Austrian Research Promotion Agency [FFG]), where she managed the Structural Programmes Division. In 2007, Sturn became Head of Quality Assurance at the University of Vienna.



Christine Mannhalter
FWF Vice-President

Since the year 2000, Christine Mannhalter has been a professor of molecular diagnostics at the Medical University of Vienna. After completing her studies in biotechnology as well as her dissertation at the University of Vienna Medical School, Mannhalter left Vienna in October 1977 to spend two years as a postdoctoral fellow at the University of Southern California Medical School. In 1985, she earned her *venia* in the field of clinical chemistry, after which she worked to establish diagnostic molecular biology as a discipline at the Medical School and at Vienna General Hospital (AKH). In 2000, she was appointed Professor of Molecular Diagnostics in Clinical Chemistry. Mannhalter is particularly concerned with the priority of generating new scientific knowledge and publishing high-quality scientific works. In addition to her work on various committees, she can look back on a long career at the FWF, where she has held a number of important positions. Since June 2010, she has served as the FWF's Vice-President in charge of Life Sciences.

Johann Eder, who has been a full professor of Business Information and Communication Systems at the University of Klagenfurt since 2007, completed his doctorate at the University of Linz in 1985. In 1989, he earned his *venia* and became an assistant professor of applied informatics in Klagenfurt. After associate professor-ships in Hamburg and Vienna, he was appointed to the position of full professor at the University of Klagenfurt in 1992. From 2005 to 2007, Eder was a professor of informatics at the University of Vienna, after which he returned to Klagenfurt, where he has served as head of the Institute for Informatics Systems since 2007. In 1998 and 1999, Eder also worked as a visiting scholar at AT&T's Shannon Laboratory (NJ, USA). As for his research interests, Eder has specialised in databases and information systems. From 2000 to 2005, he served as a member of the FWF Board, and he became the FWF's Vice-President in charge of Natural and Technical Sciences in 2005. He is currently serving his third term of office in this position.



Johann Eder FWF Vice-President



Herbert Gottweis

Herbert Gottweis has been a professor of political science at the University of Vienna since 1998. He heads the Life Science Governance Research Platform and is an associate at the BIOS Centre of the London School of Economics. His research and publications lie at the interface between social sciences, natural sciences and medicine. After studying in the US and Vienna, Gottweis received his doctorate from the University of Vienna. He visited Harvard University as a Schrödinger Fellow from 1989 to 1990, then worked as a research fellow in the MIT Programme in Science, Technology, and Society from 1992 to 1993; he also served as an assistant professor at the Department for Science and Technology Studies at Cornell University from 1993 to 1995. Visiting professorships have taken him to such faraway places as Hong Kong and Australia, and he is currently working at the United Nations University in Tokyo. From 2000 to 2005, Gottweis was a member of the FWF Board, and he became the FWF's Vice-President in charge of Humanities and Social Sciences in 2005. He is currently serving his third term of office in this position.

We strengthen science and the humanities in Austria.

The Austrian Science Fund (FWF) is Austria's central funding organisation for basic research.

Our mission

The purpose of the FWF is to support the ongoing development of Austrian science and basic research at a high international level. In this way, the FWF makes a significant contribution to cultural development, to the advancement of our knowledge-based society, and thus to the creation of value and wealth in Austria.

Our objectives

- To strengthen Austria's international performance and capabilities in science and research as well as the country's attractiveness as a location for high-level scientific activities, primarily by funding top-quality research projects for individuals and teams and by enhancing the competitiveness of Austria's innovation system and its research facilities;
- To develop Austria's human resources for science and research in both qualitative and quantitative terms based on the principle of research-driven education;
- To emphasise and enhance the interactive effects of science and research with all other areas of culture, the economy and society, and in particular to increase the acceptance of science and research through concerted public relations activities.



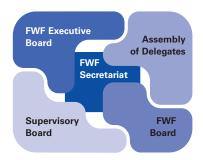
Our values

- Excellence and competition: The FWF's funding activities focus on research efforts devoted to generating new knowledge; the quality of research is assessed by international referees on a competitive basis
- Independence: Creativity in basic research requires freedom. Thanks to its legally independent status, the FWF is able to ensure this freedom and to safeguard science and research from the direct influence of special interest groups.
- International orientation: The FWF is guided by the standards of the international scientific community and actively supports cooperation across national borders.
- Equal treatment of all disciplines: The FWF treats all researchers according to the same standards, without giving preference to or discriminating against individual disciplines.

- Transparency and fairness: The FWF makes every effort to avoid conflicts of interest, to implement checks and balances in all stages of its procedures, and to communicate its methods and decision-making process clearly in order to ensure acceptance of its activities.
- **Gender mainstreaming:** The equal treatment of women and men in research is a top priority at the FWF, and our organisation pursues this objective through specific programmes and gender mainstreaming in all fields.
- **Equal opportunities:** The FWF evaluates grant applications without regard to the applicant's position or academic degree.
- Ethical standards: The FWF is dedicated to ensuring that the rules of sound scientific practice and internationally accepted ethical standards are observed within the fund's sphere of influence.



Bodies of the FWF



FWF Executive Board

The Executive Board coordinates the organisation's activities. This body is also in charge of defining the FWF's strategic objectives as well as developing and advancing its funding programmes. In addition, the Executive Board takes part in negotiations with Austrian and European research policymakers, cooperates with universities and other scientific institutions in Austria and abroad, and represents the FWF at the national and international level. The members of the Executive Board are part of the Assembly of Delegates and the FWF Board. The Vice-Presidents are each in charge of a specialist department at the FWF.

Supervisory Board

The Supervisory Board takes resolutions on the FWF's annual accounts as well as its annual budget estimates, long-term plans and annual work plans. It also approves the Executive Board's appointment or dismissal of the Management Board. In addition, the Supervisory Board is responsible for nominating the FWF President.

Assembly of Delegates

The Assembly of Delegates makes decisions on the rules of procedure for its own activities as well as those of the Executive Board and the FWF Board, and on the FWF's annual report. This body also elects the FWF's President, the Vice-Presidents, the members of the FWF Board as well as four members of the Supervisory Board.

FWF Board

The FWF Board is responsible for deciding on funding for research projects and on changes in the FWF's funding programmes.

FWF Secretariat

The Secretariat handles day-to-day operations at the FWF. This department is headed by the FWF's management (Executive Board and Management Board) and is subdivided into three divisions:

- Specialist departments (Life Sciences, Humanities and Social Sciences, Natural and Technical Sciences, Mobility and Women's Programmes)
- Strategy departments (International Programmes, National Programmes, Analysis)
- Internal departments (Public Relations, Finance, Auditing, IT, Organisation & Human Resources, Legal Affairs & Committee Support)

The FWF application and decision process

Selection process

All applications received by the FWF are subjected to a peer review procedure in which only scientists working outside Austria are asked to review proposals. These reviews form the basis for all funding decisions, thus ensuring the quality and international relevance of the research funded.

The FWF is obliged to treat all scientific disciplines equally and does not have a quota system regulating the distribution of funds among various disciplines.

Review process

The number of reviews required in order to take a decision primarily depends on the

amount of funding requested. Additional reviews may also be required for applications which span multiple disciplines.

Up to a funding amount of EUR 350,000, a minimum of two review reports are necessary in any case. Above that level, at least one review must be obtained for each additional EUR 100,000 requested. For funding in excess of EUR 550,000, each increment of EUR 150,000 requires a disproportionate number of additional reviews.

Decision process

On average, the FWF Board issues decisions on funding applications within four to five months after the application is received. Once the FWF has received a sufficient number of valid reviews, a decision on the application can be made at the next Board meeting. The FWF Board convenes five times per year.

At the FWF Board meeting, the relevant reporters present each application as well as the core statements from the reviews received, with due attention to the opinion(s) of each alternate reporter.

After the Board meeting, decision letters are prepared by the FWF Secretariat and sent to the applicants, in some cases along with relevant excerpts from the peer reviews in anonymised form.

The FWF Secretariat provides support for the activities of the FWF Board and Executive Board. In addition, the Secretariat serves as the direct point of contact for applicants in all project-related matters.

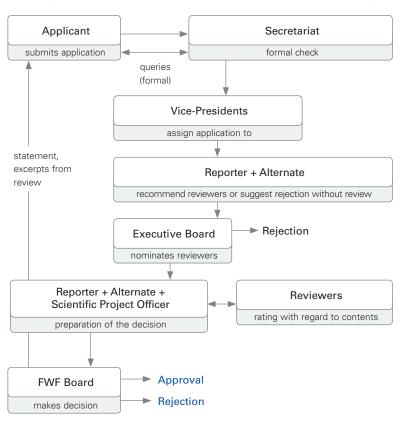
Coaching workshops

The FWF also offers coaching workshops in order to help potential applicants understand the application and decision process as well as the general conditions applicable to funding decisions.

These one-day events comprise several modules in which various topics are addressed in a combination of presentations and interactive exercises moderated by a professional coach.

Decision process

Fig. 1



On the state of scientific research in Austria 1)

A pause at the crossroads



For years now, the title of this section assessing the state of research in Austria from the FWF's perspective has invoked images or concepts related to roads and travel. Compared to "Pickin' up speed" (2005) and "In the fast lane" (2006), more recent titles have taken on a less optimistic tone: In 2008, we returned to "The slow lane" in our appraisal of the situation, and in 2009 the FWF (not to mention other institutions) believed these fields had reached a "Crossroads": Will we see a reversal in Austria's successful catching-up process – yes or no?

At the end of the year 2010, a key question in Austrian science and research remained unanswered: Have we decided on a direction yet, or are we still at the crossroads? What are the chances that the efforts of recent years were not in vain – a fear voiced, for example, by Austria's Wittgenstein Award winners in their open letter to the Austrian government in November 2010? ²⁾ In this section, we attempt to appraise the situation in light of these questions and to identify prospects for future development.

1. Achievements to date

In the field of research, technology and innovation (RTI), Austria made impressive progress by international standards until 2008, both in terms of the amount invested in this sector as well as the quality of Austria's RTI

efforts. Austria's research and development (R&D) expenditures totalled some EUR 7.8 billion in 2010, boosting R&D investments to nearly 2.8% of Austria's gross domestic product (GDP). The latter figure rose by 0.63 percentage points between 2000 and 2007, thus earning Austria a top position among European countries. In basic research, Austria is characterised by especially strong individual fields of internationally recognised excellence (supported by outstanding figures from the research community), and Austrian scientists have enjoyed remarkable success in the highly competitive procedures of the European Research Council (ERC).

There is broad political consensus in Austria regarding the high importance of education, science and research. Despite the financial crisis and the resulting austerity measures, there is also widespread agreement that these areas must be considered high priorities and must also be funded appropriately. Accordingly, the federal budget presented in November 2010 included proactive funding for education, science and research.

The basis of information and data used for RTI policy decisions, measures and reform processes is more extensive and better grounded than ever. The Austrian Dialogue on Research, the System Evaluation, the CREST (Comité de la Recherche Scientifique

¹⁾ In accordance with Art. 4 para. 1 lit. c of the Austrian Research and Technology Funding Act (FTFG) 2) See *FWF info* No. 72: 1/10.

et Technique) Expert Group Report on Austria's RTI policy, the Strategy 2020 document published by the Austrian Council for Research and Technology Development (RFTE), and an impressive number of additional studies and analyses have provided an unprecedented basis of evidence for research policy.

Austria's differentiated set of instruments for the implementation of RTI policy measures is well established and ensures high quality: The country's funding agencies (Austrian Research Promotion Agency [FFG], Austrian Science Fund [FWF], austria wirtschaftsservice [AWS]) work to high professional standards. A number of proven FWF programmes designed to establish and enhance scientific competence as well as specialist research areas (Priority Research Programmes, Doctoral Programmes, START Programme, Wittgenstein Award) and to build a bridge between science and the business world (Competence Centers for Excellent Technologies [COMET], BRIDGE Programmes, Christian Doppler Laboratories, etc.) are in place, and additional programmes are ready to be launched (e.g. clusters of excellence).

A reform of Austria's university funding system (with funds for university instruction based on enrolment) is already under way and should be fully implemented as early as 2013.

2. Future challenges

Despite impressive progress in catching up to other countries, Austria still lags behind significantly in terms of scientific output compared to nations of similar size and wealth (e.g. Switzerland, Netherlands, Sweden, Finland and Denmark). The reasons underlying this problem are currently being discussed on the basis of both quantitative and qualitative components. The key factors in this challenging situation are listed below.

2.1 Funding of universities and basic research

At 1.3% of GDP, Austria's funding of the tertiary education sector is far below the targeted level of 2.0%. Given the crucial importance of higher education for the quality of the science and research system, deficiencies in university funding have had a marked effect on Austria's scientific output. In this context, what is important is not only the amount of funding earmarked for this sector, but also the way in which the funds are provided. Leading countries such as Denmark, the Netherlands and Switzerland spend comparable percentages of GDP on research, but they generate significantly higher scientific output than Austria does. 3) One conspicuous difference is the fact that the share of thirdparty funds in university financing is higher in those countries. In nations with high scientific output, the agencies which fund basic research on a competitive basis also receive significantly higher endowments than the FWF does in Austria. 4) In addition, a recent study 5) shows that only 13 to 19% of all potential applicants employed at Austrian universities and at the Austrian Academy of Sciences (ÖAW) actually submit applications to the FWF.

Spending on basic research accounts for 0.44% of GDP in Austria, thus placing the country far behind leading nations such as Switzerland (0.83%). At the same time,



Christoph Kratky FWF President

³⁾ See Gassler et al., 2008. "Systeme der Grundlagenforschung"; www.rat-fte.at/tl_files/uploads/Studien/0811_joanneum_SystemeGrundlagenforschung.pdf 4) See FWF info No. 72; 1/10

⁵⁾ See FWF info No. 75; 4/10

scientific research is becoming more and more expensive: ⁶⁾ For example, a survey conducted by the National Science Foundation in the US found that the resources required for each publication at the top 200 US universities rose by 30% between 1990 and 2001. What this means is that increasingly large investments will be needed just in order to maintain these activities at their current level.

2.2 Scientific capacity

Despite the outstanding achievements of Austria's scientists in individual fields, bibliometric analyses indicate that the country's scientific output would have to double in order for Austria to catch up to the leading nations of the world. ⁷⁾ It is indeed striking that the countries with the highest research output are not only at the forefront in specific disciplines, but also generally exhibit higher-quality scientific output compared to Austria. Apparently, it is not necessarily productive for small countries to specialise in individual fields of excellence; instead, it is more appropriate to ensure a broad-based and competitive science and research system.

2.3 Human resources

Highly qualified personnel is beneficial to the business world, industry, and a nation's entire economy and society. Despite drastic improvements in recent years, Austria still lags behind in this respect. Again and again, we hear arguments about the below-average number of academic degrees conferred in Austria (approximately 2,800 per million inhabitants, compared to more than 4,000 in Switzerland and some 6,500 in the Netherlands) as well as the country's low percentage of university graduates; despite the

different methods used in various countries, Austria's percentage (18%) is well below the OECD average of 27%. ⁸⁾ Austria is also at the bottom of the table in terms of the share of highly qualified immigrants (11.3%).

Education at the Ph.D. level is a crucial aspect in the development of any science and research system, which is why Austria needs to expand its offerings of structured doctoral programmes. ⁹⁾ Due to enormous demand, the Doctoral Programmes offered by the FWF have, in fact, reached the limits of their budget.

Integrating junior scientists into the science and research system is just as important as education; this means that it is necessary to develop and offer adequate career opportunities. The integration of junior scientists into the university system is subject to the provisions of the recently signed collective agreement for university faculty, which makes it possible to offer career positions with qualification agreements and thus provide relatively young scientists with the prospect of indefinite employment at an early stage in their careers. We expect that most scholars who manage to obtain such a position will also make it over the 'hurdle' defined in the qualification agreement and remain at their universities until retirement. For this reason, universities will have to ensure from the very outset that the selection process for such positions focuses exclusively on people who possess truly above-average qualifications, who have already conducted independent scientific work for a number of years, and who can demonstrate the success of those activities by way of publications, international



Dorothea Sturn FWF Managing Director (since January 2011)

⁶⁾ A. Schibany & H. Gassler, 2010: Nutzen und Effekte der Grundlagenforschung; InTeReg Research Report 98-2010

⁷⁾ Austrian Research and Technology Report 2009, p. 95

⁸⁾ Austrian Research and Technology Report 2009, p. 103

⁹⁾ See the FWF's discussion paper "Rollenmodelle des Doktoratsstudiums"; www.fwf.ac.at/de/zur_diskussion/index.html

visibility and the acquisition of competitive research funding. The selection of applicants for career positions should be optimised by advertising the positions internationally and by ensuring transparent selection processes with appropriate quality assurance mechanisms.

In recent years, the FWF has observed a sharp increase in the number of 'independent applicants', that is, principal investigators who do not hold a permanent position at a university and wish to finance their own salaries on a project basis. At present, over 20% of all FWF projects are headed by such independent scholars. In principle, this can be regarded as a positive development, especially as it highlights the fact that an increasing number of scientists at Austrian universities fulfil the FWF's strict quality criteria. However, it would be desirable if the universities - for the sake of their own attractiveness as research locations - also offered career prospects for such exceptionally wellqualified junior scholars outside of existing employment and development plans.

3. RTI strategy

The Austrian federal government's comprehensive research, technology and innovation (RTI) strategy, which is based on an impressively large body of information, was approved in early 2011. The FWF has repeatedly pointed out that such a strategy should also address the general significance to be attributed to research as well as the shares of public funding to be allocated to basic research, industrial research and experimental development. In this context, the strategy should focus on ensuring balanced and for-

ward-looking development in the entire innovation system and avoid a situation in which various sectors of the system are pitted against one another. The share of public funding received by each of those sectors to date is well documented in various reports (R&D Report, Statistics Austria, etc.), but the distribution of funds has never been driven by strategic forethought; instead, it has emerged from political struggles for resources and from the activities of interest groups with varying degrees of power.

This tension between various interest groups also manifested itself in a public controversy 10) in which very different perspectives have come to light on the role and funding of basic research. In the extreme, this debate even produced the nearly 'legendary' statement that a small country like Austria does not need (or cannot afford) basic research at all. 11) In the course and aftermath of this controversy, various prominent figures from the fields of science and research policy made themselves heard. 12) In line with a recent analysis, 13) they all came to the same conclusion: No country - especially not a developed and wealthy one like Austria - can simply do without top-notch basic research. The most severe consequences of neglecting basic research would be a loss of absorption capacity for scientific know-how and separation from the international innovation base, and additional damage would follow in the long term, especially with regard to the development of highly qualified human resources.

4. Perspectives for future development

The challenges for research policy are still very significant, especially in light of the



Gerhard Kratky FWF Managing Director (until December 2010)

¹⁰⁾ See FWF info No. 73; 2/10

¹¹⁾ See FWF info No. 71; 4/09

See e.g. B. Ebersold, D. Harhoff, W. Krull und W.D. Webler, 2010: Ist eigene Grundlagenforschung verzichtbar?
 In: Forschung – Politik, Strategie, Management, 3, 4/10, Universitätsverlag Webler, www.universitaetsverlagwebler.de
 A. Schibany & H. Gassler, 2010: Nutzen und Effekte der Grundlagenforschung; InTeReg Research Report 98-2010

4. R R fa in al th a A

Christine Mannhalter FWF Vice-President for Life Sciences

international financial crisis and the resulting economic and fiscal consolidation measures. However, given the importance of R&D as well as science and education, and with particular regard to the importance of the tertiary education sector (which is closely linked to science and research), a number of measures should be accorded high priority:

4.1 Continuing to catch up in the R&D sector

R&D investments must not be reduced; in fact, they should be increased by even larger increments. Given that other countries have already committed significant resources to this area, a standstill in funding would signify a serious step in the wrong direction for Austria.

In this context, the long-term ability to plan and the security of funding are essential. In general, any measures serving those ends would be desirable. This objective would be best supported by research funding legislation which spans a ten-year planning horizon, but such legislation would also have to leave adequate space for new and sometimes unexpected developments. In this context, any legislative definition of priority research areas would be counterproductive.

4.2 Defining the significance of research segments in Austria's overall policy

The foundations for such a definition have already been laid in the government's programme for the current legislative period: 1% of GDP is to be allocated to basic research, 2% to the tertiary education sector. This would require exceptionally large increases in the tertiary education sector and in basic research, with investments climbing

to at least EUR 2.5 billion by the year 2020. While this figure seems affordable to one of the wealthiest countries in the world, at the moment such investments appear fairly unrealistic in light of the need to consolidate budgets.

4.3 Strong universities in a strong system

In addition to sufficient funding for universities, a reform of the funding system would be a prerequisite for strengthening Austria's science and research system. In this context, funding for university instruction and research would have to be separated. Instruction should be funded on the basis of enrolment, while support for research should be dominated by project-based, competitive funding without subject-area restrictions or quotas (bottom-up principle). Funding for university instruction as well as research should be based on a full-cost model which should leave some financial latitude for universities to carry out image-building measures and to make investments in infrastructure.

Strong universities also need a strong funding agency. A set of instruments for the meaningful deployment of additional project funding granted on a competitive basis has already been established in the FWF's existing programmes as well as its newly developed initiatives (clusters of excellence, NIKE, research professorships). In an initial step toward full-cost funding, some of the FWF's programmes will once again be able to cover overhead costs totalling up to 20% of direct project costs starting in 2011. The expansion of overhead coverage to all FWF funding categories should certainly follow as the next step, also in order to prevent unwanted substitution effects. International examples (e.g.

in the UK and US) show that realistic full-cost funding ranges from 75 to 100% of direct project costs.

4.4 Human resources

Weaknesses in this area can likewise only be remedied with an overall package of measures. In addition to the points mentioned in Section 2.3, it is especially important to emphasise the following:

- Training of junior scholars, improvement of doctoral education. In addition to the numerous measures taken by universities, there is a great need for more professionalised and structured doctoral education. ¹⁴⁾ Demand for the FWF's Doctoral Programmes (DKs) has veritably exploded in recent years; at present, a total of 31 DK programmes are under way. It is urgently necessary to expand this initiative, but the programme is severely limited by funding constraints.
- Brain gain. Austria needs to attract more highly qualified researchers from other countries. This can only be done by offering highly conducive general conditions, in particular by improving career prospects at universities. The FWF supports this process through its funding programmes and international cooperation agreements (see Section 4.5).
- Increasing the share of women in science. Austria is still among the countries with the smallest share of women in research. In order to provide further support for the FWF's already successful women's programmes, it would be necessary to take additional measures to inte-

grate female recipients of FWF grants into the Austrian science and research system (see Section 2.3).

4.5 Internationalisation

Like the universities, 15) the FWF has considered internationalisation a topic of major importance for many years: The FWF's mobility programmes are a true success story with demonstrably high impact, 16) and the measures taken in the START Programme have made a substantial contribution to the success of Austrian scientists and researchers applying to the ERC. The FWF's participation in the programmes of the European Science Foundation (EUROCORES) and the European Commission (ERA-Nets) as well as its support for projects under bilateral and multilateral international agreements (especially the DACH Lead Agency Agreement, see also p. 29) are among the fastest-growing areas of the FWF's funding portfolio.

The FWF's current financial prospects severely hamper the organisation's ability to respond to these developments appropriately; at present, it is not possible to expand existing programmes or implement new ones (e.g. visiting professorships, research professorships).

5. A brief look to the north/Summary

Austria has every reason to be pleased with what the country has achieved, but at the same time there is even more reason to redouble our efforts to realise the goal of catching up to the top-ranking research countries and to prevent this objective from becoming a mere illusion. One good example of a country which has benefited from subjecting itself to honest self-criticism and from con-



Johann Eder FWF Vice-President for Natural and Technical Sciences

¹⁴⁾ See the FWF's discussion paper "Rollenmodelle des Doktoratsstudiums"; www.fwf.ac.at/de/zur_diskussion/index.html

¹⁵⁾ See e.g. Universitätsbericht 2008, pp. 290 f.

¹⁶⁾ See Evaluation of the FWF mobility programmes Erwin Schrödinger and Lise Meitner (2006) www.fwf.ac.at/de/public_relations/publikationen/publikationen.html

WIN STARING STERREI

EWISSENS

ID DIE WISS

WIR STÄRKEN

WISSENSCHA

IDIE WISSENSCHA

WIR STÄRKEN

WIR STÄRKEN

WIR STÄRKEN

WIR STÄRKEN

WIN ÖSTERREIC

Herbert Gottweis FWF Vice-President for Humanities and Social Sciences

stantly questioning its achievements is Finland, which is regarded as an international role model in the field of R&D.

For a long time now, Finland has been at the very forefront of the European R&D land-scape. There are hardly any R&D indicators in which Finland does not claim a top ranking. On the basis of various evaluations, however, the Finns established that their research activities had developed less dynamically since the year 2000. Finland is still among Europe's top R&D countries, but other, smaller countries such as Denmark, Ireland and Norway have now pulled ahead, and Finland's distance behind the leading countries (e.g. the Netherlands and Switzerland) has also widened.

The Academy of Finland (the Finnish counterpart to the FWF) took a closer look at the situation and asked itself, "What are the others doing differently – or better?" The results, which were published in December 2010, ¹⁷⁾ are truly astonishing and fly in the face of various common 'dogmas' in Austrian research policy.

- Internationalisation. According to the Finnish study, one special strength of the Swiss system, for example, is the large share of foreign scientists and researchers as well as students from abroad; this is one of Finland's most apparent weaknesses. This is consistent with the FWF's assessment, as the FWF has always advocated internationalisation as well as dismantling barriers and enhancing Austria's attractiveness as a research location.
- Funding structure. In the benchmark countries examined, the public sector con-

tributes a large percentage of funding in the tertiary education sector: This share amounts to 60 to 75%, compared to 45% in Finland. Apparently, excessively large private-sector contributions to university funding – e.g. in the form of commissioned research – are not necessarily conducive to scientific output.

- Specialist research fields. Specific focus areas in research are far more important in Finland than in the countries examined. As such, focusing on specific research fields does not appear to boost scientific output.
- Research infrastructure. All of the benchmark countries examined in the Finnish study are involved in the development and deployment of international research infrastructure, but at the same time they have invested more heavily than Finland in the development of national research infrastructure. What this means is that international arrangements cannot compensate for deficiencies in national infrastructure.

Summary

All in all, we can conclude that in light of the current situation, Austria still has the opportunity to resume its catching-up process in science and research and thus to maintain a solid basis for its economic strength and national wealth.

However, considerable additional efforts will be necessary in order to advance to the top. This 'pause at the crossroads' might also have its advantages: The Finnish study shows that the dogmas of research policy, which surface again and again in various forms in Austria (e.g. higher involvement of business and industry in university funding, more research

¹⁷⁾ www.aka.fi/en-gb/A/Academy-of-Finland/The-Academy/Releases/Academy-of-Finlands-five-country-compa rison-reveals-Finnish-science-policy-needs-updating/

focus areas, etc.), have to be questioned very carefully. Austria still exhibits vast room for improvement, and compared to Finland, we have far more reason to discuss how this process can be carried out efficiently.

