FWO Annual 2012

DIVERSITY
Make a difference thanks to the Research Foundation - Flanders
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Dear reader,

This is the 2012 annual of the Research Foundation – Flanders, in which we review the activities organised in the past year and, naturally, explore what 2013 is set to bring.

2012 was once again a fascinating year for the Research Foundation – Flanders, which welcomed countless innovations. Internationalisation was once more high on the agenda, with the first Pegasus fellowships being awarded and a new call being issued for the Odysseus programme.

Since 1 January 2012, the Research Foundation – Flanders has been a National Contact Point (NCP) for several programmes, namely Ideas (ERC grants), People (Marie Curie Actions) and Socio-economic Sciences and Humanities as part of the Seventh European Framework Programme for Research and Development (FP7).

In 2013, the Research Foundation – Flanders will once again promote international collaboration and mobility, and further develop its activities in this regard.

However, 2013 will also be a year of diversity! In fact, we will be highlighting our goal of a more thorough gender equality and diversity policy. Through an active gender equality policy, the Research Foundation – Flanders aims to offer all top-quality researchers the best opportunities, regardless of their background. We aim to do so by introducing more family-friendly measures in our regulations and by offering a high degree of flexibility to fit in with medical and social circumstances.

The Research Foundation – Flanders will of course continue to pursue its fundamental mission, namely to support excellent, promising researchers, the only criterion being the exceptional quality of their work and research proposals.

Gender inequalities in the academic sector remain an important challenge. At the Research Foundation – Flanders we support slightly more female than male PhD fellows, but at postdoctoral level female researchers are clearly in the minority.

Despite these differences, male and female researchers have the same chances of success when applying for support. Female candidates simply submit fewer applications for
postdoctoral mandates. An important reason for this is probably the difficulty of combining a research career with a family.

Nevertheless, the Research Foundation – Flanders is keen to keep these talented, highly educated female researchers on board. A few steps in the right direction are the introduction of HR-related measures and diversity in the composition of the Expertpanels, which play a crucial role in the activities of the Research Foundation – Flanders.

Still, an additional effort is required. Researcher Wendy Lowen, who is supported by the Research Foundation – Flanders (University of Antwerp), made the following comment in the newspaper De Morgen1:

“I’m disappointed that there are so few women at the highest level in the academic sector, but I don’t think quotas are the solution. Pregnancy, for example, is now taken into account more than before, but to truly attract women to the top we need a change in mentality. As long as women are not supported in their career by those around them, they will continue to lag behind.”

This annual also includes features in which prof. Simone Buitendijk, an expert in the field of gender studies, and dr. ir. Elisabeth Monard, Secretary General of the Research Foundation – Flanders, discuss this issue. Several young researchers who are supported by the Research Foundation – Flanders also voice their opinions on today’s gender inequality and diversity problems.

As the President of the Research Foundation – Flanders, I am very proud of the measures we are introducing to give all researchers equal opportunities to tap into their research talents. I was therefore very interested to read this annual’s testimonials from researchers who are supported by the Research Foundation – Flanders and to discover their take on diversity in a broad sense.

I hope you enjoy reading this annual as much as I did.

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1 DMuze magazine, 6/10/2012, in the series ‘De slimste meisjes van de klas’ (‘The brightest girls in class’)

prof. Alain Verschoren
President FWO
Rector UA
Women and research: the ultimate move for scientific excellence without a loss of talent.

The number of female applicants is keeping pace with their male colleagues' and, compared to men, the number of female researchers has risen faster in the past few years. However, from postdoctoral level, things go downhill. On the lowest rung of the academic ladder, female PhD holders account for 45%, but every step up lowers the percentage at a worrying rate. At the very top we find a mere 10% of female professors – with men accounting for the remaining 90%. Can we turn the tide? And if so, how? In July 2012 the Steering Group of the League of European Research Universities (LERU) published a trendsetting paper titled “Women, research and universities: excellence without gender bias”. Elisabeth Monard, Secretary General of the Research Foundation – Flanders, and Simone Buitendijk, a member of the LERU Steering Group, exchange thoughts on the recommendations made by the LERU Steering Group for the European research sector.
“Our society invests heavily in educating women to Master’s degree level. More women than men are now graduating from our universities. Yet women are not given the opportunities to advance in academia. The world of science is still lagging behind when it comes to female participation. ‘It’s their personal choice,’ that’s what we often hear. Or ‘they don’t want to forge an academic career’. Or even ‘they lack the talent or ambition’. Others claim that women focus first on raising children, putting their academic career on the back burner. Nonsense! It’s simply part of our system: men are favoured over women when it comes to crucial positions in research and management. Women are not so easily accepted as leading scientists. What a loss of research capacity!” Simone Buitendijk sighs. She is Vice Rector at the University of Leiden, specialises in gender issues and co-wrote the LERU paper.

“But there’s more to it than just a loss of talent. There’s also a loss of content. For thirty years it was the norm to use only men in cardiovascular research. We didn’t even know that women can suffer from heart attacks with symptoms differing from those known in men. It is likely that thousands of women died simply because we weren’t carrying out the right research. Simply by looking at the differences between the sexes, we could have drastically reduced that number. The same goes for engineering. For example, car seat belts were only tested with the standard male crash testdummies weighing 70 kg and with the average male height. It was only twenty years ago that female dummies were introduced. And the first tests with pregnant dummies date back only a decade. I can cite countless other examples of this ‘tunnel vision’ in scientific research. It’s about time for us, as a society, to look beyond the strictly male perspective in science. The authorities should make this a priority.”

Raising awareness

Buitendijk is resolute in her views. “How do you change this mentality? First you need to be aware of the problem. It’s incredibly important that this gender inequality is identified and recognised. Not only in the world of research and academia, but also at a political level. Research shows that discrimination occurs at all levels of a scientific career. Selection procedures, for example, feature all sorts of hidden prejudices. These are unintentional. But the consequence is that women receive fewer opportunities than men when they apply for a position. Other studies also show that talented female researchers tend to apply to universities or funding providers that are sensitive to gender issues and take these unintentional mechanisms into account. Raising awareness is a tricky issue but once it has been done, it’s easier to sit down together, think about what you can do and devise specific measures.”

Monard continues, “I fully agree with your view. But I do think the issue is far more complex. In recent years the Research Foundation – Flanders has adopted a thorough diversity policy. We’ve taken several measures to ensure that women and men are given equal opportunities. For example, we take maternity leave into account. We automatically increase the seniority limits by a year for women who were pregnant at the preliminary stage. A woman who becomes pregnant during the PhD fellowship or postdoctoral mandate is entitled to an extension of the mandate – often by a year – in order to be able to reapply with those who meet the criteria. Yet we notice that only a few women actually apply for a postdoctoral fellowship. Precisely because so many give up at that level. We need to focus on raising awareness, but there’s more. We need to make a career in research a more attractive option and encourage women to apply for a postdoctoral mandate. That’s why we aim to build in even greater flexibility in the future.”
In the Memorandum of Understanding (MoU) signed by the European Commission and LERU in Brussels on 17 July 2012, the 21 LERU research universities commit to supporting women and encouraging them to pursue a scientific career, based on the European recommendations in the LERU paper. Máire Geoghegan-Quinn, European Commissioner for Research, Innovation and Science, fully backs the LERU Steering Group. She would like the gender policy of the Member States to be in line with the conclusions and recommendations of the LERU Steering Group. Moreover, she wants leading universities to fulfil an exemplary role in terms of gender equality. How?

