
Spinoza

John van der Oost: 'CRISPR-Cas is revolutionary' | **p.5 and 18** |

Bad name

Genomics is *not* GM but nobody knows that | **p.10** |

Yet another sports hall?

De Bongerd was just expanded and now it's full again | **p.26** |

RESOURCE [EN]

For everyone at Wageningen University & Research

no 21 – 28 June 2018 – 12th Volume


PLENTY
OF IDEAS
@ WUR

WHO'S
GOT A
BUSINESS
PLAN?

p.12

INTERNATIONAL
EDITION

NOTE THE SPADE

The campus is one Chinese rubber tree richer. This UniversiTree was planted by King Willem-Alexander on Saturday 23 June during the World Wide Wageningen alumni day. Notice the spade he used. It appears elsewhere in this *Resource*, in Looking Back on page 16. The spade was purchased over 27 years ago when Willem-Alexander's father came to Wageningen to plant an oak. That tree is still standing outside the former head office at Duivendaal, with a plaque: 'Planted by HRH Prince Claus of the Netherlands.'  photo Guy Ackermans



Read all about
World Wide Wageningen
on resource-online.nl

>> CONTENTS

no 21 – 12th volume



>> **8**
BREAST OR BOTTLE
The choice has an impact on babies' gut flora



>> **22**
GOODBYE PEEK
Popular teacher packs away his soil drill



>> **27**
TO SHANGHAI
Argo rowers compete in student World Cup

AND MORE...

- 4 Extra rooms at De Dreijen**
- 5 Café in Campus Plaza**
- 6 Review of anniversary book**
- 8 Circular Agrofood explained to parliament**
- 9 Diagnosing diabetes in Tanzania**
- 11 The fate of older dancers**
- 20 What will you be reading this summer?**
- 27 Meanwhile in Mexico**

SILENCED

These are strange times, as far as opinion is concerned. On the one hand, the world is flooded with extreme views on Twitter and Facebook. And on the other hand, I get asked to fill in a survey on an almost daily basis. The world seems to suffer simultaneously from a surplus and a shortage of opinion. The views of the silent majority go unheard, drowned out by the storm of loud opinion. Nuanced thinkers have no wish to post their considered opinions among the shouters.

There is very little of that shouted commentary at *Resource*. Pleasant, you might think, for the nuanced thinkers, but the fact is we get too little response of any kind. Does that mean that secretly, we are no longer very relevant? I hope not, but you never know...

At the moment we are trying to gauge our relevance through a widely distributed readers' survey. The survey is still running but so far, happily, it seems to show that people are reading us more than we thought. Maybe it would be going too far to conclude from this that nuanced views have been totally silenced, even within the walls of the university. But it's a thought I can't entirely suppress.

Stijn van Gils, journalist



>> [What's your opinion of Resource? Fill in the survey! | p.11](#)

UNILEVER WILL SHARE ANALYSIS EQUIPMENT

Unilever's new R&D lab is going to locate research equipment in the Shared Research Facilities on Wageningen Campus. To start with, Unilever will place several electron microscopes at WUR.

Shared Research Facilities – formerly CAT -Agrofood – was set up in 2010 so that participating companies and organizations could share costly research equipment such as electron microscopes, mass spectrometers and apparatus for DNA sequencing. It is expensive not only to purchase such equipment, but also to build up expertise in making good use of them. Collaborating in the way gives all the parties access to equipment and expertise that would be out of reach for the individual company.

The approach is a great success: last year, the shared research facilities were used by nearly 30 companies, including FrieslandCampina, TNO, Bel Leerdammer BV, Gelderse Vallei Hospital, Erasmus University, Syngenta, Hendrix Genetics and Keygene. Unilever used them too, and is now contributing equipment itself.



▲ Unilever's new research centre on campus is slowly but surely taking shape.

The company signed an agreement with WUR on 22 June to locate two electron microscopes at the university campus. At a later date, Unilever also wants to place a Nuclear Magnetic Resonance spectrometer at the Shared

Research Facilities.

'Unilever is currently building a new R&D centre on campus, because we want to be part of the food ecosystem in Wageningen,' says Unilever's spokesperson Fleur van Bruggen. 'By meeting

people from WUR, other knowledge enterprises and startups, we want to learn from each other and so innovate more effectively. This is the first real expression of this, even before we move to Wageningen mid-2019.' **AS**

OVER 200 EXTRA ROOMS AT DE DREIJE

Room rental company Socius will be building 220 temporary student units in the wings of the former Chemistry building at De Dreijen. The accommodation is intended mainly for the growing number of international students.

The new rooms should be ready by 1 September, the start of the new academic year. Idealis will be assigning students to the rooms. The temporary housing will remain available for six years.

Socius, an accommodation provider for young people that turns empty office space into housing units, already has some temporary rooms in Wageningen. It convert-

ed the university's former administration centre at Duivendaal into 180 student rooms and built 96 rooms in the Computechion building at De Dreijen.

The additional rooms in the Chemistry building are needed because of the worsening accommodation shortage in Wageningen. Dutch first-years have particular difficulty finding a room because the number of students is growing and the university reserves rooms for international students from outside Europe.

There is also some disappointing news for the development of additional student rooms as the Agro Business Park has lodged an

objection to the construction of 300 temporary student rooms on the corner of Nieuwe Kanaal and Kortenoord Allee. Those rooms were due to be completed by September 2019 but the objection procedure will now delay construction by one to two years. Some businesses in the Agro Business Park think having student housing next to the business park will put off new businesses thinking about moving there.

On the good news front, Idealis will be completing the student accommodation in the grounds of the old malt-house this year, with 375 rooms due to become available by 1 November. **AS**



▲ The Chemistry building at De Dreijen can put up 220 students.

SPINOZA PRIZE FOR JOHN VAN DER OOST

John van der Oost, personal professor of Microbiology, has been awarded a Spinoza Prize by the Netherlands Organization for Scientific Research (NWO). This is the highest academic distinction in the Netherlands.

Van der Oost received the prize – 2.5 million euros – for his outstanding, ground-breaking and inspiring work on the CRISPR-Cas technology with which scientists and companies can remove, add and change genes

with great precision, explains the NWO. He is one of the pioneers of this gene editing.

NWO has been awarding the Spinoza Prize since 1995. Previous Wageningen winners are aquatic ecologist Marten Scheffer, entomologist Marcel Dicke, and microbiologist Willem de Vos.

The other three Spinoza Prizes of 2018 went to Anna Akhmanova, professor of Cellular Dynamics in Utrecht, Marileen Dogterom, professor of Bionanoscience in Delft, and Carsten de Dreu,

professor of Social and Organizational Psychology in Leiden.

NWO also awarded a new prize, the Stevin Prize for scientists whose work has substantial social impact. This went to terrorism expert Beatrice de Graaf, professor of International and Political History at Utrecht, and to Marion Koopmans, professor of Virology at Rotterdam and an expert on zoonoses. **AS**

Read the interview with John van der Oost on p.18.

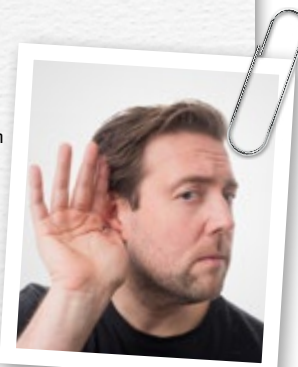
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Chair massages

WUR Council recently received concerned emails from staff about chair massages. It's always good to get input from people in the organization so I'll definitely be raising this issue in my last meeting. I will be leaving the council this summer after nearly two years. Two new PhD representatives will be starting in September, the successors to me and my colleague Tjitske Geertsema. Membership of the council means that you help decide how WUR gives shape to its policy. WUR Council advises the Executive Board, and the council's consent is required for key topics. That means for example that you make sure the board reserves a little more money for chair groups, builds a new teaching building a little faster or makes more of an effort to have an even more sustainable campus. Tjitske and I have worked on improvements to the range of courses for PhD candidates and better checks on how your research is progressing to reduce the risk of PhD students dropping out. Everyone has their own input. I am impressed by how hard all the staff and students on the council work to promote the interests of the people they represent.

Like councils at other universities, we have problems finding people to stand and getting feedback from the rank and file, despite the important topics we are dealing with. That's why I was pleased when concerned employees at Wageningen Research expressed their dissatisfaction at the fact that university staff will now become entitled to chair massages but they won't. We will therefore be discussing that matter this week with the Executive Board. I hope the council will get more spontaneous contributions from staff in future, possibly even on such topics as the budget, teaching or the development of the campus. **AS**

Guido Camps (34) is a vet and a postdoc at the Human Nutrition department. He enjoys baking, beekeeping and unusual animals.



in brief

>> CAMPUS PLAZA Bookshop and café

A bookshop and a cafe-restaurant are planned for Campus Plaza, filling the last two vacant premises in the shopping and catering centre on the campus, two years after it opened. The bookshop is a branch of the AKO chain, familiar from stations, hospitals, airports and the annual literature prize. Next door to AKO there will be a 'student café', which will also serve meals. The proprietors don't want to reveal their plans right now, but on the internet there is talk of a café-cum-sushi restaurant. Campus Plaza was finished in May 2016. In spite of the – according to property developer Ten Brinke – considerable interest from businesses, the retail premises filled up slowly. It is not known when the new businesses will open their doors. **RK**

>> CENTENNIAL FLOWER WUR gets its own lily

Wageningen University's centennial is to have a flower named after it. WUR president Louise Fresco will choose the flower shortly from a collection of brand-new daylilies (*Hemerocallis*) in The Field, an experimental garden on the western side of the campus. The new lilies – enormous flowers in blazing colours – are the product of cross-breeding experiments by Seerp Wigboldus of the Wageningen Cen-

tre for Development Innovation. It is a hobby that 'got out of control'. The selected flower will be registered as Wageningen Centennial (a working title) with the American Hemerocallis Society. **RK**

>> WOMEN ALUMNI New scholarship

University Fund Wageningen (UFW) has a new scholarship of 9000 euros for ambitious women alumni. The scholarship from the Marina van Damme Fund is intended for graduates with technical degrees and PhDs who need funding for additional training in order to take a step up in their career. The fund wants to stimulate women's promotion to higher positions. **AS**



▲ Seerp Wigboldus with his daylilies.

PHOTO: GUY ACKERMANS

HOW TWO WALLFLOWERS FINALLY BLOSSOMED

Agriculture minister Jozias van Aartsen sketched the first outlines of Wageningen University & Research during a dinner in autumn 1995. But far from being euphoric, the mood was rather downcast according to journalists Joost van Kasteren and Martijn de Groot in their book *Metamorfose: 1993-2018* (Metamorphosis: 1993-2018).