A crossroads offers an opportunity to decide on a specific direction. It would certainly be a shame if Austria chose a path which has already proven to be the wrong way elsewhere.

Christoph Kratky

Johann Eder

Herbert Gottweis

Christine Mannhalter

Gerhard Kratky

Dorothea Sturn

Ambivalence as a constant companion

The year 2010 was characterised by changing sentiments. For the first time, the FWF surpassed the 2,000 mark with a total of 2,037 application decisions. With 691 new funding approvals and a total funding volume of EUR 171.8 million, the FWF was able to leave the traces of the 2009 crisis (606 new approvals; EUR 147.6 million in funding) behind. The record funding volume achieved in the year 2008 is once again within reach. The number of people working in projects funded by the FWF also reached a record level (3,405). On the other hand, the FWF's approval rate of 24.6% (based on funding volume) is still fairly low, and certainly far from the rate observed in 2008 (31.9%). Moreover, the budget defined for the period until 2013 does not leave any latitude for the FWF to respond appropriately to changes in demand for its programmes.

In the year 2010, the FWF Board handled a total of 2,037 funding applications for research projects. A total of 40 proposals were received for the FWF's priority research programmes and doctoral programmes. At EUR 587 million, the total volume of funding requested in applications handled during the year 2010 exceeded the previous year's figure by more than EUR 100 million. By historical comparison, the number of proposals decided on by the FWF has doubled since the year 2000. On the other hand, the approval rate based on the number of applications has dropped from over 50% to around 32%.

Allocation of funds

Table 1

	2009		2010	
Cost types	Approvals (EUR millions)	percent	Approvals (EUR millions)	percent
Personnel costs	115.7	78.4	134.7	78.4
Consumables	11.7	8.0	14.5	8.4
Other costs	10.8	7.3	12.5	7.3
Travel costs	3.9	2.7	4.1	2.4
Equipment costs	2.9	1.9	2.6	1.5
Contracts for work and services	2.1	1.4	2.0	1.2
Contributions to publishing costs	0.5	0.3	1.3	0.8
Total:	147.6	100.0	171.8	100.0

If we compare the columns "Applications processed," "Approval rate" and "Total grants" in Table 7 (see p. 27) with the figures from the previous year, it is striking that the developments were not at all uniform. In the FWF's Stand-Alone Projects, the funding amount requested rose by 14.7%, and the total amount of funding approved also increased by 8.7%. However, these results also point to a flagging approval rate, which dropped to 29.3% of funding requested. After 2004, this is the second-

Research personnel funded by the FWF, 2008 to 2010

	Р	ostdocs		Ph.[). student	ts		Schrödin Iowships	٠		e Meitner ositions			na Firnbei ositions	g	Elise Rio	chter posi	tions	
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010	
Total	830	951	976	1,526	1,619	1,683	102	86	88	45	42	44	40	41	47	29	35	41	
Women	320	388	412	625	671	710	35	34	38	17	19	16	40	41	47	29	35	41	
Men	510	563	564	901	948	973	67	52	50	28	23	28	_	_	-	-	_	_	

lowest level recorded in the history of the FWF.

The rise in the total amount of approved funding compared to the previous year is a positive development in any case; at EUR 171.8 million, this sum was only EUR 4.3 million short of the record value seen in 2008 (see Fig. 3 on p. 22). However, this trend is also slightly tainted by ambivalence, as the rise in the amount of funding approved was accompanied by an even greater increase in the amount requested. The consequences for the year 2010 are as follows: At 24.6%, the approval rate based on funding volume was still low and remained largely unchanged compared to the previous year. This means that the FWF had to reject three-quarters of the funding amounts requested.

It can be demonstrated that reinforcing the FWF's investment potential serves to augment employment opportunities, in particular for young scientists and researchers at the beginning or in the early stages of their careers. As of December 31, 2010, the FWF's payroll included more than 3,400 people working in science and research (see Table 2), and this value has approximately doubled since the year 2000. With regard to the use of funds in FWF programmes, an analysis of project approvals by cost type (see Table 1) shows that the majority (78.4%) of approved FWF funds flow directly into personnel costs, that is, into the employment of young scientists and

researchers. If we consider the cost amounts requested more closely, then personnel costs are followed by project-specific material costs at 8.4%, followed by other costs (e.g. for data acquisition, workshops, C-14 analyses, etc.), which account for some 7.3% of approved funding. The share of travel costs remained roughly the same at 2.4% (2009: 2.7%), while equipment costs dropped slightly, from 1.9% to 1.5%. At 1.2%, the share of costs attributable to independent work contracts also changed only little compared to the previous year (2009: 1.4%).

During the crisis in 2009, the FWF was forced to focus on specific programmes due to budgetary constraints. In 2010, the FWF approved a total of EUR 171.8 million in funding, the second-highest amount in the organisation's history, but this amount was approved in response to the largest overall volume of funding ever requested in the history of the FWF. As a result, it was again necessary to take measures at the programme level in 2010. The priorities set by the FWF's decision-making bodies were as follows: Reinforcement of the Stand-Alone Projects as the core and backbone of FWF investment activities, and at the same time no reductions in programmes specifically intended to expand human resources. This concerned the DK Programmes, international mobility programmes, and programmes supporting career development for women in science. In all of these areas, the FWF was able to boost its approval rate or at least maintain it at an acceptable level.



A vast majority of FWF funds – approximately 80% – are used to employ young scientists and researchers.

Table 2

Impul	lse projec	ts	Technical personnel			Other personnel			Total		
2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
7	1	1	123	134	122	331	405	403	3,033	3,314	3,405
2	0	0	90	95	82	166	183	193	1,324	1,466	1,539
5	1	1	33	39	40	165	222	210	1,709	1,848	1,866

As of Dec. 31, 2010

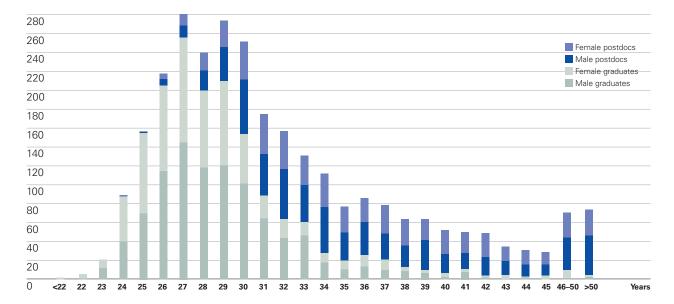
Share of women

An analysis of funding approvals yields a balanced result in terms of gender in the year 2010. With an approval rate of 32.3% (based on the number of applications), women scientists were not quite able to maintain the high level attained in 2009 (34.7%), but it is indeed positive that their

approval results are equal to those of their male colleagues. If we consider the approval rate based on funding volume, women scientists and researchers are more than a full percentage point ahead of their male counterparts (25.5% and 24.3%, respectively). These figures are especially impressive if we recall the double-digit

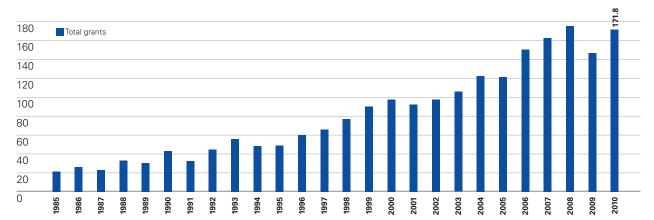
Age structure of employees in FWF-funded research projects

Fig. 2



Development of funding (total grants; EUR millions)

Fig. 3



differences observed in the not-too-distant past.

An analysis of the FWF's individual programmes reveals especially positive results in international programmes and international mobility. In the FWF's international programmes, which saw sharp increases in the number of applications, approvals and the approval rate based on the number of applications in 2010, women scientists saw an approval rate of 47.1% – which was markedly higher than that of their male counterparts (38.2%). In the Lise Meitner programme for incoming scholars (40.7%) as well as the Schrödinger programme for outgoing scholars (45.2%), the approval rates attained by women applicants were similarly encouraging.

One programme especially worth mentioning is the START Programme for outstanding young researchers: For the first time since the programme's inception in 1996, a balance of genders was achieved in the approval of six START projects in 2010; this positive development was initiated by the FWF through various structural measures. Considering that the number of female principal investigators in START projects could be counted on one hand in the first decade of the programme's existence, this represents an important milestone in the history of the programme.

However, the gender distribution of project applicants (among other things) clearly indicates that further efforts are still necessary in gender mainstreaming: Only 30% of applications are submitted by female scientists, and this percentage should not be allowed to stagnate under any circumstances.

Age structure

If we analyse the age distribution of employees in FWF-funded research projects, it is

striking that this structure has remained fairly constant and tended toward rather young employees over time. Most graduates and postdocs belong to the 26 to 30 age group (see Fig. 2). The share of women employed in FWF projects (total employees: 3,405; 1,539 women, 1,866 men) has already reached 45% and is still rising steadily. This observation also indicates that the FWF has quite impressively met its objective of supporting junior scientists and researchers. The publicsector funds invested by the FWF make a substantial contribution to the development and enhancement of human capital in Austria. The FWF's range of programmes is entirely consistent with the objective of increasing the country's research potential in qualitative and quantitative terms, and the FWF consistently adheres to the principle of research-driven education.

International peer reviews

The FWF's international peer review process for project applications lies at the heart of quality assurance for the organisation's 'brand name'. In order to enhance the international competitiveness of Austrian research, it has become the usual practice in the FWF's peer review process to have all project proposals assessed by researchers working outside of Austria. For years now, the FWF has generally relied on reviews from abroad to assess the content of grant applications. In line with common international practice, the reviewers perform this function for the FWF free of charge. A look at the statistics for the year 2010 reveals with increasing clarity that the FWF's peer review process essentially relies on three major sources of reviews (see Fig. 5, p. 25). North America represents the main source (approximately 36%), followed by reviews from the region 'EU excluding Germany and Switzerland' with around 33%. The share of reviews received from researchers in Switzerland and Germany once again dropped slightly in 2010, falling below the 20% mark (to about



In the year 2010, the FWF's overall approval rate based on the number of applications was the same for women and men (32.3%).

19.5%) for the first time. On the other hand, the source region 'Rest of the world' has also been gaining in significance; in the year 2010, the percentage of reviews from this source rose to double digits for the first time (approximately 10.2%). In total, the FWF received reviews from 57 different nations in 2010, which indicates an especially strong international element in its review operations (see Table 5). Of the 4,606 reviews received, 890 were written by female researchers (gender not surveyed in 44 cases). In order to obtain those 4,606 reviews, the FWF had to send a total of 13,549 requests (see

Table 3); this is an impressive response rate by international standards. At the same time, it is worth noting that the FWF Secretariat has had to make increasing efforts to maintain this high ratio.

Processing time

In the year 2010, the FWF was able to keep its average application processing time at a very impressive level by international comparison. In FWF programmes where applications are reviewed on a rolling basis, the time between the submission of an application and a decision by the FWF Board averaged 4.4 months. In the FWF's mobility programmes, the average processing time was even just under 4 months (see Table 4).

Table 3

Table 4

Reviews requested and received, 2008 to 2010

	2008	2009	2010
requested	10,337	11,887	13,549
received	4,170	4,205	4,606

Average processing time in months, 2008 to 2010

	Stand-Alone	Mobility	Overall
	Projects	Programmes*	average
2008	4.6	3.7	4.4
1st half of 2009	5.9	5.1	5.8
2 nd half of 2009	4.4	3.8	4.3
2010	4.5	4.0	4.4

^{*)} Schrödinger/ Meitner Programme

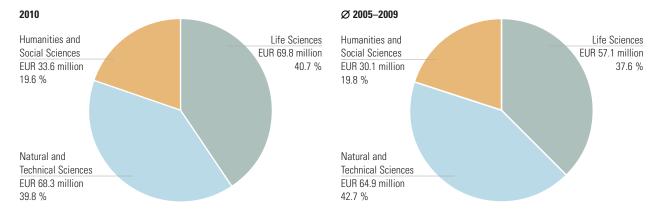
Scientific disciplines

The FWF treats all researchers according to the same standards without giving preference to or discriminating against individual disciplines. Each year, the competition for grant funds from the FWF is 're-opened' to all disciplines equally. Nevertheless, at higher levels of aggregation, comparatively stable patterns have emerged over the years. The FWF groups scientific disciplines into three broad categories:

 Life Sciences, comprising medicine, veterinary medicine and biology;

Total grants by scientific discipline





- Natural and Technical Sciences, comprising natural sciences (except biology), agriculture and forestry (without veterinary medicine), and technical sciences;
- Humanities and Social Sciences.

In the reporting period, FWF funding was distributed as follows (see Fig. 4): Of the total amount of funding approved (EUR 171.8 million), EUR 69.8 million went to applicants working in the Life Sciences category, EUR 68.3 million to researchers in the Natural and Technical Sciences, and EUR 33.6 million to scholars in the Humanities and Social Sciences.

In relative terms, this yields the following results:

- Life Sciences (2010): 40.7% (2005-2009 average: 37.6%);
- Natural and Technical Sciences (2010): 39.8% (2005-2009 average: 42.7%)
- Humanities and Social Sciences (2010): 19.6% (2005-2009 average: 19.8%).

For the purpose of categorisation, principal investigators assign their projects to the relevant scientific disciplines during the application phase according to the classification scheme used by Statistics Austria (see also Appendix, pp. 76-77).

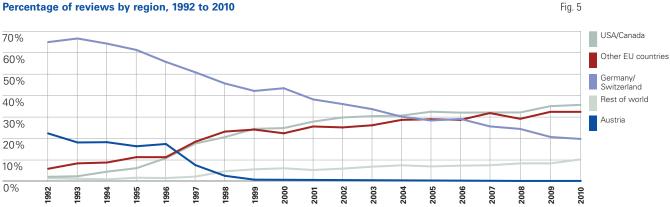
Reviews by country in 2010

Argentina Australia Belarus Belgium Brazil Bulgaria Canada Chile China China (Hong Kong) Croatia Cuba Cyprus Czech Republic	3 116 1 76 12
Belarus Belgium Brazil Bulgaria Canada Chile China China (Hong Kong) Croatia Cuba Cyprus	76 12
Belgium Brazil Bulgaria Canada Chile China China (Hong Kong) Croatia Cuba Cyprus	76 12
Brazil Bulgaria Canada Chile China China (Hong Kong) Croatia Cuba Cyprus	12
Bulgaria Canada Chile China China (Hong Kong) Croatia Cuba Cyprus	
Canada Chile China China (Hong Kong) Croatia Cuba Cyprus	
Chile China China (Hong Kong) Croatia Cuba Cyprus	4
China China (Hong Kong) Croatia Cuba Cyprus	183
China (Hong Kong) Croatia Cuba Cyprus	1
Croatia Cuba Cyprus	39
Cuba Cyprus	10
Cyprus	1
	<u>2</u>
Czech Republic	1
	17
Denmark	47
Egypt	1
Estonia	2
Finland	52
France	182
Gambia	1
Germany	757
Greece	20
Great Britain	547
Hungary	13
India	26
Iceland	2
Ireland	24
Israel	47
Italy	179
Japan	
Kuwait	75

Table 5

Lithuania	2
Luxembourg	3
Mexico	7
New Zealand	27
Netherlands	147
Norway	30
Panama	2
Poland	26
Portugal	17
Rep. of Korea	7
Romania	1
Russia	13
Saudi Arabia	1
Singapore	16
Slovakia	5
Slovenia	4
South Africa	6
Spain	90
Sweden	57
Switzerland	139
Syria	1
Taiwan	13
Thailand	1
Turkey	4
Ukraine	3
United States of America	1,468
Venezuela	1
Not specified	73
Total	4,606
Women	890
Men	3 672

Percentage of reviews by region, 1992 to 2010



Overview of grants (number of projects)

Table 6

	Application	ons processed 1)		Approvals Approval rate in percent ²⁾			
Funding programme	2010	2009	2010	2009	2010	2009	
Stand-Alone Projects	995	904	310	291	31.2	32.2	
Women/Men	232/763	229/675	62/248	74/217	26.7/32.5	32.3/32.1	
Special Research Programmes (SFBs) 3)	50	12	39	11	36.4	14.3	
Women/Men	11/39	0/12	9/30	0/11	100.0/30.0	0.0/20.0	
SFB extensions 3)	31	28	7	17	22.6	60.7	
Women/Men	2/29	2/26	1/6	1/16	50.0/20.7	50.0/61.5	
National Research Networks (NFNs) ³⁾	18	10	10	0	8.3	0.0	
Women/Men	3/15	0/10	1/9	0/0	0.0/10.0	0.0/0.0	
NFN extensions 3)	7	13	0	7	0.0	53.8	
Women/Men	2/5	2/11	0/0	2/5	0.0/0.0	100.0/45.5	
START Programme	45	50	6	6	13.3	12.0	
Women/Men	11/34	14/36	3/3	2/4	27.3/8.8	14.3/11.1	
Wittgenstein Award	22	18	1	2	4.5	11.1	
Women/Men	3/19	6/12	0/1	0/2	0.0/5.3	0.0/16.7	
International Programmes	229	210	92	67	40.2	31.9	
Women/Men	51/178	28/182	24/68	6/61	47.1/38.2	21.4/33.5	
Doctoral Programmes (DKs) 3)	6	8	5	8	29.4	36.4	
Women/Men	0/6	1/7	0/5	1/7	0.0/31.3	33.3/36.8	
DK extensions 3)	7	3	5	2	71.4	66.7	
Women/Men	2/5	0/3	2/3	0/2	100.0/60.0	0.0/66.7	
Schrödinger Programme	129	103	56	53	43.4	51.5	
Women/Men	42/87	46/57	19/37	22/31	45.2/42.5	47.8/54.4	
Meitner Programme	76	72	29	25	38.2	34.7	
Women/Men	27/49	30/42	11/18	10/15	40.7/36.7	33.3/35.7	
Translational Brainpower Programme 4)	13	3	3	1	23.1	33.3	
Women/Men	2/11	1/2	0/3	0/1	0.0/27.3	0.0/50.0	
Firnberg Programme	50	53	13	13	26.0	24.5	
Women/Men	50/-	53/-	13/–	13/–	26.0/-	24.5/-	
Richter Programme	40	31	15	16	37.5	51.6	
Women/Men	40/-	31/-	15/–	16/–	37.5/–	51.6/-	
Translational Research Programme (TRP) 4)	166	58	31	13	18.7	22.4	
Women/Men	37/129	9/49	5/26	2/11	13.5/20.2	22.2/22.4	
Programme for Arts-Based Research (PEEK)	48	63	7	7	14.6	11.1	
Women/Men	19/29	25/38	0/7	4/3	0.0/24.1	16.0/7.9	
Support for Scientific Publications 5)	105	105	62	62	59.0	59.0	
Women/Men	45/60	42/63	28/34	29/33	62.2/56.7	69.0/52.4	
Total	2,037	1,749	691	606 ⁶⁾	32.3	33.8	
Women/Men	579/1,458	519/1,230	193/498	182/424	32.3/32.3	34.7/33.5	

Outline proposals (SFBs)	11	7
Women/Men	1/10	2/5
Outline proposals (NFNs)	12	13
Women/Men	2/10	2/11
Outline proposals (DKs)	17	22
Women/Men	1/16	3/19

¹⁾ Applications processed include (new) applications handled by the FWF Board. 2) The approval rate is calculated as the ratio of full applications approved to the number of outline proposals submitted.

³⁾ Two-stage process; the numbers shown correspond to sub-projects from full applications or sub-projects within full applications (2nd stage).

Programme funded by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT).
 Does not include peer-reviewed publications in supplementary funding

⁶⁾ Includes START project extensions.

Overview of grants (EUR millions)

Table 7

	Application	ons processed 1)	Approval ra	ite in percent 2)		Total grants 3)
Funding programme	2010	2009	2010	2009	2010	2009
Stand-Alone Projects	278.9	243.2	29.3	30.4	83.0	76.3
Women/Men	65.2/213.7	62.4/180.8	25.7/30.4	29.3/30.8	17.0/65.9	18.8/57.6
Special Research Programmes (SFBs) 4)	19.6	4.9	28.0	12.9	15.0	4.2
Women/Men	4.3/15.3	0.0/4.9	50.0/24.7	0.0/17.5	3.5/11.4	0.0/4.2
SFB extensions 4)	9.9	10.0	38.3	60.4	3.8	6.0
Women/Men	0.8/9.0	0.8/9.2	52.2/37.0	47.3/61.4	0.4/3.3	0.4/5.7
National Research Networks (NFNs) 4)	7.3	5.2	10.6	0.0	4.3	0.3
Women/Men	1.2/6.1	0.0/5.2	3.2/11.9	0.0/0.0	0.2/4.0	0.1/0.3
NFN extensions 4)	2.5	4.7	0.0	42.1	0.0	2.0
Women/Men	0.6/1.8	1.1/3.6	0.0/0.0	58.2/37.2	0.0/0.0	0.6/1.3
START Programme	46.6	52.0	7.7	6.4	3.6	3.3
Women/Men	10.8/35.8	14.3/37.7	15.6/5.3	7.9/5.9	1.7/1.9	1.1/2.2
Wittgenstein Award	33.0	27.0	4.5	10.4	1.5	2.8
Women/Men	4.5/28.5	9.0/18.0	0.0/5.3	0.0/15.6	0.0/1.5	0.0/2.8
International Programmes	48.6	44.7	29.9	20.3	14.9	9.5
Women/Men	10.6/38.1	6.3/38.3	32.1/29.2	12.3/21.6	3.4/11.5	0.8/8.7
Doctoral Programmes (DKs) 4)	12.3	19.5	16.6	30.1	8.2	18.2
Women/Men	0.0/12.3	2.2/17.3	0.0 /18.0	25.9/30.7	0.1/8.1	2.1/16.1
DK extensions 4)	14.9	7.4	60.0	42.1	8.9	3.1
Women/Men	5.6/9.3	0.0/7.4	69.3/54.3	0.0/42.1	3.9/5.0	0.0/3.1
Schrödinger Fellowships	11.7	6.4	45.7	51.1	5.6	3.5
Women/Men	3.7/8.1	3.1/3.3	46.6/45.4	48.6/53.5	1.8/3.8	1.6/1.9
Meitner Programme	8.7	8.1	39.5	35.9	3.9	3.3
Women/Men	3.1/5.6	3.4/4.7	42.1/38.1	33.1/37.9	1.5/2.4	1.3/2.0
Translational Brainpower Programme 5)	4.6	0.8	23.3	39.7	1.1	0.3
Women/Men	0.8/3.7	0.3/0.5	0.0/28.4	0.0/58.8	0.0/1.1	0.0/0.3
Firnberg Programme	10.1	10.2	26.1	24.5	2.7	2.6
Women/Men	10.1/-	10.2/-	26.1/-	24.5/-	2.7/-	2.6/-
Richter Programme	11.2	6.5	34.4	43.3	4.5	3.7
Women/Men	11.2/-	6.5/-	34.4/-	43.3/-	4.5/-	3.7/-
Translational Research Programme (TRP) 5)	53.7	15.6	15.4	19.2	8.4	3.3
Women/Men	12.7/41.0	2.6/13.0	11.3/16.7	16.2/19.8	1.4/6.9	0.5/2.8
Programme for Arts-Based Research (PEEK)	12.2	14.8	14.2	11.9	1.7	1.8
Women/Men	4.8/7.4	6.1/8.7	0.0/23.4	16.6/8.6	0.0/1.7	1.0/0.8
Support for Scientific Publications 6)	1.1	0.9	58.7	53.9	0.7	0.5
Women/Men	0.4/0.7	0.3/0.5	64.7/54.8	66.9/45.3	0.3/0.4	0.2/0.2
Total	587.0	484.7	24.6	24.3	171.8 ⁷⁾	147.6 ⁸⁾
Women/Men	150.5/436.5	128.6/356.1	25.5/24.3	22.2/25.0	42.7/129.1	34.7/112.9

Outline proposals (SFBs)	52.9	30.1
Women/Men	7.0/45.9	7.9/22.1
Outline proposals (NFNs)	35.5	40.0
Women/Men	5.6/29.9	6.0/33.9
Outline proposals (DKs)	43.7	57.5
Women/Men	3.3/40.3	7.8/49.7

¹⁾ Applications processed include (new) applications handled by the FWF Board.

²⁾ For priority research programmes and doctoral programmes, the approval rate is calculated as the ratio of full applications approved to outline proposals submitted. The other approval rates are calculated as the ratio of new applications approved to applications processed.

³⁾ Includes supplementary approvals for previously funded research projects.

I Two-stage process; the numbers shown correspond to sub-projects from full applications or sub-projects within full applications (2nd stage).

⁵⁾ Programme funded by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT).

⁶⁾ Does not include peer-reviewed publications in supplementary funding requests.

⁷⁾ Includes (expiring) commissioned programmes.

⁸⁾ Includes START project extensions.

The FWF as an active partner

The central objective guiding the FWF's activities at the international level is to enhance Austria's international visibility as a research location.

Top-notch research is conducted in worldwide networks. In addition to prominent figures in the world of research as well as established and internationally visible research institutions, the general conditions created by national funding agencies also play a fundamental part in strengthening the international integration of research.

In this context, it is important to note the dynamic growth of science and research areas around the world; one particular focus of these international efforts is the integration of funding for basic research in the European Research Area. The FWF is actively involved in these efforts and takes targeted measures to support the internationalisation of Austrian science and research.

In FWF projects, international integration is not generally limited to specific international programmes, but manifests itself in the form of individual cooperation arrangements in all of the FWF's funding categories. Nearly half of the FWF projects currently in progress involve some form of cooperation with international partners, and the distribution of partner countries has remained relatively stable over the years. One-fourth of all cooperation partners are in Germany, while 17% come from the US; the UK accounts for 8%, France for 7%, and Switzerland and Italy account for 5% each. At 30%, the share of cooperation partnerships with English-speaking countries is slightly higher than that of German-speaking countries (29%). Some 9% of cooperation arrangements have been set up with Eastern

European partners, while 4% involve partners from Asia.

Until the year 2008, international cooperation arrangements showed highly dynamic growth. With a research funding contribution (i.e. projects approved plus research funding under international agreements) of EUR 9.7 million, this development reached a plateau in 2009, but in 2010 this figure again surged by more than 60% to EUR 15.9 million. In this context, the FWF's most important areas of activity are as follows:

EUROHORCs

FWF President Christoph Kratky is a member of the European Heads of Research Councils (EUROHORCs), which consists of the heads of research funding organisations from 24 European countries. The FWF participates in EUROHORCs' activities in the interest of cross-border cooperation between Europe's national research funding agencies.