Buitendijk elaborates, “For example, by including gender equality as a key element in the management, vision and strategy of the universities. By devising a concrete action plan for all levels within their structure, with equal opportunities for male and female researchers. By providing sufficient financial resources to integrate gender neutrality within their policies across the board. By developing measures for gender-neutral career development and a balance between work and family life. By ensuring transparent monitoring of the implementation of those measures. And by integrating the gender dimension into research in terms of content. A further step would be to link those gender equality action plans to financing. That would kill two birds with one stone. First of all, you would really get things going by rewarding institutions for their gender equality policy with additional financial resources. I would be thrilled were the national governments to link the financing of research to the presentation of a gender equality action plan. Secondly, by doing so, governments would send the scientific community a strong signal that they are serious about gender equality issues.”
What you can do is to encourage universities to draw up a gender equality plan to ensure that female talent is not lost. This plan should be adapted to the national legislation and autonomy. This approach creates an environment that automatically encourages women to pursue a career in science. And it’s also a way to tackle the problem of women not pursuing a career in research. For six years, eleven top German universities have been given a big financial boost to strengthen their research efforts. The assessment of Deutsche Forschungsgemeinschaft was positive across the board, except with regard to the implementation of gender equality measures. Consequently, three years ago subsidies were linked to the implementation of a concrete gender equality action plan. It was a success. Ever since, Germany was ranked high in the gender equality statistics. Soon Switzerland is set to introduce a similar measure. Why are other EU Member States not following their example?

Monard continues, “In any case, Flanders is following the trend. On 7 February 2007 the Minister of Science imposed a rule upon the Research Foundation – Flanders: only two thirds of any panel should be made up of persons of the same gender, albeit with a transition period. That caused quite a stir. In fact, we were often reproached that Flanders doesn’t have enough excellent female researchers and that rule increased their workload.”

Buitendijk says, “Really? That makes me laugh. In the Netherlands I often hear the exact same reaction.”

Monard replies, “Apparently men are concerned that their female colleagues might be overburdened.”

Buitendijk continues, “That’s nice, isn’t it? But in reality it’s not that bad. And if you look closely, there are far more talented women than you would think. That’s also what emerges from scientific literature.”

Monard explains, “With regard to its policy, the Research Foundation – Flanders has recorded quite a few achievements. In the Expertpanels that assess, among other things, the applications for postdoctoral fellowships, female participation has increased from 12% in 2006 to a staggering 32.5% in 2012. We are getting very close to the aims in the gender equality directive launched by our Minister of Scientific Policy. A nice result, we must say. But to increase the flexibility I spoke about earlier, we could further adapt the procedures of the Research Foundation – Flanders to make careers in research even more attractive to women. Through the introduction of a part-time system at postdoctoral level, for example, with the mandate being spread over a longer period of time. At the moment, mandates for Senior Clinical Investigators and research grants for sabbatical leave are already accessible to researchers with an 80% contract. That improves the balance between work and family life.

The introduction of a part-time system can only be successful if the assessment panel is also made aware of the issues at hand. The panel members need to give interested part-time researchers an opportunity to compete with full-time postdoctoral researchers by assessing the scientific output based on the number of working hours. Of course, we need to discuss this matter thoroughly. It’s about a change of mentality.”

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Monard continues, “Another issue is that with every child they have, female researchers experience a period in which their career comes second. Competition is often so fierce that these researchers have trouble continuing to compete in the system. We need to do something about this. And I think the LERU universities can set an example by saying ‘Look, this is a talented
female researcher; we need to make sure we don’t lose her during less active periods.” Once her children start school, she will have time to focus fully on her academic career again. By the way, having children is not only the responsibility of women; gender-friendly measures can also apply to men who need to take care of their family.”

Buitendijk continues, “Yes, that’s another aspect that LERU wants to highlight. The whole gender equality issue also includes gender-neutral aspects that have an impact on the entire family. Maternity leave and early parental leave should also be taken into account. In the early years, however, it’s mainly the mother who is responsible for the child’s upbringing. Men are relatively uninvolved. I don’t know how things work in Belgium, but in the Netherlands, when a child is born, the father is only given two days’ parental leave. That’s absurd. In Scandinavian countries fathers get about ten weeks of parental leave. In some Scandinavian countries in fact, the couple’s parental leave is forfeited if the father doesn’t take his leave. In Scandinavia, men are involved in the care and education of their children from very early on. Universities should pay more attention to the combination of a career and rearing children. Not only for mothers, but also for fathers. That’s a difficult issue for university policy makers. But it has become clear that in the future, young fathers need to be more closely involved in gender equality issues. A good arrangement in that field would ensure that professors selecting postdoctoral researchers would no longer have to choose between men and women based on maternity or parental leave.”

Buitendijk continues, “We know very well what needs to be done to tap into all the available research talent. There’s no need for further research into this. The literature is readily available. Now it’s a matter of implementing measures. It would be so simple to integrate the gender equality issue in financing. It needs to be done. Is there a lack of political commitment? Sure. But there’s mainly a lack of insight into the true importance of gender equality issues. People don’t fully understand the totally unjustified imbalance. If university and research policy, as well as decisions in those fields, remain the sole preserve of men, something is not quite right. In society, the balance between men and women is fifty-fifty. Why is that not the case in research?”

Monard replies, “In Flanders, universities were given clear guidelines by the government, which are also reflected in financing. But as you said, there’s still a long way to go. Universities, governments and politicians need to be made even more aware of the issues. That’s a must. And of course we also need female researchers to play their part. We can create a framework but, in the end, they need to take matters into their own hands.”

Buitendijk concludes, “Sometimes the solution lies in little things. For example, in Norway there is a system called ‘soft pushing’. It’s a very simple measure. The application form for the financing of each project proposal includes a question on gender balance. The Norwegian government also awards a prize to the university that has made the most progress in terms of gender balance. The prize includes a monetary sum that the winning university can invest in the financing of new measures. These are simple solutions. But they work. As you can see, it’s all about creative ideas and the political commitment to turn them into concrete actions.”
I think that older researchers, especially in the field of philosophy, can contribute greatly to scientific research.
Ronald Desmet was 43 and Financial Director at Sun Microsystems Benelux when he asked himself whether that was truly the life he wanted. Could he still identify with his job? After obtaining his secondary school diploma he wasn't sure whether to study Philosophy or Mathematics. Eventually he settled on the latter. But in 2002 his love for Philosophy resurfaced, stronger than ever. He swapped a very lucrative job for academia, enrolling as a Philosophy student at the University of Antwerp. His childhood dream came true.

“Financially, I could afford starting to study again. Since I had a Master's degree in Mathematics and Natural Sciences, I only had to complete one year of the Bachelor's course. But just like all the other students, I finished the Master's course in two years. My aim was to forge a career in academia, so I wanted to obtain my PhD. I thought I could apply for a PhD fellowship at the Research Foundation – Flanders but unfortunately I was too old. At the time (2005) there was still an age limit for PhD fellowships. I couldn’t even submit an application. So I enrolled at the University of Antwerp as an unpaid PhD student, hoping I would quickly become an assistant to Professor Guy Vanheeswijck. Unfortunately that didn’t happen and for a while it seemed I would have to give up on my dream of an academic career as a philosopher,” explains Desmet.

Through word of mouth, Desmet came into contact with Professor Jean Paul Van Bendegem, Head of the Centre for Logic and Philosophy of Science (CLWF) of Free university of Brussels. Age was not an issue for him and at the start of the academic year 2006-2007 he recruited Desmet as a PhD research fellow as part of a GOA project. Four years later, in 2010, Desmet obtained his PhD in Philosophy summa cum laude with a study on the early scientific-philosophical work of Anglo-American philosopher Alfred North Whitehead.

Immediately after gaining his PhD, Desmet applied to the Research Foundation – Flanders for a postdoctoral research fellowship. Age was immaterial, it was more a matter of luck. And lucky he was. In the safe haven that is CLWF, Desmet was given the opportunity to focus on the study of Whitehead for another three years.