During the meal, the directors of the Agricultural University and the Agricultural Research Service (DLO) were told they would have to partner up as Wageningen's future was at stake. The university was attracting ever fewer students and was struggling with ageing accommodation. Utrecht University was already poised to take over degree programmes. The DLO institutes were in trouble too, with rising losses. The two organizations claimed to collaborate already but there was too much mutual distrust. Van Aartsen's speech that evening accordingly went down like a lead balloon. 'But of course we also realized the wolves were circling the farm,' says Kees Karssen, the rector magnificus at the time, in the book.

Van Kasteren and De Groot give a fascinating reconstruction of how the two wallflowers entered into a marriage of convenience, after which student numbers grew again and the two institutions jointly developed into global players. Or as the rather smug subtitle puts it, 'how Wageningen became a global leader'.

The authors have fulfilled an immense task with their book, distilling a clear-cut story from

a mass of data. They consider numerous topics, including the developments in science and education, the failed attempt to embed the applied sciences university Van Hall Larenstein, the resurrection of *Resource* and the impact of Wageningen research.

The book is presented as Volume 4 following the three-part history of the Agricultural University that was published in 1993. It has certainly lived up to its promise that Volume 4 would be a more readable, journalistic book. Van Kasteren and De Groot base much of the content on an impressive number of interviews. That makes their account more lively than the previous volumes. Unfortunately there are one or two editorial errors.

The book as a whole would have benefited from more variation — shorter stories as well as the long ones, more accounts of the non-institutional aspects. How did ordinary staff experience all the changes, for example? Anecdotes in separate sections would have made the book more accessible. **RN**



DELAYED THREE MONTHS

Metamorfose (Metamorphosis) rolled off the press three months ago. But the planned presentation was cancelled because the book lacked a list of all the professors and a general introduction. That problem has now been resolved with an extensive addendum: 'The long road to success', a revised version of a chapter by Leo Klep in the book *Geschiedenis van Wageningen* (History of Wageningen) from 2013. In it, Klep describes the origins of agricultural education in Wageningen and how this developed into the institution we have today.

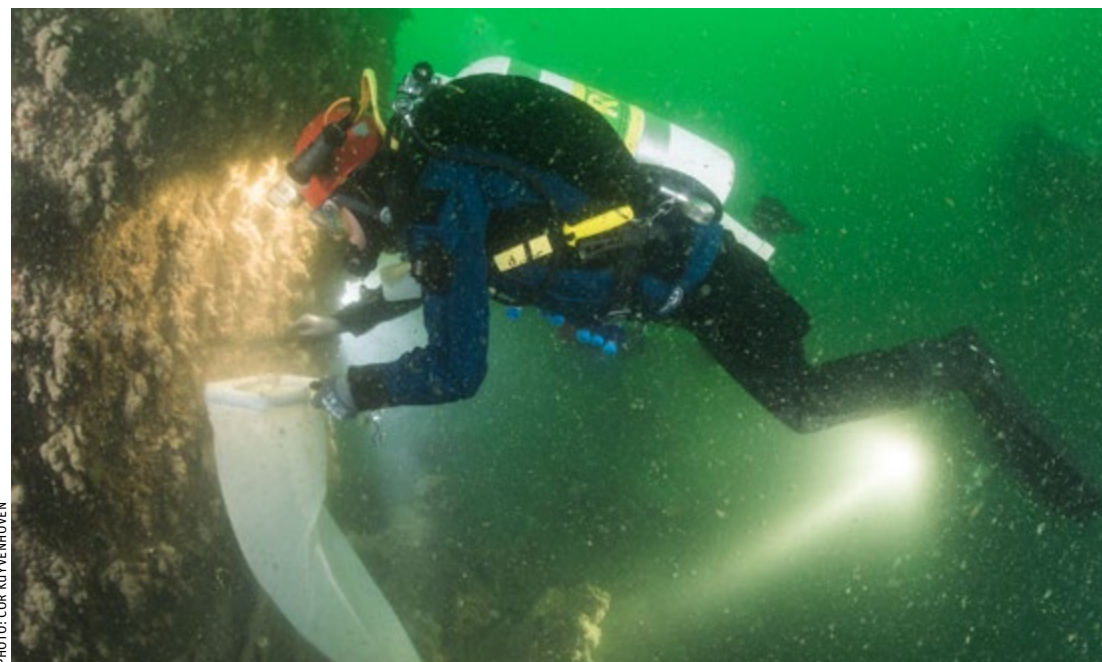


PHOTO: COR KUYVENHOVEN

WRECK LIFE

Marine biologist Joop Coolen of Wageningen Marine Research takes samples of the fauna on the wreck of the German submarine U31, which sank in the middle of the North Sea during World War I.

Coolen was one of the scientists on a nine-day expedition to Scotland organized by a Dutch foundation called 'Dive the North Sea Clean'. True to the name, divers brought up litter as well as doing research on the wealth of species on artificial reefs such as shipwrecks. The scientists want to use their findings to predict the impact of offshore wind farms on the ecosystem. **TL**

Look at the photo series
on resource-online.nl

WUR COUNCIL SHOULD DISCUSS MORE MATTERS OF SUBSTANCE

The university councils and works councils at WUR rarely discuss the direction the organization is going in. A committee led by professor of Nutrition Ellen Kampman has studied why that is, and made proposals for improvement.

Ellen Kampman, personal professor of Nutrition and Cancer, has been working at WUR for 25 years but knew nothing about the central participation structure. 'That makes her an excellent committee chair for coming up with critical reflection,' says WUR Council chair Guido Camps. The committee, which includes policymakers and ex-council members, started in April and published its recommendations on 21 June. The five main ones are:

1. The WUR Council needs to become a better reflection of the WUR community. That means attracting more professors, managers and PhD candidates. There needs to be more awareness of the compensation arrangements, and managers ought to value council work more highly as a career move.

2. The current WUR Council spends too much time on procedures and rules, putting newcomers off. The Council's work needs to be made more interesting and challenging, including through the exchange of views with each other and the Executive Board on issues in the workplace.
3. The work of the WUR Council should be more flexible. The committee proposes a maximum of a six-year term for members. And the Council should more often form ad hoc advisory committees, for example on tenure track, to which it invites staff and students with the relevant knowledge and experience.
4. There should be more collaboration between central and departmental councils.
5. The Executive Board and the various directors should consult the councils more on policy development. At present they only consult the councils about their decisions, not when they are analysing the problem or choosing a possible solution. This definitely needs to change.

All in all, the committee would like to see more discussion of strategy in WUR Council meet-



PHOTO: SVEN MENSCHER

▲ A committee led by Ellen Kampman has thought about how to improve the role played by the central councils.

ings, and greater involvement in its work by staff in particular. The involvement and organization of Wageningen students is much better. A WUR Council committee will now ponder how to put these recommendations into practice. **AS**

Science Cafe Wageningen
www.sciencecafe.wageningen.nl

Eat yourself healthy?!

Thursday, June 28
Café Loburg
19:45: Live music by 2MusE
20:15: Science

prof. Ellen Kampman (WUR)
dr. Alie de Boer (Maastricht University)

Sponsored by: **KLV** **WAGENINGEN UNIVERSITY & RESEARCH** **RESOURCE**

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Food

29 June #ShareyourWUR!d Photo Challenge

5-8 July Week of the Festival Wageningen City of Cultures

11-13 July Dutch Roots: small country big solutions

You'll find everything about 100 years of WUR on www.wur.eu/100years

WAGENINGEN UNIVERSITY & RESEARCH **100years 1918 - 2018**

TYPE OF MILK INFLUENCES BABY'S GUT BACTERIA

Both breast milk and infant formula with added prebiotics stimulate the presence of good bacteria in a baby's gut. But there are differences, such as the timing of when certain bacteria get the upper hand. These discoveries were made by PhD researcher in Microbiology Klaudyna Borewicz.

Breast milk contains specific carbohydrates, the human milk oligosaccharides (HMOs), which have an influence on the baby's gut flora. They function as prebiotics, substances that the body cannot break down, but which bacteria can. Borewicz: 'we think that HMOs evolved to promote the growth of good bacteria.' In order to simulate this helpful function of breast milk, manufacturers add prebiotics to formula, mainly using galacto- or fructo-oligosaccharides.

To find out exactly what the effect is of prebiotics in breast milk and infant formula, Borewicz studied nearly 200 mothers and their babies. First, she looked at the composition of

their breast milk and how it related to the bacteria in the baby's nappies. There are more than 200 different HMOs and each mother produces a different cocktail. Borewicz wanted to know whether there was an HMO that was particularly good at stimulating the growth of the 'good bacteria'. She didn't find one. 'It is more likely to be a combination of a lot of different components in breast milk.'

Secondly, Borewicz researched the effect of infant formula, with and without prebiotics. She discovered that babies who were given formula with prebiotics had the same quantities of the good bacteria *Bifidobacterium* and *Lactobacillus* as breastfed babies. But the colonization happened in a different way. In babies who were given infant formula, *Bifidobacterium* got the upper hand at an earlier stage. And in babies who got both formula and breast milk, this happened later. Babies on conventional infant formula without prebiotics had fewer *Bifidobacterium* and more entero-



PHOTO: SHUTTERSTOCK

▲ PhD candidate Klaudyna Borewicz: 'For the time being it seems best to breastfeed the baby if possible.'

bacteria, which can potentially causes disease.

So prebiotics have an influence on the species of bacteria in the gut and on the moment those species make their appearance. Borewicz: 'For the time be-

ing it seems best to breastfeed the baby if possible.' In future, infant formula manufacturers may be able to make use of these findings to create products that have a positive impact on the gut flora. **TL**

WUR MAPS THE CONTOURS OF THE CIRCULAR AGROFOOD SYSTEM

Our food production system needs a radical overhaul, and farmers cannot achieve that on their own. Three Wageningen experts explained this on 13 June to Dutch MPs who had invited them because they wanted to know more about the circular agrofood system.

Today's agriculture is very efficient in terms of the product but also causes climate change and the loss of biodiversity. The circular agrofood system aims at addressing those issues integrally. That is the gist of the vision that was explained at the 'technical

briefing' in The Hague by Martin Scholten, director of the Animal Sciences Group, Rogier Schulte, professor of Farming Systems Ecology, and Jan Peter Lesschen of Wageningen Environmental Research.

Central to their narrative is the soil, the right place to close the nutrient cycle in agriculture. Farmers should return more waste flows to the soil in order to increase its organic matter content and fertility. Such soils produce more food, store more CO₂ and retain more water.