European Science Foundation (ESF)

Austria is represented in the ESF by the FWF and the Austrian Academy of Sciences. The Austrian representative in the ESF's Governing Council is FWF President Christoph Kratky. The FWF supports the efforts of the ESF and EUROHORCs to set up a joint umbrella organisation in order to create a united and more powerful voice for science and research in Europe.

European Research Council (ERC)

As in 2008 and 2009, the 2010 calls for ERC Starting Grants and Advanced Grants yielded highly positive results for applicants from Austria. Of the 27 Starting Grantees conducting research in Austria, eight researchers previously received funding under the FWF's

START Programme. This clearly underscores the effectiveness of the FWF requirement under which START Programme applications must also be submitted to the ERC. The FWF is also represented by one national expert in the ERC's Programme Committee and provides support for the Austrian scientific community in cooperation in with the Austrian Research Promotion Agency (FFG).

FRA-Net scheme

In the year 2010, the FWF continued its involvement in ERA-Nets, an initiative of the European Commission which aims to improve coordination in national research and funding activities. New developments in this area of activity include the FWF's participation in CHIST-ERA (Information and Communication Sciences), E-RARE-2 (Rare Diseases) and TRANSCAN (Translational Cancer Research). In total, the FWF has taken part in 15 ERA-Net initiatives to date (see Table 33, Appendix p. 80).

EU Joint Programming

Joint Programming refers to a European Commission initiative designed to promote cooperation in tackling 'grand challenges' at the European and global level. The FWF is involved in Austria's activities under the aegis of the Austrian Federal Ministry of Science and Research as well as the Federal Ministry of Transport, Innovation and Technology. In this context, the FWF has prepared potential analyses for the subject areas chosen to date. At the European level, the FWF also provided support for the preparation of general administrative conditions for Joint Programming initiatives.

Multilateral activities

Multilateral project funding refers to all proj-

ects which are supported within the framework of transnational, often thematically related calls for proposals and which involve at least three countries. One key characteristic of these activities is the central submission and review of applications on the basis of general conditions defined by the participating funding agencies. In 2010, the FWF took part in ten multilateral programmes in connection with ESF-EUROCORES and ERA-Net calls

Bilateral activities

In 2010, the lead agency procedure established in the traditionally close cooperation between research funding organisations in Germany, Austria and Switzerland (DACH: DFG, FWF, SNF) was developed even further. Demand for grants under this application procedure for transnational projects was high in 2010, and a majority of budget increases in the field of international programmes can be attributed to DACH cooperation arrangements. In order to expand this attractive funding instrument to new geographical areas, the FWF has also signed lead agency agreements with Slovenia and France. Under the agreement between the FWF and the China Scholarship Council (CSC), the first Chinese doctoral students arrived in Austria, and preparations were made for the next call.



One particular focus of international efforts is the integration of funding for basic research in the European Research Area.

The FWF as a partner organisation and service provider

Since 2006, the FWF - as a partner organisation and as a service provider - has been offering its expertise in the fields of science, research and evaluation as well as its operational know-how and instruments in exchange for the reimbursement of costs incurred by such activities. In recent years, this area of operations has rapidly gained importance.

The expertise acquired by the FWF in the course of its high-quality, internationally cominvolved in funding activities. In recent years, the FWF has substantially expanded its activities in this area. The organisation now offers

petitive peer review processes is being requested more and more frequently by other organisations which are not directly a broad range of services, including the selection of scientific experts for reviews, evaluations of individuals, projects and programmes, complete programme management, and scientific evaluations of institutions. In this context, the FWF operates either in the capacity of a partner organisation or as a service provider.

The FWF as a partner organisation In 2010, the FWF played a major role in the following programmes run by other funding organisations:

lent Technologies (BMVIT/BMWFJ programme; commissioned by the FFG) The purpose of the COMET Programme is to strengthen cooperation between science and industry by setting up competence cen-

tres. In this programme, researchers from

the worlds of science and business work

COMET - Competence Centers for Excel-

grammes at an internationally competitive level. Three programme tracks - which are categorised by their degree of internationalisation, project volume and duration - provide funding for 'K2' and 'K1' centres as well as 'K-projects'. In 2009, the third call under this programme was devoted to applications for K-projects. At the moment, five K2 centres and 16 K1 centres have been established, and 25 K-projects are in progress. Overall, some EUR 500 million in federal funding is to be granted over the entire duration of the COMET Programme.

together on jointly defined research pro-

The Austrian Research Promotion Agency (FFG) is responsible for managing the COMET Programme. Together with the Christian Doppler Research Association (CDG), the FWF was commissioned to handle the peer review process during the application stage (ex ante evaluation). In the course of the interim evaluations launched in early 2011, the FWF is now assessing scientific output as well as business performance. The FWF and CDG have again been put in charge of the peer review process, which involves obtaining reviews from international experts, selecting and corresponding with reviewers, as well as participating actively in on-site visits and closed sessions.

The FWF as a service provider

As early as 2006, the FWF began providing support for other organisations by nominating reviewers for scientific peer review processes. In response to increasing demand, the FWF has expanded these activities considerably in recent years.



The FWF offers its expertise and know-how both as a partner organisation and as a service provider.



In 2010, the FWF supported the following organisations in the process of evaluating programmes:

■ Museum of Natural History Vienna:

Execution of an international peer review for the evaluation of the museum's scientific output (preparation of report and evaluation guidelines, execution of entire review process, organisation and execution of an international reviewer panel, summary of recommendations and reporting)

■ Vienna University of Economics and Rusiness.

Execution of the international review of applications for a full professorship pursuant to Art. 99 para. 3 of the Universities Act

Autonomous Province of Bolzano-Bozen:

Nomination of reviewers for project proposals submitted in a competitive call in the field of scientific research

■ University of Freiburg:

Nomination of reviewers for the selection of proposals submitted in the course of the university's Excellence Initiative II and the selection of W1 Junior Professors

■ University of Natural Resources and Life Sciences (BOKU), Vienna:

Nomination of reviewers for the selection of dissertation projects for BOKU DOC Grants and for the evaluation of the Department of Sustainable Agricultural Systems as well as the Department of Forest and Soil Sciences

University of Vienna:

Nomination of reviewers for the assessment of submissions in the course of Initiativkolleg projects

In addition, the FWF nominated peer reviewers free of charge for the national funding agencies in Korea and Croatia in 2010.

In general, the FWF charges organisations for these services according to each contract's size and the expense involved. These calculations are based on an hourly rate which is computed using current fullcost accounting figures and which does not include a profit margin. In order to ensure satisfaction on the part of its partners and customers and to preserve its autonomy and quality standards, the FWF has specified a set of requirements for entering into these contracts and partnerships. Along with the catalogue of services offered, these requirements have been available on the FWF's web site since December 2010 (see www. fwf.ac.at/de/dienstleistungen/index.html, in German).



Building new confidence after the crisis

After the crisis in 2009, the period under review was one of the most eventful times in the history of the FWF with regard to PR activities. Two of the year's highlights came in the form of an FWF gala event as well as the arrival of the MS Wissenschaft, both of which also served as an exercise in building new confidence and optimism.

When the FWF is only able to perform its primary function - funding scientific research - to a limited extent, the situation will obviously leave its mark on the organisation's PR and communications activities. This was certainly the case in 2009. However, when the signals point to recovery or even growth, then such a situation should also make itself noticed. In this respect, it was no coincidence that the FWF held one of the largest events in its history on March 3, 2010: Over 400 guests were greeted by FWF President Christoph Kratky at the Remise event centre in the 2nd district of Vienna, and in the spirit of the event's theme ("Cutting-edge research, made in Austria"), the guests celebrated researchers who had succeeded in acquiring extremely competitive third-party funding. The Wittgenstein Award and START grant recipients from 2009, the spokespersons of the newly approved Special Research Programmes (SFBs) and Doctoral Programmes (DKs) as well as ERC Starting and Advanced Grant recipients working in Austria took to the stage and were greeted with warm applause until the wee hours. For Beatrix Karl, Minister of Science and Research, the event was her first major official appearance before the Austrian scientific community and given her long-standing university ties,

nication, the FWF was highly successful in breaking new ground in terms of both organisation and content in 2010. In cooperation with Wissenschaft im Dialog (WID), a science communication platform involving the most important players in the German research scene, the FWF- with the support of the Austrian Federal Ministry of Science and Research and the Ministry of Transport, Innovation and Technology - managed to bring the WID's 'floating science centre', the MS Wissenschaft, to Austria from September 9 to 20, 2010. Some 12,000 visitors in Vienna. Krems and Linz were welcomed aboard the MS Wissenschaft with its 'belly full of knowledge'. The MS Wissenschaft is a freighter nearly 110 meters long which is converted into a single-theme science centre and goes on tour for several months each year. In 2010, the MS Wissenschaft set sail with 35 interactive exhibits devoted to the subject of energy, stopping in 34 cities in Germany and Austria. In addition to its exhibits, the ship also served as the perfect hub for science communication in a wide variety of forms. Of the 12.000 visitors who boarded the MS Wissenschaft in Austria, approximately 3,700 were pupils in school groups. In the Internet-based pre-registration process required for school groups, the ship was booked well beyond capacity. The majority of visitors were interested individuals of all ages who had heard about the MS Wissenschaft thanks to extensive reporting and advertising in advance. The project was a rousing success which will be repeated in 2011: The MS Wissenschaft will again dock in Austria in June 2011, this time with exhibits on the subject of health. Incidentally, the exhibitors' competition ended with another pleasing result from the FWF's perspective:

With regard to participatory science commu-



In March 2010, the FWF hosted one of the largest events in the organisation's history.

she felt right at home.

Throughout the 2011 tour, the MS Wissenschaft will house two exhibits based on leading medical research from Vienna.

Am Puls event arouses keen interest

As in the past, the FWF cooperated with the agency PR&D to organise another five Am Puls ('On the pulse') events at the Albert Schweitzer House in the 9th district of Vienna, less than a ten-minute walk from the FWF's offices. Interest in the events remained consistently high throughout the year, and the range of themes was chosen with variety in mind - not least in order to make the various facets of basic research more accessible. The events included presentations and discussions of various topics such as "Food Intolerance and Allergies", "Torture: A Brutal Instrument of Power" and "A White Christmas? Stress-Testing Weather Forecasts". Am Puls has successfully established itself as a participatory event format for the interested public.

Other events

As the decision-making process for the START Programme and the Wittgenstein Award had to be rescheduled (with grant decisions in June 2010), the FWF held two very special events in order to duly celebrate the START grant and Wittgenstein Award recipients from two years (2009 recipients in March; 2010 recipients in June). The FWF Summerfest in honour of Wolfgang Lutz, winner of the 2010 Wittgenstein Award, and the six other award recipients from that year's START Programme was held in the garden at Schloss Hetzendorf, a baroque palace in Vienna. In addition to Beatrix Karl, Austria's Federal Minister of Science and Research, some 300 quests enjoyed the rich ambience and relaxed atmosphere. Another

new activity was the FWF's presence at the Vienna Fair, Austria's largest exhibition of contemporary art. The purpose of this campaign was to raise awareness in the target community by setting up an FWF stand where visitors could take a closer look at the PEEK Programme for Arts-Based Research not least in order to emphasise the artistic and creative aspects of this new programme. Basic Research - A great adventure, a permanent exhibit at the Technisches Museum Wien since 2007, was expanded to include an additional (and especially topical) station on climate change in 2010. With START grant recipient Gottfried Kirchengast (1998) and his team from the Wegener Center for Climate and Global Change in Graz as scientific curators, Barbara Aussenegg assembled a compact, revealing and highly informative module for this exhibit, which now covers topics ranging from the history of the pacemaker to state-of-the-art climate research. The new station was opened at the museum on March 7, 2010, in a Sunday 'matinee' which featured a presentation by Kirchengast. In cooperation with the Federal Ministry of Science and Research, the FWF organised a club research event on the topic of "Government funding for different types of research: A battle for allocations after the crisis?" on March 22, 2010. The keynote address was delivered by Andreas Schibany, who underpinned his arguments for augmenting publicsector investments in basic research with findings from recent studies.

On November 25, 2010, the FWF joined forces with Joanneum Research to hold another club research event, this time on the ways in which research can prove its own value to justify public funding. The FameLab science communication contest also contin-



The MS Wissenschaft, which called at ports in Austria for the first time in 2010, was a rousing success.

Am Puls has successfully established itself as a participatory event format for the interested public.

ued successfully in the year 2010. At the final, Graz-based materials researcher Wolfram Steurer emerged victorious after a brilliant talk at the Technisches Museum Wien on May 8, 2010.

Coaching workshops

The FWF offers coaching workshops in order to help potential applicants better understand the application process as well as the general conditions applicable to the FWF's funding decisions. These intensive one-day workshops comprise several modules in which various topics are addressed using a combination of presentations and interactive exercises on 'how to operate the FWF funding machine'. In the year 2010, a total of 19 workshops were held, one especially for the START Programme and two specifically designed for women researchers. The fact that nearly all of the events were fully booked provides an indication of the scientific community's strong interest in this workshop. In the year under review, 380 participants attended these FWF information events.

FWF web sites

The FWF's web sites are among its most important communication channels. In addition to its own web site, the FWF also runs three programme-specific portals: the Schrödinger Portal, the START Portal, and the Hertha Firnberg / Elise Richter Portal (programmes supporting career development for female scientists). The FWF web site (www. fwf.ac.at) offers extensive services for applicants and serves as a source of information not only for people working in science, but also for science journalists. With some 15,500 abstracts, the FWF's constantly growing web-based project database is available to the interested public free of charge in both German and English.

The FWF also uses the Internet to actively inform the scientific community and registered media representatives by sending out an e-mail newsletter. The importance and effectiveness of this information channel became especially clear in the first half of 2009, when the FWF was able to communicate the latest developments regarding the 'approval freeze' directly to the scientific community without any 'filtering' of information. Approximately 11,300 people subscribe to this e-mail newsletter. In total, the FWF sent out 74 press and scientific newsletters during the reporting period. In addition, over 200 positions in science were advertised on the FWF's job exchange. Overall, the use of the FWF's web site showed encouraging developments in the year 2010, as the number of page views increased markedly once again. Whereas some 5.6 million page views were recorded in 2009, this figure rose to nearly 6 million in the year under review. On average, the FWF web site is accessed every five seconds.

Press conferences and briefings

During the year 2010, the FWF organised three press conferences: At the annual press conference, which was held at the end of April 2010, FWF President Christoph Kratky and Managing Director Gerhard Kratky reported on the first year after the crisis and on how the FWF's new and stable financial framework will affect its investment activities in the coming years. On June 14, 2010, Austrian Minister of Science and Research Beatrix Karl and Christoph Kratky presented the 2010 START grant and Wittgenstein Award recipients to the media. On September 9, 2010, Beatrix Karl, Christoph Kratky and Herbert Münder (in his



capacity as Managing Director of WID) held a press conference aboard the MS Wissenschaft shortly before opening the floating science centre with exhibits dedicated to the topic of energy. Press interviews and briefings on the FWF's presence at the Vienna Fair in mid-May and on a study conducted by Joanneum Research on the benefits and effects of basic research (held by co-author Andreas Schibany in October) served to round off the FWF's activities in this area.

Publications

By publishing the annual report in the spring of each year, the FWF fulfils its reporting obligations to its supervisory authority under the Austrian Research and Technology Promotion Act (FTFG). The annual report describes how the government funds made available to the FWF were invested in the context of promoting science and research, and how the country's science and research landscape developed in the year under review. The 2010 annual report has been restructured and expanded in terms of content, and for the first time it has also been published in English. In combination with the FWF's web-based proj-

ect database, the transparency of the FWF's use of funds has thus been raised to an exemplary level.

The FWF's quarterly magazine, FWF info, continued to appear regularly after its relaunch in 2008 and has attracted a steadily growing group of readers who use the 'FWF quarterly' as a source of information. The numerous requests for copies from both Austria and abroad attest to the high quality of the editorial team's efforts. The magazine's editorial policy has not changed: On the basis of comprehensive and high-quality research, FWF info reports on news from the world of basic research and science policy. The editors take special pains to ensure that neither the context in which basic research is conducted nor the opinions of the scientific community are disregarded. In this way, FWF info can be regarded as a magazine designed to evoke contradiction and provoke discussion. With a print circulation of approximately 10,000 copies plus an online edition, this publication enables the FWF to reach large parts of the interested community in Austria.

FWF info reports on news from the world of basic research and science policy.

Stabilising the FWF's funding sources

The federal funding approved in 2009 by the Austrian Federal Ministry of Science and Research (the FWF's supervisory authority) for the ensuing five business years created much-needed clarity and made it far easier to plan the use of grant funds in the year 2010. In addition to allocations totalling nearly EUR 150 million from the Ministry of Science and Research, the Ministry of Transport, Innovation and Technology provided approximately EUR 14 million in funding in the form of a mandate for the Translational Research Programme, and the Austrian National Foundation supplemented the FWF's budget with an additional EUR 15 million.

The Austrian Federal Ministry of Science and Research, which has been the FWF's sole supervisory authority since February 2009, decided to take a completely new approach to funding the FWF. The Ministry issued a binding approval of a uniform five-year budget in the amount of EUR 161.9 million per year, including funds from the National Foundation (total: EUR 809.5 million). With this allocation,

the FWF will have to operate all of its funding programmes and cover its liabilities from prior funding approvals. On the basis of this budget allocation, the FWF was then required to draw up a five-year financial plan in order to calculate the budget to be made available each year.

In this context, it was necessary to account for the following:

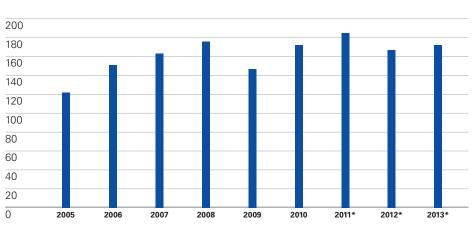
- The fulfilment of prior funding obligations;
- A value adjustment of at least two percentage points to be applied to budget commitments for individual funding programmes, i.e. an accumulation of value adjustment amounts;
- Planning of pending financing requirements which vary from year to year for the extension of Priority Research Programmes (SFBs, NFNs) and DK Programmes, which will also bring about an accumulation effect;
- The supplementary funds from the Federal Ministry of Transport, Innovation and Technology, the Austrian National Foundation, the European Union, and revenues from service operations.

Fig. 6



The Ministry's approval of funding for a five-year period has made planning substantially easier.

Effective/planned approval amounts, 2005 to 2013 (EUR million)



*) Based on the FWF's long-term plans.



The year 2010 also marked the last time the FWF was subject to a condition imposed by the Federal Ministry of Science and Research under which the funds allocated by the Austrian National Foundation are subtracted from the funding provided by the Ministry. This condition applied to the National Foundation's allocation for Priority Research Programmes (EUR 14 million), but not to the EUR 1 million allocated to increase funding for the Translational Research Programme. At the end of 2010, Minister of Science and Research Beatrix Karl announced that funding allocations from the National Foundation would no longer be offset against Ministry funds from the fiscal year 2011 onward.

Revenues from the Federal Ministry of Science and Research in 2010 amounted to EUR 149.2 million, which included a EUR 1.5 million allocation for the Clinical Research Programme (initially posted to reserves).

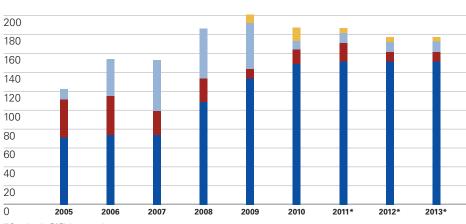
The Federal Ministry of Transport, Innovation and Technology provided a total of EUR 14 million in the form of a mandate for the Translational Research Programme and the Translational Brainpower Programme. In addition, the FWF managed to increase the funds it received from the European Uni-

on from EUR 0.8 million in 2009 to EUR 2.1 million in 2010. This allocation was increased because the FWF once again submitted a successful proposal in a call for the co-funding of mobility programmes. For the first time, the FWF also succeeded in its efforts to encourage co-funding by Austria's provincial governments. The governments of the federal provinces of Salzburg and Lower Austria took advantage of the opportunity to select and fund projects which had been evaluated as excellent but could not be funded by the FWF (EUR 0.5 million). In the year 2010, co-funding from the EU, Austria's federal provinces, other grants and donations, as well as revenues from service operations and interest income totalled EUR 4.8 million

This significant improvement in revenues enabled the FWF to boost its overall research contributions by nearly 17% in 2010; these contributions had previously dropped by 19% between 2008 and 2009.

The charts below (Fig. 6 and 7) show the development of funding allocations and the amounts of funding approved. The charts clearly indicate that these two figures followed entirely different development paths.

Sources of funds, 2005 to 2013 (EUR millions) *



*) Based on the FWF's long-term plans.



Fig. 7

Federal budget

National Foundation

Other revenues/contributions

BMVIT programmes (since 2009)

The Secretariat

As of December 31, 2010, the FWF had a total of 83 employees, including 56 women and 27 men. Therefore, the percentage of women on the FWF's staff comes to 67%.

The FWF's administrative costs (personnel and material expenses, adjusted to account for expenses for public relations and science communication) rose approximately EUR 500,000 to a total of EUR 7.3 million in 2010. The Secretariat saw a remarkable increase in revenues, which were mainly generated by service operations (see also pp. 30-31). In fact, those revenues more than doubled in comparison to the previous year. In the calculation of net administrative expenses, this item is deducted from the figure for administrative expenses. This yields a figure of approximately EUR 6.7 million for 2010, which represents an increase of 3.5% compared to the previous year.

The funding requested has proven to be the most accurate indicator of the workload handled by the FWF. Expressed as a percentage of total funding requested (in new applications submitted in 2010), net administrative expenses held steady at 0.9% in 2010. In relation to the amount of funding approved, administrative expenses came to 3.8% (2009: 4.3%).

The FWF Board convened five times during the reporting period. The Board had to decide on over 2,000 applications, nearly 700 of which were approved. The number of applications to be handled by the Board (including outline proposals for SFBs, NFNs and DKs) jumped approximately 16% compared to the previous year. However, the work of the FWF

Secretariat does not come to an end when the FWF Board makes its decision. Over the entire duration of each approved project, the Secretariat is available to provide competent answers to questions regarding project execution.

With personnel costs decreasing and materials costs rising slightly, the Public Relations and Science Communication department (for more on these activities, please see pp. 32–35) was able to keep expenditure down to EUR 1.7 million, nearly the same level as in the previous year (2009: EUR 1.6 million).

The activities of the Analysis department were expanded; in addition to numerous analyses of research activities, it is particularly worth mentioning the two studies "Factors Influencing Approval Probability in FWF Decision-Making Procedures" and "Role Models for Doctoral Studies in Austria".

In addition to various organisational units visible to the outside world, the FWF also has a number of departments which ensure smooth workflows within the organisation. In all departments, work efforts are documented using a payroll accounting system, which also serves as the basis for calculating the hourly rates charged for the FWF's service operations.

A new performance-based salary system met with remarkable acceptance among the FWF's staff and was implemented without problems in the year 2010.



The FWF Secretariat provides support over the entire duration of each approved project.



Universities successfully acquire FWF funds for basic research

With a share of approximately 86% of the EUR 171.8 million in funding approved, university researchers were the main recipients of FWF funding in 2010.

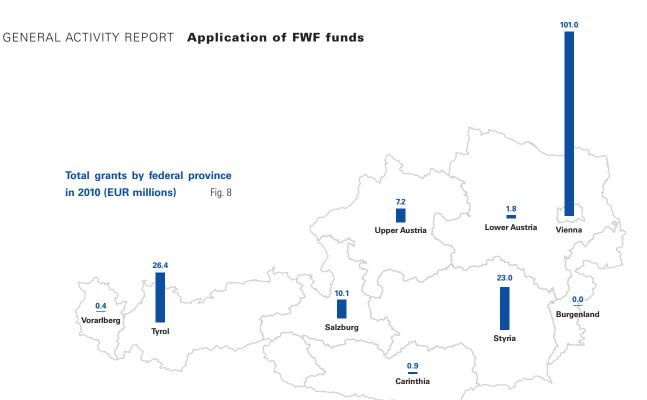
The University of Vienna was able to hold its position as the FWF's largest recipient institution in terms of the number of new approvals as well as the total amount of funding approved; however, this university did see slight declines in its share of the overall number of applications and total volume of funding approved. Applicants from the University of Vienna still receive over 20% of FWF funds; in absolute terms, this share amounted to EUR 38.3 million in 2010. The reason why the University of Vienna's share of funding approvals declined in 2010 (despite a slight increase in absolute terms) was the performance of other research institutions in Austria, some of which were able to make substantial progress in acquiring funds in both relative and absolute terms. The Vienna University of Technology (TU Vienna) was in second place with some EUR 19.5 million in 2010, followed by the Medical University of Vienna with approximately EUR 15.2 million. Therefore, the top three recipient institutions did not change compared to the previous year. A full list of all FWF funding approvals by number and volume (including individual programmes) can be found in the Appendix (pp. 78-79).

The Vienna University of Economics and Business (WU) saw the greatest increase in FWF funding in relative terms, as this institution was able to acquire EUR 3.6 million in funding in 2010, more than six times the previous year's amount. The University of Leoben also managed to boost its FWF funding considerably; in absolute terms, the funds granted to this institution increased from approximately EUR 0.6 million in 2009 to about EUR 1.9 million in 2010. The third-largest relative increase was observed at the University of Salzburg, which was able to raise its funding approvals to approximately EUR 8 million, up 90% on the previous year. The largest relative declines were recorded in the case of the University of Natural Resources and Life Sciences (BOKU) Vienna and the University of Veterinary Medicine Vienna. Their funding approvals from the FWF dropped to half of the levels recorded in 2009; this change can largely be attributed to the acquisition of funds for priority research programmes and doctoral programmes in previous years.

In absolute terms, the largest increase in FWF funding went to Innsbruck Medical University, which managed to boost its funding approvals by some EUR 5.3 million to a total of approximately EUR 12.4 million in 2010. Priority research programmes and doctoral programmes accounted for a significant portion of this university's success in acquiring funds from the FWF. In second place - trailing Innsbruck Medical University by a mere EUR 60,000 - was the TU Vienna, with an increase of about EUR 5.3 million. With a total of EUR 19.5 million, this university is the secondmost successful Austrian research institution overall in terms of FWF funding approvals. TU Vienna enjoyed especially high levels of success in the FWF's priority research programmes, international programmes and in the Translational Research Programme. The University of Salzburg came in third in terms of absolute funding increases, boosting its volume of approved funds by some



The EUR 171.8 million in funding approved in 2010 supports those basic research projects which meet the FWF's stringent quality criteria.