“My postdoctoral research was an extension of my PhD studies on the alternative relativity theory formulated by Whitehead. At CLWF I focused more on Whitehead’s later work, on his process philosophy. My research question was whether Whitehead’s process philosophy could be a good basis for interpreting quantum physics – the basic processes that form our physical reality – from the general framework of concrete, human experience, rather than reducing it to an abstract notion of externally conditioned particles that is not linked to experience,” Desmet explains.

The end of Desmet's current research mandate coincides with the end of the academic year 2012-2013. He is now 53 and is keen to continue pursuing his research. “After ten years of study and research, it would be a pity to end up on the labour market as a jobless 53-year-old,” he says. “Which is why I have applied to the Research Foundation – Flanders for an extension of my postdoctoral research mandate. My aim is to broaden the topic of my research. Unlike young researchers who can get their teeth into very detailed and specialised research for their colleagues for a longer period, as an older researcher I tend to develop a more global...
“scientific research,” he says. Desmet believes that paid maternity leave and the possibility of temporarily interrupting research projects for female researchers meet a concrete need. “These are all positive practical measures that will help us keep talent on board,” Desmet continues.

He does, however, have one remark. Why only introduce practical, facilitating measures when it comes to diversity? Why not develop flexible selection criteria to increase the diversity of scientific researchers or research teams? Desmet explains, “As I mentioned earlier, as an older researcher I am becoming more and more interested in a global vision on scientific and philosophical issues. My aim is to communicate that vision to a wider audience rather than only to specialists and experts in the field. However, such an audience does not necessarily find its way to publications in peer-reviewed – and often English-language – A1 journals. They lean more towards popular magazines or books – and preferably in their own language, in this case Dutch. That poses a disadvantage for researchers.”

“If you analyse the matter closely,” Desmet argues in a critical tone, “that means that publications which are accessible, both in terms of language and content, to the average Flemish taxpayer – who, at the end of the day, finances scientific research in Flanders – are not or are hardly considered when allocating taxpayers’ money to research proposals. Some scientists probably don’t mind, but for philosophers, who attach great importance to the love of wisdom, that doesn’t seem fair. Do that type of research and its publications pose a threat to the quality of scientific research? I don’t think so. On the contrary, I think that diversity could enable the Research Foundation – Flanders to refine and relaunch the criteria for valuable research”.

Or, as the Austrian physicist Erwin Schrödinger, who received the Nobel Prize in 1933 for his vision and spread it among a wider audience. That’s why I want to broaden the topic of my first postdoctoral research fellowship to more than just a scientific and philosophical viewpoint. I would like to work on the issue of freedom and determinism. Current brain science advances the theory that freedom is an illusion. I don’t fully agree. That’s why I would like to bring Whitehead’s theory up to date. He claims that freedom is conditioned, but at the same time real and not imagined. My aim is to reconcile the analytical and conceptual methods of purely scientific philosophy with a synthetic and empirical method that calls for a global, intuitive vision.”

Desmet is not only hoping for an extension of his current postdoctoral research fellowship. He also has a back-up plan. The Research Foundation – Flanders offers the possibility of applying for a research mandate for projects presented by two or more supervisors from different countries. In October 2012 Desmet was invited to give a series of lectures on the relationship between science and religion at Lincoln University, in California (U.S.A). There he met Elias Zafriris, a mathematician and physicist from the University of Athens, Greece. “My supervisor, Professor Van Bendegem, and Zafriris’ tutor, Professor Melios, will propose a joint interdisciplinary research project in which Zafriris and I can give the reinterpretation of quantum physics a new dimension by bringing together mathematics, natural sciences and Whitehead’s philosophy,” Desmet explains.

More diversity

Desmet fully backs the diversity policy of the Research Foundation – Flanders. The abolition of the age limit for PhD fellows came a bit too late for him, but he applauds it nevertheless. “I think that older researchers, especially in the field of philosophy, can contribute greatly to scientific research,” he says. Desmet believes that paid maternity leave and the possibility of temporarily interrupting research projects for female researchers meet a concrete need. “These are all positive practical measures that will help us keep talent on board.” Desmet continues.

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Or, as the Austrian physicist Erwin Schrödinger, who received the Nobel Prize in 1933 for his
contribution to quantum mechanics, once said, “If you cannot – in the long run – tell everyone what you have been doing, your doing has been worthless”.
I think it’s great that the Research Foundation – Flanders supports scientists who want to move abroad for their research, to expand their knowledge and experience.

Isabelle Schrauwen
Isabelle Schrauwen was over the moon when the Research Foundation – Flanders (FWO) informed her that her request for a PhD fellowship had been approved. This was back in 2005, when she was 22 years old, very young to start working on a PhD. She has always viewed it as an asset to have entered the world of research at such a young age, immediately after earning her Master’s degree. Fast-forward seven years and she is Visiting Postdoctoral Researcher at the Translational Genomics Research Institute (TGen) in Phoenix, in the middle of the Arizona desert.

During her Master’s course in Biomedical Sciences at the University of Antwerp, Schrauwen was fascinated by genetics, and especially by the genetic factors that underlie a range of pathologies. Her PhD research focused on hearing impairments. “More than one child in a thousand is born deaf or hearing-impaired,” Schrauwen explains. “Sometimes these conditions are caused by environmental factors, such as specific viral or bacterial infections during pregnancy or shortly after birth, but more than half of all cases are genetic in nature. Moreover, the hearing system is highly complex. An interruption or limitation in any part of the auditory tract can lead to a loss of hearing or deafness.”

Schrauwen started her PhD research as an FWO fellow at the Center for Medical Genetics of the University of Antwerp, in the deafness research group led by Professor Guy Van Camp. “A unique place to start your PhD research,” she stresses. “The centre has various groups - a clinical section, a diagnostic section and several research groups. I was able to ask everyone for advice and sharing expertise and equipment was not an issue, on the contrary. For my PhD I researched the genetic factors involved in otosclerosis, a specific hearing impairment that is quite common. In this condition, the stapes becomes fixed, so the ossicles do not transfer sound efficiently to the inner ear”. During her research, Schrauwen identified a number of genetic variations in DNA that increase susceptibility to otosclerosis. This led to dozens of publications as main author or co-author in A1 journals.

Since the start of Schrauwen’s PhD research, Guy Van Camp’s deafness group has worked closely with the Translational Genomics Research Institute (TGen), which has enabled her to expand her knowledge and experience. After obtaining her PhD she wanted to focus on the genetics of congenital deafness and other sensorial conditions. Her stay at TGen proved to be groundbreaking. “Phoenix is in the middle of the Arizona desert. And that’s an overwhelming experience. But my stay has been groundbreaking mainly because this centre has a wealth of experience and is equipped with the latest technologies for genetic research. Apart from my postdoctoral research mandate, the Research Foundation – Flanders provided an additional grant to finance my stay here. I’m still extremely grateful for this opportunity. I’ve gained immense experience and knowledge here. Moreover, my stay has led to several significant scientific achievements and publications,” Schrauwen says.

One of the projects Schrauwen is focusing on is the development of a diagnostic test for hereditary deafness. The goal is for one single test to analyse all known deafness genes at once. “It’s important for both the patient and the parents to know which gene caused the deafness,” Schrauwen explains. “Such a test not only allows a more accurate diagnosis; it can also predict how the hearing loss will evolve..."
over time and whether it will remain stable or worsen. This is important because it allows the best treatment options to be proposed. What's more, certain genes can cause other symptoms at a later stage, such as blindness. Such a test can also predict whether the condition is likely to affect any siblings. Parents often have a sense of guilt, so it's important for them to find out the cause of their child's condition.” Schrauwen can already chalk up a modest degree of success. As part of a pilot project, the test led to a diagnosis in 50% of cases. “We can further improve this result by adding new genes to the test,” Schrauwen explains.