The agricultural sector often makes good use of waste flows al-

ready, but there is room for improvement, say the Wageningen academics. Crop residues, for instance, can be ploughed under, as is current practice, but they can also be used as feed for breeding insects, which could then be used as livestock feed.

The Wageningen academics envisage combinations of arable and livestock farming, because those sectors need to collaborate more closely for a better exchange of livestock feed and fertilizer material. It is crucial for this that new agribusiness models are developed, which make circular methods more attractive to farmers.

These adaptations could include mixed cropping and herb-rich grasslands, in order to promote biodiversity in the countryside. Business models are needed for that too. This calls for a radical change in our food system, which is something farmers cannot achieve on their own, say the Wageningen academics.

They say the gap between the vision and the reality must first be described and discussed with all those involved – farmers, the industry, supermarkets, consumer and environmental organizations etc – before new agreements can be arrived at. **AS**

TEST DETECTS DIABETES IN WOMEN IN TANZANIA

Gestational diabetes, which develops during a pregnancy, is dangerous for both mother and baby. Elske Brouwer-Brolsma of Human Nutrition and her colleagues have developed a first version of a screening tool with which pregnant women in Tanzania with a raised risk can be identified in good time.

About six percent of women in Tanzania suffer from gestational diabetes. Their babies are often extremely big at birth, which makes the delivery more difficult, and even dangerous. These women are also at risk for diabetes after the pregnancy. Timely treatment can reduce these risks.

In the Netherlands, blood tests are done to check the blood sugar of every pregnant woman during the first trimester. 'But a lot of African countries lack the resources to do this,' says Brouwer-Brolsma. 'Often only a urine test is carried out, but that is less reliable. So a lot of women do not get diagnosed and treated.' For this reason, she thinks it is important to find alternative, simple screening tests. Those screening tests are based on known risk factors. It is known, for instance, that women are at greater risk if they are overweight or have had a

previous miscarriage, or if diabetes runs in their family. But this knowledge is based on studies of white and Asian women, and it is not known for certain whether the findings apply to African women as well. To find that out, Brouwer-Brolsma and her colleagues analysed data from 609 pregnant women in six hospitals in Dar es Salaam to see which risk factors were reliable predictors of gestational diabetes. They used this information to create the first version of a screening tool. 'Using the tool we could pick up about 64 percent of the women at risk of gestational diabetes.'

That result was a bit disappointing: a good screening tool scores at least 70 percent. According to Brouwer-Brolsma, the timing of the test may be a factor. 'Gestational diabetes usually develops between the 24th and the 28th week of the pregnancy, and about 18 percent of the participants were screened before week 24.'

Although there is still room for improvement, Brouwer-Brolsma sees the test as an important step in the right direction. 'This is already better than what was available before now. Follow-up studies could also look at other factors, such as BMI before the pregnancy.' **TL**



▲ Pregnant women in the queue for a check-up.

VISION

'Stricter rules about labels are tricky for small businesses'



Terms such as 'artisanal' might be deceptive for consumers. The same goes for pictures of fruit on products that barely contain any fruit. The European consumer organization BEUC wants stricter rules about misleading labels. A good idea, according to Kai Purnhagen of the Law and Governance chair group. But do consider small businesses.

When is a food label misleading?

'Roughly speaking, a label can be misleading when it creates expectations that are not in line with the facts. To determine whether something is misleading in the eyes of the law, the European Court of Justice takes the "average consumer" as a benchmark. As long as the information is available, consumers are expected to make their own judgement and protect their own interests.'

That doesn't sound very realistic.

'Obviously this average consumer doesn't reflect reality, as research has shown. The basic problem with the current legislation is that if you use this benchmark, it is very hard to actually mislead a consumer according to the law. But the aim isn't so much to protect consumers as to harmonize product labelling. If stricter benchmarks are needed then Member States can create them through national legislation. In the Netherlands, for example, there are stricter rules for labelling bread as "whole grain".'

What do you think of the idea for additional EU regulations?

'I think it is good to have clearer criteria for what makes labels misleading. But you should also look at the differences between countries and markets. In Scandinavian countries most products are distributed through large chains and consumers are used to more protection. But in countries such as Bulgaria, products are mainly sold at local markets. Small local businesses are often not even aware of the legislation. We should consider these small businesses when we make the rules. You don't want them being criminalized and forced to close, leaving only larger chains in business.' **TL**

Poorly chosen name increases resistance to technology

‘GENOMICS? OH, TINKERING WITH GENES!’

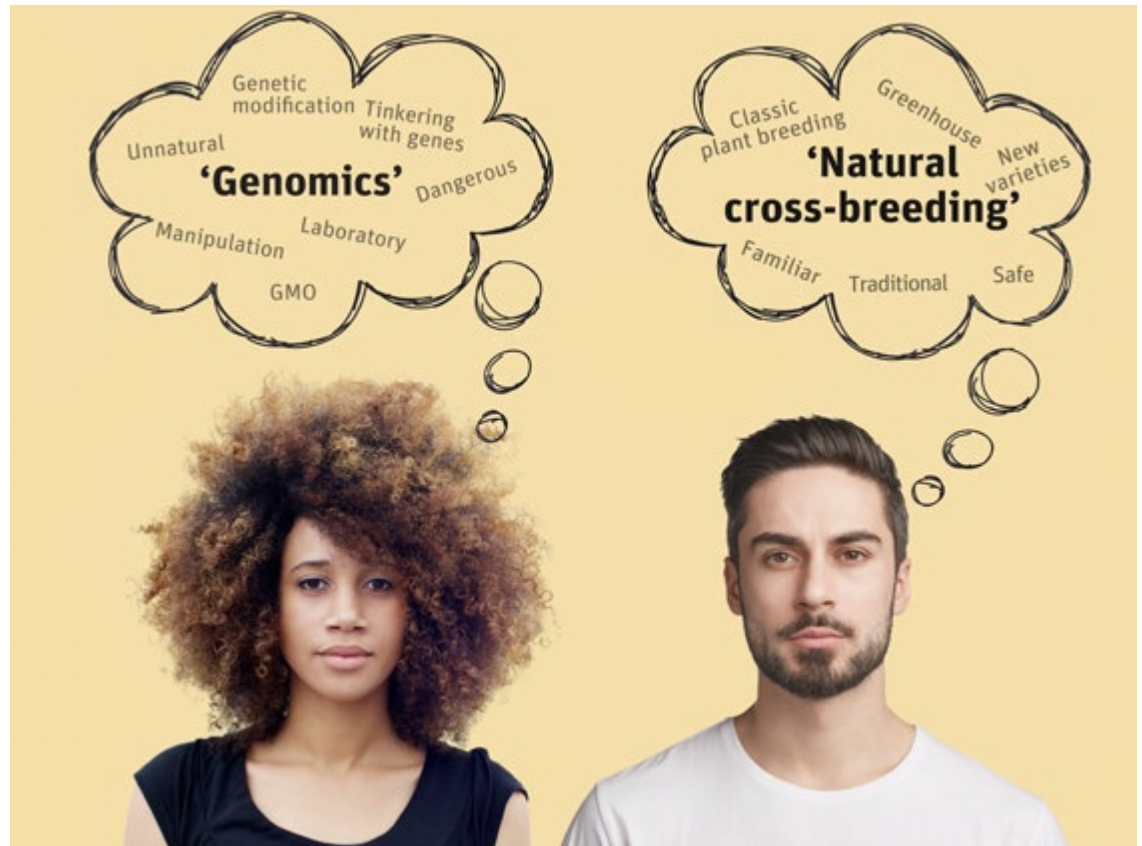
Scientists should think much harder about the names they give to new scientific techniques. If a name has negative associations – however unjustified – that can impede society’s acceptance of the technology.

This conclusion comes from the researcher Reginald Boersma in a study for which he recently obtained his PhD with supervisor and philosophy professor Bart Gremmen. *Naming is framing* is the appropriate title of his thesis, with the subtitle *The public understanding of scientific names*. That public understanding is the subject of his research. Or rather, the misunderstanding caused by names such as genomics, nanotechnology, synthetic meat and CRISPR-Cas.

Boersma, who studied Social Psychology in Groningen, focused on the concept of genomics-assisted breeding, or genomics in short, in his research. The term refers to the use of genetic analysis in plant breeding. Researchers check whether the genes for the desired properties are present in the products of cross-breeding. That speeds the breeding process up immensely compared to traditional breeding where the properties only become visible once the plant grows.

Genomics is basically an advanced form of classic plant breeding. But does the general public see it that way? No, according to Boersma’s tests. Laypeople associate genomics with genetic modification (GM) because for them the name evokes the genetic tinkering that is distrusted by so many. Boersma found convincing evidence of this in experiments with Wageningen students.

He asked two groups of students with little to no knowledge of genetics to give their opinion on genomics. However, he presented the technique to one group



▲ PhD candidate Reginald Boersma asked students for their opinions on genomics-assisted breeding. The answers varied depending on whether he called the technique ‘genomics’ or ‘natural cross-breeding’.

using the name ‘genomics’ and to the other using the name ‘natural cross-breeding’, which he thought up himself. The students in each group had previously received a brief explanation of either genetic modification or classic plant breeding, giving a 2x2 experimental design.

The results were clear. The students classed ‘genomics’ with GM and saw no connection with traditional plant breeding. The reverse was the case with ‘natural cross-breeding’, precisely as Boersma had expected based on categorization theory. ‘If people come across something they aren’t familiar with, they look for a category that it might belong to.’

‘Purely based on the name, “genomics” evokes evaluations that are the same as for genetic modification,’ concludes Boers-

ma. ‘And when the name is “natural cross-breeding”, they are the same as for classic plant breeding. I was surprised by how strong the correlation was.’ What is more, there was no difference between people who tend to draw conclusions quickly and more circumspect people.

According to Boersma, the experiments clearly show that naming is framing. His message is that scientists should change their approach to naming new techniques. ‘They should consider the associations that a name has. Not to manipulate people or as a form of marketing, but to avoid associations that prevent a proper understanding of the technology.’

Boersma sees the MRI scan as a good example to follow. That is an application for medical pur-

poses of NMR, a technique used in physics and chemistry. NMR stands for nuclear magnetic resonance. Boersma: ‘Doctors were afraid patients would be put off by the word “nuclear”, so they thought up the name “magnetic resonance imaging” instead. The emphasis is on the machine’s function — imaging — rather than the underlying technology.’

