

#### MEET THE UNIVERSITY OF GRONINGEN

Healthy Ageing is one of the research focus areas for the University of Groningen. In 2014, our University will reach the respectable age of 400 years and it will do so in excellent condition, if we are to believe the international academic community – we are now in 89th place in the Times HE ranking list. Our own students and staff are very satisfied too, as evidenced by our Top 25 position in *The Scientist's* 'Best Places to Work in Academia' ranking list, and the University of Groningen is the most recommended university in the Netherlands in the International Student Barometer!

## Sibrandes Poppema



## President of the Board of the University

So what's our secret? The key strategy is to attract ambitious and talented students, researchers and lecturers with a passion for their field from all over the world, to reward proven performance and to stimulate interdisciplinary research and teaching. We provide talent with the room to flourish. Talented secondary school pupils, students, PhD students, researchers, lecturers and support staff are given ample opportunity to get the best out of themselves. This is what allows a university to be reborn year after year, to continuously grow and to stay forever young.

We highly value operating in the heart of society, contributing to the major questions of modern society. We have chosen to contribute to the fields of Energy, Healthy Ageing and Sustainable Society. Researchers at the University cooperate on a large scale with partners from other institutions, companies, government organizations and the general public. We are located in the North of the Netherlands, rooted in the tradition and history of a city which is proud to be known as the City of Talent. The city of Groningen is a charming and bustling university town, while the countryside offers beautiful and limitless views in all directions.

We would be happy to welcome you to Groningen and bring you into contact with our talented students and researchers. But of course, there are also plenty of virtual ways to learn more about us and get in contact with us from a distance – for example via our website or Facebook, Twitter and YouTube. Last but not least, we're proud to present our key features and some of the results of our passion and performance in this brochure.

Quality works. For 400 years and counting...

**FACTS AND FIGURES GENERAL** > Founded in 1614 **28.000** students Over 5,000 Full Time Equivalent staff Over 2,000 Full Time Equivalent academic staff Annual turnover: EUR 614 million 9 faculties, covering all academic disciplines INTERNATIONAL RANKINGS Times Higher Education World University Rankings: 89 QS World University Rankings: 109 Academic Ranking of World Universities: 103 **INTERNATIONAL** > 3,000 of the 28,000 Master's and Bachelor's students > 1,100 exchange students > 800 out of the 1,500 PhD students > Nearly 20% of academic staff > 115 nationalities  $\oplus$ RESEARCH 479 full professors (male/female ratio: 385/94) 436 dissertations > 14 Research Master's programmes > 5,000 academic publications > 9 graduate schools



- > Europe: Uppsala University (Sweden); Ghent University (Belgium); University of Göttingen (Germany)
- > Asia: Universitas Gadjah Mada, University of Indonesia, Bandung Institute of Technology (Indonesia); University of Beijing, Tsinghua University, Fudan University (China); Osaka University (Japan)
- Americas: National Autonomous University (Mexico); University of São Paulo (Brazil); University of California, University of Pennsylvania (USA)



- > Aletta Jacobs, first female Dutch university student
- > Wim Duisenberg, first President of the European Central Bank
- > Klaas Knot. President of DNB. the Dutch Central Bank
- > Wim Pijbes, General Director of the Rijksmuseum Amsterdam
- > Several members of the Dutch **Royal Family**



- > Johan Bernoulli, pioneer in the field of calculus, 1700
- > Jacobus Kapteyn, discoverer of the evidence for galactic rotation, 1900
- Heike Kamerlingh Onnes, student in Groningen, Nobel Prize for Physics
- > Albert Szent-Györgyi, researcher in Groningen, Nobel Prize for Medicine 1937
- > Willem Kolff, PhD student, inventor of the artificial kidney 1946
- > Frits Zernike, professor of physics, Nobel Prize for Physics 1953
- > Ben Feringa, professor of chemistry, Spinoza Award 2004
- Petra Rudolf, professor of physics, Descartes Award 2008

STRATEGIC PARTNERS

RENOWNED SCIENTISTS, PAST AND PRESENT

**FAMOUS ALUMNI** 



>>> Talent needs space and support in order to flourish.