**Uncertain future**

The world of research is a tough sector, and very competitive. Moreover, mandates are always short-lived. As a postdoctoral researcher, it is always a challenge to obtain the necessary funding. Soon Schrauwen will also be confronted with this uncertainty, because her current mandate is due to expire at the end of September 2013. She would like to continue her work as a postdoctoral researcher either in Antwerp or at a foreign university. Schrauwen explains, “I’m open to moving, which increases my chances of finding a research position somewhere, but not everyone has that option. In the U.S.A. the ‘two-body problem’ is a familiar one. You find a job and move for that job. The relocation costs are often covered by the employer. In Belgium things are different. There you look for a job close to home. That’s why I’m happy that the Research Foundation – Flanders is following the American example by supporting scientists who want to move abroad for their research in order to expand their knowledge and experience.”

**Hope for the future**

“When I started my Biomedical Science studies, I noticed that women were in the majority among students, while the physical sciences were more of a male thing. I think women prefer to study the more human and applied aspects of science, while men have a preference for the abstract world of mathematics and physics. When I started working on my PhD, women were still in the majority, but the higher up you go, to reach the position of postdoctoral researcher or lecturer, the fewer women you encounter. In terms of job opportunities, I think women are still not taken seriously enough and their skills are underestimated. Just look at history. Marie Curie was denied certain positions because she was a woman, only to become the first woman to win the Nobel Prize years later! Times have changed, of course, but this trend is still felt. In all sectors women need to do more than men in order to become successful and to be taken seriously. I feel this is changing in the world of research, so there’s hope for the future”.

Schrauwen believes that the Research Foundation – Flanders adopts a positive approach in this view. She is very pleased that the mandate can be extended by a year in the event of pregnancy. Such measures help, because pregnancy and a career in science are difficult to combine. She is also very enthusiastic about the striking increase in female members of the Expertpanels. She is especially happy that the Research Foundation – Flanders supports students with disabilities. “One of the most motivated students that I assisted in the lab was a female thesis student from the K.H. Kempen University College who had been deaf from birth,” Schrauwen explains. “Our research was very dear to her. Although communicating was sometimes difficult, we managed to assist her really well. Her motivation to keep going was her main drive. She often asked her questions by
e-mail and at times she relied on an interpreter. She worked on various projects and was a very good researcher. Eventually she presented an excellent thesis and at the moment she is working as a researcher at another Flemish university. Her disability made her an even more motivated and better scientist.” All thanks to the Research Foundation – Flanders.
Thanks to the policy of the Research Foundation - Flanders I managed to avoid unemployment after having obtained my PhD.
Freedom is Alicja Gescinska’s bread and butter. She was keen to obtain her PhD, but could not submit an application to the Research Foundation – Flanders until February 2007. To bridge the gap, she applied for a position at the Flemish Community and was given a one-year grant to conduct research at the University of Warsaw. Four years later, in late August last year, she obtained her PhD with a thesis on the concepts of freedom and man in the works of German philosopher Max Scheler and Polish philosopher Karol Wojtyła, who went on to become Pope John Paul II. A year earlier she had also given birth to a son. She took paid maternity leave and three months of parental leave, and the Research Foundation – Flanders extended her mandate accordingly until September of this year.

“So at the moment, I’m in my fifth year as a PhD fellow, while in reality I’ve already obtained my PhD,” Gescinska explains. “If I hadn’t been given that fifth year, I would have had to obtain my PhD, have a child and look for a job all in one year. I really didn’t have the time to do all of that,” she continues. “I had so much work to do on my PhD. Then the baby came. If you also have to draft project proposals to apply for grants, you’re bound not to have enough time. You need to think about your project. What are you committing to for the next three years? You need to ask people for recommendation letters. Select your referees, draw up your CV, etc. That is all very time-consuming. Thanks to the policy of the Research Foundation – Flanders I am not out of work after obtaining my PhD,” she says with a smile.

Gescinska used the extension to look for a job. And she found one. In September this year, she is leaving for the United States where she has been given an opportunity to conduct research at the Politics department of Princeton University for ten months. Moreover, she will lecture as a Postdoctoral Research Associate as part of the James Madison Program.

Seeking inspiration

“I love the fact that at the Research Foundation – Flanders you are honoured for the results of your research. Not for sitting behind a desk, at your PC,” Gescinska insists. “For a microbiologist, an IT expert or any other specialist in the physical sciences that might be the normal course of events, but as a philosopher you can’t say ‘Right, I’m starting my day at 9 a.m. and ending it at 5 p.m.’. Studying philosophy is not like a switch you can turn on and off. In this discipline, you can’t programme yourself to come up with insights during office hours only. If you can’t manage to put anything on paper at 9 a.m., too bad, you just do something else and maybe try again at 8 p.m. As a consequence, my working hours are very
flexible. I basically work all day. I don’t really have weekends. Personally, I don’t mind. But I never set fixed working hours; there’s no such thing as ‘9 to 5’ for me.”

So do you only become a true philosopher when you’re struck by inspiration? “Yes,” Gescinska confirms, “but I do need to find it and trigger it constantly. By reading a lot for example. I need to constantly feed my soul through philosophical literature. Or sometimes through prose. Having a break from time to time also helps. A walk in nature – on the beach for example – can work miracles. All of a sudden you realise how to structure a text you’re struggling with or how to conclude a chapter. You make a quick mental note or jot it down and then finish the job at home. That has happened to me. It doesn’t matter if it’s a public holiday. If I feel the urge to write, that’s what I do.”

Satisfaction

Despite the fact that Gescinska gets a lot of recognition and praise for her work and her academic publications in peer-reviewed journals, she does reflect on the relevance of her work in a broader social context. “As a PhD fellow at the Research Foundation – Flanders you’re paid with taxpayers’ money. It is therefore important to me to give something back to society. I don’t want to focus only on analysing abstract philosophical theories,” she argues. “When I’m writing a scientific article, for example about Max Scheler’s late writings on metaphysics, which I personally find fascinating, it is read by only a handful of experts. I may have added a piece to the puzzle of worldwide intelligence and enriched my personal academic CV, but in doing so, I haven’t reached out to the rest of the world.”

That changed when Dutch publisher Lemniscaat asked her to rewrite her Master’s thesis for a broader audience. She added a few more personal viewpoints and her own life experience, and also included a reference to her father’s illness and death. Her book ‘De verovering van de vrijheid: van luie mensen, de dingen die voorbijgaan’ (‘The conquest of freedom: about lazy people and transient things’) was published in 2011 and is now in its second edition. Meanwhile, the media have discovered Gescinska, who has been invited on to Dutch and Flemish TV and radio shows, and has written for various magazines and newspapers in both countries. “It’s a pity that popular scientific publications are still undervalued in certain academic circles,” Gescinska says. “By reworking the insights gathered from my research into more accessible books, essays, articles or opinion pieces, I not only give the philosophers I study a place in modern society but also highlight my own work. The resulting satisfaction is often much greater than in the case of publications in A1 journals.”

Gender equality policy

“But don’t get me wrong,” Gescinska sets the record straight. “I feel very much at ease in academic circles, although I am sorry and sometimes uncomfortable about the fact that it is still predominantly a man’s world. Especially among philosophers. I once attended a conference in Oxford where I was the only young female researcher to give a lecture. Every other person attending was an old man, with greying hair or no hair at all. There was another woman, but she must’ve been over eighty. The jury for my PhD thesis was also made up of four men and only one female professor. Isn’t that very strange? Especially since the statistics say that it is just a matter of progression: men and women start out on an equal footing, but the higher up you go on the academic ladder, the fewer women you encounter. That can’t be a coincidence. It points to a structural problem. Not everyone will like to hear this, but it’s a fact that men and women are different. It is harder for women to build a career. The Research Foundation – Flanders should continue to make
an effort to bring about change in this respect. But of course this change should also be supported by a broader social context.”

