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RESOURCE [EN]

For everyone at Wageningen University & Research

no 7 – 10 November 2016 – 11th Volume



Unilever is coming

The likely implications summed up | **p.12**

>> ERNST + BIRD PHOTOGRAPHY

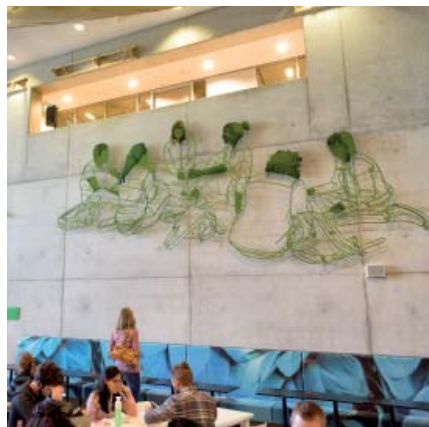
Ernst Bos, researcher on the economic valuation of nature and landscape

'Capturing the beauty of nature'

Every couple of weeks Ernst Bos takes a Friday off to go shooting. Setting his sights on that one artistic shot. 'But there's more to it than that. I also want to show how beautiful nature is and the value of conserving it. My work is all about the economic value of nature. My photos embody the aesthetic value of nature. Just look at the little owl: how beautiful the colours of its feathers are!' **RK / Photo: Guy Ackermans**

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BUNGLER

In the new evaluation system PaCE, which students can use from now on to evaluate their courses, there is a passport photo next to the questions about teachers. Strikes me as a bit tough. Teaching at a university means hard graft, often without immediate rewards. And your students can be demanding, sometimes even ruthless. I experienced this once myself as a lab assistant for molecular biology. Equipped with an out-of-date handbook I made the best of it for weeks, standing in front of a group of bright sparks. I felt more exposed with every question they asked about long-outdated techniques. There happened to be a good friend of mine in 'my' group. He reluctantly admitted that his fellow students thought me an incompetent bungler. Ouch. 'And I told them you do actually know what you are talking about, but hey'. Ouch, ouch. I thought back with shame to the evaluations I had written as a student: about muddled explanations, accents and teachers' nervousness. On second thoughts, perhaps that passport photo is not such a bad idea. It might make you realise you are talking about a person.

Rob Ramaker

>> Behaviour of fleeing wildebeest can give away poachers | p.8



MANY COMPLAINTS ABOUT SHORTAGE OF SPACE

- **Student council: 'Not enough work stations or supervision'**
- **Nationwide lobby for more funding for technical universities**

The Wageningen student council received a lot of complaints from students about shortages of space and supervision. 'During practicals people sometimes have to wait a quarter of an hour because there are not enough teachers for a big group of students,' says Karlijn Hendriks of the Student Council. The council sees this as evidence that the growth in student numbers cannot be adequately absorbed.

Student numbers at the three technical universities and Wageningen University – united in 4TU – have grown enormously in the past few years. The funding of the universities has not kept pace, claim the student representatives of 4TU and the Intercity Student Council (ISO) in an open letter to minister Bussemaker (education, culture and science), minister Kamp and state secretary Van Dam (both economic affairs). The students want extra funding to cater for the growth and prevent the need for enrolment caps. The lower house of parliament has already rejected this idea.

The Wageningen student council is

concerned about the situation at WUR. 'We hear a lot of complaints. The library, for instance, is now overcrowded during revision weeks. Students say there is no space left ten minutes after the library opens,' says Hendriks. Enrolment caps are not a good solution, says the Student council. 'Education should be accessible to all. We want to go on standing up for that principle as a student council,' says council member Ties Terlouw.

The executive board has done its best to find funding to deal with the growth, says the Student council. 'The problem is government. We need buildings to solve the space problem but on the funding we get at the moment we can't build. To keep classes small you need enough space. Students come to Wageningen specifically for the small classes and good quality education, but now they are coming up against all sorts of problems,' says Hendriks. **MF**



PHOTO: GUY ACKERMANS

MORE SPACE IN THE FORUM LIBRARY

The Forum library will be renovated thoroughly in the summer of 2017 to create space for about 200 more work stations. Offices on the third floor will be taken out. The staff working there now will move to the first and second floors. Additionally about half the book-

cases will be taken out and the books will be moved into storage. The makeover is a response to complaints about lack of space and to digitalization, says Dannie de Kleijn. At present there are 500 work stations in the library.

PLAN FOR NEW CENTRE FOR CLIMATE RESEARCH

- **Observatory would provide precise weather forecasts**
- **KNAW favours idea proposed by Bert Holtslag and colleagues**

Bert Holtslag, professor of Meteorology and air quality, wants to set up the Ruisdael Observatory for precise climate change, together with researchers from Delft and

Utrecht, and from the Dutch meteorological institute KNMI, science funding body TNO and energy research centre ECN. This is one of several plans for large research facilities nominated by the Royal Dutch Academy of Sciences (KNAW).

The idea of the Ruisdael Observatory is intended as a resource to enable the government to respond appropriately to climate change. To do that, weather forecasting needs

to be improved, write the initiators. In particular, there is a need for better forecasting of the local and regional effects of extreme weather. The observatory would produce 3D weather reports which are accurate to one kilometre.

The Ruisdael observatory is one of 13 planned research facilities which were selected by the KNAW. The academy invited scientists to come up with 'dream projects' which – if they got funding – would

benefit the science of the future. Along with the climate observatory, the KNAW also selected plans for a multifunctional research platform for ocean research and a facility for measuring gravitational waves. All the projects make use of big data and could potentially lead to scientific breakthroughs, says the Academy. The facilities should be realized by 2025, says the KNAW. It does not have the necessary funds, however. **AS**

ENGLISH-TAUGHT PROGRAMMES PROMPT GROWTH

- Universities with more English-taught Bachelor's programmes draw more students
- WUR wants internationalization but not more growth

The introduction of English-language Bachelor's degree programmes attracts larger numbers of students, show preliminary figures from the universities association VSNU.

Nationwide, the number of first-year Bachelor's students rose this academic year by eight percent. This is partly because more international students are coming to the Netherlands to study for a Bachelor's degree. The University of Twente (UT), for instance, has attracted 20 percent more first-years this year, which is largely

due to the increase in the number of programmes offered in English, says a spokesperson in the university magazine UTnieuws. This year the university is offering twelve English-taught Bachelor's degrees, up from six last year. The University of Amsterdam (UvA) attracted 18 percent more first-years, with the number coming in from abroad going up by 95 percent.

Wageningen University & Research has plans to introduce international Bachelor's degrees too. From September 2018, 7 of the 19 programmes are to be taught solely in English; other interested programmes will follow suit later. Growth is definitely not the aim in Wageningen, though, state the authors of the advisory report on international Bachelor's degrees. Although *Resource* has recently noted that individual programme directors do see growth as desirable for their programmes. **RR**

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Drink problem

Lots of people start drinking less after they've graduated. Not me. Drinks at a leaving do, a PhD get-together, a graduate school reception. Since I started my PhD — yes, that's a job too — my alcohol consumption has increased each year by about two glasses a week. Now I'm in my fourth year.

It's not that I drink excessive amounts, I just drink too often. Every evening sometimes. So last month I decided it would be good to stop for a while. I expected it to be difficult. Seeing other people sipping on a delicious craft beer and feeling incredibly jealous.

I now know it is indeed difficult, but that's nothing compared to the social pressure.

I succumbed in the very first week. I had decided to visit Marta in Berlin. Marta: 'How can you come to Berlin and not drink?' Me: 'Well, you have a point.' Really? Whatever — I ended up drinking. Including Berliner Luft. If you've never heard of it, it doesn't taste at all nice.

Neither does Mexicana, for that matter.