By encouraging talent at all levels, we help students and staff transform their passion into performance. <<

#### **ACADEMIC TALENT**

We believe that academic talent should be stimulated as early as possible. That's why our University has opened its doors to primary and secondary school pupils, offering activities to acquaint them with universities and with scholarship. And once they are students at the University, we inspire them with our research-driven teaching. Exceptional talent is rewarded; top students are given additional scope to pursue their own academic interests and to carry out research as part of special programmes within the Honours College or within the University College. Promising researchers can be admitted to our extensive tenure track system, including the prestigious Rosalind Franklin Fellowships, which lead to a full professorship. This is how we stimulate passion and talent for scholarship.

> rug.nl/talent
> rug.nl/rff

#### TALENT AT WORK

Supporting talent at all stages of an individual's career is what stimulates optimum development. We provide opportunities for professional development to both staff and students. Staff, for instance, can develop their academic leadership skills, or receive support with research grant applications and through mentoring, while students can take courses and workshops aimed at developing their skills. Support staff can gain experience in another position, and all staff are encouraged to gain experience abroad. With us, talent development is an ongoing process.

> rug.nl/work-with-us/ > rug.nl/next/

## university of groningen 2014 | 400 years

Catarina Dutilh
Novaes, a Rosalind
Franklin Fellow
and university
lecturer, is
conducting
research at
the Faculty of
Philosophy into
the empirical
side of logic and
reasoning.

'At school I couldn't decide between history and maths. Thanks to logic, I didn't need to. I'm not a conventional armchair philosopher who likes to reflect and not look outside. Isn't it odd that philosophers don't have to provide any empirical evidence for their claims? They assume that people can reason well with simple arguments. But the empirical literature shows that this is not the case. There is a gap between what logic calls correct reasoning and how people reason in practice.

I have submitted an application for an empirical study of the role that training plays in how people reason. This involves working with psychologists, cognitive scientists and mathematicians. If all goes well, I will be carrying out experiments on reasoning.

I think it's a great honour to be a Rosalind Franklin Fellow. She is a great role model. It is important for young, motivated female researchers to have an opportunity to prove themselves academically. This is what attracts clever, talented women from all around the world to Groningen.'



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### university of groningen 2014 | 400 years

Molecular geneticist Oscar Kuipers supervised the team that won the grand prize at the iGEM (International Genetically Engineered Machine) world championship. Student Alicja Daszczuk from Poland was a member of the team.

Oscar Kuipers: 'We use the iGEM competition as a teaching method in which the supervisors remain in the background and just offer feedback and facilities. It's the students who dream up what they want to do and develop their idea completely independently. The great thing about these students is that they're open to the wildest ideas and are willing to try anything. I think it's fantastic working with such motivated people. The idea of developing bacteria to detect rotten food has heaps of potential. One possibility is that we'll devote a separate research project to it.'

Alicja Daszczuk: 'The night before we had to submit our data for the European championship, we were still busy working on the final details. One student couldn't stand it any longer and went to the lab. He came back absolutely delighted: the bacteria had changed colour. This was the first visible proof that our idea worked. You have to be really motivated for this competition – you don't do it just to earn credit points. I've learned a lot and it was an inspiring experience. We wanted to make a statement about the waste of food: too much food is thrown away because of the date on the packaging. Thanks to these bacteria, that's no longer necessary.'





# QUALITY MORE





ERC starting grants, 2008-2012

ERC advanced grants, 2008-2012

2008 2009 2010 2011 2012

#### INVESTING IN QUALITY

We invest in talent by offering excellence programmes to our promising students and researchers. Five percent of our students are involved in these programmes and our attractive tenure track options are helping to attract promising research talent. The upshot is that our researchers are regularly awarded prestigious grants and scholarships. Since 2007 we have secured more than 30 European Research Council (ERC) grants, which puts us among the top research institutions in Europe. This focus on developing talent is a prime reason why the University of Groningen has been rated one of the top 25 Best Places to Work in Academia for the past three years.