Gescinska claims that some male colleagues made less than respectful comments on hearing that her fellowship from the Research Foundation – Flanders had been extended by a few months due to her pregnancy. Gescinska explains, “The standard reaction was ‘You just had three months of maternity leave, why are you getting an additional few months now?’.

It’s important for the Research Foundation – Flanders to recognise that career breaks due to pregnancy must be compensated for. In the later months of pregnancy you’re unable to attend conferences or lectures, let alone those abroad. You can be plagued by nausea, fatigue or absent-mindedness. Those are all symptoms that can delay your work, but of course they’re issues that never affect male academics. But sometimes you need to treat people unequally to generate more equality. That is also a focus of my research.”
I think it’s good that the bench fee of FWO can also be used to help researchers who have physical disabilities.
In 2005 Johan Kerkhofs started his Bachelor’s degree in Civil Engineering in Leuven. He opted for Chemistry, but eventually decided it was not his ‘thing’. For his Master’s degree, he chose to specialise in Biomedical Engineering. This is a relatively new specialisation that focuses on biomedical applications in engineering – a fascinating combination for Johan Kerkhofs. He soon came into contact with Prometheus, a very young interdisciplinary research team that specialises in tissue engineering. After obtaining his Master’s degree, he was given an opportunity to join Professor Liesbet Geris at the University of Liège for a one-year research project. Kerkhofs had found his niche. In 2011 he submitted an application to the Research Foundation – Flanders for a PhD fellowship. Since then, he has been working as a PhD researcher for Prometheus, partly in Liège, but mainly in Leuven.

Maintaining or repairing tissue, or stimulating tissue growth, can be the salvation of millions of people with bone defects caused by genetic mutations, bone cancer, accidents, war violence, etc. One of the most promising avenues is the use of stem cells combined with bio-materials and signalling molecules on which the tissue can be formed and modelled. In the past few years, the regeneration of skeletal tissue and the development of bone substitutes have been a booming multidisciplinary research field in which biology, medicine and engineering sciences go hand in hand.

Since its launch in 2006, the Prometheus research team has built a strong reputation in the design of tissue engineering concepts for the human skeleton. Researchers call this TE (tissue engineering). Prometheus currently involves some forty PhD and postdoctoral researchers. The group’s projects are funded mainly through grants provided by the Research Foundation – Flanders, the Agency for Innovation by Science and Technology (IWT) and, increasingly, through European Research Council grants. In this short timeframe the group has developed a solid technology platform including stem cell biology, cell culture, the production and characterisation of tissue and supporting materials, computer modelling of TE environments and processes, medical imaging, in-vivo screening of animal models, histological analysis, bioreactors and the rearing of laboratory animals.

Looking at cells

“A bone substitute is a supporting structure made of a specific material that can be used to grow cells. The substitute can be implanted into the body of a patient so that healthy bone can grow on it,” Kerkhofs explains. “I mainly look at those cells, particularly at their genetic makeup. Cell behaviour is determined by the cell’s genes. I try to find out how those genes interact. Once we know that, we can get a better insight into the dynamics of those cells. How? By triggering cell interaction using signalling molecules. We can then measure cell behaviour and quantify it with computer models. Via those models we can also predict how cells will behave in certain tissue environments. The better our understanding of this interaction between cells, tissue and the TE environment, the better we can actually optimise and control that environment. In my research I focus mainly on modelling genes and gene networks that control the bone formation process.”

Of course, the aim is for the engineering products that result from this research and later end up in hospitals to work without a glitch. At the moment, several products are working perfectly in the lab, in mice and rabbits. But when using human cells, that is not always
Diversity

Due to a congenital disorder, Johan Kerkhofs was born with his left arm and hand only. Nevertheless, he never considered benefiting from the possibilities that the bench fee of FWO offers to people who have physical disabilities.

“I think it’s good that the bench fee of FWO can also be used to help researchers who have physical disabilities. During my Civil Engineering studies, one of my fellow students broke his back in an accident and ended up in a wheelchair. If it makes it easier for those people to achieve their dream of a career in research, then I can only applaud this measure. If it had been really necessary, I would’ve accepted it too,” says Kerkhofs. “But I can manage fine with the small part of my right arm that I have. If I hadn’t had that, then cell cultures in the lab would’ve been impossible for me to carry out. I use the same tools everyone else does, of course, the smaller the pipettes and test tubes, the more difficult it is for me to work with them. In the end I didn’t work in the lab for very long and at the moment I’m mainly working with IT programmes. No problems there. Isn’t it mainly about the results anyway?”

Neurofibromatosis (NF) is a rare disease that is inherited via the parents. There are two variants, NF1 and the even more rare NF2. The genetic mutation associated with NF can affect organs, but also the skin, eyes, nervous system and bones. A typical symptom of NF is the appearance of light brown patches on the skin. “NF is one of the most widespread single gene disorders, but bone defects are a rare symptom. In Europe only about 500 children have been diagnosed with bone defects caused by NF1. They are born with crooked legs that break easily, but never heal,” Kerkhofs explains.

That is a very interesting fact for Kerkhofs’ research team, because it perfectly matches his main field of expertise. The team is now hard at work trying to find a technique that will solve the issues of children affected by NF1. “This is a ‘niche market’ for us, in which we can test and implement our new concepts,” Kerkhofs explains. “Since it’s such a rare disease, medical science has so far failed to show an interest in finding a solution for it. That’s why it is so interesting for us to test our bone products for the first time, proving that they actually work. Tests are currently being conducted on rabbits. We hope to set up a trial within five years. As a PhD student it’s quite a challenge to work on such a fascinating project as part of a multidisciplinary team made up of surgeons, materials experts and biomedical engineers.”

Moreover, Prometheus has also joined forces with Bone4Kids, a fund that was set up recently in order to find sponsors and philanthropists interested in this issue and to collect funds to help fund research and awareness-raising campaigns.

the case. With some human cells the products work, with others they don’t. Kerkhofs explains, “The big question is why, of course. That’s what the entire research focuses on.”
He is not sure whether he wants to pursue a further career in research. “Although I’m fascinated by research, I do feel the need for more direct social involvement. I would love to work for the Red Cross, for example. That is not research of course, but it does attract me. Once I’ve obtained my PhD, I’ll decide what to do. For now I’m still considering both options.”

Obtaining a PhD and dreams for the future

Kerkhofs has just submitted his application to the Research Foundation - Flanders for an extension of his PhD fellowship mandate. Right now, his main concern is obtaining his PhD. The topic: modelling of gene networks. Kerkhofs explains, “The added value of my PhD research lies in systems biology. Through those gene networks, I want to collect as many genes as possible into one model to see how they interact. That is really the paradigm of systems biology: the whole is greater than the sum of the parts. That complexity fascinates me. I love doing what I do.”
More men are given postdoctoral fellowships, that's true, but the reason is that more men than women submit applications.
Lieve Doucé studied Communication Sciences and Management in Louvain. She was mainly interested in consumer behaviour. How do consumers act when looking for bargains? The behaviour of both consumers and shopkeepers is determined by many unconscious motivations and mechanisms. This is a field in which applied psychology plays a big role. In 2009 the Marketing and Strategy department of the University of Hasselt published a vacancy for a PhD researcher in scent marketing. Doucé saw it and didn’t hesitate for a second. Two years later she submitted an application to the Research Foundation – Flanders for a PhD fellowship, which she was awarded. Doucé is now 27 and is finishing the second year of her PhD fellowship mandate. She has just applied for a two-year extension.

When she first applied for a PhD fellowship, Doucé’s proposal was not approved. The Research Foundation – Flanders informed her that her research project was not specific enough. So she needed to do some more homework. “I had described my research question too vaguely,” she explains. “Consequently, the feasibility of my project was difficult to assess”. The second time around she was luckier. ‘Reculer pour mieux sauter’ (‘Take a step back to jump higher’) is a beautiful French expression that perfectly describes the minor flaw that characterised the beginning of her research career.