I kept it up in the second week but it was not much fun. 'Aren't you drinking? How boring!' 'What do you mean? Aren't we worth it?' 'Poor you! Have you got health problems?'

A postdoc friend of mine tells me I'm lucky I'm not a woman. 'If I don't drink on just one occasion, everyone assumes I must be pregnant.'

Now I've started hiding at parties as a preventive measure to avoid any questions. And if people ask — which still frequently happens — then I am no longer able to conceal my irritation.

Now I understand exactly why people who don't drink are always so unsociable. **B**



in brief

>> SUSTAINABLE AGRICULTURE

Research funding gone

Budget cuts to agricultural research in the Netherlands are damaging not just for Wageningen Research but also for the ministry of Economic Affairs. There is no money left for developing sustainable sheds and barns or new crop farming systems, for example. This is apparent from a WUR analysis, *Dun IJs*, (Thin Ice). In 2009 Wageningen Research (the former DLO) received nearly 100 million euros for programme research; in 2016, less than 75 million. Of that money, barely 20 million is available for policy research and barely 10 million for fundamental knowledge-base research. WUR has now listed for the ministry which research themes are being sacrificed to the cuts. Examples are research on sustainable production chains and system innovation. What is more, there is much less money for research in the fields of animal welfare, plant health, manure and minerals, nature, soil, water and climate.

AS

>> UNILEVER PRIZE

Development research in Congo

Paul Hofman, Master's student of International development studies, won the Unilever Research Prize this year for his final thesis on the dissemination and adoption of agricultural technology in the Democratic Republic of Congo. Every year Unilever's R&D department allocates 13 prizes to Dutch universities. One outstanding student

is selected at each university. The prize consists of a sculpture and 2500 euros. **AS**

>> ART

Scala Natura

A new artwork temporarily graces the lawn outside the Forum. The work, *Scala Natura*, and an exhibition inside the building relate to a new book by Gerard Jagers op Akkerhuis: *Evolution and transitions in complexity*. In the book, the ecologist and thinker and 12 co-authors elaborate on his quest for a new order in nature. *Scala Natura* refers to the eponymous 'ladder of life' thought up by the Greek philosopher Aristotle as a way of categorizing nature. The artwork will be here till next summer. If the material survives the winter. **RK**



Stijn van Gils (29) is doing doctoral research on ecosystem services in agriculture. Every month he describes his struggles with the scientific system.



WUR TAKES TROUW JOURNALIST TO COURT

- Hans Marijnissen's claims unjustified, says WUR
- Trouw: 'University uses its standing in the industry's interests'

Wageningen University & Research is taking legal action against Hans Marijnissen, a journalist with the daily newspaper Trouw. The issue at stake is whether the results of the Wageningen study on deposit money had been agreed beforehand in a letter. The case was heard on Monday 7 November.

Between 2009 and 2012, Wageningen Food and Biobased Research did research on the recycling of household plastic waste in the knowledge centre on post-collection waste sorting. The study compared the costs of the deposit money system with those of waste

sorting before and after collection. A draft paper for the supervisory committee was leaked by a client with the aim of convincing the minister responsible to scrap the deposit money system.

Trouw journalist Marijnissen followed this case closely and commented in articles that it looked very like research on demand, with the industry as client. In the TV programme De Haagse Lobby, however, he went a step further. 'I have seen the tender document and that already said the provisional conclusion had to be that the deposit money system was too expensive,' says Marijnissen. WUR asked him to produce this letter or withdraw his allegations. When he did neither, the institution took out a court case, claiming that Marijnissen's allegations are 'damaging' and 'unfair', and once again demanding rectification.

Marijnissen's lawyer claims that the leaked draft WUR paper, an A4 sheet of initial results, was the tender document in question. That paper stated that recycling was the most expensive system. This was based on a quick two-month literature study, says Trouw. Also, at that stage a WUR employee called the supporters of deposit money 'opponents', reports the Trouw defence lawyer. He bases this on confidential documents and email exchanges which WUR made available to the Academic Integrity Committee and which were sent to Marijnissen by email.

Trouw's lawyer claims that the knowledge centre on post-collection sorting is a cover for the industry so it can use research to further its interests – the large-scale introduction of post-collection waste sorting. 'The university is us-



Trouw journalist Hans Marijnissen.

ing its academic standing in the interests of the industry. And now it wants to whitewash this bad behaviour by suing the journalist.'

WUR's defence lawyer claims that Trouw shows bias. The daily paper systematically interprets documents without reference to their context, he says.

The verdict is due in two weeks.

AS



PHOTO: SVEN MENSCHER

COSY

A very close encounter with the performing arts. This was certainly possible at the sixth Studium Gener-

ale theatre festival Roomservice on Thursday 3 November. Nine student rooms dotted around Wageningen were the setting for a range

of intimate concerts, theatrical performances, film screenings and poetry readings. In Huize Calzatura in the High street, an audience of

about 15 squeezed in between cupboards, clothes and lamps to enjoy the sound of the Gouds Clarinet Ensemble. **R**

'WAGENINGEN CHANGED REPORT UNDER PRESSURE'

- Ministry apparently asked for change to fish farming report
- Academic integrity committee investigates

Wageningen researchers may have changed a report on fish-farming at the request of the then minister of Agriculture, nature and food quality, said daily newspaper *Trouw* on 1 November.

The report from 2010, put together by Wageningen Economic Research (formerly the LEI), addressed the question of why fish farming in the Netherlands was in decline. The client, the ministry, saw the report in a draft stage. Internal emails and documents, obtained through the law on transparency in government (WOB), show that civil servants were uneasy about the impact of certain passages on an ongoing legal case.

The Socialist Party (SP) asked questions in

parliament about the documents last June. That prompted the Wageningen Social Sciences Group (SSG) to launch an internal investigation. A couple of weeks ago the matter was referred to the Academic Integrity Committee (CWI) at Wageningen University & Research. The committee will announce its verdict in about seven weeks' time. Until then, WUR declines to comment.

The legal case concerned is about whether there was any question of unfair state support for a fish farmer who was given a grant to establish a tilapia farm. He then switched to farming claresse, a hybrid species of catfish. Fish farmers breeding African catfish, who had not received grants, saw this as unfair competition and took the government to court. In its defence the ministry said claresse and African catfish were two different products. In a draft version of the LEI report, however, the researchers had said: 'It cannot be ruled out that in some



The hybrid catfish species claresse.

market segments African catfish will be replaced by claresse.' But what the final version said was: 'The product claresse differs from African catfish in the colour and texture of the fillet.' **RR**

Read too the article on academic integrity on page 20.

RESEARCH ON SUSTAINABLE FOOD PRODUCTION IN CHINA

- Chinese government invests over three million
- Development economist Nico Heerink coordinates project

Chinese and Wageningen scientists are going to study how they can develop sustainable food production in China. To this end they are receiving over three million euros in funding from the Chinese ministry of Science and Technology and the Royal Dutch Academy of Sciences (KNAW).

The Chinese and Wageningen researchers intend to explore the cross-connections between food production, land use and water pollution, in order then to make recommendations for a safe food system based on a careful management of resources. There is an urgent need for an integral approach of this kind in China, which is plagued by food scandals and environmental pollution. Wageningen development economist Nico Heerink will be coordinating the research. The project builds on long-term collaboration between Wageningen and Chinese research groups. Wageningen development economists have been working for more than 20 years with the agricultural university in Nanjing, Environmental Policy has close links with Tsinghua University in Beijing, the Soil quality department with the China Agricultural University (CAU) in Beijing and the Wageningen group Water systems and global change with the Chinese Academy of Sciences in Shijiazhuang. **AS**

HAVE MERCY, MR TRUMP

BLOG

Resource blogger Leonardo Medina Santa Cruz from Mexico had a long, not so happy night following the US presidential elections.