EUR 3.8 million to a total of EUR 8 million in 2010. Salzburg's success in 2010 was largely based on two successful doctoral programme proposals. In absolute figures, the largest decreases were recorded in the case of the University of Natural Resources and Life Sciences Vienna, which received approximately EUR 4.3 million less than in 2009 (2010: EUR 4.8 million), as well as the University of Veterinary Medicine Vienna, where FWF funding declined by EUR 3.3 million (2010: EUR 2.5 million). Across all universities in Austria, an additional EUR 21 million was allocated to university research institutions in 2010 (total: approximately EUR 147.9 million). This figure is almost exactly equal to the overall funding amount approved by the FWF in the crisis year 2009. In total, 15 out of 20 university research institutions were able to boost the funds they acquired from the FWF.

At the same time, non-university research institutions also managed to obtain more FWF funding in 2010; the Austrian Academy of Sciences received funding in the amount of EUR 10.4 million (up EUR 0.5 million compared to 2009), and other non-university research institutions, including those outside of Austria, obtained EUR 13.5 million (up EUR 2.7 million compared to 2009).

Every project approved – and thus also every euro of funding granted – by the FWF under-

goes a stringent and highly selective international peer review process. The EUR 171.8 million in funding approved in 2010 supports those basic research projects which meet these stringent quality criteria. In total, the FWF attained a funding volume just below the record level approved in 2008 (EUR 176.1 million).

Broken down by federal province, the approval statistics above make it clear that those provinces with university research locations have a clear competitive advantage which makes it difficult or even impossible for other provinces to catch up. The undisputed leader is Vienna, which received the majority of FWF funds (EUR 101.0 million, or 58.8%; up from approximately EUR 95 million in 2009). However, Vienna's relative share of funding has actually declined (2009: 64%). The other federal provinces of Austria were highly successful in obtaining FWF funding in 2010; taken together, they managed to obtain a total of about 41% of the FWF's funding volume, up approximately six percentage points on the previous year. Among the other provinces of Austria, the long-standing competition for second place was clearly won by the Tyrol in 2010 (EUR 26.4 million, up nearly 42% or EUR 7.8 million on 2009), thus widening its slight lead from the previous year (EUR 345,000). The province of Styria came in third place with EUR 23.0 million (up 26% compared to 2009).

Programmes to strengthen Austria's science and innovation system



EXPLORING NEW FRONTIERS – FUNDING TOP-QUALITY RESEARCH

Support for stand-alone projects	42
Stand-Alone Projects	
■ Priority research programmes	44
Special Research Programmes (SFBs),	
National Research Networks (NFNs)	
Awards and prizes	48
START Programme, Wittgenstein Award	
■ International programmes	52
Multilateral project funding, bilateral	
project funding, networks and infrastructure	



CULTIVATING TALENTS – DEVELOPMENT OF HUMAN RESOURCES

Doctoral programmes	54
Doctoral Programmes (DKs)	
International mobility	56
Schrödinger Programme, Meitner Programme,	
Translational Brainpower Programme	
Career development for female scientists	62
Firnberg Programme, Richter Programme	



REALISING NEW IDEAS – INTERACTIVE EFFECTS BETWEEN SCIENCE AND SOCIETY

■ Funding for application-oriented basic research	66
Translational Research Programme (TRP),	
Clinical Research (KLIF)	
■ Support for artistic research	70
Programme for Arts-Based Research (PEEK)	
Support for scientific publications	72
and science communication	
Support for Scientific Publications	

Stand-Alone Projects

Target group Scientists and researchers of all disciplines in Austria

Objective To support non-profit-oriented individual research projects

Requirements High scientific quality by international standards

Duration ■ Up to 36 months

■ Follow-up applications possible

Grant amounts Variable, depending on specific project; average funding level:

approximately EUR 90,000 per year

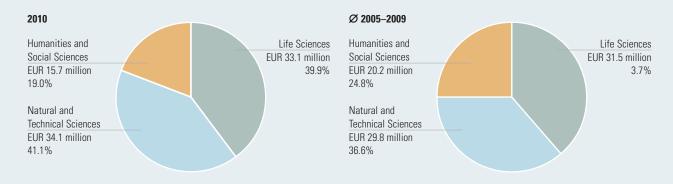
Applications ■ Reviewed on a rolling basis; no submission deadlines

■ To be submitted in English

Award decisions Decisions are taken by the FWF Board on the basis of international peer reviews

Grants by scientific discipline (Stand-Alone Projects)





The backbone of FWF funding

As the FWF's oldest, largest and most flexible funding programme, Stand-Alone Projects still account for some 50% of the overall funding approved by the FWF.

The FWF Board decided on a total of 995 applications in 2010, thus closing on to the 1,000 mark; this represents an increase of approximately 10% compared to the previous year. Of the applications handled in the period under review, 232 (23.3%) were submitted by female scientists and researchers, which signifies a slight decline compared to the previous year.

With regard to approvals, the FWF Board was able to approve funding for 310 projects with a total funding amount of approximately EUR 83 million. In comparison to the previous year, this represents an increase of 6.5% in the number of approvals and 8.7% in the amount of funding granted.

The share of applications approved by the FWF showed less encouraging development in 2010: at 31.2% (based on the number of applications), this percentage fell to its lowest level in the history of the FWF. Thus the FWF is quite far from the approval rates seen in the past (e.g. roughly 53% in the year 2000).

The approval rate based on funding volume is calculated as the ratio between the amount of funding granted for new projects and the funding requested in all applications handled by the FWF Board. This value came to 29.3% in 2010. After 2004, this was the secondlowest result in the history of the FWF.

The positive developments in terms of gender distribution in the year 2009 – when female applicants saw a higher approval rate (based on the number of applications) than their male counterparts in this programme could not be maintained in 2010. Although the approval rate for male applicants remained nearly unchanged (2010: 32.5%; 2009: 32.1%), the rate for female applicants dropped from 32.3% in 2009 to 26.7% in 2010. In this regard, the FWF is still pursuing its objective of balancing approval rates.

In 2010, the distribution of funding amounts across disciplines in this programme was largely consistent with its long-term average and also matched the overall distribution of funds among scientific disciplines in all FWF programmes (see also p. 24).



(a) weblink www.fwf.ac.at/en/projects/ stand-alone_projects.html

Stand-Alone Projects - Overview

Number of projects

Table 8

Approvals Approval rate in percent

/ \ppi	ications processed	7 tpprovato		7 (pprovarrate in percent					
2010	2009	2010	2009	2010	2009				
995	904	310	291	31.2	32.2				
232/763	229/675	62/248	74/217	26.7/32.5	32.3/32.1				
Appl	ications processed	Approval rate in percent		Total grants					
2010	2009	2010	2009	2010	2009				
278.9	243.2	29.3	30.4	83.0	76.3				
65.2/213.7	62.4/180.8	25.7/30.4	29.3/30.8	17.0/65.9	18.8/57.6				
	2010 995 232/763 Appl 2010 278.9	995 904 232/763 229/675 Applications processed 2010 2009 278.9 243.2	2010 2009 2010 995 904 310 232/763 229/675 62/248 Applications processed Approva 2010 2009 2010 278.9 243.2 29.3	2010 2009 2010 2009 995 904 310 291 232/763 229/675 62/248 74/217 Applications processed Approval rate in percent 2010 2009 2010 2009 278.9 243.2 29.3 30.4	2010 2009 2010 2009 2010 995 904 310 291 31.2 232/763 229/675 62/248 74/217 26.7/32.5 Applications processed Approval rate in percent 2010 2009 2010 2009 2010 278.9 243.2 29.3 30.4 83.0				

Applications processed

Special Research Programmes (SFBs)

Target group

Research groups of all disciplines working at

- Austrian universities or
- non-profit, non-university research institutions

Objectives

- To establish research networks on par with international standards through autonomous research concentration at a single university location (or multiple locations, subject to certain conditions)
- To build extremely productive, tightly interconnected research establishments for long-term, generally interdisciplinary/multidisciplinary work on complex research topics

Requirements

- Proven research potential
- The core group of applicants must be of sufficient size and be qualified to establish and run a research programme of high international standing in line with the profile of the participating research institution(s); a minimum of 5, maximum of 15 principal investigators for sub-projects; letter(s) of support from participating research institution(s).
- Where the percentage of women in a group of applicants is lower than the 30% target level, the principal applicant is required to provide reasons for this shortfall.

Duration

8 years; an interim evaluation after 4 years determines whether projects are allowed to continue.

Grant amounts

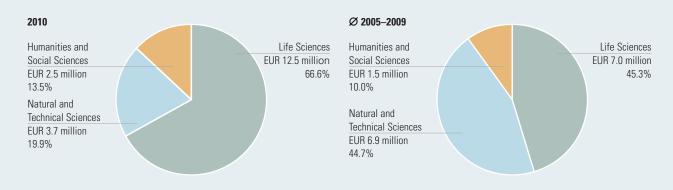
Approximately EUR 1 million per year

Award decisions

Decisions are taken once per year on the basis of international peer reviews.

Grants by scientific discipline (SFBs including extensions)





Successful research groups

The FWF's Special Research Programmes (SFBs) saw an important and long overdue first in the year 2010: For the first time in the FWF's history, a special research programme with a female spokesperson was approved. Within the four SFB projects approved in the reporting period, nine sub-projects are headed by women. With an approval rate of 50% (based on funding volume; ratio of funding approved to outline proposals), female scientists and researchers have thus pulled far ahead of their male counterparts (24.7%) in this respect.

In addition to his SFB project, Walter Pohl – who won the Wittgenstein Award in 2003 also enjoyed remarkable success at the European level, as he received an ERC Advanced Grant in 2010. The two other special research programmes approved in 2010 are headed by Günther Rupprechter at the Vienna University of Technology and Jörg Striessnig at the University of Innsbruck. In addition, the SFB programme launched by Lukas Huber in 2003 was extended. A list of all SFB projects currently under way can be found in the Appendix (p. 84). In the process of streamlining the FWF's Priority Research Programmes, the FWF decided in 2010 to redesign the SFB Programme and at

the same time to discontinue the NFN Programme. The main reason behind these changes was that the two programmes have developed in such a way that the differences between them have become increasingly unclear in recent years.

Key features of the new SFB Programme:

- The 'single location' principle will largely remain the same, but justified exceptions will be made in order to ensure flexibility.
- The minimum size of an SFB project is 5 principal investigators, the maximum size 15, with an average total funding volume of EUR 1 million per year.
- For all researchers participating in an SFB project, a firm commitment is required from all of the research institutions involved.
- The objectives of the programme now explicitly mention ensuring high-quality education for junior scientists and researchers, maintaining a gender-sensitive orientation in research and education, and increasing the share of women in science and research.
- Applicants are required to develop and implement internal communication and cooperation policies as well as dissemination strategies (also beyond the scientific community).



(a) weblink www.fwf.ac.at/en/projects/

sfb.html

SFBs - Overview Table 9

Number of projects	Proposals processed	Proposals approved	Applications processed	Sub-projects processed	Sub-projects approved	Approval rate in percent
Special Research Programmes (SFBs)	11	4	4	50 ¹⁾	39	36.4 ²⁾
Women/Men	1/10	1/3	1/3	11/39	9/30	100.0/30.0 2)
SFB extensions	_	_	3	31	7	22.6
Women/Men	-/-	-/-	0/3	2/29	1/6	50.0/20.7

Funding requested/approved (EUR millions)	Proposals processed	· .	Applications processed	' '	Sub-projects approved 3)	Approval rate in percent
Special Research Programmes (SFBs)	52.9	19.2	19.2	19.6 ¹⁾	14.8	28.0 ²⁾
Women/Men	7.0/45.9	7.0/12.2	7.0/12.2	4.3/15.3	3.5/11.3	50.0/24.7 ²⁾
SFB extensions	_	_	9.9	9.9	3.8	38.3
Women/Men	-/-	-/-	0.8/9.0	0.8/0.9	0.4/3.3	52.4/37.1

1) Includes 5 sub-projects in previously launched SFBs. 2) The approval rate is calculated as the ratio of full applications approved to outline proposals submitted. 3) Approvals

National Research Networks (NFNs)

Target group

Scientists and researchers working in all disciplines at

- Austrian universities or
- non-profit, non-university research institutions

Objective

To promote concentration in specific areas of research, generally by developing nationwide networks for collaborative interdisciplinary work on large-scale research projects in the medium term.

Requirements

- Proven research potential
- Bundling of research activities on a specific topic throughout Austria (local limitations may be permitted)
- Creation of added value by merging efforts into an NFN compared to the sum of individual initiatives

Duration

8 years; an interim evaluation after 4 years determines whether projects are allowed to continue.

Grant amounts

Average: EUR 600,000 per year (varies according to individual network characteristics)

Applications

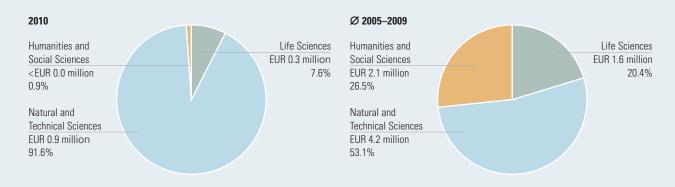
In early 2011, the NFN Programme was assimilated into the revised SFB Programme.

Award decisions

Decisions are taken during the FWF Board's final session each year on the basis of international peer reviews.

Grants by scientific discipline (NFNs including extensions)





One last time

Of the 12 NFN outline proposals submitted to the FWF by November 2009, two were approved, which meant that the applicants in question were invited to submit a full proposal in each case. In its last session of the year, the FWF Board decided on a total of 18 subprojects. In the end, the Board approved the NFN proposal submitted by Roderick Bloem (Institute for Applied Information Processing and Communications, Graz University of Technology) with a total of nine sub-projects. This network encompasses a total of five research institutions: Graz University of Technology, the Institute of Science and Technology Austria (IST Austria), Vienna University of Technology, the University of Salzburg and the University of Linz. For the first time, IST Austria succeeded in acquiring funds under the NFN Programme (for two sub-projects); one of the principal investigators, Thomas Henzinger, also received an ERC Advanced Grant in 2010. A list of all NFN projects currently under way can be found in the Appendix (p. 84).

The rather low approval rate of 8.3% (ratio of new applications approved to outline proposals handled) can be attributed to the highly

competitive funding environment for NFNs as well as the FWF's small overall budget in 2010.

The final year for proposals of NFNs, which were assimilated into the SFB Programme in early 2011, brought a record number of 21 applications (up 75% on the previous year). The FWF Board will issue decisions on those proposals at the beginning of December 2011.

After thorough deliberation, the decision to discontinue the NFN Programme was made by the FWF's decision-making bodies in the summer of 2010. In this context, key aspects of the NFN Programme will be integrated into the new SFB Programme (see p. 44 for details).

In order to counter the low percentage of women in 2010 - only one of the sub-projects approved is headed by a female researcher - the new SFB Programme will continue to require the principal applicant to provide reasons in cases where the targeted percentage of women (30%) is not reached. In the future, the SFB Programme will also continue to emphasise gender-sensitive approaches to research.



In early 2011, the NFN Programme was assimilated into the re-designed Special Research Programme (SFB).

NFNs - Overview Table 10

Number of projects	Proposals	Proposals	Applications	Sub-projects	Sub-projects	Approval rate
	processed	approved	processed	processed	approved	in percent
National Research Networks (NFNs)	12	2	2	18 ¹⁾	10	8.3 ²⁾
Women/Men	2/10	0/2	0/2	3/15	1/9	0.0/10.0 2)
NFN extensions	_	_	1	7	0	0.0
Women/Men	-/-	-/-	0/1	2/5	0/0	0.0/0.0

Funding requested/approved (EUR millions)	Proposals processed		Applications processed	Sub-projects processed	Sub-projects approved 3)	Approval rate in percent
National Research Networks (NFNs)	35.5	6.1	6.1	7.3 ¹⁾	3.7	10.6 ²⁾
Women/Men	5.6/29.9	0.0/6.1	0.0/6.1	1.2/6.1	0.2/3.6	3.2/11.9 2)
NFN extensions	_	_	2.5	2.5	0.0	0.0
Women/Men	-/-	-/-	0.6/1.8	0.6/1.8	0.0/0.0	0.0/0.0

¹⁾ Includes 2 sub-projects in previously launched NFNs. 2) The approval rate is calculated as the ratio of full applications approved to outline proposals submitted. 3) Approvals

START Programme

Target group

Highly promising young researchers of all disciplines

Objective

To provide researchers with the means to plan their research work on a long-term basis and with sufficient financial security. By assuming responsibility for the establishment and management of a research group, principal investigators are able to gain the qualifications necessary for leading positions in science and research, especially at institutions of higher education in Austria or abroad.

Requirements

- No less than two years, no more than ten years after conferral of doctoral degree (at submission deadline). Longer periods may be possible in the case of parental leave, evidence of military or civil service, or evidence of clinical training periods.
- Outstanding international track record
- Evidence of scientific independence
- One or more years of international experience (desirable)
- Full professors not eligible

Duration

6 years; an interim evaluation after 3 years determines whether projects are allowed to continue.

Grant amounts

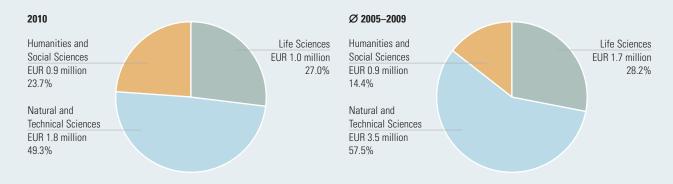
Up to EUR 200,000 per year

Award decisions

- Decisions are taken by the FWF Board on the basis of recommendations by the international START/Wittgenstein Jury; recommendations are made on the basis of international peer reviews and a hearing.
- Once per year
- Awarded by the Austrian Federal Minister of Science and Research

Grants by scientific discipline (START Programme including extensions)





A new first: Gender parity

In the course of the 15th call in the START Programme, proposals from a total of six top-notch junior researchers were accepted. For the first time in the history of the programme (i.e. since 1996), an equal number of women and men were accepted; 24.4% of the total number of applications were submitted by women, and their approval rate of 27.3% was far higher than that of their male counterparts (8.8%). The average approval rate (ratio of applications received to applications approved) of 13.3% clearly highlights the extremely competitive nature of this programme.

In the period under review, applicants in the Humanities and Social Sciences category made substantial progress, with their share of START project approvals increasing from 9.5% in 2009 to 23.7% in 2010. The average age of researchers in this programme was 35.8 years in 2010. A list of all START projects currently under way can be found in the Appendix (p. 83).

Another encouraging development can be identified in the success rate of START pro-

ject leaders at the European level: Among the START recipients in 2010, Julius Brennecke and Barbara Horejs were also able to obtain ERC Starting Grants. Therefore, eight of Austria's ERC Starting Grantees since 2007 have a background in the START Programme.

Each year, the START grants are announced by the Austrian Federal Ministry of Science and Research on the basis of recommendations submitted by the International START/ Wittgenstein Jury. This year's principal investigators were honoured by Beatrix Karl, Austria's Minister of Science and Research, and Christoph Kratky at the FWF's 'Summerfest' in mid-June.

The jury is chaired by Sheila Jasanoff, a professor at the Kennedy School of Government (Harvard University), and its decisions are based on reviews from international experts and on a hearing to which the most promising candidates are invited. A list of the members of the international START/Wittgenstein Jury can be found on p. 89.



weblink
www.fwf.ac.at/en/projects/
start.html

START Programme – Overview

START Programme

Women/Men

Table 11

Number of projects	Appl	lications processed	ed Approvals		als Approval rate in percent			
Funding programme	2010	2009	2010	2009	2010	2009		
START Programme	45	50	6	6	13.3	12.0		
Women/Men	11/34	14/36	3/3	2/4	27.3/8.8	14.3/11.1		
Funding requested/approved (EUR millions)	Applications processed		Approv	val rate in percent	Total grants			
Funding programme	2010	2009	2010	2009	2010	2009		

52.0

14.3/37.7

46.6

10.8/35.8

7.7

15.6/5.3

3.3

1.1/2.2

3.6

1.7/1.9

6.4

7.9/5.9

Wittgenstein Award

Target group Outstanding researchers of all disciplines

Objective To provide researchers with a maximum of freedom and flexibility in carrying out

their research work

Requirements Internationally recognised track record in the relevant field

■ Employment at an Austrian research institution

Candidates must not be over 56 years of age at the time of nomination

(i.e. as of the nomination deadline)

Duration 5 years

Grant amounts Up to EUR 1.5 million per award

Nomination Candidates are nominated by authorised persons.

■ Self-nominations are not permitted.

Award decisions Decisions are taken by the FWF Board on the basis of recommendations from

the international START/Wittgenstein Jury; these recommendations are made $\,$

on the basis of international peer reviews.

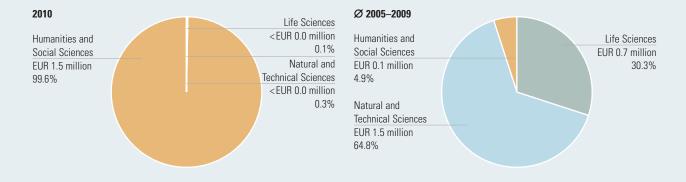
Once per year

Awarded by the Austrian Federal Minister of Science and Research

Number of awards 1 or 2 per year

Grants by scientific discipline (Wittgenstein Award)

Fig. 13



FШF

Wittgenstein Award goes to social scientist for the first time

The 15th call for the Wittgenstein Award brought a large number of nominations (22 researchers) compared to previous years. The only less encouraging development was the small share of women researchers among the nominees (3 out of 22). The persons authorised to submit nominations for the Wittgenstein Award include all rectors and (if not the same person) vice-rectors for research at Austrian universities, as well as the president of the Austrian Academy of Sciences, the president of the Institute of Science and Technology Austria, and all prior Wittgenstein Award winners.

For the first time since the programme's inception in 1996, the Wittgenstein Award was presented to a social scientist (Wolfgang Lutz) in 2010; it was also the first time since 2004 (Walter Pohl) that the award was given to a researcher from the Humanities and Social Sciences category. Wolfgang Lutz has established a strong presence at no less than three institutions in Austria. Since 2002, he has been the director of the Vienna Institute of Demography (VID) at the Austrian Academy of Sciences, and since 1994 he has headed

the World Population Programme at the International Institute for Applied Systems Analysis (IIASA) in Laxenburg (near Vienna), Austria. Finally, Lutz has also held a full professorship in social statistics at the Vienna University of Economics and Business since 2009.

Using the funds from the Wittgenstein Award, Lutz founded the Wittgenstein Centre for Demography and Global Human Capital in early 2011. This new institution is supported by the Austrian Academy of Sciences and Vienna University of Economics and Business in close cooperation with the IIASA. Lutz's objective in these efforts is to provide first-rate research conditions for interdisciplinary researchers focusing on population and economics, and thus to establish one of the world's leading research centres in the field. The research group surrounding Lutz, who himself received an ERC Advanced Grant in 2008, includes two ERC Starting Grantees. Their research will make it possible to articulate new visions and political approaches for some of the greatest challenges faced by societies today. A list of all past Wittgenstein Award winners can be found in the Appendix (p. 82).



(W) weblink www.fwf.ac.at/en/projects/ wittgenstein.html

Wittgenstein Award - Overview

Number of projects

Table 12

Approvals Approval rate in percent

Transport of projects	, , , , ,	roatione processa		, ipprovato	, , , , , , , , , , , , , , , , , , ,	ai rate in percent		
Funding programme	2010	2009	2010	2009	2010	2009		
Wittgenstein Award	22	18	1	2	4.5	11.1		
Women/Men	3/19	6/12	0/1	0/2	0.0/5.3	0.0/16.7		
Funding requested/approved	Applications processed		Approv	al rate in percent	Total grants			
(EUR millions)								
Funding programme	2010	2009	2010	2009	2010	2009		
Wittgenstein Award	33.0	27.0	4.5	10.4	1.5	2.8		
Women/Men	4.5/28.5	9.0/18.0	0.0/5.3	0.0/15.6	0.0/1.5	0.0/2.8		

Applications processed

International Programmes

Joint projects

Support for closely integrated bilateral research projects

ERA-Net

Support for European research cooperation projects on specific topics with partners from multiple countries. Funding is provided by the respective national funding agencies.

ESF EUROCORES

Subject-specific European Science Foundation (ESF) research programmes in which transnational cooperative projects involving at least three partners from three different countries can be submitted. Funding is provided by the respective national funding agencies.

Joint Seminars

Multiple-day workshops/seminars focusing on specific topics for the purpose of initiating bilateral cooperation projects and preparing applications for joint projects

Money Follows Researcher

Enables researchers to take funding along with them when they move to another country.

Funding of project costs in developing countries

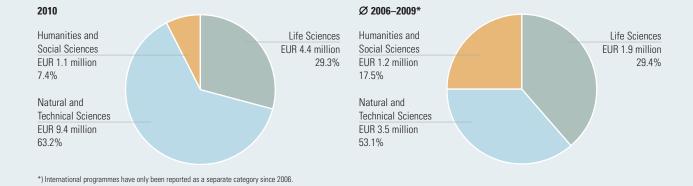
Coverage of expenses incurred by cooperation partners in developing countries in the course of cooperation projects

CSC-FWF Scholarship Programme

Funding for Chinese doctoral candidates visiting Austrian research institutions

Grants by scientific discipline (International programmes)

Fig. 14



Worldwide integration

The FWF's international programmes include a variety of funding instruments for bilateral and multilateral research projects, for international networking and the preparation of research cooperation arrangements, and for the provision of international research infrastructure (see also p. 28 as well as p. 81, Table 34).

One of the FWF's main objectives is to promote the international integration of Austria's researchers, especially in the European Research Area. In 2010, funding for these efforts was increased, above all through the DACH Lead Agency Procedure.

As for multilateral project funding (ESF-EUROCORES, ERA-Nets), a total of 16 subprojects were approved: 3 sub-projects in the course of two ERA-Net calls and 13 subprojects within the framework of seven EUROCORES.

In the FWF's bilateral funding activities (DACH, bilateral cooperation projects), a total of 49 projects were approved, including cooperation arrangements with partners in

Argentina, France, Germany, Russia, Switzerland and the US.

In 2010, the FWF decided to take part in eight new ESF Research Networking Programmes. Through these programmes, the FWF finances Austria's participation in over 60 research networks which enable Austrian researchers to connect with their colleagues in the European Research Area.

As part of the FWF's bilateral agreements, Joint Seminars mainly serve the purpose of preparing bilateral cooperation projects. In 2010, a total of eight Joint Seminars with Japan, Korea, Russia and Taiwan were approved.

As in past years, the FWF's financial contributions to the International Continental Drilling Programme (ICDP) as well as the European Consortium for Ocean Research Drilling (ECORD) have provided Austrian scientists with access to the infrastructure in those internationally financed research projects.