In her second attempt, Doucé described three fields in scent marketing that she wanted to research. The relevance of her research was clear. “It is becoming increasingly difficult for retailers to distinguish themselves from their competitors,” she explains. “Many retailers offer similar products, so the overall shopping experience is becoming increasingly important. Scents can play a role in putting a retailer ahead of competitors. There is a lot of interest in scent marketing in the United States. Here in Belgium, this discipline is slowly gaining ground.”

Doucé’s first research field focuses on everything connected with individual differences and the effect of scent on consumer behaviour. She explains, “It has been scientifically proven that spreading scents in a shop has a clear effect on people’s behaviour. In my research I aim to check experimentally whether that applies to everyone. So, in brief, I want to analyse the differences between individuals. How intense is people’s reaction to emotional stimuli? In technical language we call this ‘affect intensity’. For example, when watching a sad film, are you strongly influenced by the emotional scenes? If so, then your score for affect intensity is high. Scent is also an emotional stimulus. It influences our mood. A pleasant scent makes people feel better. It’s that simple. In our research we’ve noticed that people who score high in terms of affect intensity are also more influenced by scents in shops.”

Recognising scents

Doucé also discovered that apparently it’s not that easy to recognise scents. Women seem to be far better than men in this regard. Moreover, there also seems to be a link between scent recognition and scent expertise. How do people who have been trained in recognising scents deal with scents in shops? “A shopkeeper might want to choose scents that reflect the products on offer, because in the end it’s better to choose a scent that matches the products on the shelves,” Doucé explains. “However, in order to find a matching scent, you need to be able to recognise scents properly. A bit like a wine
She discovered that certain lighting set-ups negatively influence customers. So that’s the research question: “Can you change that negative perception by adding a scent dimension?”

Finally, at a later stage in her research, Doucé will also focus on the interaction between scent, memory and product range perceptions. What is the effect of scents on memories of certain products or on recognising these products once people are confronted with them after a period of time? How do scents influence customer satisfaction about the product range on offer? That is her third field of research.

Interaction

Douce’s second research field concerns the interaction between scents and other atmospheric elements. “Shopping is a holistic experience,” she argues. “Scent is not the only element that counts. There’s also the music you hear, the space to move around, the colours, etc. And how these atmospheric elements are combined into a coherent whole. Earlier research had revealed that playing Christmas music in a shop during the Christmas festivities, accompanied by a pine scent, had a much greater impact than playing hit parade songs.”

Currently Doucé is researching to what extent a scent can mask negative elements, ensuring customers are not annoyed by the latter. For example, is a pleasant scent enough to encourage consumers to give a messy shop a positive evaluation compared to a tidy one? Or should something be added to that scent? Lemon scent, for example, reminds people of freshness and cleanliness. Lighting could also play a role. As part of Doucé’s research team, another PhD student assessed the lighting set-ups in three Belgian supermarkets.

Safe for the time being

In her group of young friends, Doucé is seeing that more and more of them are starting a family. “I’m 27 and that’s something I need to take into account,” she smiles. “Completing a PhD in four years is quite a challenge as it is. If you get pregnant during that time, it’s particularly nice to hear that your mandate can be extended by nine months.”

Mobility is another important issue for Doucé. “If you’re striving for a career in research, it’s important to gain experience and expertise abroad. And if you’re raising children at the same time, additional funding is often a must, especially if your partner is joining you. I welcome all the measures that the Research Foundation – Flanders has included in its diversity and gender equality policy to give women the opportunity to make their dream of working in research come true.”

Does she have plans to go abroad herself? “Not for the time being. Our department has been working with Professor Bosmans from the University of Tilburg for a while. That’s not that far away of course. If I decide to pursue further research, that is definitely a possibility. A few
months in Tilburg for a research stay doesn’t sound bad at all,” Doucé says.

But first Doucé needs to work on her PhD for another two years. Once that’s done, she has to make another important decision. A postdoctoral mandate? Then she needs to submit more applications. For the time being, the University of Hasselt is her safe haven, but what happens next? “At PhD fellow level, the balance between men and women is excellent. Women are even in a slight majority. In our department we have four female PhD students and one male. But if you look at women’s opportunities at postdoctoral level, that balance shifts. Our department has one female professor and three male ones. Striking. The diversity and gender equality policy that the Research Foundation – Flanders has been following for the past few years is definitely a step in the right direction and will encourage more women to come on board. Still, I think it is a matter of personal initiative. More men are given postdoctoral fellowships, that’s true, but the reason is that more men than women submit applications,” she concludes.
FINANCING AND ALLOCATION OF FUNDS 2012
FWO relies on various financing sources to support researchers. In 2012 the budget totalled 218.4 million euros, which were distributed as follows:

**Flemish Government**
Subsidy, including the Odysseus programme, international collaboration and research at big international research facilities: 161.6 million euros (74%)
Subsidy from the National Lottery: 11.5 million euros (5%)

**Federal Government**
Grant for additional researchers (Federal Science Policy): 7.7 million euros (4%)
FGWO subsidy: Fund for Medical Scientific Research (Federal Public Service Health, Food Chain safety and Environment): 2.1 million euros (1%)
IIKW subsidy: Inter-University Institute for Nuclear Science (Federal Public Service Economy, SMEs, Self-employed and Energy): 2 million euros (1%)

**Fiscal and parafiscal measures:**
For its postdoctoral fellowships FWO is granted a 75% income tax exemption, which results in an estimated extra budget of 9.7 million euros (4%). Moreover, FWO is exempt from employers’ social security contributions for Postdoctoral Researchers, which have been added to the reference list dated 31 December 1995. This gives FWO an estimated extra 6.7 million euros (3%) to spend. Finally, FWO can rely on the employment programme for fundamental research, the Scientific Maribel Plan, which brings in 17.1 million euros (8%).

**Funds are raised not only through subsidies, but also via benefactors:**
- Prizes: various companies and institutions support fundamental research in their fields with their own prizes.
- Donations and legacies
- FWO Excellence Prizes: the ‘Flemish Nobel Prizes’, each worth € 100,000, have been made possible thanks to donations and legacies.
## SUBSIDIES FROM THE FLEMISH AND FEDERAL GOVERNMENTS (IN kEUR)

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### Graph

- **Flemish Government**
- **Federal Government**
- **Total subsidies**

The graph illustrates the evolution of subsidies from the Flemish and Federal Governments from 2006 to 2012, with a notable increase in total subsidies over the years.
DISTRIBUTION OF SUBSIDIES ACROSS FWO’S INSTRUMENTS (IN %)

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
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<th>2009</th>
<th>2010</th>
<th>2011</th>
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SUBSIDY DISTRIBUTION 2012

- **43%** Fellowships
- **2%** Scientific contacts
- **1%** Research grants
- **53%** Research projects
- **2%** Administrative management
EVOLUTION 2006 - 2012
FELLOWSHIPS PORTFOLIO AND SUCCESS RATE

FELLOWSHIPS PORTFOLIO

EVOLUTION OF THE SUCCESS RATE FOR FELLOWSHIPS

Target: 33%

PhD fellowships
Postdoctoral fellowships
RESEARCHERS IN OFFICE ON 1 OCTOBER 2012

PhD FELLOWSHIPS PER SCIENTIFIC FIELD

<table>
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<th>Field</th>
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<th>%</th>
<th>Postdoctoral Fellows</th>
<th>%</th>
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<td>31%</td>
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<tr>
<td>Science and Technology</td>
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<td>1%</td>
<td>15</td>
<td>2%</td>
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NUMBER OF RESEARCHERS BY TYPE AND GENDER