18:51 Trump won't win, of course. He won't. He can't. This is a man who threatened to block remittances if we don't pay for his damn wall. That's the money Mexicans in the United States send their families back home, it's our highest source of foreign income. If he goes through with it, millions of people will go hungry.

22:19 I spoke with Rafael and Ernesto, my cousins living north of the border. No, they are not drug dealers, nor rapists. They are scared, though, as we all should be. A US leader who is fascinated by the destructive power of nukes, who believes climate change is a Chinese hoax, who says 'I love war'. He would impact lives far beyond his own country.

00:32 The polls on the east coast are closing now, the counting is on. First glimpse: he rules in Kentucky and Indiana. I need to get some sleep.

04:02 Crap! He won Florida. My aunt jokes about learning the wall-building craft, my cousins are questioning democracy.

05:08 Why am I even surprised? Many Americans have been thinking their

country is messed up for a while now and they mostly blame immigrants. Suddenly, this guy comes and says it's okay to say it out loud. Says it's okay to hate.

07:46 He won Pennsylvania. It's basically over now.

07:47 F*ck.

08:12 In one night, hate triumphed over love, ignorance over knowledge, hierarchy over equality, fear over hope. I don't know what the future holds. I'm afraid, though. I know that much. **B**



FLEEING ANIMALS CAN GIVE AWAY POACHERS

- Movement patterns vary per species and situation
- NWO gives millions of euros for research in South Africa

Movement patterns of animals seem to be so specific that they can give away the reason they are on the move. Wageningen researchers at the Resource ecology chair group are going to see whether they can make use of this fact to catch up with poachers before they strike. The project, sponsored by the NWO to the tune of a million euros, is four years in duration.

The idea is based on recent Wageningen research in South Africa which studied how the density of zebras and wildebeest changes after an encounter with a lion. The researchers fitted the animals with transmitters and tracked their movements. The expectation was that the density would decrease, explains Frank van Langevelde. After all, the animals flee and disperse.

And the expectation was right, but the surprise was how long the effect lasted. 'The disturbance was visible for up to eight hours after the encounter,' says Van Langevelde. Only then is the density of the herds and the speed at which the animals move back at the old level. 'As well as that, you can distinguish between zebras and wildebeest on the basis of those patterns.'

The results set the researchers and Professor Herbert Prins on a trail. As Henjo de Knecht expressed it: 'If you can measure the reaction of



animals to a disturbance so precisely, can't we use that in the war on poaching?' The assumption here is that animals such as zebras, wildebeest and impalas react differently to disturbances by poachers than to those caused by lions, tourists or park rangers.

In order to test this, 200 animals will be tracked in a South African wildlife park next spring. The animals will be fitted with a tracking device including a speedometer, so that ex-

actly what they are doing can be monitored. De Knecht: 'The idea is that when abnormal behaviour is detected you can get a park ranger to the spot as fast as possible.'

Technologists from Twente University are involved in the project too. Should the warning system turn out to work, the next step is to get an idea of the animals' movement patterns without the use of transmitters, using infrared cameras from space for instance. **✎ RK**

GENE FOUND THAT MAKES BANANA FUNGUS RESISTANT TO FUNGICIDES

- Farmers spraying increasingly often to combat black sigatoka
- Gene *Pfcp51* reduces sensitivity to fungicides

Banana growers are having to spray increasingly often to keep black sigatoka at bay because the fungus responsible for the disease is becoming less and less sensitive to fungicides. Pablo Chong, a PhD candidate under phytopathologist Gert Kema, researched which gene in the fungal DNA is responsible for this resistance. He came up with *Pfcp51*. This raises new possibilities for crop protection, says his supervisor Gert Kema.

Black sigatoka, caused by the fungus *Pseudocercospora fijiensis*, damages the leaves of banana plants, resulting in diminished or even devastated harvests. While the fungus is typically treated with azoles, it is now developing resistance. Chong assessed seven hundred strains of the fungus for their resistance to three azoles. This led him to discover that the fungus's sensitivity to the fungicide was reduced by the over-expression of *Pfcp51*, which causes the fungicide to be pumped around the fungus more quickly.

As the gene is in the fungus, there is nothing to be gained by genetically modifying the plant. However, this research does provide useful information for finding other crop protection agents with which to combat black sigatoka, says super-

visor Kema. 'It is important that we find agents to kill the fungus *P. fijiensis* that use other lines of attack than the azoles.' A cocktail of agents should reduce the evolutionary pressure exerted by the fungicides, so that the agents are more effective.

Nevertheless, this is not yet a sustainable solution, fears Kema. 'Sooner or later, the fungus will again develop resistance. We need to make a resistant banana.' And why don't we have one yet? 'Because the development costs are at least 20 million euros and the banana sector is too conservative to invest that much.' Chong's research was funded by the government of Ecuador, the world's largest banana exporter, and the agrochemical company Syngenta. **✎ AS**

A STEP CLOSER TO TRACING FRUIT JUICE FRAUD

- Grape juice reveals information about origins and cultivation method
- Possible instrument for demonstrating tampering

Using a combination of chemical and statistical analysis methods, it will soon be possible to trace fraud involving fruit juice. This has been shown by Daniel Granato's doctoral research.

Fruit juice is susceptible to tampering. 'It is made into concentrate and the concentrate is sent to the other side of the world where it is reconstituted,' says professor of Food Authenticity Saskia van Ruth, supervisor of the research. 'That reconstitution is a high-risk step.' Producers sometimes dilute the juice more than is stated on the packaging, mix it with cheaper juices without stating this or sell regular juice as organic.

So that such food fraud can be stopped in future, at Wageningen University & Research Granato first searched for the differences between commercially available fruit juices. Next, he focused on juice made from red grapes from various regions (Brazil and Europe) and produced using various cultivation methods (organic, biodynamic and regular). Granato looked at the phenolic content, an important group of bioactive compounds, and at

the antioxidative effect. He also used an instrument called an electronic tongue to produce a taste profile of the juices. For scent profiles, he used the mass spectrometer.

The greatest differences, Granato found, were between juices made from different fruits, such as apples, oranges, pomegranates and elderberries. In the group of red grape juices the differences were very small. But by unleashing all sorts of statistical techniques on the data, Granato was nonetheless able to establish with great certainty whether a particular grape juice came from Brazil or Europe. And when the details of the organic and biodynamic juices were combined by region, he could distinguish them from the regular juices. Organic and biodynamic red grape juices could not be distinguished from one another.

Not that this means an off-the-shelf method for tracing fraud is now available, says Van Ruth. 'This research is a preliminary step. The first thing we have to do now is develop a large database. In other words, measure very many samples so that we can accurately assign a juice to a certain group.' That need not take years. 'We now know which analyses we need to carry out. If you set your mind to it, you can put together a database like this in under six months. It is more a question of money than anything else.' **AS**



VISION <<

'Curb on patents is good news'

The European Commission wants to set limits to patents on plants and animals. The legislative body will not be granting patents for plants and animals which are the product of conventional biological processes such as cross-breeding and selection, wrote the Commission last week in a clarification of the European Biotechnology Directive of 1998. That is good news, says Bert Visser of the Centre for Genetic Resources Netherlands (CGN) in Wageningen.

Has it been a heated debate?

'It certainly has, because there are huge interests at stake. Major breeders such as Syngenta and Monsanto want extensive patent rights on plants. Small breeding companies cannot afford to apply for and defend patents so they are hampered by the patenting legislation. This is really a conflict between the haves and the have-nots. And it is important that we keep enough breeding companies. The CGN is pleased with this announcement.'

Why are you pleased?