They deliberately chose a name that takes the perceptions of the general public into account, says Boersma. ‘Scientists often choose names that help them communicate with one another, but they lose sight of the general public as a result. I’m advocating naming as a kind of co-creation process. You could use panels, for example, to test the perceptions and associations evoked by a new technology.’ **© RK**

WHICH WAY FOR RESOURCE?

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resource.wur.nl/res34

Thanks in advance!

RESOURCE
For everyone at Wageningen University & Research



PROPOSITION

'Once you turn 30 you are a dinosaur'

Gut bacteria and ballroom dancing. These two themes have dominated the life of Klaudyna Borewicz in recent years. While doing her PhD research in Microbiology she took part in her last competition as a professional dancer. She would rather not give her age.

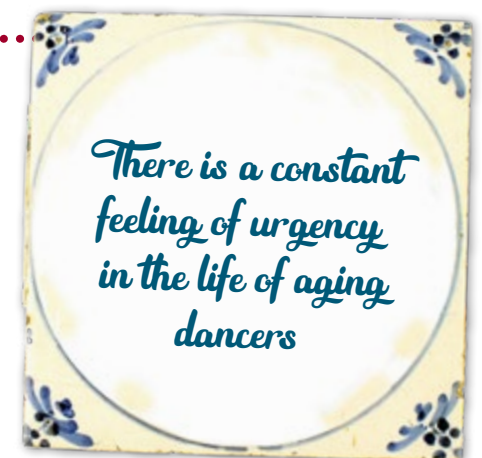
'I used to be a semi-professional ballet dancer and later on I became a dance teacher and danced ballroom professionally, while I was studying and working in the USA. I started dancing when I was about 14, which is very late as most dancers start at five and become professional at around 16. Because dancing is so physically demanding, most dancers retire at around 35. Hence the feeling of urgency to reach the top as soon as you can, because that gives you more career years. You want to do as much as possible before it's too late.

Last year I danced my final ballroom competition and my dancing partner and I came 4th in the Blackpool Dance Festival, the most prestigious ballroom dance competition in the world. I had to travel a



Klaudyna Aneta Borewicz graduated with a PhD on 13 June for her study on human gastrointestinal microbiota modulations with dietary prebiotics.

lot because my dancing partner lived in the UK. It meant all I did was work and dance. In the weeks before the competition we trained for six to seven hours per day. It was hard work combining that with my PhD thesis. On the other hand it's easier than with another job, because it was up to me when I worked. It is always a dilemma when to stop dancing competitively, because once you turn 30 you really are considered a dinosaur on the dance scene. There is a huge influx of younger people eager to step into your place. I decided to retire because think I have achieved the best I can and I wanted to leave the competitive scene on a good note. Now I'm training to become a dance teacher and judge. This is something I can still combine with a day job. And it actually pays quite well. In the US, for example, dance teachers get paid a similar hourly rate as surgeons. My first teaching exams are just three weeks after my PhD defence, so I have to start preparing as soon as the defence is done.' **TL**



Entrepreneurship in Wageningen could use a boost

Idea seeks entrepreneur

Wageningen researchers and graduates don't stand out for their entrepreneurial qualities, which is a shame as there are plenty of promising innovations. Startlife director Jan Meiling explains what his organization is doing to encourage a commercial instinct, and four young entrepreneurs tell their stories.

text Albert Sikkema *illustration* Paul Gerlach



Wageningen has a long way to go where academic entrepreneurship is concerned, says Jan Meiling. He is the director of Startlife, the Wageningen organization that helps new companies in the food and agriculture sector. Graduates were traditionally expected to go and work for a company or the public sector; little attention was paid to the option of starting your own company. Researchers were generally not given the opportunity by their managers to make money from their knowledge, for example by running a business part-time. Most Wageningen directors felt that their inventions and patents should lead to new research projects for WUR rather than start-ups for the researchers.

That culture has changed in recent years. Wageningen still brings up the rear in rankings of the number of start-ups and spinoffs (see inset) but Meiling sees improvement in both the number and quality of the new companies. Getting to that stage has taken years. 'Startlife started supporting start-ups 10 years ago. Eight years ago, we started offering loans on soft terms to help start-ups progress more. Three years ago, we started a mentoring programme to assist young entrepreneurs, and for the past 18 months we've offered partnerships with companies like Unilever so that starters get feedback and can collaborate more. It's up to the entrepreneur to make the start-up a success but these conditions do help.'

FANTASTIC PLANS

But that does not mean entrepreneurship has become standard practice in Wageningen. 'There is still a lot of untapped potential among WUR staff,' concludes Meiling. He thinks the biggest problem is that there are far more good ideas than there are good entrepreneurs. 'I often hear fantastic plans, in which the researcher also sees a route for turning the know-how into something marketable or of use to society. But it still doesn't take off because the researchers have doubts, feel they aren't entrepreneurial enough and lack the capital needed to develop the business.'

That is why Startlife and WUR department Corporate Value Creation are starting a new activity: venture building. 'We'll be talking to the research groups to identify proposals and discuss and improve them. If everyone feels that our best chance of creating value from the proposal is via a start-up, then we look for an entrepreneur and a financier, and see whether we can build a company with the researcher, entrepreneur and financier.'

'There is still a lot of untapped potential among WUR staff'

Jan Meiling, Startlife director

MEAT SUBSTITUTES

The aim is to use this approach to create more Wageningen start-ups. Startlife is currently supporting 172 start-ups but only 27 are based in Wageningen. And so far the number of Wageningen entrepreneurs is only growing slowly. Another 30 starters were added last year, but only four came from Wageningen.

However, Meiling expects several high-profile new Wageningen start-ups in the next few years. He expects a lot from shear cell technology, for example, which WUR is using to create meat substitutes. 'Atze Jan van der Goot, who developed this technology, is an incredibly commercially minded researcher. But that is not enough: the initiative deserves a dedicated, talented individual who has it in them to be a real entrepreneur. We are currently in talks with an entrepreneur and a financier and reckon we will be able to set up this start-up in three months' time.'

A second prospect is a possible breakthrough in getting Gert Kema's research on disease-resistant banana varieties to a marketable stage. Kema has already spent five years looking for financiers for Musaradix BV, a company that develops banana varieties that are resistant to encroaching soil fungi. Meiling: 'That is plant breeding work. The technology is tricky and it's a long-term affair. Also, Kema enjoys having a finger in more than one pie.'



But we are now working on a joint venture between Musaradix and an established plant breeding company.'

ORGANIC CROP PROTECTION


Meiling says that Wageningen students are generally more active and successful in creating new businesses than Wageningen researchers. 'A lively community has evolved in Starthub, the incubator for start-ups by Wageningen students, with lots of workshops for both students and PhD candidates.' But Meiling wants more here too. 'Lots of student businesses stop again after a couple of years.'

LITTLE BUSINESS ACTIVITY

You can measure how entrepreneurial a university is from the numbers of start-ups (new science companies) per 1000 graduates and spin-offs (new science companies emerging specifically from research at the university) per 1000 researchers. WUR scores poorly on both measures according to figures from U-Multirank. Eindhoven University of Technology is good for 10 start-ups per 1000 graduates, but WUR has only 0.6 per 1000. Where the top Dutch performer (Delft University of Technology) produces 14 spin-offs per 1000 researchers, laggards such as Wageningen, Rotterdam, Groningen and VU University Amsterdam have 1 to 2 companies per 1000 researchers. It should be noted that the Netherlands as a whole scores relatively poorly: global top universities produce between 51 and 215 spin-offs per 1000 researchers.

You want a few to carry on growing and have an impact.'

One candidate for such a breakthrough is Melle Hochstenbach's company Bio-innovations. The Wageningen graduate has had his organic crop protection company for nearly three years now. 'The company has scaled up production a lot but can barely keep pace with demand from vegetable growers. That is beginning to take off.'

To encourage entrepreneurship amongst WUR staff and students, it is important to attract businesses from outside Wageningen to the campus, says Meiling. 'We need to create an entrepreneurial atmosphere, where starters and companies can exchange ideas. We are already bringing in a world of entrepreneurs and investors with conferences such as F&A Next. Knowledge is one of Wageningen's strong points, but you also need examples of successful start-ups to get further.' 

Making better crops

Company name: Hudson River Bio-technology

Entrepreneurs: Rudi Ariaans and Ferdinand Los

Business: Improving crops with the help of CRISPR and SuRE

Location: Radix, Wageningen Campus



▲ Rudi Ariaans

Rudi Ariaans and Ferdinand Los met in New York, where Ariaans lived with a view of the Hudson River – hence the company's name. Ariaans has a business studies background, Los is a biologist who studied in Utrecht and did his PhD in the US. Their company develops better crops with the help of new technologies. They use the CRISPR technology, for which the two obtained licences in the US, to modify genes in plant genomes very precisely. The SuRE technology, which comes from the Netherlands Cancer Institute, lets them accurately determine the position in the genome where CRISPR needs to intervene. The entrepreneurs already have several clients, including two of the largest plant breeding companies in the world.

In 2015, the company received an EU grant to develop African marigolds with increased lutein levels. Lutein is a nutritional supplement that protects against macular degeneration and is used in chicken feed to colour the egg yolks nice and orange. This project brought them into contact with Leo Marcelis, professor of Horticulture at WUR, and that's how they ended up in Wageningen. Ariaans: 'We now have eight people and we're growing fast. We initially paid WUR to do all the research, but now we are mainly renting accommodation. After the summer, we'll move to our own place at the Wageningen Business & Science Park, but we will carry on exchanging knowledge with the university.'

Which crops would suit here?

Company name: Agrisim

Entrepreneur: Ronald de Bruijn

Business: Developing software packages for farmers

Location: Bevrijdingsstraat, Wageningen



▲ Ronald de Bruijn

Ronald de Bruijn is an entrepreneurial globetrotter who put down roots in Wageningen in 2017. He has been running businesses since 2005, worked for several companies belonging to the renowned Dutch IT entrepreneur Roel Pieper, set up a sturgeon nursery in Russia and a software company for agricultural development in Turkey. In Turkey, De Bruijn saw that agricultural simulation can help farmers decide which crops would give the best yields on their land using soil and climate data. He is now developing the idea further in his Dutch company.

Agrisim is developing three software packages, one to determine the most suitable crops for that location, one for predicting income and one for giving farmers management advice. He gets support from Startlife and Climate-KIC with mentors, accelerator programmes and loans on favourable terms. He chose Wageningen as his location because WUR can assess and validate his models, and it is easy for him to hire in knowledge. Agrisim has five employees. Like De Bruijn, they are still working on the basis of company shares and expected income.