(a) weblink

www.fwf.ac.at/en/projects/ transnational_funding_activities.html

International Programmes - Overview

Table 13

Number of projects	Appl	ications processed	Approvals		Approval rate in percent	
Funding programme	2010	2009	2010	2009	2010	2009
International Programmes	229	210	92	67	40.2	31.9
Women/Men	51/178	28/182	24/68	6/61	47.1/38.2	21.4/33.5
Funding requested/approved	Applications processed		Approval rate in percent			Total grants

Funding requested/approved (EUR millions)	Applications processed		Approv	val rate in percent	Total grants	
Funding programme	2010	2009	2010	2009	2010	2009
International Programmes	48.6	44.7	29.9	20.3	14.9	9.5
Women/Men	10.6/38.1	6.3/38.3	32.1/29.2	12.3/21.6	3.4/11.5	0.8/8.7

Doctoral Programmes (DKs)

Target group

Research groups of all disciplines working at

- Austrian universities or
- non-profit, non-university research institutions

Objective

The purpose of the DK Programme is to promote the establishment of education centres for highly qualified young scholars and researchers from the national and international scientific community. These projects are intended to support concentration in specific areas at Austrian research institutions and to promote the continuity and impact of those focus areas. DK projects can only be established at research institutions which have the accreditation necessary to award doctoral degrees.

Requirements

- A DK project is a research unit in which multiple scientists/researchers (minimum: 5; maximum 20) with outstanding research track records by international standards cooperate in establishing a formal arrangement to educate and train doctoral candidates in a clearly defined medium-term (and, where possible, also multi-disciplinary) research context. DK projects supported by the FWF should above all be established in close connection with previously funded clusters of excellence (SFBs or NFNs).
- Where the percentage of women in a group of applicants is lower than the 30% target level, the principal applicant is required to provide reasons for this shortfall.
- General resources (space, laboratories, equipment, etc.) for high-quality scientific research
- Commitment from the relevant university that education and training under the DK programme will be accepted for the conferral of a doctoral degree, plus special support for the project

Duration

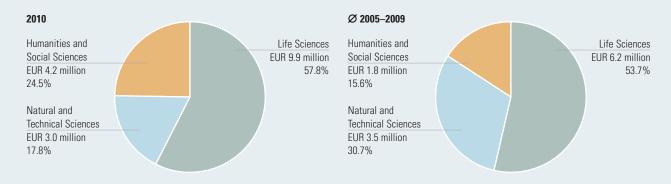
12 years; interim evaluations every four years determine whether programmes are allowed to continue.

Award decisions

Decisions are taken once per year on the basis of international peer reviews.

Grants by scientific discipline (DKs including extensions)





FШF

Education and training centres for junior scholars

In 2010, the FWF approved a total of five DK projects and was thus unable to maintain the level attained in the previous year (eight approvals); this was mainly due to budgetary constraints. With an approval rate of 24.5% in 2010, applicants in the Humanities and Social Sciences category were not able to sustain their above-average performance from the previous year (31.4%); however, the approval rate in this category was still markedly higher than the FWF's overall average (19.6%).

The FWF's Doctoral Programmes (DKs) saw a number of firsts and special developments in 2010: For the first time, a DK project was approved in the field of psychology; this proposal was submitted by Josef Perner from the University of Salzburg. The DK proposal submitted by Michael Lang of Vienna University of Economics and Business is based on a Special Research Programme (SFB) and ventures forth into new territory with regard to interdisciplinarity: The faculty members are from the fields of business and economics,

law and psychology. The DK project set up by Thomas Bugnyar of the University of Vienna involves a START grant recipient (Bugnyar, 2007), an ERC Advanced Grantee (Tecumseh Fitch, 2008), and a winner of the Scientist of the Year award (Kurt Kotrschal, 2010).

The other two DK projects approved by the FWF are from the categories of Life Sciences and Natural and Technical Sciences; these programmes are headed by Steffen Hering (University of Vienna) and Thomas Blaschke (University of Salzburg). A list of all DK projects currently under way can be found in the Appendix (p. 85).

In addition to the new projects approved, five ongoing DK programmes were extended in 2010.

In response to the persistently low share of women in this programme (the five approvals did not involve any female project leaders), the 2010 call now requires the principal applicant to provide reasons in cases where the targeted percentage of women (30%) is not reached.



(a) weblink www.fwf.ac.at/en/projects/ doctoral_programmes.html

DKs - Overview Table 14

Number of projects	Applications	Applications	Applications	Applications	Approval rate
	processed	processed	processed	approved	in percent
Doctoral Programmes (DKs)	17	6	6	5	29.4 ²⁾
Women/Men	1/16	0/6	0/6	0/5	0.0/31.3 2)
DK extensions	_	_	7	5	71.4
Women/Men	-/-	-/-	2/5	2/3	100.0/60.0

Funding requested/approved (EUR millions)	Applications processed	Applications processed	Applications processed	Applications approved 1)	Approval rate in percent
Doctoral Programmes (DKs)	43.7	12.3	12.3	7.2	16.6 ²⁾
Women/Men	3.3/40.3	0.0/12.3	0.0/12.3	0.0/7.2	0.0/17.9 2)
DK extensions	_	_	14.9	8.9	60.0
Women/Men	-/-	-/-	5.6/9.3	3.9/5.0	69.4/54.3

1) Approvals 2) The approval rate is calculated as the ratio of full applications approved to outline proposals submitted.

Erwin Schrödinger Programme

Target group

Outstanding young scientists and researchers of all disciplines from Austria

Objectives

- To enable Austrian researchers to work at leading research facilities abroad and to acquire international experience in the postdoc phase
- To facilitate access to new areas of science, methods, procedures and techniques so that Schrödinger fellows can contribute to the development of their respective fields upon their return to Austria

Requirements

- Completion of doctorate
- International scientific publications
- Invitation from research facility abroad
- For applications including a return phase: confirmation from a research institution in Austria

Duration

10 to 24 months without a return phase; 16 to 36 months with a return phase (return phase: 6 to 12 months)

Grant amounts

- Fellowship for research abroad: EUR 30,000 to EUR 36,700 per year (tax-exempt) depending on research location; return phase: employment contract with senior postdoc salary plus EUR 10,000 per year
- Funds for research abroad are paid out in the respective national currency

Applications

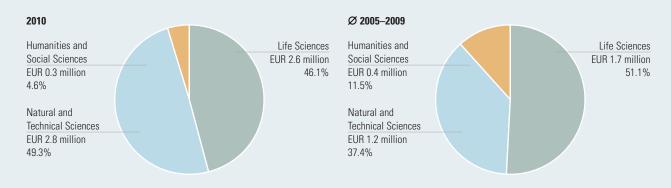
- Reviewed on a rolling basis; no submission deadlines
- To be submitted in English

Award decisions

Decisions are taken by the FWF Board on the basis of international peer reviews.

Grants by scientific discipline (Schrödinger Programme)





Outgoing success

With a total of 128 application decisions issued, the Schrödinger Programme saw a drastic increase in the year 2010. The number of new approvals rose slightly, and the approval rate came to 43.4% in the year under review. One especially positive development was the high approval rate among female applicants (45.2% of applications handled). Although the (biological) age limit has been eliminated, the average age of applicants remained fairly low at 31.8 years.

In this outgoing programme, North America remained the most popular destination and even widened its lead over other regions in 2010. With 28.5 Schrödinger fellows (one fellowship was divided equally between the US and France) going to the US and two to Canada, North America was favoured by over 50% of fellowship recipients. As expected, Europe came in second place with 21.5 fellowships, with Austria's neighbouring countries Germany, Italy and Switzerland accounting for the majority (11 fellowships). Another striking trend is the gradual reduction in fellowships for research in the UK, which was chosen by only three researchers, down considerably from the 14 scholars sent there in 2007. The only 'exotic' destination was Australia, where four Schrödinger fellows decided to conduct their research. For a list of all destination countries, please refer to the Appendix (p. 81).

Since April 2009, it has also been possible to combine a Schrödinger Fellowship with a return phase. This expansion was made possible by the FWF's successful application for EU co-funding. In 2010, the FWF submitted a follow-up application to the European Commission; this application was again approved, thus enabling further programme improvements in the course of the year. 54% of all applications included a request for a return phase in 2010, and the share of approved applications with a return phase came to

The conspicuously low share of fellowships in the Humanities and Social Sciences category (4.6%), a trend which has been observed repeatedly for years now, has prompted a more precise analysis of this underrepresented category at the FWF.



(a) weblink

www.fwf.ac.at/en/projects/ schroedinger.html

Schrödinger Programme - Overview

Women/Men

Table 15

Number of projects	Applications processed		Approvals		Approval rate in percent	
Funding programme	2010	2009	2010	2009	2010	2009
Erwin Schrödinger Programme	129	103	56	53	43.4	51.5
Women/Men	42/87	46/57	19/37	22/31	45.2/42.5	47.8/54.4
Funding requested/approved (EUR millions)	Applications processed		Approv	val rate in percent		Total grants
Funding programme	2010	2009	2010	2009	2010	2009
Erwin Schrödinger Programme	11.7	6.4	45.7	51.1	5.6	3.5

3.1/3.3

3.7/8.1

46.6/45.4

1.6/1.9

48.6/53.5

1.8/3.8

Lise Meitner Programme

Target group Outstanding scientists and researchers of all disciplines who are capable of making

a contribution to the advancement in science at an Austrian research institution

Objectives ■ To enhance quality and scientific know-how in the Austrian scientific community

■ To establish international contacts

Requirements

Completion of doctorate

■ International scientific publications

■ No age limit

■ Invitation from an Austrian research institution

Duration 12 to 24 months (extensions not permitted)

Grant amounts Based on qualifications

■ Postdoc salary (EUR 58,780 per year) or

■ Senior postdoc salary (EUR 64,670 per year)

■ Plus EUR 10,000 for materials, assistants, travel, etc.

Applications ■ To be submitted jointly with an Austrian co-applicant

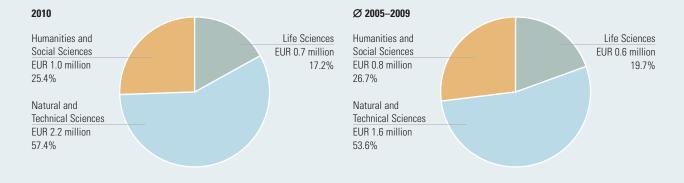
Reviewed on a rolling basis; no submission deadlines

■ To be submitted in English

Award decisions Decisions are taken by the FWF Board on the basis of international peer reviews.

Grants by scientific discipline (Meitner Programme)





Strengthening Austria's scientific community

Compared to the previous year, the FWF's incoming programme saw a slight increase in the number of applications received as well as the number approved in the year 2010. At least for researchers from other European countries, Austria is an attractive destination: 20 of the 29 approved projects were submitted by researchers from continental Europe. Among the successful applicants, 14 researchers are from Western Europe, while the remaining six come from Eastern Europe. Overall, the best-represented countries were Germany, Italy and Russia. A number of applicants came from countries not represented in the previous year: Bulgaria, India, Israel, Canada, Serbia, Hungary and Belarus. At the same time, six countries from the previous year were no longer among the approvals. This points to major fluctuations in the researchers' countries of origin. A list of all countries from which Meitner fellows originate can be found in the Appendix on p. 81.

The approval rate rose slightly to 38.2% of the applications submitted, and female researchers saw an especially high success rate of 40.7%, up more than seven percentage points from the previous year.

One Meitner Fellowship application which was rejected by the FWF Board but recommended to the relevant provincial government succeeded in obtaining funds from the Province of Salzburg.

The average age of fellows in the incoming programme is also relatively low (36 years).

Another positive development in the Meitner Programme is the fact that most projects are approved for the full duration requested. The variety of countries from which the scientists and researchers come to Austria as well as their broad distribution across scientific disciplines also clearly highlights the strong demand for these fellowships as well as the high standing of the programme in the international scientific community.



www.fwf.ac.at/en/projects/meitner.html

Meitner Programme – Overview

Number of projects

Table 16

Humber of projects	/ \ppi	ications processea		/ tpprovais	7 (pprovarrate in percent		
Funding programme	2010	2009	2010	2009	2010	2009	
Lise Meitner Programme	76	72	29	25	38.2	34.7	
Women/Men	27/49	30/42	11/18	10/15	40.7/36.7	33.3/35.7	
Funding requested/approved	Applications processed		Approv	al rate in percent	t Total grants		
(EUR millions)							
Funding programme	2010	2009	2010	2009	2010	2009	
Lise Meitner Programme	8.7	8.1	39.5	35.9	3.9	3.3	
Women/Men	3.1/5.6	3.4/4.7	42.1/38.1	33.1/37.9	1.5/2.4	1.3/2.0	

Applications processed

Approvals Approval rate in percent

Translational Brainpower Programme

This programme generally pursues the same objectives as the Translational Research Programme. However, the Translational Brainpower Programme includes the following additional aspects:

Target group

- Scientists and researchers outside of Austria in all disciplines who wish to develop and carry out joint projects with Austrian scientists and researchers but do not wish to shift the focus of their work and life to Austria
- Scientists and researchers of all disciplines in Austria who wish to carry out a joint research project with a partner abroad

Objective

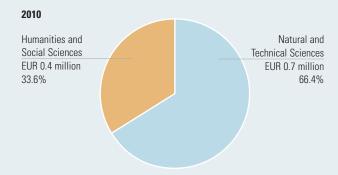
The objective of the Translational Brainpower Programme (TBP) is to support the high-level integration of internationally renowned foreign scholars and researchers of all disciplines into Austrian research projects at the interface between further/targeted basic research and applied research. In order to enhance 'brain gain', the potential of these scientists and researchers should create added value for the projects submitted and contribute to strengthening Austria's science and innovation system.

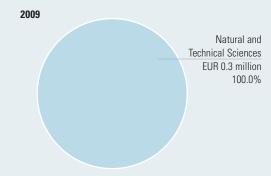
Award decisions

The Austrian Federal Ministry of Transport, Innovation and Technology makes the final award decisions on the basis of the FWF Board's funding recommendations. The Board's recommendations are in turn based on international peer reviews and the recommendations of the Bridge Advisory Board.

Grants by scientific discipline (Translational Brainpower Programme)







Support from outside Austria

After the year 2009, which was largely characterised by budget problems and even saw a suspension of certain calls, the FWF was able to carry out two calls and two rounds of decisions in this programme in 2010. As decisions on the autumn call are not issued until the spring of the following year, it is necessary to review the Translational Brainpower Programme over a two-year period.

The autumn call was the only one in this programme in 2009, which naturally meant that a larger number of applications were received. In the programme's 9th call, therefore, a total of seven applications were received by the FWF, followed by another six applications in the 10th call (spring 2010). In contrast, only three applications were decided on in the course of the year 2009. Applications to the Translational Brainpower Programme, which is funded by the Austrian

Federal Ministry of Transport, Innovation and Technology, can only be submitted in connection with applications to the Translational Research Programme (see pp. 66-67). Of the three Translational Brainpower projects approved in 2010, two are being carried out in cooperation with scientists from the US, while one involves researchers from the Republic of Korea.

The integration of researchers from abroad into the Austrian scientific community (and the resulting opportunity for members of the Austrian research group to visit the partner research institution abroad) creates significant added value for the projects funded and supports the international networking activities of Austrian researchers. In this way, the Translational Brainpower Programme makes an important contribution to 'brain gain' in Austria.





Translational Brainpower Programme - Overview

Number of projects

Table 17

Approval rate in percent

Funding programme	2010	2009	2010	2009	2010	2009		
Translational Brainpower Programme	13	3	3	1	23.1	33.3		
Women/Men	2/11	1/2	0/3	0/1	0.0/27.3	0.0/50.0		
Funding requested/approved	Appl	ications processed	Approv	val rate in percent	Total grants			
(EUR millions)								
Funding programme	2010	2009	2010	2009	2010	2009		
Translational Brainpower Programme	4.6	0.8	23.3	39.7	1.1	0.3		
Women/Men	0.8/3.7	0.3/0.5	0.0/28.4	0.0/58.8	0.0/1.1	0.0/0.3		

Applications processed

Approvals

Hertha Firnberg Programme

Target group Outstanding university graduates of all disciplines

Objectives

- To enhance women's opportunities for academic careers at Austrian research institutions
- To provide as much support as possible at the beginning of a female scholar's academic career or upon her return from maternity leave

Requirements

- Completion of doctorate
- International scientific publications
- Age: no older than 41 years at the time of application, or a maximum of 4 years postdoctoral experience (not including periods devoted to child care)

Duration

36 months (of which up to 12 months may be spent at a research institution abroad)

Applications

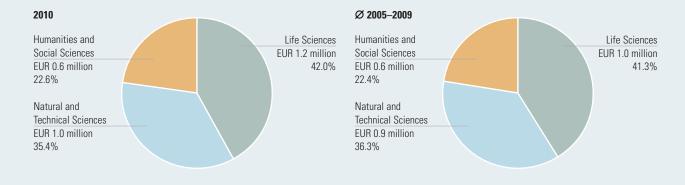
■ Two calls per year (spring and fall)

Award decisions

- Decisions are taken by the FWF Board on the basis of international peer reviews.
- Decisions are taken twice a year, during the FWF Board's meetings in June (for the autumn call) and December (for the spring call).

Grants by scientific discipline Firnberg Programme)





Enhancing career opportunities

For several years now, this postdoctoral programme has provided women with effective support at the beginning of their academic careers. In 2010, the approval rate came to 26.0%, with 50 applications handled and 13 approved. One especially encouraging development is the fact that the Board was able to approve projects in the Humanities and Social Sciences category for the first time since 2007. Another first was observed in the research institutions involved: For the first time since the Firnberg Programme was established (1999), a female scientist received funding for research at the Paracelsus Medical University (PMU) in Salzburg. The other research institutions hosting Firnberg grantees are the University of Vienna, the University of Natural Resources and Life Sciences Vienna, the Vienna University of Technology, and the University of Graz.

A look at the average age of Firnberg grantees shows that these scholars are far younger than the programme's age limit of 41 years: At 33.5 years, the average age in 2010 was consistent with the long-term trend.

Four of the project heads have also shown that children need not be an obstacle to a career in science and research, as they had a combined total of seven "Firnberg kids" at the time of application.

One of the FWF's more significant contributions to career development for female scientists is the annual two-day Firnberg-Richter Workshop. In addition to providing female scientists with an opportunity to network, this event also serves the purpose of coaching and personal development. The workshop has been an integral and essential part of the programmes since their very inception. With the workshop under new management in 2010, a number of structures and approaches were redesigned with special attention to achieving a balance between the scholars' personal lives, careers and relationship networks / families. The feedback on the workshop from Firnberg veterans as well as newcomers was entirely positive.



(W) weblink www.fwf.ac.at/en/projects/ firnberg.html

Firnberg Programme - Overview

Number of projects

Funding programme

Table 18

Approval rate in percent

2010

Hertha Firnberg Programme	50	53	13	13	26.0	24.5
Women/Men	50/-	53/-	13/-	13/-	26.0/-	24.5/-
Funding requested/approved	Appl	ications processed	Approv	val rate in percent	Total grants	
(EUR millions)						
Funding programme	2010	2009	2010	2009	2010	2009
Hertha Firnberg Programme	10.1	10.2	26.1	24.5	2.7	2.6
Women/Men	10.1/-	10.2/-	26.1/-	24.5/-	2.7/-	2.6/-

2009

Applications processed

2010

Approvals

2009

2010

Elise Richter Programme

Target group

Outstanding female researchers of all disciplines who wish to pursue a university career

Objective

- To support outstanding female scientists and researchers in their pursuit of a university career
- By the end of the funding period, the grant recipient should reach a qualification level which allows her to apply for a professorship in Austria or abroad (venia legendi/docendi or a similar qualification level).

Requirements

- Relevant postdoctoral experience in Austria or abroad
- International scientific publications
- Preparatory steps in the planned research project
- No age limit

Duration

12 to 48 months

Applications

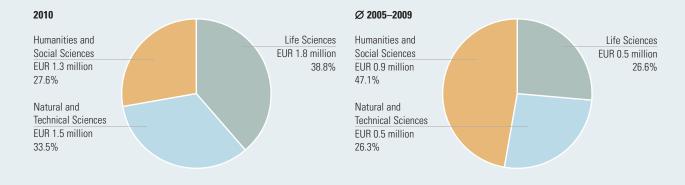
■ Two calls per year (spring and fall)

Award decisions

- Decisions are taken by the FWF Board on the basis of international peer reviews.
- Decisions are taken twice a year, during the FWF Board's meetings in June (for the autumn call) and December (for the spring call).

Grants by scientific discipline (Richter Programme)





Supporting career development

In this senior postdoc programme, which is designed to support career development for female scientists and researchers and to help recipients attain the qualification level necessary for a professorship in Austria or abroad, the number of applications received rose by nearly 30% in 2010. However, as the number of positions available was reduced by one compared to the previous year, the approval rate came to a mere 37.5%.

The research institutions of Richter grantees are widely distributed across Austria. Projects were approved at the University of Vienna, the Vienna University of Technology, the University of Natural Resources and Life Sciences Vienna, the University of Veterinary Medicine Vienna, the Ludwig Boltzmann Gesellschaft in Vienna, the University of Graz, Graz University of Technology, the University of Innsbruck, the University of Linz and the University of Salzburg. The recipients included four principal investigators with children (six in total).

One of the FWF's significant contributions to career development for female scientists is the annual two-day Firnberg-Richter Work-

shop. In addition to providing female scientists with an opportunity to network, this event also serves the purpose of coaching and personal development. The workshop has been an integral and essential part of the programmes since their very inception (for more information on the 2010 workshop, see p. 63).

The Richter Programme does not stipulate an age limit for applications, and the average age of grant recipients in 2010 was 35.7 years. Compared to the previous year's figure, the average age dropped slightly in the year under review.

A look at the careers of past Richter grantees clearly shows that meeting the FWF's quality standards in one programme augurs well for later success in science and research careers. In 2010, two-thirds of the 15 Richter grantees had participated in FWF projects in the past: Four of them had been awarded positions under the Firnberg Programme, three had spent time abroad with Schrödinger Fellowships, two had been independent scientists in stand-alone projects, and one had taken part in the Meitner Programme.



(a) weblink www.fwf.ac.at/en/projects/ richter.html

Richter Programme - Overview

Number of projects

Table 19

Approvals Approval rate in percent

	FF			PP	I I I		
Funding programme	2010	2009	2010	2009	2010	2009	
Elise Richter Programme	40	31	15	16	37.5	51.6	
Women/Men	40/-	31/-	15/-	16/-	37.5/-	51.6/-	
Funding requested/approved	Applications processed		Approval rate in percent			Total grants	
(EUR millions)							
Funding programme	2010	2009	2010	2009	2010	2009	
Elise Richter Programme	11.2	6.5	34.4	43.3	4.5	3.7	
Women/Men	11.2/-	6.5/-	34.4/-	43.3/-	4.5/-	3.7/-	

Applications processed

Translational Research Programme

The Translational Research Programme is administered on behalf of the Austrian Federal Ministry of Transport, Innovation and Technology within the framework of the Bridge Initiative. This initiative involves two programmes – the BRIDGE Programme at the Austrian Research Promotion Agency (FFG) and the Translational Research Programme at the FWF – which differ in terms of their proximity to applied research.

Target group

Scientists and researchers of all disciplines in Austria

Objectives

This programme is intended to provide an opportunity to examine research findings from the perspective of actual applications or other uses, and to give outstanding researchers a chance to develop these findings into specific applications and/or economic, social or cultural benefits. These uses or benefits of research might come in the form of patents or successful partnerships with the world of business, medicine, politics, the arts, government or other interest groups in Austria and abroad. However, additional financing is then left up to the respective partners or funding institutions.

Specifically, the Translational Research Programme pursues the following objectives:

- To support further/targeted basic research at the interface to applied research;
- To develop Austria's human resources for science and research based on the principle of research-driven education;
- To intensify national cooperation and international networking.

Requirements

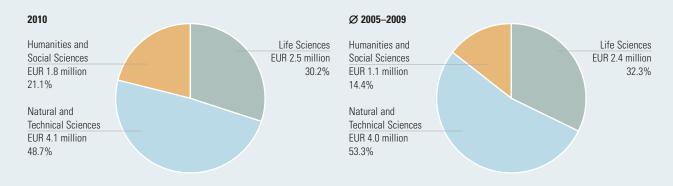
- High scientific quality by international standards
- Innovation potential of expected application
- No commercial funding partner to date

Award decisions

The Austrian Federal Ministry of Transport, Innovation and Technology makes the final award decisions on the basis of the FWF Board's funding recommendations. The Board's recommendations are in turn based on international peer reviews and the recommendations of the Bridge Advisory Board.

Grants by scientific discipline (Translational Research Programme)





An applied perspective

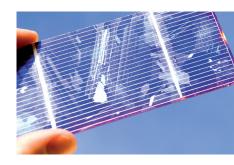
After the turbulent budget developments in 2009, the FWF was able to hold two calls in the Translational Research Programme in 2010. As decisions on the autumn call are not issued until the spring of the following year, it is necessary to review this programme over a two-year period. The Translational Research Programme is funded by the Austrian Federal Ministry of Transport, Innovation and Technology.

A look at the programme's application statistics from 2010 show that it is once again approaching the levels attained in 2008 (i.e. prior to the budget crisis). With 166 applications processed, the number of submissions was even higher compared to 2008 (135 applications). With only 31 applications approved, however, the number of approvals has still not recovered (2008: 51 approvals). The approval rate based on the number of applications thus came to 18.7% in 2010 (compared to 36.7% in 2008).

In any case, the large number of applications is a clear sign of the consistently high interest in this programme.

In order to secure funding in the year 2010, it was necessary to look ahead to the TRP budgets in the upcoming calls; in addition, the National Foundation made an additional EUR 1 million in funding available. Both of these measures were carried out with the consent (and support, in the case of the National Foundation's contribution) of the Federal Ministry of Transport, Innovation and Technology.

Hardly any changes were observed in the distribution of projects across scientific disciplines. Approximately half of the projects can be assigned to the Natural and Technical Sciences category, while just under one-third pertained to Life Sciences. As the FWF's new PEEK Programme offers an attractive opportunity to obtain funding for arts-based research, the number of art-related applications received in this programme dropped sharply. Two TRP applications which were rejected by the FWF Board but recommended to the relevant provincial government succeeded in obtaining funds from the government of the Lower Austrian province.





Translational Research Programme - Overview

Translational Research Programme

Women/Men

Table 20

Number of projects	Applications processed			Approvals	Approval rate in percent		
Funding programme	2010	2009	2010	2009	2010	2009	
Translational Research Programme	166	58	31	13	18.7	22.4	
Women/Men	37/129	9/49	5/26	2/11	13.5/20.2	22.2/22.4	
Funding requested/approved	Appl	ications processed	Approv	al rate in percent	nt Total grants		
(EUR millions)							
Funding programme	2010	2009	2010	2009	2010	2009	

15.6

2.6/13.0

53.7

12.7/41.0

15.4

11.3/16.7

19.2

16.2/19.8

8.4

1.4/6.9

3.3

0.5/2.8

Experimental call for proposals: Clinical Research (KLIF)

Target group

Clinical scientists working in Austria who possess the relevant qualifications, sufficient available capacity and the infrastructure necessary to carry out the project submitted.