'Because the patenting legislation imposes limitations on the use of our collection too. The European Patent Office gave Syngenta a patent on bell pepper plants which are resistant to whitefly, for example. That natural characteristic comes from our bell pepper collection, which was developed with public funding. We are appealing against the granting of that patent.'

For which plants is it still possible to get a patent?

'For all plants and animals which are the product of non-biological processes, such as genetic modification. And I suspect also for new breeding techniques such as Crispr-Cas, because with that you laser changes in the genome. That is a technical process.'

What are the implications of this announcement?

'It is up to the independent European Patent Office what they do with the European Commission's ruling. But they will certainly have to take it seriously. The appeal against Syngenta is a nice test case in that regard. And I think the patent holders, especially the big breeding companies, are considering taking this to court because of their investments in patents. What is not clear yet is whether this ruling applies only to new patents or has retroactive effect. If that is the case we can expect more court cases.' **AS**



THE UNDERGROUND LEGACY OF PLANTS

- Gerlinde de Deyn studies plant-soil interactions
- Fundamental insights useful in agriculture as well

What legacy do plants leave behind in the soil after they have disappeared? This is the question that keeps Gerlinde de Deyn busy. In October she was appointed personal professor in the Soil biology and biological soil quality chair group.

The legacy of plants takes a variety of forms. Take soil life for instance. Plants create the conditions under which specific fungi and bacteria flourish, thus determining which species live where. Plants also influence the amount of organic matter in the soil. De Deyn is interested in how this interaction between plant and soil works. She would like to obtain insights that go beyond generalizations such as 'diverse vegetation is beneficial.' Fundamental insights gained can then be applied in agriculture. Legacies influence matters such as the growth of newly planted agricultural crops. It is useful for farmers to understand this process.

For some time now, De Deyn has been study-



PHOTO: DAVID VROOM

ing legacies with the help of satellites. By using remote sensing she hopes to see at an early stage whether plants leave a legacy behind in particular soils. Meanwhile she is working hard on her own academic legacy. She is an editor of the *Global Soil Biodiversity Atlas*, a recently presented reference work surveying all forms of

life in the soil. She is also very active in outreach towards the general public. She is involved in Science Café Wageningen, for instance, and she helped get hold of Bill Gates for the television programme College Tour. She also works with an artist to make time lapse films of soil life. **RR**

BEES ON THE TRAIL OF CANNABIS

- Successful trial carried out for Taskforce Brabant Zeeland
- Wageningen students came up with the idea

Bees can be easily trained to track down illegal cannabis farms. This has been shown by a trial carried out by Wageningen bee researchers for Taskforce Brabant Zeeland. The idea was conceived by Wageningen students. As part of their Academic Consultancy Training (ACT) they were tasked with devising innovative projects based on Wageningen-type knowledge that could put a spanner in the works of cannabis farms. The client was Taskforce Brabant Zeeland, an organization in which the police, judicial authorities and tax authorities are cooperating to fight organized crime in the southern provinces.

The students came up with the idea of using bees as a bio-informer. Not that this is new; Wageningen researchers are already using bees to identify sources of environmental pollution. But that involves the passive gathering of chemicals foreign to the environment. These cling to the

bees while they are out foraging.

In this new project the detection is active and bees are trained to smell cannabis plants, explains researcher Coby van Dooremalen. A job that bees are well suited for, she says. They have an excellent sense of smell and are easily trained. In addition, the researchers are applying classical conditioning. 'We use sugar water to train the bees. First we get them used to drinking sugar water from a cotton bud. Then we add the scent of cannabis and eventually they respond to just the scent.'

The bees respond to the cannabis scent with what is known as the proboscis extension reflex, which means they stick out their tongue. A sensor detects this. For this task, Van Dooremalen has been using a Vador 136, a prototype that looks like a dustbuster. The inner part of this instrument holds 36 trained bees, each one sitting in its own little harness, waiting to smell.

According to Van Dooremalen, the training takes no more than an hour. 'You can teach them anything. I started them on the scent of a general household cleaner. That worked well. Later I was given some small cannabis plants to practice

with.' It is now clear that this method works. Further research is needed to learn more about just how sensitive the method is. **RR**



The remains of a cannabis farm shut down in Amsterdam.

PHOTO: A. STORM PHOTOGRAPHY/SHUTTERSTOCK.COM

Mexican blogger Leonardo went to see the gay monument, Mars researcher Wamelink appealed to kids and the varroa mite's days might be numbered. You can read about all this and more on resource-online.nl.

MEANWHILE ON...



RESOURCE-ONLINE.NL

GAY MONUMENT

Blogger Leonardo looks back on his recent visit to the Anne Frank house and the gay monument in Amsterdam. 'Unlike Anne, I'm free to leave the building into a surprisingly warm, sunny day. I spot, around the corner and shadowed by the Westerkerk, a pinkish granite triangle (...). The sign reads Homomonument, "to inspire and support lesbians and gays in their struggle against denial, oppression and discrimination". The triangles replicate the pink marks used in Nazi concentration camps to identify those who were held captive after being exposed as homosexuals. I remember Anne's houseguest: "this could easily happen again". It may already have.'



FOTO: KAVALENKAU/SHUTTERSTOCK.COM

name is 'Koedood' and she is married to Mr 'In 't Veld'. So she is named Mrs Koedood-In 't Veld: Mrs Cow dead-In the Field. The funniest one I know so far...

KLOKHUIS PRIZE

Ecologist Wieger Wamelink has won the Klokhuis science prize, issued by the Dutch children's television programme Klokhuis. His research on growing vegetables on Martian soil appealed to a jury of children as well as to the editors of the popular science programme. In cultural centre LUX in Nijmegen, Wamelink's extra-terrestrial agriculture had to compete with research on topics including robots in the classroom and why people cry.

Watch the video
on resource-online.nl.



VARROAKILLER

Wageningen came second in the annual iGem competition for synthetic biology. This is the second time a Wageningen team has scored highly. The Wageningen students led by their captain Thomas Swartjes reached the limelight in Boston on 31 October with the varroa killer. This is a modified *E. coli* bacterium which produced a toxin that specifically targets varroa mites. Varroa is a major cause of bee deaths.

COLLEGE TOUR

Student society Ceres will be organizing the annual Captains tour on 18 November. This is a variation on the television programme College Tour. The guest is CEO Onno van de Stolpe of

biotech company Galápagos, specialized in developing medicines with novel modes of action. The Captains tour is open to all.

BUSSEMAKER REJECTS LOBBY

Minister Bussemaker does not intend to allocate any extra funding to the technical universities in order to avoid or remove enrolment caps. The minister announced this in parliament. The technical universities already get more funding than the rest, she said. The VVD and the CDA were not satisfied with her explanation. They asked Bussemaker to launch a searching investigation into the funding of universities, with the suggestion that more funding should go to the technical universities.

WHAT'S IN A NAME?

In the Typical Dutch series Yue Han from China had some fun last month at the expense of silly Dutch surnames. This response to that story from 'Mrs Smit' is one to treasure: 'I'm Dutch, my surname is not so special (Smit: Blacksmith), however my elderly neighbour's sur-

PROPOSITION

'Direct integration in Dutch society is achieved when you become outspoken.'

Proposition in the thesis presented by Shairul Izan Binti Ramlee, who graduated with a PhD on 28 October

Unilever comes to campus



Unilever is going to build an R&D centre for nutrition on the Wageningen campus, next-door to FrieslandCampina. From 2019 the building will accommodate 550 of the multinational's research staff. What are the possible implications of this for Wageningen University & Research? Does Unilever really stand to benefit? And will the the company coming here affect the independence of Wageningen research? Answers to these three questions from some of the people involved.

text Albert Sikkema illustration Geert-Jan Bruins

1 What does the arrival of Unilever mean to WUR?

An influential multinational moving in next-door. What does that mean for Wageningen University & Research? Professor Remko Boom, who knows Unilever inside out, sees more pros than cons.