> rug.nl/top-research/

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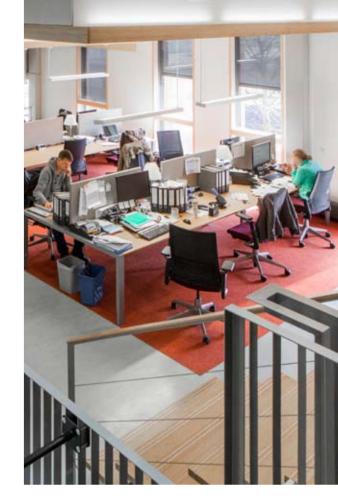
#### PASSION AND PERFORMANCE

We score an impressive 89th place in the Times Higher Education ranking of the world's universities, and are among the 75 best universities worldwide in the National Taiwan University's 2012 Performance Ranking of Scientific Papers for World Universities. We are proud of our leading research schools - NOVA (the Netherlands Research School for Astronomy), the Research Centre for Functional Molecular Systems involving our top researcher Ben Feringa, and ZIAM (Zernike Institute for Advanced Materials), which ranks in the global top five in the field of Materials Science.

The joint efforts of the University and the University Medical Center of Groningen has led to remarkable research initiatives and results in the field of Healthy Ageing. One of these is ERIBA, the European Institute for the Biology of Ageing. This institute investigates the causes of ageing and aims to develop novel strategies to prevent or combat age-related disease, as well as provide evidence-based recommendations for healthy ageing. The institute has got off to a flying start by being awarded various grants for special projects. Furthermore it was chosen from several prestigious institutions all over the world to head a consortium that will set up a flourishing institute for stem cell research at the Skoltech University in Skolkovo, Russia.

Our teaching is first-rate: the 2013 Master's selection guide puts us in the top three universities in the Netherlands and our Master's in Nanoscience has been rated the best Master's programme in the country. We are also doing well according to the annual Elsevier survey of degree programmes in higher education, with our degree programmes in Philosophy and Theology being judged the best in the country for several years now by students and professors in these disciplines.

> rug.nl/rankings



#### INTERNATIONAL PARTNERSHIPS

By looking beyond our borders we can achieve more and better results, while at the same time ensuring that more people can benefit from our research and teaching. The University offers double and joint degree programmes with universities across the world, some of them as part of the European Commission's prestigious Erasmus Mundus programme. Our research is also reaping the benefits of international cooperation. Within the U4 network, we have joined forces with the universities of Ghent, Uppsala and Göttingen to carry out research into cultural transfer and transmission and into the ageing brain. The University of Groningen is also actively involved in development cooperation with projects in the field of e-learning, good governance, pharmacy, IT, health and government decentralization in Africa and Asia.

> rug.nl/doubledegree > rug.nl/collaboration

## university of groningen 2014 | 400 years

## Professor of Economic History

Herman de Jong
was voted Lecturer
of the Year in 2012
in the Faculty
of Economics
and Business.
He also landed
a stupendous
€ 1.5 million prize
for his research
into the European
prosperity paradox.

'In Economic History we study the causes of economic growth and stagnation. Why have certain countries become rich while others remain poor? We can learn from history.

I am enormously proud of the prize of € 1.5 million awarded to me by the Netherlands Organisation for Scientific Research (NWO) for research into the prosperity paradox in the first half of the twentieth century. During that period of wars and severe economic crisis, we also see huge advances in quality of life. This doesn't match the moderate development in national income, the indicator used to measure economic growth. And yet people lived for longer, they grew taller and had more leisure time. How is that possible? I would like to develop a broader measure of human prosperity that takes account of changes in life expectancy, income distribution, and working hours. This will enable us to better explain the causes and effects of economic development.

Why did my students elect me Lecturer of the Year? Probably because I hand over much of the responsibility to them in seminars. I think it's important for academics to learn to ask the right questions. That's something that students appreciate.'