Objective

The purpose of this programme is to identify any existing funding gaps in patient-oriented, academic clinical research and to estimate the size of such gaps, but not necessarily to fill them. The result of the call and the availability of alternative funding sources will be used to determine whether and to what extent additional calls can be organised in the future.

Requirements

- Applicants must be able to demonstrate that they have conducted suitable preparatory work related to the proposed studies. Project proposals must involve patients or healthy subjects, qualify as top-notch clinical research by international standards, and undergo an international peer review.
- Moreover, documented approval from the competent ethics commission is to be obtained before any project can be launched.

Grant amounts

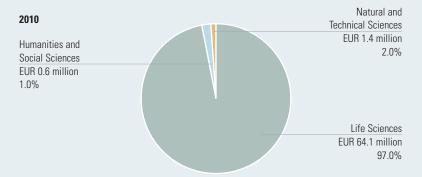
- Given the relatively small budget available, large-scale and especially costly clinical studies cannot be financed.
- In addition, studies where business organisations have a direct commercial interest in the results as well as purely exploratory studies are not eligible for funding.

Award decisions

Decisions are taken by the FWF Board on the basis of international peer reviews and the recommendations of an international expert jury.







A successful experiment

In coordination with the Federal Ministry of Science and Research, the FWF launched an experimental call for funding applications in the field of clinical research in mid-June 2010. The aim of this call was to examine the nature and scope of the 'funding gap' in clinical research in Austria. In the first step - and as a prerequisite for funding - interested clinical researchers were asked to submit letters of interest (Lols) by the end of September 2010 in order to inform the FWF that they were interested in submitting proposals.

The number of Lols received by the FWF exceeded all expectations by a wide margin. A total of 327 Lols were submitted, and the amount of funding requested came to approximately EUR 66 million. In their Lols, clinical researchers were asked to classify their projects by scientific discipline according to the scheme used by Statistics Austria. The most common discipline indicated in these letters was clinical medicine (not including surgery and psychiatry), which accounted for 45.4%

of these preliminary submissions. This discipline was followed by the neurosciences (11.1%) and surgery/anaesthesiology (9.0%).

The LoI stage provided the FWF with a unique opportunity to clearly demonstrate the impressive potential for first-rate clinical research in Austria. With any luck, the large number of applications received by the end of January 2011 will help convince research and health policy makers to make more funding available and to transform this 'experiment' into an actual funding programme with regular calls in the future.

The jury consisted solely of international, well-established clinical researchers whose expertise covers the full range of disciplines addressed in the proposals; the jury members nominated specific international peer reviewers for each application and will make funding decisions on the basis of those reviews in early June 2011.



(a) weblink www.fwf.ac.at/en/projects/ clinical-research-call.html

KLIF - Overview

Ta	bl	е	21	
Ia	υI	U	۷ ۱	

Number of projects	Lols	Applications
	received	received
Funding programme		
Clinical Research	327	183
Women/Men	102/225	53/130
Funding requested/approved	Lols	Applications
(EUR million)	received	received
Funding programme		
Clinical Research	66.2	38.6
Women/Men	21.1/45.1	11.9/26.7

Programme for Arts-Based Research (PEEK)

A programme initiative of the Austrian Federal Ministry of Science and Research

Target group

All individuals who work in the fields of the arts and sciences in Austria and who possess the appropriate qualifications

Objectives

- To fund high-quality, innovative arts-based research efforts in which artistic practice plays a key role
- To enhance the research competence, quality and international reputation of Austria's researchers in art-related fields
- To increase awareness of arts-based research and its potential applications among a broader public and in the research and art communities

Requirements

- High-quality art-related research by international standards
- Sufficient available capacity
- Necessary infrastructure (affiliation with a suitable university or non-university institution in Austria which can ensure the documentation, support and quality of findings as required for the project)

Duration

Up to 36 months

Applications

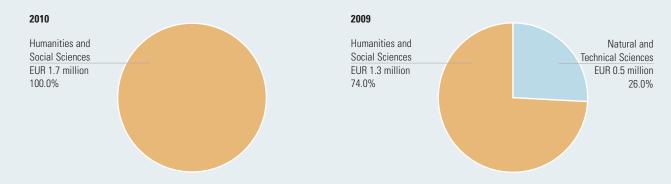
- One call per year (every spring)
- Precise description of the project's objectives, methods and duration

Award decisions

Decisions are taken by the FWF Board on the basis of the International PEEK Board's recommendations, which, in turn, are based on international peer reviews.

Grants by scientific discipline (PEEK)





Innovative arts-based research

The second call launched in the PEEK Programme for Arts-Based Research drew a total of 48 applications (2009: 63 applications). In this call, 14 projects were resubmissions, that is, applications which had been rejected in 2009 and were then submitted in revised form.

As in 2009, a total of seven applications were approved; four of them were resubmissions. The members of the International PEEK Board can be found in the Appendix (p. 89).

In 2010, the gender aspect of the PEEK Programme certainly showed room for improvement. While women recipients were in the majority in the 2009 call (four out of the seven projects approved), not a single female applicant was successful in 2010. In this context, it will be necessary to make a concerted effort to encourage women in arts-based research to submit applications in the future.

Of the 48 applications received, 27 came from art universities, 11 from 'classic' universities, and ten from non-university research institutions. The seven approvals are distributed among research institutions as follows: For the first time, a 'classic' university (Uni-

versity of Klagenfurt) was able to obtain funding under this programme. Among the non-university institutions, Ars Electronica Linz was successful in acquiring funds. The other five approvals went to art universities, specifically the University of Applied Arts Vienna, the Academy of Fine Arts Vienna, the University of Music and Performing Arts Graz (two projects) and the University for Art and Industrial Design in Linz.

The PEEK projects are assigned to the discipline of humanities and social sciences in accordance with the classification scheme used by Statistics Austria. A look at the specific areas addressed by projects approved in 2010 reveals the following picture: One project concerned the field of performing arts, two projects dealt with literature, one focused on arts and media, two were related to music, and one involved research on architecture.

For the first time, applicants were also permitted to submit audiovisual materials with their applications in 2010. Of the nine applications received in this specific category, one was successful (University for Art and Industrial Design in Linz).



(a) weblink www.fwf.ac.at/en/projects/ peek.html

PEEK - Overview Table 22

Number of projects	Appl	ications processed	Approvals		Approv	Approval rate in percent	
Funding programme	2010	2009	2010	2009	2010	2009	
PEEK	48	63	7	7	14.6	11.1	
Women/Men	19/29	25/38	0/7	4/3	0.0/24.1	16.0/7.9	

Funding requested/approved (EUR millions)	Appl	Applications processed Approval rate in percent				Total grants		
Funding programme	2010 2009		2010	2009	2010	2009		
PEEK	12.2 14.8		14.2	11.9	1.7	1.8		
Women/Men	4.8/7.4	6.1/8.7	0.0/23.4	16.6/8.6	0.0/1.7	1.0/0.8		

Support for Scientific Publications

Stand-alone publications

Target group Scientists and researchers of all disciplines

Objective To provide support for the dissemination of stand-alone publications to a broader audience

in an appropriate and economical manner

Award decisions Decisions are taken by the FWF Board on the basis of international peer reviews.

Translation and foreign language editing of stand-alone publications

Target group Scientists and researchers of all disciplines

Objective Funding for the costs of translating scientific publications into a language relevant to the

specific discipline or for the costs of foreign language editing in order to disseminate

publications to a broader audience in an appropriate and economical manner

Award decisions Decisions are taken by the FWF Board on the basis of the application forms submitted.

Peer-reviewed publications

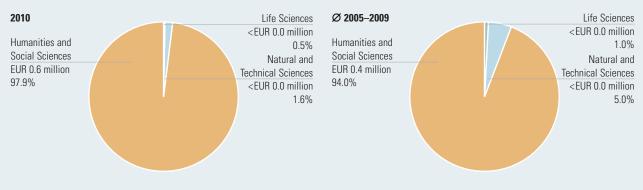
Target group Scientists and researchers of all disciplines

Objective Funding of costs for peer-reviewed publications arising from FWF projects up to three years

after the end of each project

Grants by scientific discipline (Support for Scientific Publications) *





*) Does not include peer-reviewed publications.

Enhancing accessibility and visibility

The FWF's publication funding activities can be subdivided into three target areas, all of which aim to make research findings accessible to a broader public in an appropriate and economical manner: The FWF's grants for stand-alone publications are designed to support the dissemination of scientific works in general, while funding for translations and foreign-language editing (since early 2011) of stand-alone publications supports the dissemination of publications in a language relevant to the scientific discipline. The third form of support is provided for peer-reviewed publications; the purpose of these funds is to cover the costs of such publications arising from FWF projects up to three years after the end of each project. Support for peer-reviewed publications can be requested as additional funding in submissions to the FWF's other programmes.

The number of applications and approvals has remained quite stable in recent years. This is also true of the high approval rate among female scientists and researchers (62.2%).

One especially significant aspect of this pro-

gramme is the sometimes unique and internationally ground-breaking measures the FWF has taken in its funding of open access publications. The FWF's leading role in this area was confirmed by the institutions participating in an international open access workshop held in Amsterdam in June 2010. Over 60% of all applications for stand-alone publications are submitted with requests for open access grants. In the first quarter after the FWF introduced its open access policy in 2009, this percentage was only 25%. This positive development is even more obvious in the case of approvals, as approximately 71% of grants approved include funding for open access.

Through its participation in PubMed (UKPub-MedCentral), the FWF was able to make more than 600 publications freely available within a period of just nine months. With regard to peer-reviewed publications (as a supplementary funding request in all other programmes), the FWF was able to support approximately 400 contributions to peerreviewed publications with some EUR 0.8 million, over 80% of which was allocated to open access publications.





www.fwf.ac.at/en/projects/ stand_alone_publications.html

www.fwf.ac.at/en/projects/ translations_publications.html

www.fwf.ac.at/en/projects/ peer-reviewed_publications.html

Support for Scientific Publications - Overview *

Table 23

A ------

Number of projects	Appl	ications processed		Approvals	Approv	/al rate in percent
Funding programme	2010	2009	2010	2009	2010	2009
Support for Scientific Publications	105	105	62	62	59.0	59.0
Women/Men	45/60	42/63	28/34	29/33	62.2/56.7	69.0/52.4
Funding requested/approved (EUR millions)	Appl	ications processed	Approv	val rate in percent		Total grants
Funding programme	2010	2009	2010	2009	2010	2009
Support for Scientific Publications	1.1	0.9	58.7	53.9	0.7	0.5

Manufacture Commitment

^{*)} Does not include peer-reviewed publications.

Appendix



Tables 75

Research and experimental development (R&D) by international comparison; ERC Starting and Advanced Grants; Bibliometric data from top 30 countries; Development of funding; Number of grants per research institution; Funding amounts approved per research institution; Total grants by federal province; ERA-Net participation; Destinations of Erwin Schrödinger fellows; Countries of origin of Lise Meitner grantees; International Programmes – Funding; Wittgenstein recipients since 1996; Ongoing and approved START projects; Ongoing and approved Special Research Programmes (SFBs); Ongoing and approved National Research Networks (NFNs); Ongoing and approved Doctoral Programmes (DKs)

Bodies of the FWF	86
Supervisory Board, FWF Management, FWF Board, Assembly of Delegates,	
International START/Wittgenstein Jury, PEEK Board	
FWF Secretariat	90
Ralance sheet and annual accounts	92

Research and experimental development (R&D) by international comparison, 2007

Table 24

	Gross domestic R&D spending		ss domestic g financed by	Employees in R&D		Share of gros spending		
Country		Government	Businesses		Businesses	Higher education institutions	Public sector	Private non- profit sector
	Percent of GDP	Per	cent	Full-time equivalents	Р	ercent of gross domest	ic R&D sper	nding
OECD total	2.28	28.1	64.2	_	69.6	17.0	10.9	2.4
EU 25	1.80	33.4	55.0	2,313,578	63.5	22.6	12.7	1.2
EU 15	1.90	32.7	55.6	2,111,166	64.3	22.4	12.1	1.2
Austria	2.54	32.9	48.7	53,252	70.6	23.8	5.3	0.3
Japan	3.44	15.6	77.7	937,865	77.9	12.6	7.8	1.8
USA	2.66	28.3	66.2	_	72.2	13.1	10.9	3.8

Source: OECD (MSTI 2009-2), Statistics Austria. Prepared by the Austrian Ministry of Science and Research (BMWF).

ERC Starting and Advanced Grants by host country, 2007 to 2010 (ranked by grants per million population)*

Country	Population 2005	Proposals submitted	Proposals approved	Success rate percent	Applications per million pop.	Grants per million pop.
Switzerland	7,783,026	621	138	22.2	79.8	17.7
Israel	7,285,033	685	103	15.0	94.0	14.1
Sweden	9,340,682	856	78	9.1	91.6	8.4
Netherlands	16,577,612	1,100	126	11.5	66.4	7.6
Finland	5,351,427	477	32	6.7	89.1	6.0
United Kingdom	62,008,048	2,860	353	12.3	46.1	5.7
Austria	8,375,290	366	43	11.7	43.7	5.1
Cyprus	803,147	68	4	5.9	84.7	5.0
Belgium	10,827,000	617	53	8.6	57.0	4.9
Denmark	5,534,738	356	27	7.6	64.3	4.9
France	64,713,762	1,731	242	14.0	26.7	3.7
Norway	4,858,199	236	18	7.6	48.6	3.7
Iceland	317,630	20	1	5.0	63.0	3.1
Ireland	4,455,780	300	14	4.7	67.3	3.1
Germany	81,802,257	2,104	234	11.1	25.7	2.9
Spain	45,989,016	1,323	105	7.9	28.8	2.3
Hungary	10,013,000	303	21	6.9	30.3	2.1
Italy	60,340,328	3,073	121	3.9	50.9	2.0
Portugal	10,626,000	284	16	5.6	26.7	1.5
Greece	11,295,002	599	16	2.7	53.0	1.4
Estonia	1,340,127	23	1	4.3	17.2	0.7
Czech Republic	10,506,813	172	7	4.1	16.4	0.7
Bulgaria	7,563,710	89	3	3.4	11.8	0.4
Poland	38,167,329	369	7	1.9	9.7	0.2
Turkey	72,561,312	293	1	0.3	4.0	0.01

^{*} Source: European Research Council (ERC); (a) withdrawn & ineligible proposals not taken into account, (b) selected for funding refers to Pls who have signed the grant agreements (for closed calls) or have been invited to start preparations of grant agreements, (c) host country refers to the country of the host institution which provided the support letter at the time of application.

Bibliometric data from top 30 countries, 2000 to 2010

(Ranked by citations per 1,000 population)

Table 26

Rank Country	Papers	Citations	Ø Population in 1,000 (2000–2009)	World share of papers in percent	World share of citations in percent	Citations per paper	Papers per 1,000 population	Citations per 1,000 population	2-year citation growth in percent
1 Switzerland	176,149	2,970,249	7,429	1.44	2.04	16.86	23.71	399.84	11.5
2 Sweden	177,080	2,631,627	9,042	1.45	1.80	14.86	19.58	291.04	11.3
3 Denmark	95,394	1,521,336	5,418	0.78	1.04	15.95	17.61	280.81	11.7
4 Iceland	4,985	77,408	299	0.04	0.05	15.53	16.70	259.25	13.3
5 Netherlands	244,440	3,813,286	16,265	2.00	2.61	15.60	15.03	234.45	11.8
6 Finland	87,974	1,212,613	5,246	0.72	0.83	13.78	16.77	231.15	11.4
7 United Kingdom	853,298	12,648,181	59,834	6.97	8.67	14.82	14.26	211.39	11.4
8 Israel	110,485	1,407,070	6,940	0.90	0.96	12.74	15.92	202.75	11.3
9 Norway	68,654	870,319	4,629	0.56	0.60	12.68	14.83	188.02	12.2
10 Canada	438,863	5,814,304	32,146	3.58	3.98	13.25	13.65	180.87	11.7
11 Belgium	133,141	1,817,464	10,481	1.09	1.25	13.65	12.70	173.41	12.1
12 Australia	290,420	3,481,564	20,386	2.37	2.39	11.99	14.25	170.78	12.1
13 USA	3,018,196	48,299,498	294,574	24.64	33.09	16.00	10.25	163.96	11.1
14 New Zealand	56,005	606,943	4,093	0.46	0.42	10.84	13.68	148.28	12.0
15 Austria	92,753	1,197,527	8,202	0.76	0.82	12.91	11.31	146.01	11.9
16 Singapore	61,565	570,178	4,300	0.50	0.39	9.26	14.32	132.60	14.7
17 Germany	775,782	10,276,896	82,302	6.33	7.04	13.25	9.43	124.87	11.4
18 Ireland	42,548	487,661	4,123	0.35	0.33	11.46	10.32	118.28	12.5
19 France	551,473	6,874,545	60,914	4.50	4.71	12.47	9.05	112.86	11.3
20 Italy	416,802	4,930,138	58,158	3.40	3.38	11.83	7.17	84.77	11.8
21 Spain	321,929	3,372,398	43,086	2.63	2.31	10.48	7.47	78.27	12.5
22 Slovenia	22,670	152,382	2,000	0.19	0.10	6.72	11.34	76.19	13.1
23 Japan	781,348	8,110,278	127,547	6.38	5.56	10.38	6.13	63.59	11.0
24 Greece	79,759	678,053	11,091	0.65	0.46	8.50	7.19	61.14	13.5
25 Estonia	8,477	77,780	1,300	0.07	0.05	9.18	6.52	59.83	12.7
26 Taiwan	165,859	1,158,762	22,000	1.35	0.79	6.99	7.54	52.67	13.5
27 Portugal	57,760	523,294	10,483	0.47	0.36	9.06	5.51	49.92	14.0
28 Czech Republic	64,571	502,808	10,287	0.53	0.34	7.79	6.28	48.88	13.0
29 Hungary	49,589	489,050	10,107	0.40	0.34	9.86	4.91	48.39	12.1
30 South Korea	260,670	1,835,224	48,013	2.13	1.26	7.04	5.43	38.22	14.1

Sources: (1) Papers and Citations from ISI "Essential Science Indicators" (January 1, 2000–January 1, 2011); (2) DECD Population Data 2000–2009 and CIA Factbook (Estimated: Singapore. Estonia. Taiwan. Slovenia)

Development of funding in the Life Sciences

	2008		2009		2010	
	EUR million	Percent	EUR million	Percent	EUR million	Percent
Anatomy, pathology	3.3	1.9	2.7	1.8	1.9	1.1
Medical chemistry, medical physics, physiology	6.6	3.8	6.6	4.5	10.3	6.0
Pharmaceutics, pharmacology, toxicology	1.6	0.9	1.9	1.3	6.1	3.5
Hygiene, medical microbiology	3.1	1.7	5.5	3.7	6.0	3.5
Clinical medicine	2.2	1.3	2.3	1.5	2.0	1.1
Surgery, anesthesiology	0.3	0.2	0.1	0.0	0.4	0.2
Psychiatry, neurology	1.1	0.6	0.6	0.4	3.1	1.8
Forensic medicine	0.0	0.0	0.0	0.0	0.0	0.0
Other areas of human medicine	0.7	0.4	0.9	0.6	1.5	0.9
Veterinary medicine	0.6	0.3	0.7	0.4	0.4	0.2
Biology, botany, zoology	41.3	23.5	34.0	23.0	38.2	22.2
Total	60.8	34.5	55.2	37.4	69.8	40.7
Total grants	176.1		147.6		171.8	

Development of funding in the Natural and Technical Sciences

Table 28

	2008		2009		2010		
	EUR million	Percent	EUR million	Percent	EUR million	Percent	
Mathematics, computer sciences	17.7	10.1	18.2	12.3	20.2	11.8	
Physics, mechanics, astronomy	32.2	18.3	19.0	12.9	21.2	12.3	
Chemistry	10.7	6.1	7.8	5.3	11.1	6.4	
Geology, mineralogy	2.3	1.3	1.9	1.3	4.4	2.6	
Meterology, climatology	1.0	0.6	2.3	1.6	1.2	0.7	
Hydrology, hydrography	2.6	1.5	1.2	0.8	0.7	0.4	
Geography	0.7	0.4	0.8	0.6	0.9	0.5	
Other areas of natural sciences	3.0	1.7	2.7	1.8	1.9	1.1	
Mining, metallurgy	0.1	0.1	0.0	0.0	0.6	0.4	
Mechanical engineering	0.5	0.3	0.3	0.2	0.2	0.1	
Civil engineering	0.5	0.3	0.4	0.3	0.8	0.5	
Architecture	0.4	0.2	0.7	0.5	0.6	0.4	
Electrical engineering, electronics	1.1	0.7	2.8	1.9	0.9	0.5	
Technical chemistry, fuel and mineral oil engineering	0.4	0.2	0.2	0.1	0.4	0.2	
Geodesy, surveying	0.6	0.4	0.2	0.1	0.2	0.1	
Traffic and transport	0.0	0.0	0.0	0.0	0.0	0.0	
Other areas of technical sciences	1.3	0.7	0.7	0.5	1.9	1.1	
Agronomy, plant breeding, environmental protection	0.9	0.5	0.2	0.1	0.0	0.0	
Horticulture, fruiticulture	0.1	0.1	0.0	0.0	0.0	0.0	
Forestry and timber	0.6	0.3	0.2	0.1	0.6	0.3	
Livestock breeding, animal husbandry	0.2	0.1	0.4	0.3	0.3	0.2	
Other areas of agriculture and forestry	1.6	0.9	0.0	0.0	0.3	0.2	
Total	78.7	44.7	60.1	40.7	68.3	39.8	
Total grants	176.1		147.6		171.8		

Development of funding in the Humanities and Social Sciences

	2008		2009		2010	
	EUR million	Percent	EUR million	Percent	EUR million	Percent
Philosophy	1.3	0.8	2.1	1.4	2.1	1.2
Theology	0.6	0.3	1.2	0.8	0.8	0.5
Historical sciences	10.0	5.7	8.3	5.6	8.0	4.7
Linguistics and literature	3.8	2.1	5.2	3.5	3.6	2.1
Other philological and cultural studies	3.1	1.7	2.2	1.5	1.7	1.0
Aesthetics and art history	2.7	1.5	2.5	1.7	3.8	2.2
Other areas of the humanities	0.7	0.4	1.2	0.8	0.8	0.5
Political science	2.6	1.5	0.6	0.4	0.5	0.3
Legal science	1.0	0.6	0.7	0.5	0.9	0.5
Economics	3.9	2.2	4.3	2.9	3.7	2.2
Sociology	2.4	1.4	1.5	1.0	1.5	0.9
Psychology	1.5	0.9	0.7	0.5	1.4	0.8
Regional planning	0.1	0.0	0.1	0.1	0.1	0.1
Applied statistics	0.7	0.4	0.1	0.0	1.8	1.1
Pedagogy, educational science	0.4	0.2	0.7	0.5	0.7	0.4
Other areas of social sciences	2.0	1.1	1.2	0.8	2.2	1.3
Total	36.6	20.8	32.3	21.9	33.6	19.6
Total grants	176.1		147.6		171.8	

Table 30

Number of grants per research institution in 2010

																,				
	Stand-Alone Projects	SFBs 1)	SFB extensions 1)	NFNs 1)	START Programme	Wittgenstein Award	International Programmes	DKs	DK extensions	Schrödinger Programme	Brainpower ²⁾ Meitner Programme	Translational	Firnberg Programme	Richter Programme	TRP 2)	Support for Scientific Publications ³⁾ PEEK	Total 2010	Percent 2010	Total 2009	Percent 2009
a) Research institutions:																				
University of Vienna	71.0	10.3	1.0	0.0	2.1	0.0	18.7	1.6	1.2	12.0	8.0	1.0	3.0	1.0 4	4.1	0.0 16.0	150.8	21.8	154.9	25.6
University of Graz	20.4	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	3.0	2.0	0.0	4.0	1.0	1.3 0	0.0 4.0	39.7	5.7	36.2	0.9
University of Innsbruck	27.4	4.0	1.0	0.0	1.0	0.0	5.4	0.0	0.1	5.0	3.0	0.0	0.0	3.0 4.	0	0.0 0.0	53.9	7.8	43.2	7.1
Medical University of Vienna	31.6	2.0	0.0	0.0	0.0	0.0	1.0	0.3	1.1	7.0	2.0	0.0	1.0 (0.0	2.3 0	0.0 0.0	1 48.3	7.0	46.5	7.7
Medical University of Graz	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	1.0 0.1	0.0 0.0	18.4	2.7	5.8	0.9
Medical University of Innsbruck	11.8	8.0	4.0	0.0	0.0	0.0	2.0	0.0	6.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0 0.0	31.7	4.6	23.5	3.9
University of Salzburg	14.0	0.0	0.0	1.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	1.0 0	0.6 0.	0.0 3.0	27.6	4.0	29.4	4.9
Vienna University of Technology	26.0	7.8	0.0	4.0	0.0	0.0	21.7	0.1	0.5	4.0	2.0	1.0	2.0 2	2.0 4	4.3 0	0.0 0.0	75.4	10.9	59.8	9.9
Graz University of Technology	17.8	0.0	0.0	2.0	0.0	0.0	0.9	0.0	0.0	2.0	2.0	0.0	0.0	2.0 1	1.2 0	0.0 0.0	33.0	4.8	14.7	2.4
University of Leoben	5.7	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.4 0.	0.0 0.0	7.4	1.7	0.3	0.0
University of Natural Resources and Applied Life Sciences Vienna	7.1	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	1.0	1.0	0.0	2.0 2	2.0 3.	6	0.0 0.0	21.7	3.1	28.0	4.6
University of Veterinary Medicine Vienna	2.7	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	1.0 0	0.7 0	0.0 0.0	7.8	1.1	11.0	1.8
Vienna University of Economics and Business Administration	0.0	0:0	0.0	0.0	0.0	0.5	2.0	1.0	8.0	0.0	1.0	0.0	0.0	0.0	1.0 0.1	0.0 1.0	7.3	1.1	2.9	0.5
University of Linz	12.4	0.0	0.0	1.0	0.0	0.0	2.0	0.0	0.0	2.0	1.0	0.0	0.0	1.0 1	1.0 0.1	0.0 0.0	23.4	3.4	20.4	3.4
University of Klagenfurt	1.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0 1.0	5.1	0.7	3.5	9.0
Academy of Fine Arts Vienna	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0 0.0	1.7	0.2	3.0	0.5
University of Applied Arts Vienna	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0 1.0	1 2.0	0.3	2.6	0.4
University of Music and Performing Arts Graz	1.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	2.0 0.0	3.0	0.4	1.0	0.2
University of Music and Performing Arts Vienna	2.1	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 1.0	3.1	0.4	1.0	0.2
University for Art and Industrial Design Linz	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0	1.0 0.0	1.0	0.1	0.7	0.1
Total	269.0	32.0	9.0	8.0	3.3	0.5	75.0	2.0	4.6	46.0 2	26.0	2.0 13	12.0 14	14.0 25	25.9 6.	6.0 27.0	562.3	81.4	488.6 4)	9.08
b) Non-university and other institutions:	IS:																			
Austrian Academy of Sciences	14.3	5.5	0.0	0.0	2.0	0.5	7.0	0.0	0.2	2.0	1.0	0.0	0.0	0.0	2	0.0 10.0	1 46.0	6.7	44.6	7.4
Ohter research institutions 5)	26.7	1.5	1.0	2.0	8.0	0.0	10.0	0.0	0.1	5.0	2.0	1.0	1.0	1.0 4.	6 1	.0 25.0	82.7	12.0	72.8	12.0
Total	310.0	39.0	7.0	10.0	0.9	1.0	92.0	2.0	5.0	56.0 2	29.0	3.0 1	13.0 1	5.0 31.0		7.0 62.0	0.169	100.0	0.909	100.0

¹⁾ The figures shown here refer to sub-projects within full applications.