Remko Boom is familiar with Unilever. He worked at the company's R&D lab in Vlaardingen for six years and has worked a lot with Unilever since he became professor of Food technology at WUR in 1998. Particularly within the Institute for Sustainable Process Technology (ISPT), a consortium of universities and companies seeking to improve their processing and make it more sustainable.

'Unilever has big ambitions when it comes to sustainability,' says Boom. 'The company is in Wetsus too, the water institute that does research on water-saving measures and waste water from cleaning processes. The company is investing in projects aimed at saving water throughout the chain.' Unilever is a major research partner in the Netherlands, says Boom. 'And if as WUR we have a mission to make better use of resources, it is logical to collaborate with other parties that want to do that too, such as Unilever.'

For Boom, Unilever is a nice research partner to work with. 'The researchers there have all got PhDs, they know a lot and you learn a lot from them. In some research fields they are ahead of us.' Unilever's R&D centre is big and has the capacity to do fundamental research too. 'When I worked for Unilever, I was working on mathematical models. That research did not lead to any direct applications. And I never had the idea that the management wanted to influence the results of the research. They always looked for criticism, including from universities. Which is appropriate for a market leader that produces consumer products. You don't want your claims to prove shaky.' Unilever does not publish all its research results, adds Boom. 'Things which are crucial to the company, it keeps to itself. But it is not a secretive company.'

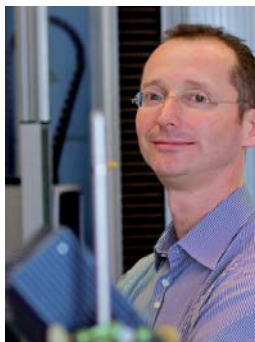
According to Boom, Unilever coming to Wageningen is

going to mean more collaboration between WUR and the company over the using of research infrastructure. 'I hope they will share expensive equipment, for example at the Centre for Advanced Technology AgroFood. That sort of collaboration will then make WUR stronger too. I also think more joint projects will be set up, because strong researchers will talk to each other more. And thirdly, this is good publicity for Food Valley of course. It wouldn't surprise me if other research institutes will want to set up shop in Wageningen now too.'

But won't this close collaboration combined with the geographical proximity of a company compromise WUR's independence? Not necessarily, says Boom. 'I don't see the companies as a customer, because the customer is always right. I see them as partners you can work with if you like. If I have to choose between a company and a PhD researcher or a student, I'll choose the PhD researcher or student. I always tell a company that before we start a study. If the company wants us to switch to a new topic, for instance, while the PhD researcher wants to go deeper into the topic we're on at the moment, I'll go with the PhD researcher's wishes.'

WHAT DO WE ALREADY DO WITH UNILEVER?

Unilever has been collaborating for years with the Wageningen nutrition and food research groups, especially in the Top institute Food and Nutrition (TIFN) and the Institute for Sustainable Process Technology (ISPT), broad consortia of universities and companies for pre-competitive research. The company also works with Wageningen water technologists in Wetsus, the European centre for sustainable water technology in Leeuwarden. And Unilever finances three endowed chairs at WUR: those of Rob Hamer (Food chemistry), John van Duijnhoven (Biophysics) and Simeon Stoyanov (Surface science). These professors all work on fundamental research questions. They decline to comment on Unilever's plans in Wageningen.



Remko Boom

2 What's in it for Unilever?

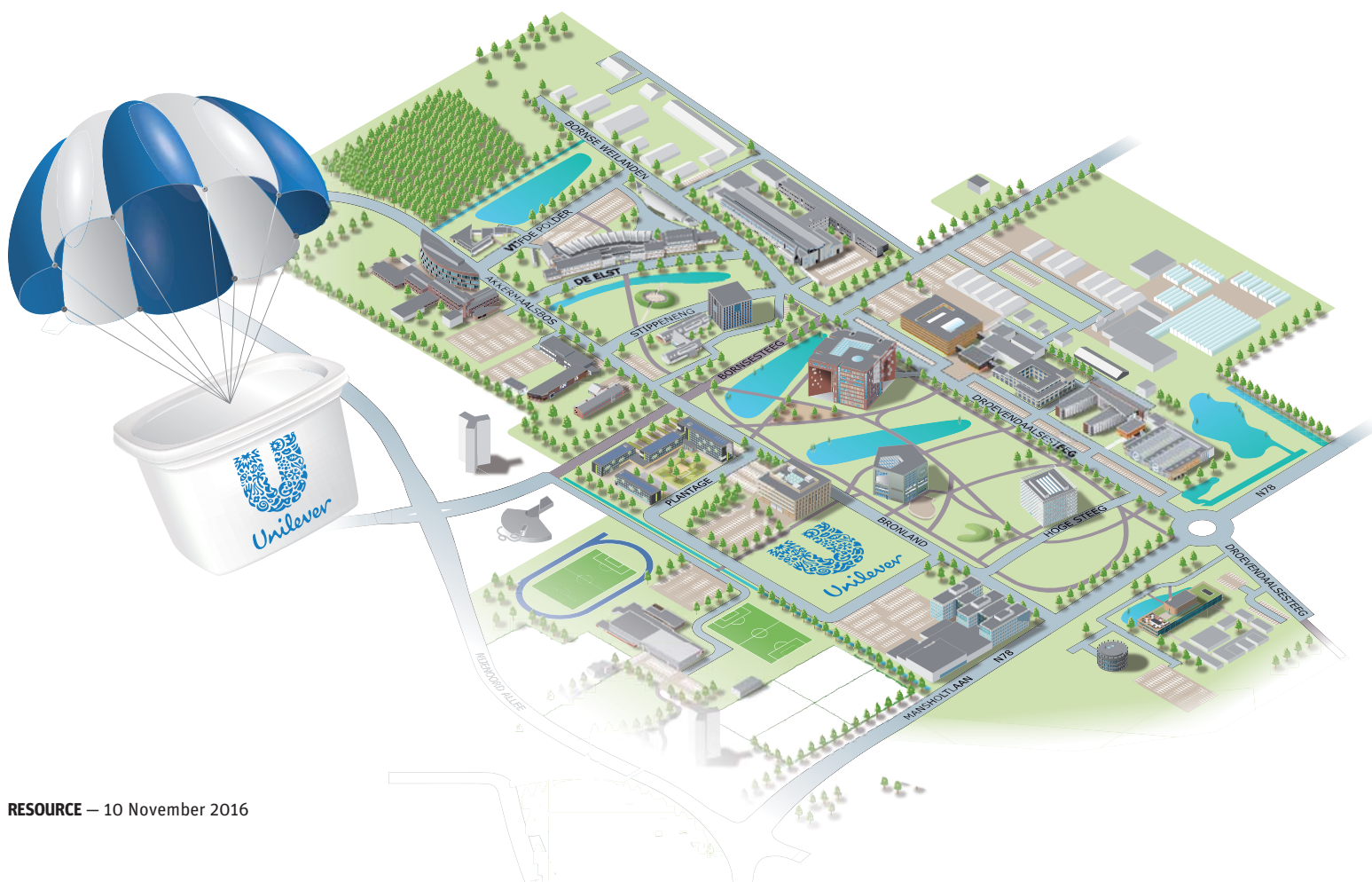
Unilever hopes the branch in Wageningen will give innovation a boost. FrieslandCampina has had its Innovation Centre on the Wageningen campus for three years now. Has that proved beneficial? Certainly, says Ger Willems, research director at the company.