**RESEARCHERS IN OFFICE ON 1 OCTOBER 2012**

- **398 Male**
- **460 Female**

**Fellows**
- **398 Male**
- **460 Female**

**Postdoctoral researchers**
- **530 Male**
- **337 Female**
RESEARCH PROJECTS AND RESEARCH GRANTS
2006 - 2012

SUCCESS RATE RESEARCH PROJECTS AND RESEARCH GRANTS (%)

Target: 33%

Success rate n
Success rate amount
RESEARCH PROJECTS AND RESEARCH GRANTS BY DISCIPLINE ON 1 JANUARY 2012

<table>
<thead>
<tr>
<th>%</th>
<th>Discipline</th>
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<th>Amount (in kEUR)</th>
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<td>Science and Technology</td>
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<td>€ 23.363</td>
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RESEARCH PROJECTS AND RESEARCH GRANTS BY DISCIPLINE ON 1 JANUARY 2012

<table>
<thead>
<tr>
<th>Discipline</th>
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<tr>
<td>Biological Sciences</td>
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<td>Humanities</td>
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<tr>
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<td>Medical Sciences</td>
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<tr>
<td>Science and Technology</td>
<td>312</td>
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FWO OVERVIEW 2012
Mission

The mission of the Research Foundation Flanders (FWO) is to stimulate and support groundbreaking fundamental research in all areas of science at the universities in the Flemish Community, including collaboration agreements between Flemish universities and other research institutes.

FWO funds excellent and promising researchers as well as research projects following an interuniversity competition and an evaluation by national and international experts.

The only criterion is the outstanding quality of both the researcher and the research proposal, regardless of scientific discipline, host institute, gender, political or religious beliefs. The selection procedure is based on a bottom-up principle and an interuniversity competition.

Social basis

Fundamental scientific research that focuses on expanding knowledge about human beings and their environment helps raising the social and cultural standards of our society. By maintaining a high level of knowledge through scientific research, the high-quality education of talented young people in a broad range of disciplines can be guaranteed. In the longer term, this knowledge and the resulting human capital lay the groundwork for focused, applied, technological, strategic, policy-supporting and policy-preparing research; they are a key element in the creation of wellbeing and welfare. Groundbreaking research is also at the heart of knowledge expansion, which is particularly necessary for the major challenges facing our society today (environment, mobility, health, etc.).

Decisions in economic or social strategic fields will be made not only on the basis of social and socio-economic needs, but also through excellent research groups.

Fundamental scientific research is the first crucial link in the innovation chain and a breeding ground for new technologies and economic and social developments.

In contrast to other research types, fundamental research primarily relies on government funding, since it seldom leads to short-term economic or social valorisation. A balanced distribution of resources between focused and non-focused research is therefore an absolute necessity.

The Research Foundation – Flanders also adopts a European philosophy. It is proud of the excellent results that Flemish researchers can show as part of the programmes offered by the European Research Council (ERC), its European counterpart.

The Research Foundation – Flanders actively pursues its European dimension by offering several ERC Starting Grants candidates access to ERC support projects.
Research

FWO research initiatives

(For a description of these initiatives, go to http://www.fwo.be)

1. FWO provides financial support to individual researchers through:
   - Grants for young researchers (PhD fellowships) for 2x2 years *
   - Special PhD grants for 1 year *
   - Clinical PhD grants for 2 years, part-time *
   - Postdoctoral Research Fellowships for 2x3 years *
   - Fundamental Clinical Fellowships for 3x5 years, part-time *
   - Bench fees for every PhD fellow and postdoctoral researcher
   - Research Grants for 1 year
   - Travel grants/Research mobility
     - Attending conferences in Europe and beyond
     - Short and longer study visits in Europe and beyond
     - Bilateral exchange projects
     - Pegasus (long/short)

* See our website for a list of beneficiaries

2. FWO awards grants to research teams as follows:
   - Research projects up to 4 years, but can be further extended (including: scientific/technical staff, consumables and equipment)
   - Big Science: support for projects at large international research facilities, such as CERN (Isolde/CMS), DUBBLE at ESRF-Grenoble, Mercator telescope, Icecube, Spiral II
   - Odysseus

3. FWO stimulates national and international collaboration through support for:
   - Scientific research communities
   - The organisation of scientific meetings in Belgium
   - Sabbatical leave
   - Participation in research initiatives and collaboration within the European Research Area (ERA)
     - Era-NET
     - JPI
     - Fet-Flagships
   - Coordination grants for large-scale international collaboration agreements
   - Bilateral research collaboration (Brasil, China, Ecuador, Québec, South-Africa, Vietnam)
Scientific awards and grants via patronage activities

Private patronage offers companies and institutions an opportunity to get involved with fundamental research at FWO and recognise the social importance of scientific research. For young researchers, this can open doors to those companies, thus broadening their future horizons. Various patrons award fellowships and grants, and reward scientific excellence. Applications for these prizes are assessed by the FWO’s scientific jury.

FWO Excellence Prizes

Every five years, FWO grants the following awards through donations and legacies (next selection in 2015):

- 2 Dr A. De Leeuw-Damry-Bourlart Prizes, one for Physical Sciences and one for Applied Sciences;
- 2 Dr Joseph Maisin Prizes, one for Fundamental Biomedical Sciences and one for Clinical Biomedical Sciences;
- The Ernest-John Solvay Prize for the Humanities

These prizes are worth € 100,000 each and, in terms of importance, can be considered the “Flemish Nobel Prizes”.

In 2011 the following scientific prizes were awarded:

- Scientific Prize Callataï & Wouters
  € 10.000 - Florance Guillaume, KU Leuven
- Scientific Prize Alcatel-Lucent Bell
  € 8.000 - François Quintin, UCL
- Scientific Award Foundation AstraZeneca Cardiology
  € 50.000 - Diether Lambrechts, KU Leuven
- Scientific Award Foundation AstraZeneca
  € 25.000 - Bart De Geest, KU Leuven
- IBM Belgium Award for Informatics
  € 5.000 - Alexander Bertrand, KU Leuven
- InBev-Baillet Latour Health Prize
  € 250.000 - Gero Miesenböck, Univ. Oxford
- InBev-Baillet Latour Prize for Clinical Research
  € 75.000 - Elfride De Baere, UGent
- Scientific Prize McKinsey & Company
  € 5.000 - Abhishek Garg, KU Leuven
- Umicore Thesis Awards
  2 x € 2.500 - Prizes awarded on 2 may 2013.
- Acerta Scientific Award
  € 5.000 - Nicky Dries, KU Leuven
- Scientific Prize Pfizer
  € 30.000 - Geert van Loo, UGent
Donations and legacies

The Research Foundation mission partly thanks to financial donations from benefactors and testators. The desired goal and type of scientific research can be set out in the conditions of the act of donation or will, as long as the research topic is sufficiently generic. The government has ensured that the tax levied on these donations is very limited, so that the money goes almost entirely to scientific research through the following instruments:

- Monetary donations are tax deductible under Art. 104, 3° b of the 1992 Income Tax Act, provided the sum donated is at least 40 euro (Art. 107) and lower than 250,000 euro (to be indexed); moreover, the sum donated cannot amount to more than 10% of the net taxable income (Art. 109), or, in the case of companies, 500,000 euro and not more than 5% of the net taxable income (Art. 200).

For more information, contact the FWO administration.
account number FWO: BE05 4245 5308 0175 (BIC KREDBEBB)
FWO is a Public Utility Foundation

The organisation chart below gives an overview of the various structures within FWO.
Every year on 1 October a new FWO president is appointed. As stated in the statutes, the position alternates between the rectors of the four major Flemish universities.

The current president is Prof. Alain Verschoren, rector UA (October 2012 – September 2013).