2) Programme funded by the Austrian Federal Ministry of Transport, Innovation and Technology (BMMT).

3) Does not include peer-reviewed publications in supplementary funding requests.

4) Includes START project extensions.

5) Includes universities abroad.

Funding amounts per research institution in 2010 (EUR million)

																	L				
	Stand-Alone Projects	SFBs 1)	SFB extensions ¹⁾	NFNs 1)	START Programme	Programmes Wittgenstein Award	International	DKs	DK extensions	Schrödinger Programme	Brainpower ²⁾ Meitner Programme	Translational	Firnberg Programme	Richter Programme	TRP ²⁾	Publications ³⁾ PEEK	Support for Scientific	Total 2010	Percent 2010	Total 2009	Percent 2009
a) Research institutions:																					
University of Vienna	19.9	4.0	0.4	0.1	1.3	0.0	3.2	2.4	1.9	1.1	1.1	0.4	9.0	0.6	1.2 (0.0	0.2	38.3	22.3	38.1	25.8
University of Graz	5.6	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.3	0.3	0.0	0.8	0.3	0.4	0.0	0.1	8.1	4.7	9.2	6.2
University of Innsbruck	6.9	1.7	0.4	0.1	9.0	0.0	1.0	0.1	0.2	9.0	0.4	0.0	0.0	. 6:0	1.1	0.0	0:0	14.0	8.1	10.4	7.1
Medical University of Vienna	9.3	0.7	0.0	0.0	0.0	0.0	0.4	9.0	2.1	8.0	0.3	0.0	0.2	0.0	0.8	0.0	0:0	15.2	8.8	11.6	7.9
Medical University of Graz	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	4.5	2.6	2.9	2.0
Medical University of Innsbruck	3.0	3.0	2.5	0.1	0.0	0.0	0.5	8:0	2.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0:0	12.4	7.2	7.0	4.8
University of Salzburg	3.6	0.0	0.0	0.3	0.0	0.0	0.3	2.9	0.0	0.1	0.2	0.0	0.0	0.3	0.1	0.0	0.0	8.0	4.7	4.2	2.9
Vienna University of Technology	8.9	2.9	0.0	1.5	0.0	0.0	4.5	0.2	0.7	0.4	0.3	0.3	0.4	0.4	1.2 (0.0	0:0	19.5	11.4	14.2	9.6
Graz University of Technology	4.4	0.0	0.0	0.7	0.0	0.0	0.5	0.0	0.0	0.1	0.3	0.0	0.0	0.5	0.3	0.0	0:0	6.9	4.0	4.0	2.7
University of Leoben	1.5	0.0	0.0	0.0	0:0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0:0	0.0	0.1	0.0	0:0	1.9	1.1	9.0	0.4
University of Natural Resources and Applied Life Sciences Vienna	2.1	0.0	0.0	0.1	0.0	0.0	9.0	0.0	0.0	0.1	0.1	0.0	0.4	0.5	0.8	0.0	0:0	4.8	2.8	9.1	6.2
University of Veterinary Medicine Vienna	1.8	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2 (0.2 (0.0	0.0	2.5	1.5	5.8	3.9
Vienna University of Economics and Business Administration	0.0	0.0	0.0	0.0	0:0	0.7	0.0	1.3	1.3	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0:0	3.6	2.1	9.0	0.4
University of Linz	3.2	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.3	0.1	0.0	0.0	0.4	0.4	0.0	0:0	5.4	3.2	9.9	4.5
University of Klagenfurt	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2 0	0.0	0.7	0.4	0.7	0.5
Academy of Fine Arts Vienna	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3 0	0.0	0.5	0.3	0.3	0.2
University of Applied Arts Vienna	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1 (0.0	0.3 0	0.0	0.4	0.3	9.0	0.4
University of Music and Performing Arts Graz	0.1	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3 0	0:0	0.4	0.3	0.3	0.2
University of Music and Performing Arts Vienna	0.5	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.5	0.3	0.3	0.2
University for Art and Industrial Design Linz	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3 0	0.0	0.3	0.2	0.2	0.1
Total	72.8	12.4	3.3	3.3	2.0	0.7	12.5	8.2	8.2	4.7	3.5	0.7	2.5	4.3	1.1	1.4 0	0.3	147.9	86.1	126.9 4)	86.0
b) Non-university and other institutions:																					
Austrian Academy of Sciences	3.6	2.0	0.0	0.0	1.2	8:0	1.4	0.0	0.5	0.5	0.2	0.0	0.0	0.0	0.1	0.0	0.1	10.4	0.0	9.8	6.7
Ohter research institutions 51	9.9	9.0	0.4	1.0	0.5	0.0	1.0	0.0	0.3	0.4	0.2	0.4	0.2	0.3	1.2 (0.3 0	0.3	13.5	7.9	10.9	7.4
Total	83.0	15.0	3.8	4.3	3.6	1.5	14.9	8.2	8.9	5.6	3.9	=	2.7	4.5	8.4	1.7 0	0.7 171.8	. 8 6)	90	147.6	9

1) The figures shown here refer to sub-projects within full applications.

2) Programme funded by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT).

3) Does not include peer-reviewed publications in supplementary funding requests.

4) Includes START project extensions.

5) Includes universities abroad.

6) Includes (expriring) commissioned programmes.

Total grants by federal province in 2010 (EUR million)

Table 32

	Burgen- land	Carinthia	Lower Austria	Upper Austria	Salzburg	Styria	Tyrol	Vorarl- berg	Vienna	Abroad	Total
Stand-Alone Projects	0.0	0.3	0.4	4.2	3.9	15.9	9.9	0.3	47.8	0.4	83.0
SFBs 1)	0.0	0.0	0.0	0.0	0.4	0.0	4.7	0.0	9.8	0.0	15.0
SFB extensions 1)	0.0	0.0	0.0	0.0	0.4	0.0	2.9	0.0	0.4	0.0	3.8
NFNs 1)	0.0	0.0	0.9	0.5	0.3	0.7	0.1	0.0	1.6	0.0	4.3
START Programme	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	3.0	0.0	3.6
Wittgenstein Award	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5
International Programmes	0.0	0.3	0.4	0.5	0.8	1.3	1.4	0.0	10.0	0.2	14.9
DKs	0.0	0.0	0.0	0.0	2.9	0.0	0.8	0.0	4.5	0.0	8.2
DK extensions	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	6.8	0.0	8.9
Schrödinger Programme	0.0	0.0	0.0	0.4	0.3	1.2	1.0	0.0	2.6	0.2	5.6
Meitner Programme	0.0	0.0	0.0	0.1	0.3	0.7	0.6	0.0	2.2	0.0	3.9
Translational Brainpower 2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1
Firnberg Programme	0.0	0.0	0.0	0.0	0.2	0.8	0.0	0.0	1.7	0.0	2.7
Richter Programme	0.0	0.0	0.0	0.4	0.3	0.8	0.9	0.0	2.1	0.0	4.5
Translational Research 2)	0.0	0.0	0.0	0.5	0.2	1.3	1.1	0.1	4.9	0.2	8.4
PEEK	0.0	0.2	0.0	0.6	0.0	0.3	0.0	0.0	0.6	0.0	1.7
Support for Scientific Publications ³⁾	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.4	0.0	0.7
Total	0.0	0.9	1.8	7.2	10.1	23.0	26.4	0.4	101.0	1.1	171.8 4)

ERA-Net participation

ERA-Net	Field	Start	Duration	FWF's role	Calls	FWF projects
ERA-Chemistry	Chemistry	2004	5 years	Work package leader	2008	4
					2009	1
Pathogenomics	Pathogenomics	2004	8 years	Partner	2008	5
					2010	3
NanoSciERA	Nanosciences	2005	3 years	Work package leader	2008*	1
EUROPOLAR	Polar research	2005	4 years	Task leader	2009	2
HERA	Humanities	2005	4 years	Partner	2009*	10
BioDivErsA	Biodiversity	2005	4 years	Partner	2008	2
NEURON	Neurosciences	2007	5 years	Work package leader	2008	1
					2009	2
					2010	0
					2011	
ASTRONET	Astronomy	2005	4 years	Associate partner (since 2007)	2008	2
NORFACE	Social sciences	2004	5 years	Associate partner (since 2007)	2008*	2
Plant Genomics	Plant genomics	2006	4 years	Participation in call (2008)	2008	4
E-Rare	Rare diseases	2006	4 years	Participation in call (2009)	2009	3
CHISTERA	Information technology	2010	2 years	Task leader	2010	
E-Rare-2	Rare diseases	2010	4 years	Partner	2010	
BioDivErsA2	Biodiversity	2010	4 years	Partner	2010	
TRANSCAN	Cancer research	2010	4 years	Partner		
TIMINOUALN	ouncer resourch	2010	-r yours	i di dioi		

^{*} ERA-Net Plus cofunding by the EU

The figures shown here refer to sub-projects within full applications.
 Programme funded by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT).
 Does not include peer-reviewed publications in supplementary funding requests.
 Includes (expiring) commissioned programmes.

Countries of origin of Lise Meitner grantees,

Table 34 **2008 to 2010**

Table 36

International Programmes – Funding in 2010	

Programme	Grants (EUR million)
Bilateral projects	4.2
Bilateral projects –	6.4
Lead Agency Procedure	
Joint Seminars, establishment of research	0.1
partnerships	
ESF EUROCORES	3.2
ERA-Net calls	0.6
Additional grants	0.4
ESF Research Networking Programmes, Expert	1.0
Commitees, ICDP, ECORD, membership fees	
Total	15.9

Destinations of Erwin Schrödinger fellows, 2008 to 2010

	2008	2009	2010
Australia	1	3	4
Canada	4	8	2
Denmark		1	1
Finland		1	1
France	2	2	1.5
Germany	3	2	6
Great Britain	12	8	3
Hungary	2		
Italy	1		1
Japan		1	
Mexico		1	
Netherlands		1	1
New Zealand	2		
Portugal	1		
Sweden	1	1	2
Switzerland	9	4	4
Spain		3	1
USA	37	17	28.5
Total	75	53	56
Women	26	22	19
Men	49	31	37

	2008	2009	2010
Austria	1		
Belarus			1
Bulgaria			1
Canada			1
China	1	1	
Czech Republic	1		
Finland	1		
France		2	1
Germany	6	4	5
Hungary			2
India			1
Island		1	
Israel			1
Italy	2	5	6
Japan		1	
Lebanon		1	
Mexico	1		
Mongolia	1		
New Zealand		1	
Poland	2		
Romania	1		
Russia	1	2	5
Serbia	1		1
Slovakia	2	1	
Spain		1	1
Switzerland		1	1
Ukraine	2	1	1
USA	3	3	1
Total	26	25	29
Women	12	10	11
Men	14	15	18

Wittgenstein awardees since 1996

Year	Name	Project
1996	Erwin F. WAGNER	Morphogeresis of the vertebrate face
	Ruth WODAK	Discourse, Politics, Identity
1997	Erich GORNIK	Semiconductor Nanoelectronics
	Antonius und Marjori MATZKE	Epigenetic silencing of plant transgenes
1998	Georg GOTTLOB	Information Systems and Artificial Intelligence
	Walter SCHACHERMAYER	Stochastic Processes in Finance
	Peter ZOLLER	Theoretical Quantum Optics and Quantum Information
1999	Kim Ashley NASMYTH	Yeast cell cycle
2000	Andre GINGRICH	Local Identities and wider Influences
	Peter Alexander MARKOWICH	Applied Mathematics
2001	Meinrad BUSSLINGER	Molecular mechanisms of lineage commitment in the hematopoietic system
	Heribert HIRT	Cell cycle control in plants
2002	Ferenc KRAUSZ	Quantum optics: ultrafast and high-field processes
2003	Renée SCHROEDER	RNA folding and catalysis, RNA-binding antibiotics
2004	Walter POHL	Early Medieval History and Culture
2005	Barry J. DICKSON	The development and function of neural circuits
	Rudolf GRIMM	Atomic and molecular quantum gases
2006	Jörg SCHMIEDMAYER	Atomic Physics, Quantum Optics, Miniaturizing on a chip
2007	Christian KRATTENTHALER	Classical Combinatorics and Applications
	Rudolf ZECHNER	Metabolic lipases in lipid and energy metabolism
2008	Markus ARNDT	Quantum interference with clusters and complex molecules
2009	Jürgen A. KNOBLICH	Asymmetric Cell Division
	Gerhard WIDMER	Computer Science, Artificial Intelligence, Music
2010	Wolfgang LUTZ	Demography

Ongoing and approved START projects*

Year	Name	Project
2003	Georg KRESSE	New directions in ab initio modeling of materials properties
	Andreas VILLUNGER	Assessment of the target potential of Bim, Bmf and PUMA/bbc3
2004	Michael KUNZINGER	Nonlinear Distributional Geometry
	Vassil PALANKOVSKI	Simulation of Advanced Semiconductor Devices
	Thomas PROHASKA	VIRIS - Vienna Isotope Research Investigations and Surveys
	Gerhard J. SCHÜTZ	Immunology at a Nanoscopic View: A Single-Molecule Approach
2005	Michael HINTERMÜLLER	Interfaces and free boundaries
	Matthias HORN	Environmental chlamydiae and amoebae
	Alexandra LUSSER	Chromatin Assembly: Role of chromodomain protein CHD1
	Michael MOSER	One thousand years of Ukrainian language history in Galicia
	Norbert ZIMMERMANN	The Domitilla Catacomb in Rome
2006	Norbert POLACEK	Nucleotide analog interference in the ribosome
	Gerald TESCHL	Spectral Analysis und Applications to Soliton Equations
2007	Kathrin BREUKER	Structure, folding, and dissociation of gaseous biomolecules
	Thomas BUGNYAR	Raven politics: Understanding and use of social relations
	Otfried GÜHNE	Multipartite entanglement
	Bernhard LAMEL	Biholomorphic Equivalence: Analysis, Algebra and Geometry
	Thomas LÖRTING	Deeply Supercooled Liquid Water
	Paul-Heinz MAYRHOFER	Atomistic study of metastable phases
	Sigrid WADAUER	The production of work. Welfare, labour-market and the disputed boundaries
		of labour.
	Thomas J. J. WALLNIG	Monastic Enlightenment & the Benedictine Republic of Letters
2008	Markus ASPELMEYER	Quantum-Opto-Mechanics
	Tom Jan BATTIN	Architecture of carbon fluxes in fluvial networks
	Massimo FORNASIER	Sparse Approximation and Optimization in High-Dimensions
	Daniel GRUMILLER	Black Holes in AdS, the Universe, and Analog Systems
	Alexander KENDL	Turbulence in the Edge of Magnetised Plasmas: Emergent Structures and Transport
	Karel RIHA	Mechanisms of chromosome end protection
	Kristin TESSMAR-RAIBLE	A Molecular Approach to Lunar Periodicity
	Christina WALDSICH	RNA folding in the living cell
2009	Francesca FERLAINO	Ultracold Erbium: Exploring Exotic Quantum Gases
	Ilse FISCHER	Compact enumeration formulas for generalized partitions
	Arthur KASER	XBP1 and Endoplasmic Reticulum Stress in Mucosal Homeostasis
	Manuel KAUERS	Fast Computer Algebra for Special Functions
	David TEIS	Regulation of ESCRT mediated cell surface remodeling
2010	Julius BRENNECKE	The piRNA pathway in the Drosophila germline
	Barbara HOREJS	From Sedentism to Protourban Societies in Western Anatolia
	Barbara KRAUS	Novel theoretical tools for quantum many-body systems
	Melanie MALZAHN	A Comprehensive Edition of Tocharian Manuscripts
	Florian SCHRECK	Quantum-Degenerate Strontium: Mixtures, Molecules and Many-Body Physics
	Thorsten SCHUMM	Nuclear Physics with a Laser: ²²⁹ Thorium
	Bojan ZAGROVIC	Protein-protein interactions: from specific to global

^{*)} as of December 31, 2010

Ongoing and approved Special Research Programmes (SFBs)*

Table 39

Year	Name	Project
1998	Manfred BIETAK	The Synchronization of Civilizations in the Eastern Mediterranean in the Second
		Millennium B.C.
1999	Joachim BURGDÖRFER	Advanced Light Sources (ADLIS)
2001	Udo BLÄSI	Modulators of RNA Fate and Function
	Rudolf VALENTA	Molecular and immunological strategies for prevention, diagnosis and treatment of
		Type I allergies
2003	Lukas A. HUBER	Cell proliferation and cell death in tumors
	Michael LANG	International Tax Coordination
2004	Karl UNTERRAINER	Infrared optical nanostructures (IR-ON)
2005	Mathias MÜLLER	Jak-Stat – Signalling from Basis to Disease
2006	Karl KUNISCH	Mathematical Optimization and Applications in Biomedical Sciences
	Klaus OEGGL	The History of Mining Activities in the Tyrol and Adjacent Areas; Impact on
		Environment and Human Societies
	Rudolf ZECHNER	Lipotoxicity: Lipid-induced Cell Dysfunction and Cell Death
2007	Franz KLEIN	Chromosome dynamics – unravelling the function of chromosomal domains
	Harald H. SITTE	Transmembrane Transporters in Health and Disease
2008	Gerhard ADAM	Fusarium metabolites and detoxification reactions
	Rainer BLATT	Foundations and Applications of Quantum Science
2009	Georg KRESSE	Computational Materials Laboratory
2010	Walter POHL	Visions of Community: Comparative Approaches to Ethnicity, Region and Empire in
		Christianity, Islam and Buddhism (400–1600 CE)
	Günther RUPPRECHTER	Functional oxide surfaces and interfaces
	Renée SCHROEDER	RNA regulation of the transcriptome
	Jörg STRIESSNIG	Cell signaling in chronic CNS disorders

^{*)} as of December 31, 2010

Ongoing and approved National Research Networks (NFNs)*

Year	Name	Project
2004	Oswin AICHHOLZER	Industrial Geometry
2005	Michael DRMOTA	Analytic Combinatorics and Probabilistic Number Theory
	Helmut SITTER	Organic Films
2006	Deborah E. KLIMBURG-SALTER	The Cultural History of the Western Himalaya from the 8th Century
2007	Otmar SCHERZER	Photoacoustic Imaging in Biology and Medicine
	Hermann STUPPNER	Drugs from Nature Targeting Inflammation
	Rudolf WINTER-EBMER	The Austrian Center for Labor Economics and the Analysis of the Welfare State
	Michael ZEHETBAUER	High Performance Bulk Nanostructured Materials
	Thomas ZEMEN	Signal and Information Processing in Science and Engineering
2008	Michael JURSA	Imperium and Officium
	Fritz PLASSER	Austrian National Election Study (AUTNES) 2010
2010	Roderick BLOEM	Rigorous Systems Engineering (RiSE)

^{*)} as of December 31, 2010

Ongoing and approved Doctoral Programmes (DKs)*

Year	Name	Project
1998	Jürgen HAFNER	Computational Materials Science
2004	Ellen L. ZECHNER	Molecular Enzymology: Structure, Function and Biotechnological Exploitation
		of Enzymes
	Josef ZECHNER	Vienna Graduate School of Finance
2005	Bernhard E. FLUCHER	Molecular Cell Biology and Oncology
	Christof GATTRINGER	Hadrones in vacuum, nuclei and stars
2006	Markus ARNDT	Complex Quantum Systems
	Andrea BARTA	RNA Biology
	Horst BISCHOF	Confluence of Vision and Graphics
	Stefan BÖHM	Cell Communication in Health and Disease
	Georg DECHANT	Signal Processing in Neurons
	Maria SIBILIA	Inflammation and Immunity
	Olaf STEINBACH	Numerical Simulations in Technical Sciences
	Alois WOLDAN	Austrian Galicia and its multicultural heritage
2007	Peter PAULE	Computational Mathematics: Numerical Analysis and Symbolic Computation
	Josef THALHAMER	Immunity in Cancer and Allergy
2008	Manuela BACCARINI	Molecular Mechanisms of Cell Signaling
	Günter BLÖSCHL	Water Resource Systems
	Timothy SKERN	Structure and Interaction of Biological Macromolecules
2009	Mitchell G. ASH	The Sciences in historical, philosophical and cultural contexts
	Gerald HÖFLER	Metabolic and Cardiovascular Disease
	Maarten JANSSEN	Vienna Graduate School of Economics
	Christian OBINGER	Biomolecular Technology of Proteins – BioToP
	Sabine SCHINDLER	Computational Interdisciplinary Modelling
	Christian SCHLÖTTERER	Population Genetics
	Alfred WAGENHOFER	DART Doctoral Programme in Accounting, Reporting and Taxation
	Wolfgang WOESS	Discrete Mathematics
2010	Thomas BLASCHKE	Geographic information science. Integrating interdisciplinary concepts
		and methods
	Thomas BUGNYAR	Cognition and Communication
	Steffen HERING	Molecular Drug Targets
	Michael LANG	International Business Taxation
	Josef PERNER	Imaging the Mind: consciousness, higher mental and social processes

^{*)} as of December 31, 2010

Supervisory Board

3rd Term from December 2009

Chairman Wilhelm KRULL Volkswagen Foundation, Hannover
Deputy Chairman Horst SEIDLER University of Vienna, Faculty of Life Sciences
Members Angelika AMON Department of Biology, Massachusetts Institute of Technology
Juliane BESTERS-DILGER University of Freiburg, Institute of Slavonic Studies
Friedrich FAULHAMMER BMWF – Section I/Universities and Colleges
Peter FRATZL Max-Planck-Institute of Colloids and Interfaces
Gerhard GRUND Raiffeisen Centrobank AG
Felicitas PAUSS ETH Zurich, CERN PH Department
Maria-Theresia RÖHSLER BMVIT
Advisory Member Peter MITTERBAUER Chair of the FFG Advisory Board

Gender statistics	Table 42
FWF Management	5
Women/Men	2/3
Supervisory Board	9
Women/Men	4/5
Biology and Medical Sciences	18
Board	
Women/Men	5/13
Humanities and Social Sciences	16
Board	
Women/Men	7/9
Natural and Technical Sciences	18
Board	
Women/Men	2/16
Assembly of Delegates	60
Women/Men	18/42
START/Wittgenstein Jury	14
Women/Men	4/10
PEEK Board	8
Women/Men	3/5
Secretariat	83
Women/Men	56/27
Total	231
Women/Men	101/130

FWF Management

Executive Board

3rd Term from June 2010

President

Christoph KRATKY

Institute of Physical Chemistry, University of Graz

Vice-President

Renée SCHROEDER (until May 2010) Christine MANNHALTER (from June 2010) Department of Laboratory Medicine, Medical University Vienna

Vice-President

Johann EDER

Institute of Informatics Systems, University of Klagenfurt

Vice-President

Herbert GOTTWEIS

Institute of Political Sciences, University of Vienna

Management of the Secretariat

Managing Director

Gerhard KRATKY (until December 2010)

Managing Director

Dorothea STURN (from January 2011)



FWF Board

2nd Term from October 2008

FWF Executive Board

Christoph KRATKY, Christine MANNHALTER, Johann EDER, Herbert GOTTWEIS

Scientific discipline	Reporter	Alternate
Biology and Medical Sciences		
General biology	Christian STURMBAUER	Ruben SOMMARUGA
Environmental sciences	Marianne POPP	Ortrun MITTELSTEN SCHEID
Biochemistry – genetics, microbiology, biotechnology	Günther DAUM	Fátima FERREIRA
Cell biology	Mathias MÜLLER	J. Victor SMALL
Biochemistry	Bernhard-Michael MAYER	lain B.H. WILSON
Neuro sciences	Christine E. BANDTLOW	Reinhold SCHMIDT
Clinical medicine	Markus MÜLLER	W. Wolfgang FLEISCHHACKER
Theoretical medicine I	Gerald HÖFLER	Hannes STOCKINGER
Theoretical medicine II	Reinhold ERBEN	Maria SIBILIA
Humanities and Social Sciences		
Economics	Engelbert J. DOCKNER	Alexia FÜRNKRANZ-PRSKAWETZ
Social sciences I	Wolfgang C. MÜLLER	Kirsten SCHMALENBACH
Social sciences II	Alan SCOTT	Erich KIRCHLER
Philosophy/ theology	Friedrich STADLER	Sigrid MÜLLER
Historical sciences	Josef EHMER	Gabriele HAUG-MORITZ
Classical studies	Bernhard PALME	Carola METZNER-NEBELSICK
Literature and language studies	Werner WOLF	Gerlinde MAUTNER
Aesthetics, art history and cultural studies	Renate PROCHNO	Andreas DORSCHEL
Natural and Technical Sciences		
Mathematics I	Klaus SCHMIDT	Robert TICHY
Mathematics II	Ulrich LANGER	Manfred DEISTLER
Computer science	Hermann HELLWAGNER	Thomas EITER
Experimental physics	Karl UNTERRAINER	Rudolf GRIMM
Theoretical physics and astrophysics	Eckhard KROTSCHECK	Claudia AMBROSCH-DRAXL
Inorganic chemistry	Ulrich SCHUBERT	Nadia C. MÖSCH-ZANETTI
Organic chemistry	Johann MULZER	Ronald MICURA
Geosciences	Christian KOEBERL	Helmut ROTT
Engineering technology	Wolfgang PRIBYL	Hans IRSCHIK