Willems does not have to think hard to come up with the benefits of coming to the Wageningen campus. 'The biggest advantage for us is that it makes collaboration so easy.' Formerly, when he worked from FrieslandCampina's R&D lab in Deventer, Willems had to make appointments to go to Wageningen. Nowadays he calls research leaders at WUR to ask if they have time for a cup of coffee. After all, they are walking distance apart. 'The intensity of the cooperation has increased a lot.' The dairy company has been on the Wageningen campus since 2013. The number of joint projects with WUR has not increased significantly in these years, says Willems. 'We already knew which Wageningen groups were relevant to us before we moved here. We were already working with them. But now it's much easier for our researchers and those at WUR to pop in to see each other. The quality of the collaboration has improved a lot.' A second benefit is what Willems calls 'bycatch'. 'You are chatting to someone at WUR and you hear something. When I was at the open day at Food & Biobased Research,



Ger Willems

for instance, I heard they had developed a machine for measuring the ripeness of fruit. Then I wondered whether you could also use it to measure the ripeness of cheese. That turned out to be too difficult, but you only make a connection like that if you happen to come across it.' Another bit of bycatch looks likely to lead to a follow-up project. At a business drinks party Willems came across a company on the campus with a 3D printer. 'That was a nice coincidence because just at that time we wanted to do something with 3D printers related to packaging.' Bycatch can produce innovations and it can save money too. The most recent example, says Willems, was when



researchers at FrieslandCampina wanted to buy an some expensive analysing equipment. Before making the purchase they called in on researchers at WUR. They had a different machine which only cost a quarter of the one FrieslandCampina had in mind, and with which they could do the same research. 'That's the sort of nice coincidence you only get if you visit each other.'

FrieslandCampina also shares facilities with WUR in the Centre for Advanced Technology AgroFood, and makes use of the library and postal services at WUR. In turn, the university's Dairy practicals are conducted in FrieslandCampina's innovation centre, where about 30 WUR students spend three weeks making butter, cheese and yoghurt. 'We have the right facilities for that. At first people thought: "A nuisance, extra work, having students around." After the

first time it was: "It's nice, training young people – rewarding work."'

Willems believes in the informal collaboration between companies and the university. 'You have to get to know each other and learn to trust each other. For that you need to meet up regularly so that you know what to expect of each other. You can sew up research collaboration in contracts, but they are often based on mistrust and that doesn't work.' Willems is aware of the critical noises made by people who think the business world dictates the research agenda too much, because often nowadays researchers need a signature from companies in order to get funding for a proposal. Willems: 'We try to provide clarity by indicating what our research agenda is. Then WUR researchers know: there's no point going along to FrieslandCampina with this topic.'

3

Does the presence of companies here affect independence?

The imminent arrival of Unilever in Wageningen UR has revived the discussion about commercial interference in research again. This interference is indeed going too far, claim three Wageningen professors, but that has nothing to do with geographical proximity. It is due to a glitch in research funding by NWO.

Professor of Food microbiology Marcel Zwietering likes working with food producers such as Unilever, preferably in a consortium. 'As a food microbiologist, I have to collaborate with the food industry. If I don't do that, I'm not doing my work properly. But for the sake of balance it's good for me to work with societal organizations addressing food safety too.'

That balance has been lost now, says Zwietering. 'Most of the research proposals nowadays have to be submitted via companies.' The goes not only for research financiers focusing specifically on public-private collaboration but also for the major research financier NWO. 'It has gone too far. the industry now has too much of a say in the research agenda.'

Sacco de Vries, professor of Biochemistry, agrees. He gives an example. 'The NWO programme Building blocks of Life asks companies for 10 percent cofinancing. A project worth half a million euros has just been acquired for this fundamental research programme. So then you have to generate 50,000 euros from companies for fundamental research. Often that's not feasible. Companies get approached by so many researchers that they don't have any more funding available.' These days, companies are even asked for cofunding for EU networks training PhD researchers, says De Vries. 'The funding system for research with uncertain results is completely out of kilter

at the moment.'

According to Sander Kersten, professor of Nutrition, metabolism and genomics, the influence of companies extends to Wageningen PhD research as well. 'I think 20 to 30 percent of my PhD candidates are working on public-private projects. These are financed by NWO and one or more companies, for example, but in that case it is ultimately the company which sets the research agenda.'

Kersten does not blame the companies for this. 'But I do question whether this is a sensible system from the Dutch government's point of view. They now leave research decision-making entirely up to the business world. This means less fundamental research and more research focused on the short term.'

Kersten raised this problem recently in the Dutch newspaper *Het Parool*. In public-private research projects in the top sectors, funded by the NWO, he explains in the article, cofinancing by companies is compulsory. So the companies negotiate the setup of the research with the researchers. But at the end of the day, when all the research proposals for the top sector have been worked out, the company can suddenly withdraw because it thinks another study is more important. There is more and more of this kind of dropping out, says Kersten. 'You are at the mercy of the company. Previously you sometimes had your project rejected by the NWO, but then you knew there were other strong groups who must have submitted a better proposal. You don't know that anymore now, though.'

According to Kersten, research groups face a dilemma now. 'We need to ask ourselves whether this is what we want. At the moment we often submit proposals in all sorts of places and these are the kinds of problems we run up against. We could be concentrating on academic quality and depth instead.' But in the current funding system that would mean accepting that your research group will shrink. ③



PHOTO: GUY ACKERMANS

Marcel Zwietering



Sacco de Vries



Sander Kersten



ART IN THE CANTEEN

Two giant art works have graced the concrete walls of the dining rooms in Orion since Thursday 3 November. This creation in green steel, representing convivial student life, is the work of American artist Frank Plant. It is based on photos Plant took of groups of students on the grass on a warm spring day. In the other Orion dining room hangs an enormous globe build of pieces of used wood. This work by Amsterdam artist Diederick Kraaijeveld emphasizes the international dimension of the university.

© RK, photo: Guy Ackermans

Read the whole story
on resource-online.nl.



Noa en Fientje are serving science!

For most people, the phrase ‘Wageningen animal research’ brings to mind pigs, cows, chickens and fish. But for the past four years cats and dogs have also been crossing the threshold of Zodiac. ‘Companion animals are very important in our society. Life sciences includes them too.’

text Rik Nijland photos Sven Menschel

Noa would like nothing better than to reach up and grab that tasty dog treat from the table. The eleven-year-old half Labrador, half Golden Retriever stretches longingly in its direction. Until her owner pulls her firmly by the lead past the temptation. ‘Do you see how she does that?’ whispers Bonne Beerda of Behavioural Ecology. ‘That is actually what this research is all about: how does the owner handle the dog?’

To avoid causing distraction in the test room, we watch Noa, her owner and a researcher from behind a one-way screen, the kind used in interrogation rooms in American police series. Cameras record every action that occurs in the grey-painted room in Zodiac, even during breaks: how do the dog and owner interact then?

COMPANION ANIMALS

This nutrition and behavioural centre for dogs and cats was set up four years ago when the ani-

mal researchers moved from the Marijkeweg in Wageningen to the campus. ‘The interest in companion animals coincided with the switch from zootechnics to animal sciences,’ explains Guido Bosch of Animal Nutrition. ‘Before that, we studied cows, pigs, chickens and fish; since then the focus has widened to include the one-and-a-half million dogs and nearly three million cats in the Netherlands. They are very important in our society. Life sciences includes them too.’

Traditionally, companion animals are the research field of the Faculty of Veterinary Medicine at Utrecht University. Not that Utrecht and Wageningen are in competition, believes Beerda. Over there, they focus on the health problems of individual animals. ‘If you have a dog that chases its own tail, they can tell you in Utrecht what medicines must be taken and what behavioural therapy is needed. We study where deviant behaviour comes from. It might be inherent to the animal itself or stem from the environment, including the owner.’