The Board investigates all the matters on which the Board of Trustees is called to deliberate, and presents them to the Board of Trustees. These include the budget, the accounts, the awarding of the different research grants and the formation of the FWO Expertpanels.

The Board consists of the following members (1 October 2012):

- President:
  - Prof. Alain Verschoren, rector UA
- Vice-President:
  - Prof. Mark Waer, rector KU Leuven
- Secretary General:
  - dr.ir. Elisabeth Monard
- Members:
  - Prof. Paul De Knop, rector VUB
  - Prof. Luc De Schepper, rector of the University of Hasselt, observer
  - Prof. Erik Van Bockstaele, Administrator-General of the Institute for Agricultural and Fisheries Research
  - Prof. Paul Van Cauwenberge, rector UGent
  - Prof. Géry van Outryve d’Ydewalle the Permanent Secretary of the Royal Flemish Academy of Belgium for Sciences and the Arts

The Board of Trustees decides upon the proposals of the Board concerning recommendations by the Expertpanels and scientific committees, the activities of FWO, the budget and accounts, etc.

The Board of Trustees is made up of the following members (1 October 2012):

- President:
  - Prof. Alain Verschoren, rector UA
- Vice-President:
  - Prof. Mark Waer, rector KU Leuven
- Secretary General:
  - dr.ir. Elisabeth Monard
- Members:
  - Mrs Patricia Ceyesens, president of the Committee for Economic Affairs, Economic Government Instruments, Innovation, Science Policy, Employment and Social Economy of the Flemish Parliament
  - Prof. Patrick De Baetselier, Vice-Rector Research VUB
  - Prof. Paul De Knop, Rector VUB
  - Prof. Luc De Schepper, Rector UHasselt
  - Prof. Jakob Fokkema, Professor at the Delft University of Technology
  - mevrouw Danielle Gilliot, raadgever wetenschap en innovatie, kabinet minister Lieten, regeringsafgevaardigde
  - Mr Guido Gryseels, Director-General, Royal Museum for Central Africa
  - Mr Roger Heijens, Senior Partner at PricewaterhouseCoopers en bestuurder van bedrijven
  - prof. Bernard Himpe, President of the Belgian Royal Academy of Medicine
  - Mr Luc Jansegers, Administrator-General of the Agency for Higher Education, Adult Education and Study Grants
Prof. Peter Marynen, Vice-Rector for Research, KU Leuven
Prof. Luc Jozef Moens, Vice-Rector Ugent
Mr. Georges Stienlet, Vice-Principal Private Secretary to Minister Muyters and Inspector-General of Finance
Prof. Carel Stolker, Professor at the University of Leiden
Prof. Jean-Pierre Timmermans, President Onderzoeksraad UA
Prof. Erik Van Bockstaele, Administrator-General of the Institute for Agricultural and Fisheries Research
Prof. Paul Van Cauwenberge, Rector UGent
Prof. Géry van Outryve d’Ydewalle, Permanent Secretary of the Royal Flemish Academy of Belgium for Sciences and the Arts
Mrs. Mia Vanstraelen, Director of Human Resources Service Delivery EMEA - IBM Belgium/Luxembourg
Prof. Karel Velle, Director-General, State Archives
general-major Harry Vindevogel, Rector of the Royal Military Academy, advisory member

**FWO in its national context**

The FWO Board of Trustees is responsible for the allocation of the funds mainly provided by the Flemish Community and, to a lesser extent, by the federal government. In the French Community, FWO’s sister organisation is the “Fonds de la Recherche Scientifique – F.R.S.-FNRS”. The Boards of Trustees of both organisations manage the Federal Fund for Scientific Research (FFWO), which manages the non-distributable funds and a number of other well-defined responsibilities, e.g., common areas of the buildings, several prizes, donations and legacies.
Scientific advice

For the evaluation of applications for fellowships and research projects, FWO calls on the advice of 29 subject-specialist Expertpanels and 1 interdisciplinary panel, each made up of 16 experts \(^1\). Most of these experts are affiliated to a non-Flemish university.

The 29 Expert panels are categorised into five scientific areas:
- Biological Sciences
- Humanities
- Social Sciences
- Medical Sciences
- Science and Technology

These panels meet twice a year and deliver scientific opinions which are then submitted to the Board and the Board of Trustees.

There is also an “International Scientific Collaboration Committee” consisting of 14 Flemish members, or former members, of Expert panels from various scientific disciplines. This committee advises on applications for attending conferences, stays abroad, bilateral exchange agreements, scientific research networks, participation in European research programmes (Era-NET, JPI, etc.) and requests to organise conferences in Belgium. This committee meets once every month.

In 2012 a new panel for International Collaboration was established. This panel meets three or four times a year, depending on the needs, and evaluates all proposals for international collaboration that go beyond individual mobility and for which there is no continuous submission process:
- Bilateral research cooperation
- ERA-NET (Flemish members are consulted for advice)
- International Coordination Actions
- Pegasus Marie Curie Fellowship

There are also a number of advisory groups with well-defined mandates which advise on a specific line of research (Committee for Clinical Fellowships, Levenslijn Committee, Odysseus Committee, Big Science Jury, etc.) or within a specific collaboration. These groups meet once or twice a year as required.

When it comes to the educational research, both in terms of policy-making and implementation, of the Flemish Community’s Department of Education, the Research Foundation – Flanders is asked for advice concerning the submitted applications.

\(^1\) Exceptions are Expert panels Cult4 (18) and Med8 (19)
FIELDS:

**Biological Sciences**
- Bio1: Molecular and Cellular Biology
- Bio2: Functional Biology
- Bio3: Biodiversity and Ecology
- Bio4: Applied Biological Sciences

**Humanities**
- Cult1: Language
- Cult2: Art and Literature
- Cult3: History, History of Art and Archaeology
- Cult4: Theology, Philosophy and Science of Religion

**Social Sciences**
- G&M1: Jurisprudence and Criminology
- G&M2: Economics, Business Economics and Management
- G&M3: Psychology, Pedagogy, Didactics and Social Work
- G&M4: Social, Political and Communication Sciences

**Medical Sciences**
- Med1: Pharmaceutical Sciences and Protein Chemistry
- Med2: Genetics, Functional Genomics Research, Bioinformatics and Developmental Biology
- Med3: Microbiology and Immunology
- Med4: Cancer Research
- Med5: Cellular Biology, Physiology, Physiopathology and Medical Clinical Research of Organ Systems I
- Med6: Cellular Biology, Physiology, Physiopathology and Medical Clinical Research of Organ Systems II
- Med7: Cellular Biology, Physiology, Physiopathology and Medical Clinical Research of Organ Systems III
- Med8: Health Sciences

**Science and Technology**
- W&T1: Mathematical Sciences
- W&T2: Physics
- W&T3: Condensed Matter and Physical Chemistry
- W&T4: Chemistry
- W&T5: IT and Knowledge Technology
- W&T6: Chemical Engineering, Materials Science
- W&T7: Energy, Electrical Engineering, Electronics and Mechanics
- W&T8: Sciences of the Earth and Space
- W&T9: Science and Technology of Constructions and the Built Environment

**Interdisciplinary Expert Panel**
Administration

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dr.ir. Elisabeth Monard

ADMINISTRATION
Danny Huysmans

REPORTING, FINANCING & BUDGET
Anne-Aymon Gunst

SUPPORT FOR RESEARCHERS
dr. Hans Willems

DOCUMENT MANAGEMENT
Danique Moors

OPERATIONAL PLANNING
Christiane Linthout

PERSONNEL AND ACCOUNTING DEPARTMENT
Stephan Duray, Alain De Dobbeleer

IT DEPARTMENT
Geert De Pauw

LOGISTICS DEPARTMENT
Werner Coorevits

APPLICATIONS AND CURRENT RESEARCH DEPARTMENT
Tanja Rubbrecht

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