Members of the Assembly of Delegates

3rd Term from September 2009

Representatives	of the	FWF	Executive	Board

Christoph KRATKY Christine MANNHALTER Johann EDER Herbert GOTTWEIS

Representatives of the universities

Member Alternate **University of Vienna** Heinz ENGL Georg WINCKLER **Medical University of Vienna** Hans LASSMANN Ingrid PABINGER **University of Graz** Irmtraud FISCHER Renate DWORCZAK **Medical University of Graz** Michael TRAUNER (bis Juni 2010) Wolfgang GRAIER Irmgard LIPPE (ab Juli 2010) **University of Innsbruck** Hannelore Tilmann MÄRK WECK-HANNEMANN **Medical University of Innsbruck** Lukas A. HUBER Ludger HENGST **University of Salzburg** Sonja PUNTSCHER-RIEKMANN Erich MÜLLER Vienna University of Technology Emmerich BERTAGNOLLI Sabine SEIDLER **Graz University of Technology** Franz STELZER Gerhard HOLZAPFEL **University of Linz** Richard HAGELAUER Gabriele KOTSIS

University of Natural Resources and Applied Life Sciences Vienna Paul KOSMA Martin H. GERZABEK

Fritz FBNFR

University of Veterinary Medicine Vienna

Peter SWETLY Gottfried BREM

Vienna University of Economics and

Business

Christoph BADELT Barbara SPORN

University of Klagenfurt

University of Leoben

Werner SITTE

Marina FISCHER-KOWALSKI Helmut HABERL

Academy of Fine Arts Vienna

Stephan SCHMIDT-WULFFEN Andreas SPIEGL

University of Applied Arts Vienna

Gerald BAST Barbara PUTZ-PLECKO University of Music and Performing Arts Vienna

Claudia WALKENSTEINER-Alfred SMUDITS

PRESCHI

Mozarteum University Salzburg

Wolfgang GRATZER Joachim BRÜGGE

University of Music and Performing Arts Graz

Robert HÖLDRICH Gerd GRUPE

University for Art and Industrial Design Linz

Sabine POLLAK Karin BRUNS

Representatives of the Austrian Academy of Sciences (ÖAW)

ÖAW Section for the Humanities and the Social Sciences Michael Al RAM Andre GINGRICH

ÖAW Section for Mathematics and the Natural Sciences

Uwe B. SLEYTR Gerd W. UTERMANN

Representatives of the National Union of Students (ÖH)

Sigrid MAURER Thomas WALLERBERGER

Representatives of the Federal Ministry of Science and Research

Non-University Research Institutions (LBG)

Claudia LINGNER Marisa RADATZ

Non-University Research Institutions (CDG)

Franz Georg RAMMERSTORFER Reinhard KÖGERLER

Representatives of the Federal Ministry of Science and Research

Andreas ALTMANN Heinz BOYER

Representatives of the Federal Ministry of Transport, Innovation and Technology (BMVIT)

Non-University Research Institutions (ARC)

Anton PLIMON Wolfgang KNOLL

Non-University Research Institutions (Joanneum Research)

Edmund MÜLLER Bernhard PELZL

Representatives of the Federal Mnistry of Transport, Innovation and Technology (BMVIT)

Norbert ROZSENICH Margit HARJUNG



Members of the International START/ Wittgenstein Jury

Name	Institute, Research institution	Scientific discipline
Natural and Technical Sciences		
Wolfgang HACKBUSCH	Max Planck Society, Max Planck Institute for Mathematics in the Sciences, Leipzig, D	Mathematics
Peter HERZIG	Leibniz Institute of Marine Sciences at the Christian-Albrechts- University of Kiel, D	Earth sciences, geology
Cecilia JARLSKOG	Dept. of Mathematical Physics, Lund Institute of Technology, S	Theoretical physics
Klaus von KLITZING	Max Planck Society, Max Planck Institute for Solid State Experimental Research, Stuttgart, D	
Ali H. NAYFEH	Department of Engineering Science and Mechanics, Virginia Engine Polytechnic Institute and State University, Blacksburg, USA	
Julius REBEK, Jr.	Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, USA	Chemistry
Colette ROLLAND	Centre de Recherche en Informatique, Université Paris1 Panthéon Sorbonne, F	Computer sciences
Humanities and Social Sciences		
Sheila JASANOFF	Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, USA	Science and public policy
Peter NIJKAMP	Department of Spatial Economics, Free University Amsterdam, NL	Economics
Jan L. ZIOLKOWSKI	Department of the Classics, Harvard University, USA	Comparative literature and linguistics
Biology and Medical Sciences		
Douglas T. FEARON	Wellcome Trust Immunology Unit, University of Cambridge, School of Clinical Medicine, MRC Centre, UK	Neurosciences
Kurt von FIGURA	Georg August University of Göttingen, D	Biochemistry, cell biology
UIf R. RAPP	Max Planck Institute for Biochemistry, Martinsried, D	Biochemistry, molecular- biology
Melitta SCHACHNER CAMARTIN	Center for Molecular Neurobiology, University of Hamburg, D	Neurosciences

Members of the PEEK Board

Name		Discipline
Paula CRABTREE	Bergen National Academy of the Arts, Norway	Arts & media
Staffan HENRIKSSON	Sweden	Architecture
Nigel JOHNSON	University of Dundee, Great Britain	Arts & media
Efva LILJA	University of Dance Stockholm, Sweden	Performing arts
Emmanuel NUÑES	France	Music
Janet RITTERMAN	Great Britain	Music
Yrjö SOTAMAA	University of Art and Design Helsinki, Finland	Design
Michael WORTON	University College London, Great Britain	Literature

Secretariat

As of December 31, 2010, the FWF employed 83 people: 56 women and 27 men. Therefore, the percentage of women on the FWF's staff comes to 67%. A complete directory of FWF staff members can be found at www.fwf.ac.at/en/contact/index.html

Contacts at the FWF		Clir
Management		
President	Christoph Kratky	0-1
Managing Director	Dorothea Sturn	- Cel
Vice-President (Biology and Medical Sciences)	Christine Mannhalter	
Vice-President (Natural and Technical Sciences)	Johann Eder	Gei Bio
Vice-President (Humanities and Social Sciences)	Herbert Gottweis	
Assistant	Elisabeth Thörnblom	Env
Corporate Communications		Ge
Head of Department	Stefan Bernhardt	D.
Media relations	Stefan Bernhardt	— Bio
info magazine	Editor-in-Chief Stefan Bernhardt Dep. Editor-in-Chief Marc Seumenicht	Na
	Editors	Vic
	Alexander Damianisch Margit Schwarz-Stiglbauer	He
Publications	Stefan Bernhardt Natascha Rueff (on leave) Margit Schwarz-Stiglbauer Marc Seumenicht	Ma
Corporate Design	Natascha Rueff (on leave)	Co
Website Management	Yoko Muraoka	
Research Marketing	Josef Martin Bergant	
Gender Mainstreaming		Th
Head of Unit	Sabine Haubenwallner	— an
	Alexandra Madritsch	
		Ex
Biology and Medical Sciences	OL 1 d. M. L. H.	
Vice-President	Christine Mannhalter	
Head of Department	Stephanie Resch	— Inc
Neuro Sciences	Scientific Project Officer Milojka Gindl Administrative Project Officer	Org
	Ena K. Linnau	
Theoretical Medicine I	Scientific Project Officer Stephanie Resch Administrative Project Officer	
	Anita Stürtz	Ge Te

Clinical Medicine, Theoretical Medicine II	Scientific Project Officer Markus Kubicek Administrative Project Officer Silvia Spitzer
Cell Biology	Scientific Project Officer Herbert Mayer Operational Project Officer Iris Fortmann
Genetics, Microbiology, Biotechnology	Scientific Project Officer Milojka Gindl Administrative Project Officer Ena K. Linnau
Environmental Sciences, General Biology	Scientific Project Officer Bettina Reitner Operational Project Officer Thomas Tallian
Biochemistry	Scientific Project Officer Inge Unfried Operational Project Officer Ingrid Schütz

Natural and Technical Sciences

Vice-President	Johann Eder
Head of Department	Kati Huttunen
Mathematics	Scientific Project Officer Stefan Mühlbachler Administrative Project Officer Maria Oberbauer
Computer Science	Scientific Project Officer Stefan Mühlbachler Administrative Project Officer Regina Moser
Theoretical Physics and Astrophysics	Scientific Project Officer Doris Rakoczy Administrative Project Officer Natascha Dimovic
Experimental Physics	Scientific Project Officer Doris Rakoczy Administrative Project Officer Christophe Hintermaier
Inorganic Chemistry	Scientific Project Officer Bettina Löscher Administrative Project Officer Ursula Koller
Organic Chemistry	Scientific Project Officer Bettina Löscher Administrative Project Officer Christophe Hintermaier
Geosciences and Technical Sciences	Scientific Project Officer Kati Huttunen Operational Project Officer Elvisa Seumenicht

VICE-FIESIUEIII	Herbert Gottweis		
Head of Department	Falk Reckling		Adı Fer
Classical Studies, Art History, Cultural Studies	Scientific Project Officer Beatrix Asamer Administrative Project Officer Sabina Abdel-Kader	National Programmes Head of Department	Ru
Historical Sciences, Linguistics, Literature Studies	Scientific Project Officer Monika Maruska Administrative Project Officer	Support for Stand-Alone Projects, Evaluation, Coaching Workshops	Pro Ru
Philosophy/Theology	Georg Rücklinger Scientific Project Officer Beatrix Asamer	Priority Research Programmes (SFBs, NFNs); Doctoral Programmes (DKs)	Pro Sal
Social Sciences and Law.	Administrative Project Officer Georg Rücklinger Scientific Project Officer	Awards and Prizes (Wittgenstein Award, START Programme)	Pro Ma
Economics, Psychology	Petra Grabner Falk Reckling Operational Project Officer Petra Bohle	Science – Economy (TRP); Services; Priority Research Programmes	Pro Bir
	Administrative Project Officer Diana Gaida	Stand-Alone Projects; Priority Research Pro- urammes: Doctoral	Op Ma Ge
Programme for Arts-Based Research (PEEK)	Programme Management, Scientific Project Officer Alexander Damianisch	Programmes; Coaching Workshops; Assistant to the Department Head	
	Operational Project Officer Maria Weissenböck	Evaluation of Final Reports; Info Specials; Evaluation;	Ad ı Ma
Support for Scientific Publications (stand-alone publications, translation costs)	Programme Management Doris Haslinger Administrative Project Officer	Services; Awards and Prizes; TRP	Si-l Ale
	Eva Fuchs	Analysis	
	Ingrid Fürnkranz	Head of Department	Fal
Mobility Programmes and Wor		Data Collection and Analysis	Fal Ana
Head of Department	Barbara Zimmermann		Ch
Programme Management	Barbara Zimmermann Susanne Menschik		
International Mobility	Administrative Project Officer	Consultant	Ge
(Schrödinger Programme, Meitner Programme)	Robert Gass Reinhard Schmidt Operational Project Officer Susanne Woytacek	Dispatch of Application Documents	Ele
Carreer Development for	Administrative Project Officer	Programme descriptions, FAQs,	арр
Female Scientists (Firnberg Programme,	Robert Gass Operational Project Officer	www.fwf.ac.at/en/projects/in	dex
Richter Programme)	Susanne Woytacek		
International Programmes		E-mail addresses (Firstname. extensions can be found at w	
Head of Department	Reinhard Belocky	Business hours: Monday to T	
EU, ERC, EUROHORCs, DACH	Reinhard Belocky		

Programme Management

Christoph Bärenreuter

Humanities and Social Sciences

Herbert Gottweis

Vice-President

Bilateral Programmes

ESF Programmes	Programme Management Beatrice Lawal Administrative Project Officer Feng Xie
National Programmes	
Head of Department	Rudolf Novak
Support for Stand-Alone Projects, Evaluation, Coaching Workshops	Programme Management Rudolf Novak
Priority Research Programmes (SFBs, NFNs); Doctoral Programmes (DKs)	Programme Management Sabine Haubenwallner
Awards and Prizes (Wittgenstein Award, START Programme)	Programme Management Mario Mandl
Science – Economy (TRP); Services; Priority Research Programmes	Programme Management Birgit Woitech
Stand-Alone Projects; Priority Research Pro- grammes; Doctoral Programmes; Coaching Workshops; Assistant to the Department Head	Operational Project Officer Mario Mandl Gerit Oberraufner
Evaluation of Final Reports; Info Specials; Evaluation; Services; Awards and Prizes; TRP	Administrative Project Officer Martina Kunzmann Si-Phi Kutzenberger Alexandra Madritsch
Analysis	
Head of Department	Falk Reckling
Data Collection and Analysis	Falk Reckling Analyst Christian Fischer
Consultant	Gerhard Kratky
Dispatch of Application Documents	Eleonora Anderl-Dubrovina Jayanta Trescher
Programme descriptions, FAQs,	application documents
www.fwf.ac.at/en/projects/in	••
, ,,	

stname@fwf.ac.at) and telephone w.fwf.ac.at/en/contact/index.html

rsday 8 to 5 p.m.;

Friday 8 to 3 p.m.

Reception: Tel.: +43-1-505 67 40; E-Mail: office@fwf.ac.at

1. Balance sheet as of December 31, 2010

(not including scientific apparatus and equipment)

Assets:

	Dec. 31, 2010	Dec. 31, 2009
	EUR	EUR
A. Fixed assets		
1. Tangible fixed assets (equipment)	397,739.59	496,042.96
2. Advances to suppliers	21,600.00	0.00
	419,339.59	496,042.96
B. Current assets		
I. Accounts receivable and other assets		
Accounts receivable from Federal Ministry of Science and Research (BMWF) and Federal Ministry of Transport, Innovation and Technology (BMVIT)	59,384,904.69	28,729,913.99
Accounts receivable from National Foundation for Research, Technology and Development	41,011,937.80	43,945,000.00
3. Accounts receivable from Austrian provincial governments	512,820.00	0.00
Accounts receivable from Federal Ministry of Science and Research due to advance charges approved for upcoming years	322,480,000.00	313,390,000.00
5. Other receivables and assets	152,636.51	134,491.98
	423,542,299.00	386,199,405.97
II. Cash on hand and at banks		
1. Cash on hand	2,211.69	1,595.27
2. Credit balances at banks	28,564,522.55	30,002,798.41
3. Securities	0.00	1,196,974.20
	28,566,734.24	31,201,367.88
	452,109,033.24	417,400,773.85
C. Accruals and deferred items	426,833.59	408,713.88
	452,955,206.42	418,305,530.69
D. Trustee claims on federal ministries		
1. Federal Ministry of Science and Research	422,531.08	925,921.20
2. Federal Ministry of Transport, Innovation and Technology	0.00	224,779.39
	422,531.08	1,150,700.59
E. Securities and credit balances held at banks due to trustee claims		
Credit balances at banks	516,452.41	1,708,685.47
	516,452.41	1,708,685.47

Liabilities:

	Dec. 31, 2010	Dec. 31, 2009
	EUR	EUR
A. Provisions		
1. Provisions for personnel expenses	1,449,758.00	1,517,161.00
2. Other provisions	145,958.00	124,408.00
	1,595,716.00	1,641,569.00
B. Liabilities		
Liabilities to principal investigators / project leaders		
1. Liabilities from research funding	354,832,862.46	336,126,151.59
2. Contingent liabilities		
a) Research years / overheads approved	13,878,293.00	14,345,877.68
b) Amounts pending decision by partner organisations	3,837,980.11	3,776,549.49
c) Amounts pending funding by provincial governments	637,799.41	0.00
3. Obligations from international agreements	3,058,833.41	3,767,721.87
4. Obligations from overhead costs	3,400.00	3,400.00
	376,249,168.39	358,019,700.63
Contractual obligations		
5. Obligations from agreements with the Federal Ministry of		
Transport, Innovation and Technology	4,851,093.41	0.00
Obligations from agreements with the European Union (COFUND)	172,003.47	544,341.11
 Obligations from interest income not yet repaid to the National Foundation 	55,478.51	63,313.13
Other liabilities (FWF Secretariat costs)		
8. Trade accounts receivable	229,324.40	239,354.76
	381,557,068.18	358,866,709.63
C. Unutilised advance charges to Federal Ministry of Science		
and Research	69,787,422.24	57,782,252.06
D. Accruals and deferred items	15,000.00	15,000.00
	452,955,206.42	418,305,530.69
E. Trustee liabilities to contract partners of federal ministries	400 504 00	005 004 00
Federal Ministry of Science and Research	422,531.08	925,921.20
2. Federal Ministry of Transport, Innovation and Technology	0.00	224,779.39
PICTURE A COLUMN TALENT A COLU	422,531.08	1,150,700.59
F. Liabilities to contract partners of the Federal Ministry of Transport, Innovation and Technology / Federal Ministry of Science and Research	516,452.41	1,708,685.47
G. Obligations not yet in effect for research projects	310,432.41	1,700,003.47
Potential contributions to international projects	5,875,000.00	6,900,000.00
Lead Agency Projects (LAPs) in Special Research Programmes	786,452.30	0.00
2. 2000 / Gonof Frojosto (E. i. of in Option Hospital Hospital Hospital	6,661,452.30	6,900,000.00

2. Income statement for the period from January 1 to December 31, 2010

(not including scientific apparatus and equipment)

I. Revenues

	2010	2009
	EUR	EUR
1. Revenues from research funding		
a) Contributions from Republic of Austria		
Contributions from BMWF (regular contributions)	149,233,138.95	127,047,243.00
Contributions from BMWF (residual funds from START/Wittgenstein Programme and Hertha Firnberg projects)	0.00	6,732,451.53
Contributions from BMVIT (regular contributions)	0.00	6,413,000.00
Contributions from BMVIT (Translational Research Programme)	14,034,450.00	2,532,959.00
Contributions from BMVIT (residual funds from Nano Programme and Impulse Projects)	549,794.56	0.00
	163,817,383.51	142,725,653.53
b) Contributions from the National Foundation for Research, Technology and Development	15,000,000.00	10,000,000.00
c) Contributions from the European Union (COFUND)	2,073,737.80	773,933.33
d) Contributions from provincial governments	512,820.00	0.00
e) Other grants and donations	1,034,573.41	733,663.23
	182,438,514.72	154,233,250.09
2. Change in utilisation of funds approved by BMVIT	-4,851,093.41	0.00
3. Change in utilisation of advance charges from BMWF for upcoming years		
a) Change in approved advance charges from BMWF for upcoming years	9,090,000.00	81,676,500.00
b) Unutilised advance charges from the BMWF (annual surplus)	-12,005,170.18	-43,665,458.14
	-2,915,170.18	38,011,041.86
4. Return of research contributions		
a) Return of approved research contributions	6,756,450.18	6,532,936.88
b) Retained research contributions in international agreements	7,000.01	0.00
	6,763,450.19	6,532,936.88
5. Collection of research contributions under contingent approvals	5,126,205.65	2,055,144.83
6. Other revenues		
a) Revenues from completed research projects	42,443.25	4,887.39
b) Reimbursement for services and other administrative revenues	703,585.88	303,159.98
c) Interest income	433,371.27	269,817.35
	1,179,400.40	577,864.72
TOTAL REVENUES (carryover)	187,741,307.37	201,410,238.38

II. Expenses

	2010	2009
	EUR	EUR
7. Funding programmes		
a) Stand-Alone Projects	82,951,909.98	76,328,962.55
b) Priority Research Programmes (SFBs, NFNs)	22,998,252.19	12,490,574.70
c) START Programme and Wittgenstein Award	5,139,558.55	9,141,827.43
d) International Programmes	14,906,559.48	8,760,887.72
e) Programme for Arts-Based Research	1,738,351.05	1,767,998.89
f) Doctoral Programmes	17,094,761.54	21,288,502.19

	2010	2009
	EUR	EUR
g) International Mobility	9,501,262.21	6,759,088.22
h) Career Development for Female Scientists	7,281,192.01	6,302,444.44
i) Translational Research	9,456,012.05	3,590,787.34
j) Support for Scientific Publications	658,570.00	463,311.89
Approved projects	171,726,429.06	146,894,385.37
k) Payroll costs (paid out to research institutions)	665,177.62	616,976.65
I) Research expenditure from international agreements	998,920.36	972,922.84
m) Research expenditure from publication agreements	13,129.99	0.00
Approved research contributions	173,403,657.03	148,484,284.86
n) proVISION	46,436.88	0.00
o) NANO projects	2,366.22	735.33
Commissioned research (discontinued)	48,803.10	735.33
Total research contributions	173,452,460.13	148,485,020.19
p) minus: Commissioned research (discontinued)	-48,803.10	-735.33
	173,403,657.03	148,484,284.86
8. Changes in research contributions under contingent approvals compared to previous year		
a) Unpaid contingent approvals of research years approved		
before 2009	0.00	11,808,419.09
b) Changes in approved research years / overheads	4,658,620.97	4,592,603.42
c) Change in contingent approvals pending decisions by partner organisations	61,430.62	3,776,549.49
d) Amounts pending funding by provincial governments	637,799.41	0.0
	5,357,851.00	20,177,572.00
9. Transfers of residual funds		
START projects	0.00	12,937,032.9
Wittgenstein Awards	0.00	6,956,374.2
Hertha Firnberg Programme	0.00	4,477,224.2
	0.00	24,370,631.4
10. Administrative expenses		
a) Personnel expenses	4,726,359.83	4,414,835.7
b) Other administrative expenses	2,592,155.06	2,340,563.63
·	7,318,514.89	6,755,399.3
11. Public relations		
a) Personnel expenses (direct)	297,546.51	325,072.12
b) Personnel expenses (indirect)	234,541.97	286,611.46
c) Other administrative expenses (direct)	896,189.89	739,856.2
d) Other administrative expenses (indirect)	233,006.07	270,810.9
	1,661,284.45	1,622,350.7
TOTAL EXPENSES	187,741,307.37	201,410,238.38
12. Result	0.00	0.00

95

		Index of illustrations	
Fig.	1	Decision process	11
Fig.	2	Age structure of employees in FWF-funded research projects	22
Fig.	3	Development of funding (total grants)	22
Fig.	4	Total grants by scientific discipline	24
Fig.	5	Percentage of reviews by region, 1992 to 2010	25
Fig.	6	Effective/planned approval amounts, 2005 to 2013	36
Fig.	7	Sources of funds, 2005 to 2013	37
Fig.	8	Total grants by federal province	40 42
Fig.	9	Grants by scientific discipline (Stand-Alone Projects) Grants by scientific discipline (SFBs)	42
Fig. Fig.	11	Grants by scientific discipline (SFBS) Grants by scientific discipline (NFNs)	44
Fig.	12	Grants by scientific discipline (NTNS) Grants by scientific discipline (START Programme)	48
Fig.	13	Grants by scientific discipline (STANT Programme) Grants by scientific discipline (Wittgenstein Award)	50
Fig.	14	Grants by scientific discipline (International Programmes)	52
Fig.	15	Grants by scientific discipline (International Programmes)	54
Fig.	16	Grants by scientific discipline (Schrödinger Programme)	56
Fig.	17	Grants by scientific discipline (Meitner Programme)	58
Fig.	18	Grants by scientific discipline (Translational Brainpower Programme)	60
Fig.	19	Grants by scientific discipline (Firnberg Programme)	62
Fig.	20	Grants by scientific discipline (Richter Programme)	64
Fig.	21	Grants by scientific discipline (Translational Research Programme)	66
Fig.	22	Funding requests by scientific discipline (KLIF – LoIs)	68
Fig.	23	Grants by scientific discipline (PEEK)	70
Fig.	24	Grants by scientific discipline (Support for Scientific Publications)	72
		Index of tables	00
Table	1	Allocation of funds	
Table Table	3	Research personnel funded by the FWF, 2008–2010 Reviews requested and received, 2008 to 2010	20
Table	4	Average processing time in months, 2008 to 2010	24
Table	5	Reviews by country in 2010	25
Table	6	Overview of grants (number of projects)	26
Table	7	Overview of grants (number of projects) Overview of grants (EUR millions)	27
Table	8	Stand-Alone Projects – Overview	43
Table	9	SFBs – Overview	45
Table	10	NFNs – Overview	47
Table	11	START Programme – Overview	49
Table	12	Wittgenstein Award – Overview	51
Table	13	International Programmes – Overview	53
Table	14	DKs – Overview	55
Table	15	Schrödinger Programme – Overview	57
Table	16	Meitner Programme – Overview	59
Table	17	Translational Brainpower Programme – Overview	61
Table	18	Firnberg Programme – Overview	63
Table	19 20	Richter Programme – Overview	65
Table Table	21	Translational Research Programme – Overview KLIF – Overview	67 69
Table	22	PEEK – Overview	71
Table	23	Support for Scientific Publications – Overview	73
Table	24	Research and experimental development (R&D) by international comparison	75
Table	25	ERC Starting and Advanced Grants by host country, 2007 to 2010	75
Table	26	Bibliometric data from top 30 countries, 2000 to 2010	76
Table	27	Development of funding in the Life Sciences	76
Table	28	Development of funding in the Natural and Technical Sciences	77
Table	29	Development of funding in the Humanities and Social Sciences	77
Table	30	Number of grants per research institution in 2010	78
Table	31	Funding amounts per research institution in 2010	79
Table	32	Total grants by federal province in 2010	80
Table	33	ERA-Net participation	80
Table	34	International Programmes – Funding in 2010	81
Table	35	Destinations of Erwin Schrödinger fellows, 2008 to 2010	81
Table Table	36 37	Countries of origin of Lise Meitner grantees, 2008 to 2010	81 82
Table	38	Wittgenstein recipients since 1996 Ongoing and approved START grants	83
Table	39	Ongoing and approved Stant grants Ongoing and approved Special Research Programmes (SFBs)	
Table	40	Ongoing and approved Special Research Networks (NFNs)	84
Table	41	Ongoing and approved National Programmes (DKs)	85
Table	42	Bodies of the FWF – Gender statistics	86



Publishing information

Media owner: Austrian Science Fund (FWF)

Haus der Forschung E-Mail: office@fwf.ac.at

Sensengasse 1, A-1090 Vienna, Austria

Web site: www.fwf.ac.at

President: Christoph Kratky

Project management: Marc Seumenicht

Editors: Stefan Bernhardt, Marc Seumenicht

Data analysis: Christian Fischer

Managing Director: Dorothea Sturn

Translation: Christopher J. Anderson

Design: Starmühler Agentur & Verlag GesmbH (Christoph Rösch, Katharina Krizsanits, Christine

Starmühler)

Printing: Ueberreuter Print GmbH

Printed on Hello Silk;

cover: 300 g/m², inside pages: 115 g/m²

Cover images: Elke Krystufek, cover design incorporating Silent Scream from the eponymous

series, c-print on plastic, 70 x 50 cm, 2003

Photo credits: FWF/APA-Fotoservice/Denk,

FWF/Hans Schubert, FWF/Marc Seumenicht,

iStockphoto, Christian Jungwirth, Wilhelm Krull

Illustrations: Willi Schmid