OVERWEIGHT

The cats studied by the researchers in the nutrition and behavioural centre in Wageningen live on site. Some thirty castrated male cats and spayed female cats spend the day in mixed groups of eight animals in a room with outdoor access. ‘If you do behavioural research on cats you have to provide their accommodation,’ tells Beerda. ‘Cats are less used to travelling than



French Mastiff Fientje waits to see what will happen. She is participating in an undergraduate study into whether dogs are altruistic.

dogs. If they had to come here for a behavioural test, they would be really distressed by the time they arrived.'

The campus cats also take part in welfare research. For example, students learn which signals indicate excitement. In order to see this in an extreme form, they then do stress research in a cat shelter. 'We are keen to avoid inducing stress here,' tells Bosch. 'Our cats are too valuable for that. Stress would interfere with the nutrition research we are doing, for example.'

Not only are foods tested for manufacturers who do not have the necessary facilities, but an important question for the researcher is why so many cats are overweight. As with people, for animals this is a harbinger of all sorts of ailments. This is why Bosch is trying to find a balance between protein content, tastiness and the satiation offered by the food. But another issue is also addressed: the cat's personality.

'At the moment we are looking at whether impulsivity increases the risk of overeating. We have a test for this. Cats can choose to press one of two pedals. Pressing the one pedal get them a small treat immediately, pressing the other pedal gets them a bigger reward but they have to wait for it.' Initial results indicate that impulsive cats, the great majority of whom choose the quick reward, are at greater risk of being overweight than cautious animals.

SEPARATION ANXIETY

When carrying out tests on dogs, the Wageningen behavioural centre uses volunteers, owners who apply with their foot-footed friends. It is more work to keep dogs than cats, says behavioural ecologist Beerda in explaining the different approach. Who would let them out three times a day, for example? Moreover, as in-house accommodation is not necessary, it is ethically undesirable, the researcher believes. 'After all, our dog research mainly concerns the human-animal relationship, how this translates into problematic behaviour like separation anxiety or aggression.'

For example, Beerda and his colleagues have helped carry out behavioural tests designed to demonstrate aggression and have closely examined the test for Socially Acceptable Behaviour. Many breed associations use this to exclude aggressive animals from the breeding population. How predictive actually is this test, which



Noa, half Labrador and half Golden Retriever, does tests as part of a study into the relationship between dog-raising style and canine behaviour.

subjects a dog to all sorts of test conditions, such as confrontations with dummies of other dogs or strangely dressed people? 'We did not devise the test conditions, they are taken from the literature, but we did validate the behavioural test and proposed changes to it. A reliable instrument is important, especially where an issue is concerned that is often an emotive one.'


FIENTJE

But not all the research in the behavioural centre is in some way of immediate social relevance. In the room next to Noa, French Mastiff Fientje and her owner are visiting. At eighteen months, Fientje is a teenager and is taking part in an undergraduate study addressing the question of whether dogs are altruistic. Do they want to be helpful to their owner? Are they happy for him or her to have a tasty treat when they get something themselves? 'Often our research also has a educational angle,' says Beerda.

Owners who are having problems with their dog cannot come to Wageningen for a walk-in clinic offering advice. 'We devise the studies. After that, an internet survey is published that dog owners can fill in. By answering the questions, they are reporting on themselves and their

dog. Next, we invite them to take part in our tests.'

Since mainly dog owners who are concerned with their dog's wellbeing respond and no reimbursement is offered, Zodiac gets a relatively large number of well-behaved, well-trained dogs. 'To be honest, we get too few problem cases,' confirms Beerda. 'At the moment we are looking into whether we can get a subsidy so that we can refund at least travel expenses.'

Among others, this would benefit the PhD research for which Noa is doing her best: can owners be categorized by their dog-raising style? And is this predictive of the dog's behaviour? 'This has been derived from human parenting styles,' says Beerda. 'It is known that parenting style – in particular being demanding and the level of engagement – has predictive value for the child's learning performance and social development. We wonder whether that same concept applies to the human-dog relationship. Together with students, PhD candidate Ineke van Herwijnen is currently researching whether the picture that owners have painted in the survey is correct, and how we can improve the questionnaire. For us, it is often more about the owner than the dog.' 

‘Integrity complaints affect the whole institution’

Complaints about academic integrity tend to be blamed on individual scientists. Unfairly, claims Barend van der Meulen, chair of the committee for academic integrity (CWI). ‘The worst thing colleagues can do is to back off. Because don’t forget, it’s a complaint against the institution too.’

text Albert Sikkema photos Guy Ackermans and Rathenau Instituut

They haven’t come across a master fraudster like Diederik Stapel in Wageningen yet. But Barend van der Meulen, chair of the committee for academic integrity committee (CWI) and confidential counsellor Marcel Zwietering get regular complaints about inappropriate behaviour by researchers. At the behest of the rector, the CWI has pondered a handful of complaints about Wageningen research, while Zwietering was approached by ten staff members with complaints over three years. Van der Meulen, head of research at the Rathenau Institute and Leiden professor of Academic policy, has been chairing the Wageningen integrity committee for a year now. He is aware of the integrity allegations about Wageningen research that have been in the media in recent years. Examples include a controversy in 2012 about Wageningen bee research, and another early this year about a study on bottle deposits. Only last week there was a report in the newspaper *Trouw* about LEI researchers who were said to have changed a report on fisheries under the influence of civil servants. The chair cannot reveal details about the complaints his committee investigates, but is willing to say something general about them.

COUNTER-PRESSURE

Public opinion is quick to assume an integrity case means deliberate cheating, as if researchers do not act in good faith. That is too simplistic, thinks Van der Meulen. ‘You often see, especially in practice- and policy-oriented research, that clients share and exchange knowledge at an early stage. They also interact during this stage regarding the significance of the results. Then you can get into a situation in which researchers are well-intentioned but nevertheless act carelessly and at odds with the integrity code.’

Lessons can be learned from this, thinks Van der Meulen. ‘In contract research there is always a tension between the interests of the client and those of the public regarding knowledge. There is always pressure on the researcher to serve the interests of a company or ministry. So then you need counter-pressure. Research groups and institutes need to keep their sights on the public mission, and researchers need to be able to distance themselves from the interests of the client. Researchers have to keep each other on their toes in that regard.’



Chair of the academic integrity committee (CWI)
Barend van der Meulen

‘Researchers have to keep each other on their toes’

TOO LITTLE KNOWLEDGE

There is something else in play in policy-oriented research too, says Van der Meulen. 'You sometime have to make decisions on the basis of incomplete knowledge. Take risk analyses of toxic substances in the environment. What concentration of this kind of substance is acceptable? There is generally insufficient research to be able to state incontrovertibly at which concentration a substance starts to affect our health. In that case, you usually observe a certain margin and get a figure on that basis – 'this is our advice'. In the vast majority of controversies about research the faultfinder feels the need for more knowledge or considers the knowledge on which the advice is based insufficient.'

Researchers can bear this in mind too, says Van der Meulen. If those lodging a complaint attack the research publicly, you are better off being open about the choices you made. And that concerns not just the individual researcher but the institute as a whole. 'An integrity complaint like that places a heavy burden on the researcher concerned. They need support. The worst thing colleagues can do is to back off. Because don't forget, it's a complaint against the organization as well. People sometimes forget that at the university, where the emphasis lies on personal professionalism and responsibility.'