## SOCIAL COMMITMENT

Where should we place the boundary between state intervention and civic responsibility? What are the optimum conditions for healthy ageing? To what extent is people's behaviour sustainable and should the government and businesses take account of this? «

> As a research university, the University of Groningen sees it as an honour and an obligation to contribute to the major challenges facing today's society. There are three focal points heading our research agenda - healthy ageing, energy and sustainable society. Our approach is always a multidisciplinary one and it ties in with the Grand Challenges formulated at a European level.

#### **Healthy Ageing**

How do we stay healthy, happy and socially active for longer? This is the key question in our Healthy Ageing research. The LifeLines research programme of the University of Groningen and University Medical Center Groningen is monitoring 165,000 inhabitants of the northern Netherlands over a five-year period. Children, parents and grandparents are being examined and asked about their illnesses, lifestyle, nutrition and medication.

With the largest gas field in Western Europe on its doorstep, the University has a long tradition in the area of energy research. The most important themes at present are climate change and energy shortages, and they are largely being addressed in conjunction with the business community under the umbrella of the Energy Academy Europe.

#### Sustainable Society

The world is changing - the various societies that make it up are working together or competing with each other, and are sometimes even in conflict with each other. Even within a single society, there can be potential threats endangering the continued survival of that society. How much influence can we have, and do we want to have, on these dynamics so as to create a sustainable society together?

> rug.nl/research/priorities



The University of Groningen is actively involved in creating social and economic added value for the knowledge it develops. We aim to operate at the cutting edge of scientific knowledge and its application in the business world. We regard knowledge valorization as an extremely important economic and social factor. Together with the University Medical Center Groningen and the Hanze University of Applied Sciences, the University of Groningen is an active partner in the Centre for Valorisation and Entrepreneurship and is working on marketing knowledge initiatives and training young people to become entrepreneurs.

#### Alumni

Over 100,000 alumni of the University of Groningen are opening up new possibilities by placing their knowledge and their networks at the disposal of the University. Studies show that this sharing of expertise sparks a greater involvement in teaching and research. And by sharing information about their field and about internship options, as well as targeted study advice, alumni can make a valuable contribution to teaching.

> rug.nl/alumni

#### University sustainability

The University of Groningen has achieved 53rd place in the 2012 UI GreenMetric University Ranking. This ranking system compared 215 universities from 49 countries in terms of 'sustainability on campus' and 'environmentally friendly management'. The Environmental Performance Indicators point to enormous improvements over the past 13 years when it comes to reducing energy consumption and hazardous and non-hazardous waste. Sustainability also governs the University's procurement policy, with sustainability criteria weighing heavily in decisions about which companies to deal with.

#### > rug.nl/sustainability

#### Public presentation and debate

The University of Groningen encourages and supports its academic staff to join in the public debate. Our researchers make frequent use of various media to share their scientific ideas with the world. A good example is the 'Opinion' feature published every week on the University website. We also showcase the added value of our research in our weekly video magazine 'Unifocus'.

> rug.nl/unifocus



Professor of Law
and Economics
and director of
research at the
Faculty of Law and
academic director
of Sustainable
Society.

'We want to bring together the researchers who are already working in this area and publicize the topic more widely. It is typically a theme where you have to work with researchers and organizations from outside the University. Sustainability isn't just about the environment - it's also about social tensions, the challenges facing Europe. How do we maintain a balanced society? This is an area where we as a university can make a major contribution. Because so much is already being done, my first job is to make a reconnaissance of all the faculties to actively involve all researchers in this research focus. It needs to become part of the public mind-set. I see a good deal of common ground between my own research and Sustainable Society. For example, I'm looking at how businesses deal with financial and economic problems, as well as at the organization of the economy and climate law, such as CO2 emissions trading.'







## GRONINGEN



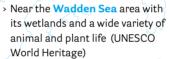
- > A safe city where you quickly feel at home
- of the northern Netherlands
- average age in the Netherlands
- > With an interesting mix of centuriesold buildings and spectacular modern architecture
- > The nearby countryside offers beautiful scenery and limitless views in all directions
- animal and plant life (UNESCO World Heritage)
- capitals of other European countries just a short distance away











> In the **heart of Europe** with the