Robotics in the greenhouse

Company name: Saia Agrobotics
Bart van Tuijl

Entrepreneurs: Ruud Barth and Bart van Tuijl

Business: Developing marketable robots for greenhouse horticulture

Location: Plus Ultra, Wageningen Campus

Ruud Barth and Bart van Tuijl started up a company last year that is developing robotics for greenhouse horticulture. Barth does not want to be any more specific than that at present so as not to alert competitors. Barth studied artificial intelligence at Nijmegen, has a job in Wageningen Plant Research's greenhouse technology group and is doing a PhD on robots with the Farm Technology group. 'WUR has been working on robots in horticulture for 20 years now. The technology is mature and almost ready to market.' Barth wants to take that final step, in a Wageningen spin-off with two colleagues. 'Wageningen Research does some great research, but you're involved in a lot of projects at the same time. If you want to make progress, you need to concentrate on just one thing. So I'm focusing on image recognition using deep learning in my PhD, which is almost finished. Now I want to turn a concept for a robot into something that can be used in practice. I need focus and time for that.' Barth has obtained licences for three WUR patents and is talking to financiers. If that works out, he will go all-in on the company.



▲ Bart van Tuijl and Ruud Barth

Useful substances from waste

Company name: Greencoverly

Entrepreneur: Carlos Cabrera

Business: Obtaining raw materials from industrial waste

Location: Plus Ultra, Wageningen Campus

There is more in industrial waste than you think. Raw materials for polymers, aromas and flavourings for example. If a food company can extract those substances, the amount of waste and CO₂ emissions will fall and this will result in new products, says Greencoverly founder Carlos Cabrera.

Cabrera was born in Panama, did his MSc in Wageningen, his PhD in Delft and is now a postdoc in the Biobased Chemistry and Technology group at Wageningen. He works part-time in his own company. He does not have a huge factory full of separation equipment; instead he shares an office in Wageningen and has a trial setup in Delft. 'I've developed new technology that lets us properly identify and extract compounds from waste flows in a reactor — that extraction is important. Clients explain to me what waste flows they have, after which I can say what useful compounds they can extract from them and what equipment they need. If the trial at the company is successful, I then work with partners to build a larger unit on site.' Cabrera was given a loan by Start-life to set up his company.



▲ Carlos Cabrera



PHOTO: ANNEKE KHO

Guy Ackermans has been photographer for *Resource* and WUR for 35 years now. Capturing special moments through all those years. In this celebration year for WUR he shows us some of his most special 'pics'.



LIKE FATHER, LIKE SON

'The nice thing about photography is that you are capturing something different every time. That keeps it interesting. Sometimes you get an exceptional subject, like this prince with a spade planting a tree in front of the administration centre in Duivendaal in 1991. Not my usual fare. And history repeated itself last week. The prince's son, who is now the King of the Netherlands, came to campus to plant a tree (see p.2). With the same spade — WUR had kept it all that time.'

Spinoza winner John van der Oost: 'CRISPR-Cas is genuinely revolutionary'

Carefully cutting into genes



Last week, John van der Oost received the 'Dutch Nobel Prize'. There are rumours that the Wageningen professor of Microbiology could be about to get a real Nobel Prize for his groundbreaking work on CRISPR-Cas. 'But I try not to think about that so much. The Spinoza Prize is actually much better.'

text NWO, Nienke Beintema *photo* NWO, Rafaël Philippen



CRISPR-Cas is the new buzzword in the life sciences these days. What does it actually mean?

'CRISPR-Cas is a molecular system that enables you to cut DNA in specific places. That means you can essentially alter any gene in any organism. This "genome editing" is much easier, more precise and more efficient than other kinds of genetic modification. It's truly revolutionary.'

What role did you play in its discovery?

'CRISPR was discovered about ten years ago as a system in the DNA of bacteria. This is DNA in which small sequences of genetic code are continuously repeated. In 2005, foreign researchers discovered that there are fragments in that DNA that are identical to pieces of virus DNA. That's why they thought it was probably an unknown kind of immune system that bacteria use to protect themselves against viruses. In other words, it's a system that recognizes an incoming virus and then renders it harmless. I found this so exciting that I decided to use part of the money from my Vici grant to discover how the CRISPR system works. We were one of the first groups worldwide to start working on this, so the timing was fantastic. We were able to show that this was indeed an immune system. And we showed for the first time that CRISPR-Cas is suitable for general genome editing.'



'If there was no exchange of DNA, we would still be bacteria crawling through the mud'

So how does that work?

'CRISPR DNA, which contains pieces of virus DNA, is like a database of intruders, a kind of archive of fingerprints. In order to use this information, that DNA has to be transcribed into RNA, a process that we know from the regular protein synthesis in every living cell. In this case, CRISPR RNA is made that guides DNA-cutting enzymes such as Cas to the right place in the virus DNA. Cas will only bind to that DNA and cut it if there is a match. As soon as an enzyme cuts the DNA of a certain cell, repair proteins try to mend the break. In many cases there are small errors that lead to the inactivation of that gene. But you can also insert a completely new piece of DNA where the cut took place.'

Is this already being done in practice?

'This is already being used a lot in biotechnology to give microorganisms and plants certain desired properties. Companies are using the CRISPR technique on bacteria and fungi to improve the production of biofuels, for example. It works extremely well in plants too. In the US, for example, there are apples on the market that no longer turn brown after you've cut them. There are also many examples of successful genome editing of human cells. For example, you can silence genes in a targeted way to study what their precise function is. A next step would be to make people better, but that's still a long way off for most genetic diseases.'

Are there also ethical issues?

'Yes, anything to do with genetic modification is still treated with suspicion. But CRISPR-Cas is not actually any different to what happens in nature. If there was no exchange of DNA, we would still be bacteria crawling through the mud. What we're doing is nothing new. We're just doing it much faster than how it happens in nature.'

What are the most promising applications?

'You can make crops resistant to drought, disease or salinization, or you can significantly increase

yields. With the world population constantly on the rise, that could become extremely important. You can have microorganisms make certain medicines, or biofuels or bioplastics. Of course we have to make quite sure that the end products are safe and healthy. But in my opinion this debate has started to spiral out of control. CRISPR allows us to make extremely precise changes to DNA. It's a wonderful technique that lets us do many great things.'

Are people insufficiently aware of this?

'Yes, I think we made mistakes in that respect, especially in the past. As scientists, we should have explained the story of genetic modification better decades ago. I think the most important thing is to emphasize the huge challenges we're facing, from global food security to climate change and the depletion of fossil fuels. We have to give better explanations of what's possible now, but also what the dilemmas are.'

What's the regulatory situation?

'Within the EU, any changes at the DNA level that aren't spontaneous are covered by the strict rules for genetically modified organisms. So they look at the process rather than the end product. These rules still stem from a time when there was much less knowledge and far fewer technical possibilities. Legislation in the US has already been relaxed: genetic modification is allowed there as long as the end product can't be distinguished from what could happen in nature itself. We have to talk about that more at the European level.'

The CRISPR-Cas work is rumoured to be about to get a Nobel Prize, but there's a lot of haggling about who should get it.

'Yes, that's right. In a column in a Dutch newspaper, Piet Borst predicted that that Nobel Prize would go to the people who are working on the most spectacular human applications rather than the microbiologists who laid the foundation for that. He thought that was a pity. I thanked him for his column at the time. But I try not to think about it so much. The Spinoza Prize is actually much better. It's fine this way.'

What are you going to do with the 2.5 million euros?

'As far as bacterial immune systems are concerned, we only have the tip of the iceberg in our sights at the moment. At Wageningen we have identified a few systems that are comparable to CRISPR-Cas but can do slightly different things. I would like to investigate these systems further, and make improvements by creating synthetic variations. Perhaps there yet are more natural variations. And so we dream on, that's the beauty of our profession.' ®

◀ Professor holding a personal chair in Microbiology
John van der Oost: 'You can use CRISPR to make crops resistant to drought, disease or salinization.'

YOUR SUMMER READS?

It's almost holiday time, the ideal moment to get some reading done. *Resource* called WUR staff who have been in the news this academic year and asked what books they would be devouring after all those journal articles and course manuals. Do they have any golden tips or guilty pleasures?

text Roelof Kleis, Tessa Louwerens and Linda van der Nat illustration Henk van Ruitenbeek

Dolf Weijers



Professor of Biochemistry, unravelled the mystery of the plant hormone auxin

'I wouldn't call it a guilty pleasure but I do always use my holidays to get through a stack of thrillers. During the academic year, I read tons of articles and proposals, always for a specific purpose. It's wonderful to read "aimlessly" on holiday. **The latest book by Daniel Silva, one of my favourite thriller writers, is due to be published on 17 July. I'm already looking forward to that.** Incidentally, I notice that I do get something useful from reading novels with short chapters and cliffhangers. I try to think about the attention span and narrative in my articles and research proposals too. I try to include thriller elements in my own texts in the hope that a reader or reviewer will find it difficult to put the text down and want to read on expectantly to the next section.'

Han Zuilhof



Professor of Organic Chemistry, recently became fellow of the Royal Society of Chemistry in Britain

'When I celebrated 25 years in the job, the chair group gave me *China. A History* by John Keay. I'd love to know more about the country because of my professional and personal links with the place (Zuilhof works at Tianjin University as well and has an adoptive son from China, ed.). I am also taking two thick books by Ian W. Toll, *Pacific Crucible* and *The Conquering Tide*, about the Second World War in Asia. I don't know much about this but I find history fascinating. That history is still very relevant for understanding the culture there. I

will also be rereading *How old is the universe* by D. Weintraub. As regards literature, *The Book of Sapphire* by Gilbert Sinoué is on the list. Very calm narrative prose. **Whether my wife will let me read all that is the big question, of course...'**

Eveline Verhulst



Assistant professor at the Laboratory of Entomology, received a Vidi grant for research on sex differences in wasps

'I used to read an awful lot but I've had little time for that recently. Both the literature for my work and more relaxing reads have gone by the wayside. It's also a question of setting priorities but this does rank lower down the list. I won't be going away on holiday this summer, just day trips. **If I do get the time, I'd like to read *The Invention of Nature about the life and expeditions of the explorer and scientist Alexander von Humboldt*.** I was recently given it as a present.'

Henry van den Brand



Teacher of the Year 2018

'I always visit the second-hand shop Dorcas in Barneveld just before I go on holiday. It has a huge range and low prices. Then I take a stack of good books with me. These can be novels, but not necessarily. **Various writers appeal but I particularly like Geert Mak. He writes well, and you get that in combination with history.** The last book I read was also by Mak: *The Lives of Jan Six*. Not his best book, incidentally. I read a lot when on holiday — lap-



top off and settle down with a good book. I can pass the time quite happily reading. So I can't yet say what books I'll be reading this time. It certainly won't be work. Something everyone should read? *QB VII* by Leon Uris.'

Mihris Naduthodi



PhD student in Bioprocess Engineering, winner of the 2017 Thesis Award

'I very rarely read books or articles that aren't to do with science.


I prefer doing other things in my free time, like travelling. Before going on any trips, I always look up travelogues about the place I am going to visit to help me understand the history and significance, which lets me enjoy the place more. I am planning to visit northern parts of India when I return home and I am trying to find some travelogues about that area. The last novel I read was *Randamoozham* by M.T Vasudevan Nair, almost a year ago. It belongs to the genre of mythology and historical fiction and is written in my native language, Malayalam. The novel tells the story of the Indian epic *Mahabharata* from the point of view of one of the protagonists,

Bhima. It would be an adventurous and exciting read for people who are interested in Indian mythological histories.'

Lisa Becking



Assistant professor in Animal Sciences and researcher at Wageningen Marine Research, recently started the WUR-wide book club 'On the Same Page'.

'I always try to take two weeks off entirely in the summer, be completely offline on Menorca. All I do then is read, write a bit, cook and enjoy meals until late in the evening with friends. I will be taking five books with me this time, including *Barracoon: the Story of the Last "Black Cargo"* by Zora Neale Hurston, the story of one of the last slaves to be taken to America from Africa. **This was a sad year for literature as both Tom Wolfe and Philip Roth died.** Roth was my literary hero; I've read everything he ever wrote. I think I'll take one of his books with me as a nostalgic read, perhaps *Human Stain* or *American Pastoral*. Wolfe is also a hero — as a teenager, I thought *Electric Kool-Aid Acid Test* was amazing. 

‘I love showing how important the soil is for life on Earth’

GERT PEEK

1953, Hillegom, Netherlands

- 1972-76 Arable Farming, Leeuwarden Agricultural College
- 1976-77 National service
- 1977 Appointment at Wageningen Agricultural University
- 2000 Teacher of the Year Award
- 2013 Co-author of *Landschappen van Nederland* [Dutch landscapes]
- 2011 Teacher of the Year Award
- 2015 Excellent Education Prize for Landscape Geography
- 2016 Excellent Education Prize for Soil 1
- 2017 Honorary Member of the Dutch Soil Society
- 2018 Excellent Education Prize for Soil and Landscapes of the Netherlands

Gert Peek started his WUR career as a field trip assistant. He progressed to become a lecturer and coordinator of various soil science subjects. Peek lives in Zetten and is in a relationship but does not live with his partner.

Popular teacher is hanging up his earth drill

Peek era comes to an end

After teaching for 41 years, it's time for a change: Gert Peek plans to travel and go gardening in his vegetable plot. On 5 July 2018, the striking Soil Science teacher will pronounce his final didactic words from the Wadden Sea dyke in Hornhuizen. *Resource* joined him for one last field trip.

text Luuk Zegers *photos* Guy Ackermans

It's a quarter to eight in the morning on 14 June. Around 35 second-year Soil, Water and Atmosphere students have gathered next to a coach in the car park in front of Gaia. Gert Peek chats to Hydrology lecturer Roel Dijkema, who is setting off with a different group. 'How many excursions still to go?' asks Dijkema with a laugh. Peek: 'Yes, it's the final count-down.' Just before eight, Peek and fellow teacher Bart Makaske usher their students onto the coach. At eight o'clock sharp, Peek tells the coach driver, 'You can go now, Henk!'

The students will be visiting two locations to determine the landscape identity by examining the hydrology, plot division, buildings and other landscape features. Then they will grab the earth drill to investigate the soil characteristics. Peek: 'We do this throughout the Netherlands, from southern Limburg up to the Wadden Sea dyke and from the east of Limburg to Zeeland. Today we are working in the area round the central rivers.'

BECOMING A FARMER

The first location is a pear orchard in Lienden. Makaske asks the students what they observe in the landscape. Peek – in dark green boots, a fisherman's hat and a jacket that has clearly been on quite a few excursions itself – stands close by and chews on a blade of grass. He nods approvingly at every correct answer. A little later, the students get down to work, but not before the master has shown them how one last time. 'This is how you work the drill.'

Peek wanted to be a farmer when he was young. 'A dairy farmer with cows. But after working as an intern on a livestock farm I realized it's a very tough life. Getting up at five every morning, working hard all day and then bringing in the hay in the late evening.' So Peek abandoned the dairy farming idea and enrolled on the Arable Farming programme at the agricultural college in Leeuwarden. One of the modules he took there would eventually become his calling. 'For the Soil Science course I spent three months mapping the soil in the land consolidation area of Den Ham in Overijssel. I thought then: Yes! This is a fantastic world.'

Thanks to his experience in Overijssel, Peek was able to start work on 16 May 1977 as a field trip assistant at the agricultural university in Wageningen. 'There were vast numbers of students so the field trips continued throughout the summer. Sometimes we ended up spending a long period in a guesthouse with not much going on in the evenings. So what do you do? Have a booze-up! And the teachers joined in. I spent many an evening boozing until three or four in the morning. Going to bed completely paralytic. But still up again at eight thirty for teaching duties. I couldn't let the students see I had a hangover.'

LESS SOCIAL CONTACT

There was less pressure on education back then. 'Now everything has to be ever faster and more efficient. In the past the staff had much more social contact with



one another. For example, the entire chair group would have coffee and tea together twice a day. Now we only do that if it's someone's birthday.' Peek sees this as a negative effect of a positive development, because in general he is pleased with the efficiency improvements. 'People used to take seven years to complete their degrees, and you also had "fun subjects" where you wondered whether they were really necessary.'

Students have also changed over the years. 'In the past, the students would address the staff after a field trip, sometimes with a gift, often with a round of applause. That was followed by a period with fewer gifts and speeches, in which everyone came and shook your hand personally. In recent years you see more and more students packing up quickly and going home after such an intensive field week without even shaking your hand. Not all students do that by a long way, but it's a trend and that's a shame.' Yet a lot of students came to say goodbye to Peek personally this year. At the end of May, the more senior students organized a leaving do. 'I liked that. Them saying: see, Gert, we won't let you just go.'

HANGING ON HIS EVERY WORD

Meanwhile, the students in the orchard are working with their earth drills in groups. As the drill goes deeper, the soil changes. 'It's turning sandy,' says one student. 'That's great, that you're starting to interpret what you see even while you're drilling,' says Peek. 'Try

breaking it open. What can you see along the break? Those orange dots? What do they tell you?' Peek wanders back and forth between the groups, prodding them in the right direction but letting them draw their own conclusions. He is in his element and his enthusiasm is contagious: the students drill hard and assess each clod of earth in a cheerful atmosphere.

Peek never received any teacher training. 'I *have* had people who inspired me. Toine Jongmans was my big role model in how to teach well. Without Toine, I'm not sure I would have become the teacher I am now.' Jongmans, who is now retired, taught Peek a number of significant didactic lessons. 'Firstly, have a logical story with a systematic structure. Secondly, use clear-cut examples that tie in with students' own experiences.

'If you put your all into teaching, that's at the expense of your private life'

That lets you explain complex things simply. Thirdly, show enthusiasm.' That enthusiasm is one of the principal reasons for the many teaching prizes Peek has won (see inset). Student Jasmine Barwari: 'You remember everything Peek tells you because of his enthusiasm. It's almost impossible to tune out; you are hanging on his every word. You don't get that with every teacher.'

OPENING THE DOOR

Peek prefers to teach first-year and second-year students. 'All students studying environment sciences have to do the course Soil 1: the basis of soil science. The first question I ask them is: What is a soil? You have 225 students in the room, but all you get is a fearful silence. Soil seems so obvious: you walk on top of it, perhaps you'll be buried in it. None of them realize at that point that it's an entire system of processes and properties that influences the quality of life.'

'They really start from scratch,' continues Peek, clearly enjoying this. 'I love showing people how important the soil is for the functioning of life on Earth. To get them from level zero to level 10 and open the door to the discipline. It's so wonderful to see how someone can develop with the knowledge they acquire and how they deal with that knowledge. And if students say after two or three courses "now I get it", I go home in the evening and pour myself a glass of wine to celebrate.'

TIME TO MOVE ON

His enthusiasm raises the question of whether he is really ready to retire. Emphatically: 'Yes. I've done this for 41 years and I had a wonderful time. But it's time to move on. As a teacher you are restricted to the WUR

holidays: one week at Christmas and four weeks in the summer. I can never go away in the spring, the loveliest time of the year. My vegetable garden hasn't done anything for 15 years now. I want to travel, I want to work in my garden and above all I want more time for my partner and my social contacts. Because if you put your all into teaching, that is at the expense of your private life to some extent. It was great but this was enough.'

CARTLOAD OF MANURE

Peek has seen many changes in his 41 years working at WUR. 'There were a lot of students in the 1970s and 1980s, then numbers plummeted in the 1990s and the early 2000s. It was still the Agricultural University back then and agriculture had a really negative image. If you watched the news, you'd always see a cartload of manure being driven across the field. It was all about soil and groundwater contamination, animal diseases and so on. That had consequences for student numbers. At one point they were even talking about getting rid of Wageningen as a separate university; we were going to become a branch of Utrecht University.'

But there was a change of tack halfway through the 1990s, says Peek. 'The Agricultural University became Wageningen University, degree programmes were introduced that had less to do with farming, and the campus was built. That had an immense positive effect. And that slogan — For quality of life. Fantastic. I always come back to that in my courses: what does soil science mean for the quality of life? I can tell you that soil science is central to the university's mission.'

WUR's renewed popularity does have its downsides, thinks Peek. 'The rising number of students has led to high workloads. I hope we will become stricter about


the quality of the intake. Making sure we get high-quality secondary school students rather than going for as many students as possible.' Students should also be encouraged to study harder. 'At present, you can resit as often as you want. I see some colleagues getting demotivated when students take the same exam five times. So a tougher binding study advice and fewer resits.'

TASTING THE SOIL

In the pear orchard, the students are discussing their soil analyses with Peek. Makaske has just finished with his groups. What has he learnt from five years working with Peek? 'A huge amount. How he creates the right atmosphere on site, how he gives the group the feeling they're about to do something special.' How does he feel about Peek leaving? 'It's the end of an era.'

After a ride in the coach to the second location, Peek gets the students to analyse the soil by tasting it. 'Just bite on it. Don't chew, just one bite. What do you taste? Sand? No, not sand? So what is this?' 'Clay,' says one of the students. 'Greasy clay, right.' Peek doesn't taste it himself. 'The dentist won't let me. My teeth have worn down after all those years.'

The journey back to campus starts at about twelve thirty. Peek takes out his lunch box. This is the time to grab some food as the coach will be leaving for the second trip at one thirty. It is hard work, but he enjoys it too. 'I'm doing everything for the last time. It feels like a farewell tour.'

Does he have one more wise lesson for his students? 'Doing a degree is a choice, you choose this. So get everything you can out of it. And follow your heart. That's what I did, and the results were all positive for me.' 

EARTH DRILLING CHAMPIONSHIP: FROM PASTIME TO SPECTACLE

In addition to his enthusiastic teaching, Gert Peek is also known for the Earth Drilling Championship, an annual competition in which around 500 students from all over the Netherlands try to drill a hole 1.2 metres deep as fast as possible. 'In the early 80s, we were in a guesthouse for two weeks during a field trip. One evening, I proposed a competition: drilling as deep a hole as possible for a crate of beer. That competition continued until the end of the 80s. The deepest hole was 11.05 metres.'

In the early 90s, study association Pyrus revived the competition. 'At their anniversary event we had a competition for who could drill the deepest hole in 15 minutes.' It became a tradition that grew and grew. 'It was starting to cost an incredible amount of time. So then Pyrus decided the first person to drill 1.2 metres would be the winner. That was how the student championship started and that has escalated into what we have today.' By which Peek means a spectacle with hundreds of participants, barbecues, beer on tap and fantastical costumes. Last autumn, he served as chief referee for the last time. 'It was wonderful, but here too it's time to move on.'



PHOTO: SVEN MENSCHER

TAP (1)

A dripping tap with a puddle of water beneath it produces an irritating sound. Researchers at the University of Cambridge know where that noise comes from. Not, as has always been assumed, from the impact of the drop on the water surface. With high-speed cameras and sensitive audio apparatus, they showed that the culprit is an air bubble.

TAP (2)

The bubble is created because the water surface quickly closes over the drop of water, creating a column of water. A small air bubble gets trapped by that impact and vibrates. It is the vibration that reaches our ears. This can be solved by adding a pinch of salt, thus lowering the surface tension so that the water closes more slowly and doesn't 'trap' any air. Or you could of course fix the tap.

DEAR BODY

Women have more positive thoughts about their bodies after writing a letter to their body. This was revealed by a writing assignment given to a large number of university students by psychologists at Western University in Canada. An affectionate letter in which you thank your body for all the fantastic things it does for you helps generate a more positive image. Can't do any harm, anyway.

SENSITIVE

Horses read our moods from our faces and our voices, Japanese researchers at the University of Tokyo have shown. It was already known that dogs can do this, but now it turns out that horses are similarly sensitive to moods. This is something all horse-mad girls and boys have always known, of course.



PHOTO: SVEN MENSCHER

Expanded sports centre is almost too small again

De Bongerd Sports Centre was expanded two years ago with a new sports hall. But it is once again approaching full capacity due to the continuing growth in student numbers, say both the director of the centre and the board of Thymos, the student sports association.

'The new sports hall has catered well for the additional 750 students coming in over the past two years,' says Henri ten Klooster, head of De Bongerd Sports Centre (SCB). 'And at the moment we are well equipped for exam periods too.' For exams, De Bongerd can accommodate 1000 students at a time, more than double its former capacity.

But if the number of students goes on rising in line with the trend of recent years, Ten Klooster predicts the centre will soon get crowded again. 'Because even though we now have lots of space, we are noticing that we are already nearly full.' The main reason for this is that relatively large numbers of students take part in a sport

run by a club. Ten Klooster: 'It is easier to cater for 50 extra people in an aerobics class than for the same number in a student volleyball club. They form five teams, all of which have the right to one and a half hours of training.'

Esther Veldhuizen, chair of SWU Thymos, doubts whether the sports centre will still be able to accommodate all the students into the near future. There are still waiting lists for several sports, including volleyball, she says. And the introduction of the extended daytime schedule could cause additional problems. From September, classes will continue until 19:00, leaving short evenings for sport. 'Thymos's aim is to get every member of a club training at least once a week. With the extended schedule, it is going to be harder to make sure that happens.'

On the other hand, Ten Klooster sees new opportunities in the extended schedule as well. Classes are spread over a longer period of time, creating gaps in students' timetables. 'So we may

be able to increase the number of daytime classes people can sign up for, reducing the pressure on our facilities in the evening.'

There are no immediate plans for a new extension of the Sports Centre. If the number of students making use of it goes on growing, it will need to find creative ways of making good use of the accommodation, says Peter Booman, director of WUR's Facilities and Services. 'My impression is that with the facilities we have now and the effort put in by teachers and staff, we have a great sports centre. Exactly how things will work out in the next few years remains to be seen. We shall have to go on monitoring it well from September.'

Ten Klooster underlines the importance of the sports centre for WUR. 'It is a safe meeting place for students, where they can sample a wide range of sports cheaply. And exercise has a positive impact on academic results. Sit less, feel better!' **15**



Wageningen rowers in Shanghai

Argo rowers Arlette de Vegt and Tijmen van Rietbergen will be temporarily swapping the Rhine for the waters of Shanghai. They will be joining students from other cities to represent the Netherlands in the World University Championships in August.

De Vegt, a Food Technology MSc student, rows in a women's lightweight double skull with Anouk van Leeuwen from Delft. Van Rietbergen, a Management, Economics and Consumer Studies BSc student, rows with students from Utrecht, Tilburg and Amsterdam in a men's lightweight coxless four. The rowers qualified for the championships on 16 June in the Argo anniversary races in Amsterdam.

They started making arrangements as soon as the good news had sunk in. De Vegt: 'We booked tickets for Shanghai that Friday.

We'll hire a boat and oars when we get there. So there's some logistics to sort out, but we're working on that.'

De Vegt and Van Leeuwen know one another through competitive rowing. 'We were both in a skiff (one-person boat, ed.) but we thought we'd go faster if we rowed together,' says De Vegt. 'That turned out to be right. We aren't the strongest, biggest or broadest rowers but we have good technique.'

It is sometimes difficult to combine training with your studies, says De Vegt. 'Neither Anouk nor I have time to train during the week because of our degree work so we train all weekend. I go to Delft Friday afternoon and only get back Sunday evening, so it's pretty intensive.'

Van Rietbergen's team only trained for two weeks for the Argo anniversary races. 'Not long



PHOTO: PROTEUS PAPAZZI

▲ Wageningen Master's student Arlette de Vegt (left) rows in a women's lightweight double skull with Anouk van Leeuwen from Delft.

enough to focus on technical aspects; we just worked hard to qualify. Which we managed. Now we will be working on our technique.'

The 2018 World University Championships, organized by the International University Sports Federation (FISU), are held on different dates in different cities

around the world. The rowing competitions are on 10, 11 and 12 August in Shanghai. 📍 LZ

Read more on resource-online.nl

MEANWHILE IN... MEXICO

'The trauma will impact their whole lives'

Even though President Trump has ended the family separation resulting from his zero tolerance policy at the border with Mexico, most families are still to be reunited. Alan Encinas Zazueta from Mexico is upset by how far the US government will go to protect its own interests.

'From a Mexican point of view, the situation regarding the border and immigration to the US is degrading. In my view, the "zero-tolerance" policy has resulted in a humanitarian crisis. More than 2000 children were separated from their parents for months and "stored" at inappropriate facilities where they were treated as prisoners. This is unacceptable: they are children and not criminals. They were experiencing stress and trauma during that time which will impact their whole lives.

The policy demonstrates once more that the current US regime does not hesitate to cross the limits of the historical values of the United Nations in order to defend its own interests. The United States have a long history of human rights



Alan Encinas Zazueta from Mexico is an MSc student of Environmental Sciences. He talks about the situation in his home country.



PHOTO: KARL SONNENBERG / SHUTTERSTOCK.COM

promotion and leadership. However, the Trump government has pulled back from international agreements as it does not believe in multilateralism and the creation of common ground. This currently limits the scope for international organizations to act. Recently, Melania Trump and the former First Lady Laura Bush announced their concerns about the family separation. I think this is good as it creates public awareness and strengthens the discourse about the need for the government to be more careful about human rights.

I follow events in my home country closely by reading national and international newspapers. My family, friends and I talk about what has to be done. I think this is essential since we are the young generation, who will shape the future. It is important to know what is happening around us.' 📍 JS

YOU ON CAMPUS

That Jody Berkelmans (23) has time for a chat is quite special in itself, given her long list of extracurricular activities. Alongside her Master's in Nutrition and Health, she does committee and voluntary work for a rowing club, a study association and the Red Cross. And every weekend she works back in her home village.

Jody took up a whole lot of activities as soon as she moved to Wageningen for her Bachelor's. 'I am an enterprising person and I like organizing things. People often ask me, how do you do it all? But I enjoy it all!' Although Jody does admit that she does perhaps occasionally end up with too much on her plate. 'But then I don't dare to mention it, so I just carry on and finish the job. That teaches me to plan well!' When asked how she combines all those activities with her studies, she answers honestly: 'I just don't put 100 percent effort into my studies. That is a conscious choice. I would rather get a six and not be stressed than a seven and not have a life.' But she gets

sevens anyway: this morning she got a 7.3 for her thesis. 'I really wrote that in the last two weeks. For exams too, I often revise at the last minute. Maybe that's not really the right way to do things, but the main thing is to get your credits, isn't it? This way I can

'Better a six without stress than a seven without a life'

combine it with the rest of my life. If I'm honest I might have learned more from my committee work than from some of my courses.' In October Jody will do an internship somewhere else, and she will have to leave her busy life in Wageningen behind. But that doesn't bother her. 'I am really looking forward to working and when I do my internship, I want to put my all into it.' For now Jody has a few other events planned,



PHOTO: EVA VAN DER GRAAF

such as the date dinner that she is organizing with a group of friends. 'We are divided into four groups, each of which arranges dates for another group and makes the invitation, which give them a personalized dressing-up theme. On the evening itself you recognize your date by his outfit, as he got the same theme.' But there is still a lot to do before that, so Jody has enough on her plate once again. **EvdG**

PARTIES

In the party mood? Resource tells you where to go.



TORCKPARK – WOETSTOK WAGENINGEN
Saturday 30 June from 13:00 to 00:00

This fun mini-festival is being held for the fifth time. The ideal opportunity to lounge on your picnic rug and enjoy some great cover bands. The theme is the 80s and 90s. Think Lenny Kravitz, The Cure and Prince.

MATHS BUILDING, DE DREIJEN – INTERCORPORALE
Sunday 8 July from 22:00 to 04:00

One of the big public parties during Ceres' anniversary week. The Maths Building on the old campus will be turned into a fantastic party venue for the occasion. Yes-R will be one of the acts.

MOLENSTRAAT – SUMMER HOLIDAY VRIJMIBO
Friday 13 July from 16:30 to 19:30

Café Loburg, restaurant Sa Lolla, Het Oude Pakhuis and Heerenstraat-theater will be ensuring a perfect start to the holidays with this street party. There will be live performances, food and summer drinks. **R**



PHOTO: SVEN MENSCHTEL

▲ Twisting by the pool at the Festa LAfrique on Saturday 23 June.

Wageningen Master's students do internships and thesis research all around the world, getting to know their field and other cultures. Here they talk about their adventures.

Sustainable palm oil in Indonesia

'Arranging a research visa for my thesis in Indonesia was quite a business. It took me three months. I had to upload a lot of documents and then I still had to Skype at four o'clock in the morning to defend my study in front of an Indonesian admission committee. I had already booked my flight and they gave me no indication whatsoever of what they thought of it, so it was still uncertain whether I was accepted. Luckily I was.

DUAL STRATEGY

I studied how the Indonesian government seeks to create legitimacy for their sustainable palm oil. I conducted more than 40 interviews, most of them in the cities of Bogor and Jakarta, but I went to Sumatra and Borneo too. I had already learned a little bit of Indonesian, just for the daily shopping, but if the interviews were in Indonesian, I took an interpreter along with me. Fortunately, most of the interviews were in English.

Most of the interviews were with government officials but I also interviewed people from NGOs, companies, and representatives of farmers. I found out that the Indonesian government pursues a dual strategy to legitimize its policy. On the one hand, they adopt a very cooperative attitude and there is scope for participation by stakeholders, and on the other hand they set clear boundaries. Internationally, for instance, they behave in quite an authoritarian way. The palm oil is produced in Indonesia so other countries have very little say about it.

PHOTO TOGETHER

During my research I stayed in Bogor, a city with about one million inhabitants near Jakarta. Very few western tourists came there.

When I was in the famous botanical gardens, a lot of Indonesians wanted to have their photo taken with me. But I still felt I was part of the city: I learned to find my way around and I lived among Indonesians. Thanks to the research visa I could come and go as much as I liked so I went to Malaysia, for example. Towards the end of my stay my girlfriend came over and we travelled east, via East Java and Bali to Lombok. It was beautiful and varied, with cities and nature. We usually slept in the homes of Indonesians who rented out rooms. That meant you had a lot of contact with them, which was very nice. I was sorry to have to go back home.' **EvK**



THE WORKS

- Who?** Gersom van der Elst, Master's student of Environmental Sciences
- What?** Thesis at the Centre for International Forestry Research
- Where?** Bogor, Indonesia

More interviews on resource-online.nl

Orion Irregular Opening Hours Summer 2018

	Date	Monday to Friday	Saturday and Sunday
The Building	2 July to 8 July	8 am - 6 pm	Closed
	9 July to 5 August	Closed	Closed
	6 August to 2 September	8 am - 6 pm	Closed
Bikebasement	2 July to 8 July	8 am - 8 pm	Closed
	9 July to 5 August	Closed	Closed
	6 August to 2 September	8 am - 6 pm	Closed
The Spot	2 July to 8 July	8 am - 8 pm <i>(closes Friday 6 July at 4 pm)</i>	Closed
	9 July to 5 August	Closed	Closed
	6 August to 2 September	9 am - 2 pm	Closed
Restaurant	2 July to 8 July	11.30 am - 1.30 pm	Closed
	9 July to 2 September	Closed	Closed

Leeuwenborch Irregular Opening Hours Summer 2018

	Date	Monday to Friday	Saturday	Sunday
The Building	9 July to 2 September	7 am - 10.30 pm	8 am - 5.30 pm	Closed
Restaurant / Coffee Bar	9 July to 15 July	9 am - 3 pm	Closed	Closed
	16 July to 19 August	11 am - 1.30 pm	Closed	Closed
	20 August to 26 August	9 am - 3 pm	Closed	Closed
	27 August to 2 September	8 am - 5 pm	Closed	Closed

	Date	Monday to Thursday	Friday	Saturday and Sunday
Library	9 July to 15 July	9 am - 5 pm	9 am - 5 pm	Closed
	16 July to 26 August	9 am - 5 pm	Closed	Closed
	27 August to 2 September	9 am - 5 pm	9 am - 5 pm	Closed

After 6 pm entrance is only possible after registration at the reception desk

Forum Irregular Opening Hours Summer 2018

	Date	Monday to Friday	Saturday and Sunday
The Building	9 July to 5 August	8 am - 8 pm	Closed
The Library	7 July to 2 September	8.30 am - 5.30 pm	Closed
Student Desk	9 July to 12 August	10 am - 12 pm	Closed
IT Service Point	9 July to 12 August	10 am - 12 pm	Closed
WURshop	2 July to 15 July	10 am - 2 pm	Closed
	16 July to 12 August	Closed	Closed
Restaurant	9 July to 26 August	11.30 am - 1.30 pm	Closed
Grand Café	9 July to 26 August	Closed	Closed
Wageningen in'to Languages	9 July to 5 August	9 am - 5 pm	Closed

During working hours, the building is open to the public. After working hours, entrance is only possible with a WUR card.

Announcements

PRESENT YOUR BSC, MSC OR FIRST-YEAR PHD RESEARCH AT THE ELLS SCIENTIFIC STUDENT CONFERENCE

On 9 and 10 November, 350 students from seven European countries will come together for a scientific student conference on the theme: 'Life Sciences: looking across disciplines'. And you can be part of it! Send a summary of your research in before the (extended) deadline on 30 June. Registration is open for students on all programmes.

WUR.EU/ELLS2018

BEYOND CONNECTION – ME & YOU IN THE DYNAMICS OF COLLABORATION: REGISTER NOW

This course, starting in September, consists of four workshops and four individual coaching sessions: Open up and locate yourself, Dynamics and trust, Network and connect, and Project presentation. We focus on the dynamics at play when people, groups or (project) teams meet and connect across disciplines. The trainers are Djura Prins and Cor Meurs. For more information search the

intranet for Beyond Connection or email Ann-Marie Ryan at lend.chr@wur.nl.

Agenda

Thursday 28 June to Sunday 8 July FILMS FOR STUDENTS

Djam: A Greek road movie about an emancipated girl, refugees and closed borders. *Gabriel e a Montanha*: a sensitive Brazilian reflection on the loss of a friend and a last ode to Gabriel Buchmann. *Homecoming (1945)*: a Hungarian drama about a Jewish family that moves to a small Hungarian village after the war. On Thursday 5 July: *Food & Film: The Salesman*. This benefit screening is part of the International Culture Festival Iran (5-8 July), organized by Wageningen - City of Cultures. It will be introduced by an Iranian film buff and there will be a delicious Iranian buffet before the film. Location: Wilhelmaweg 3A, Wageningen.

€6.50/€5.

MOVIE-W.NL

Saturday 30 June & Sunday 1 July,
10:00-17:00

WEEKEND WORKSHOP SHADOW LIBERATION BY INSPIRINGTHEATER WITH EVAN HASTINGS

A workshop on Political Ecology, Theatre of the Oppressed and Shadows. Creatively crafted visual stories are used to captivate the imagination and invite audiences to interrupt injustice and oppression. Audience members are invited on stage to improvise interventions in scenes depicting oppression. Evan Hastings has a passion for turning pain into medicine through theatre. He inspired theatrical dialogue from the fault lines of war zones, from working with prisoners in high security facilities to engaging families through open air performances in public spaces. Venue: Gaia building. Cost: €70 for students (including lunch). More info: Facebook.

Sunday 1 July, 14:00-17:00

BOOKFACE, AT THE LEEFFESTIVAL

Come to the public library to make a bookface. Find a favourite book and *Resource's* house photographer Guy Ackermans will create a unique bookface. Like the photo? Share it then, and you might win a delicious photo cake or a print of your photo!

11TH EDITION OF EXHIBITION IN ARBORETUM 'SUMMER SNOW' (UNTIL 23 SEPTEMBER)

The theme of this year's *Beelden op de berg* was partly inspired by 100 years of WUR. Summer snow links the idea of endless rejuvenation to the cyclical processes observable all around us in nature: germination, flowering, dying off and sprouting again – nature renewing itself time and again. Ten artists sought inspiration in variations on this theme. There is Eaneas Wilder's flowering labyrinth, Karin van Dam's man-sized 'pit', and Kizan Freijsen's ecological carpet. Sjoerd Buisman focused on cyclical creations out of salvaged wood; Frenchman Stéphane Couchy made a moving construction that reacts to the sun. Every Sunday at 14:00, there is an introductory tour for €4 pp (free for children). You don't have to sign up in advance. Location: Belmonte Arboretum.

BEELDENOPDEBERG.NL

Colophon

Resource is the magazine and news website for students and staff at Wageningen University & Research. Resource magazine comes out every fortnight on Thursday.

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>>TYPICAL DUTCH



ILLUSTRATION: HENK VAN RUITENBEEK

A most wanted item

Since I came to Netherland one and a half years ago, I have always used portable bike lights because of their practicality. And since then, I have lost at least three of them. Almost every time I forgot to take them off my bike, they were gone when I got back.

The last time I lost my lights was when I went to church. It was quiet and already night so I thought my bike lights would be safe, since there was no one around. But after I came back, they were gone, and I had to cycle home without lights, hoping no police would be out patrolling. Another time, I unintentionally left my wallet on the bus from Amsterdam to Volendam. I was in a panic, since all of my ID and bank cards were in there. The customer service lady of the bus company informed me that they post all items of lost property on their website so I had to check it myself. When I did that, I saw a lot of lost mobile phones and handbags, but not my wallet. Luckily the next day, a lady contacted me on Facebook, saying that she had found my wallet and wanted to return it to me. I was so grateful because nothing in my wallet was lost when I got it back. Many of my friends have told me Dutch people are very honest. And I definitely agree. Your belongings are safe here. There is one exception however: your bike light. **Earlyn Yaputra, an MSc student of Food Technology student from Indonesia**

'Your belongings are safe in the Netherlands. With one exception: your bike light'

Do you have a nice anecdote about your experience of going Dutch? Send it in! Describe an encounter with Dutch culture in detail and comment on it briefly. 300 words max. Send it to resource@wur.nl and earn twenty-five euros and Dutch candy.