AUTHORSHIP

As well as the CWI, Wageningen University & Research also has two confidential counsellors for academic integrity: professor of Landscape architecture Adri van den Brink and professor of Food microbiology Marcel Zwietering. The latter has talked to ten staff members with a complaint about dubious behaviour over the past three years. Most of them were PhD candidates or postdocs who were in conflict with their professor or supervisor. Zwietering referred three of the ten complainants to another confidential advisor because, for example, it was a matter of intimidation rather than of academic integrity. Another three of the ten complaints were about the authorship of academic articles. 'Sometimes co-authors suddenly appear out of the blue who didn't take part in the research. There are rules about that but of course there are grey areas. The order in which the authors are named can be an issue too. If you are in time with your complaint, this kind of row about authors can often be resolved. But if you are too late, or if PhD candidates don't dare to make a fuss, things can go badly wrong,' says Zwietering.

PLAGIARISM


The remaining four complaints were about plagiarism. These were not serious cases like that of VU professor Peter Nijkamp, who often quoted his own work without referencing it, says Zwietering reassuringly. 'It might be that one person thought of something and another person uses that bit of text in a figure in a publication without referencing it. There are clear rules on that in the (Dutch universities association) VSNU's Integrity Code.



Academic integrity confidential counsellor Marcel Zwietering

'If you are in time with your complaint a row can often be resolved'

PhD candidates sign that code too, but few of them know what it says.' A plagiarism case can often be rectified if the confidential counsellor is consulted in time. But not everyone is always satisfied at the end of the day. Sometimes there is a lasting loss of confidence.'

These internal integrity issues never get into the papers but that does not make them any less important, says Zwietering. 'You have to pay attention to little things too. In my field, food safety, the rule is: you must report near-accidents as well so as to keep the guidelines for food safety sharp. It works like this for academic integrity too.' 

WORKSHOP ON INTEGRITY

How do you maintain your integrity as a researcher if your research focuses on social change, is externally funded and generates public debate? This was discussed during the lunch workshop *Integrity for impact* on Wednesday 9 November in Impulse. Participants discussed a case concerning the Danish company Lego, which wants to make sustainable Lego bricks out of palm oil and get Wageningen researchers to do a life cycle analysis of the old and the new bricks.

**Read the report
on the workshop
on resource-online.nl.**

IS THE NEW COURSE EVALUATION BETTER?

As usual, at the end of period 1 last week, Wageningen students found the digital course survey in their inboxes. Only this one looks different to previous editions. The new evaluation – PaCE – claims to be quicker and easier to fill in than the old EvaSys (see too the report on page 26). But is it really?

text Anne van der Heijden and Annie Berendsen illustration Henk van Ruitenbeek

Melanie van den Bosch



Master's student of Bioinformatics

'When I filled in the course evaluation I noticed it took me less time than normal. I thought, 'am I done already?' I **didn't know that they had changed it but I noticed that the questions about teachers were much less**

detailed. That is a pity. The main reason why I fill in the evaluation is to give teachers points for improvement. I don't think there'll be a better response rate now that it's shorter, given than people didn't make time for it in the first place.'

Maaïke Kool



Bachelor's student of Animal Sciences

'I filled in the survey in the last period and it had been changed. It did not take as long to fill it in and the questions were clearer. What I found especially useful was that you could select which teachers you had had and fill in the survey for those teachers only. That was already possible before but then you had to click your way through a long list of teachers before you could close the survey. **This survey is less time-consuming and I think that makes it less off-putting for a lot of students.**

Stan Jansen



Master's student of Environmental sciences and member of the programme committee for BMW, MUE, MES and MCL

'As the degree programme officer for the study association Aktief Slip, I have often noticed that students are

not very willing to fill in the EvaSys online evaluation. That is why many programme committees have sought and found other ways of evaluating courses. The programme committees for BMW, MUE, MES and MCL have been analysing their courses for years using a separate written evaluation. When I filled in the PaCE evaluation I got a positive surprise. It is easy to fill in because the questions are posed efficiently and the proportion of open to closed questions is good. Nearly all the students I've talked to are positive about it. **Now students can contribute actively to the quality of their courses, in no more than five minutes.**

Robert van der Kraan



Master's student of Food quality management

'I have just started my Master's programme here so I have never filled in the Wageningen course evaluation before. **I thought the survey was too long and too detailed and for that reason I didn't finish it.**

So in my opinion it would be sensible to shorten it even more: the less time it takes the more people will fill it in. I do think it's very good that you can evaluate teachers personally.

Antonella van Osnabrugge



Bachelor's student of International land and water management, student council member for VeSte

'In the student council we are very positive about the new evaluation system PaCE. **The old EvaSys was too long, which meant few students filled it in. That is a pity because a lot is done with the results.**

A lot of students are not aware of that, whereas it is so important for maintaining and improving the quality of our ed-



ucation. Sadly there still wasn't any room in the evaluation of last period for questions about the teachers. Because the idea is that teachers can add questions themselves so as to get feedback that is as specific as possible. As student council we think it's a pity in that sense that PaCE has already been launched. It would have made a better impression if there had been input from the teachers from the start. Now a lot of students don't know about this aspect of the evaluation. The aim is to work that into the next evaluation, in the hope that students will then be able to see its value.'

Jim Renema



Master's student of Biotechnology

'I haven't been taking courses at Wageningen University for very long but up to now I have always filled in the evaluation for all the courses. If I'm asked for my opinion I am happy to give it. It is nice that it is valued and that there is also space to add optional comments outside the standard questions. The evaluation does not take too long and the questions are clear. It is good that the new version keeps you moving through the teacher

evaluations instead of making you plough through a very long list. **The new setup gives you much more motivation to keep going.** What does surprise me was how soon the evaluation is sent around: even before the exam. At that point you can't say yet really whether the course met your expectations.'

Anneke Kuijper



Master's student of Food safety, board member of the Education Institute Wageningen (OWI)

'The new education evaluation system was developed to make it easier for students to fill in the evaluations. You can even do it on the phone now. It is not for nothing that these improvements have been introduced. Because it really is important that the evaluations are filled in by as many students as possible. The evaluations are not used only by the teachers but also by the programme committees and the education institute. **A high response rate is important for the results of the evaluations to be reliable.** So I appeal to all students: fill in the evaluations; it doesn't take much time and the results are very valuable.'



Have a look at
the Soundbites
on resource-online.nl.

Reality of New Wilderness can disappoint

A visit to the Oostvaardersplassen sometimes ends in disappointment for people who have seen the film *De nieuwe wildernis* (The new wilderness). Master's student of Forest and nature management Floor van Gils discovered this during her thesis research. The film shows the unique wild nature in the area, but most of the territory is inaccessible to leisure-seekers.

The popularity of the Oostvaardersplassen has grown considerably since the success of the film in 2013. The state forest service *Staatsbosbeheer* is keen for visitor numbers to go on growing, so it asked Wageningen University to do some research among visitors. This was a nice opportunity for Floor van Gils, who had become interested in the area through the film,

and through the controversy about the large ruminants which sometimes die of hunger there in the winter. For her Master's thesis she asked visitors whether their visit to the Oostvaardersplassen lived up to their expectations.

NOT A ZOO

It was clear from Floor's interviews that visitors really did experience the Oostvaarder-splassen as 'wild nature'. But there were disappointments as well. Some visitors, for example, thought the many dead trees were depressing and messy. Others were disappointed by the limited length of the footpaths. The film also had a strong impact on the expectations of people hoping to spot game. The close-ups of the Konik ponies in the film suggested that the animals in the reserve could be approached. 'But the Oostvaardersplassen is not a zoo,' says Floor. She found out that people were disappointed that they could only watch the animals from a distance.

LONGER PATHS

According to Floor there are a couple of things *Staatsbosbeheer* could do to meet the needs of visitors. One would be to create longer walks. Another would be to make active use

of the media to moderate the high expectations raised by *De nieuwe wildernis*, closing the gap between expectations and reality. Floor also considers it essential that *Staatsbosbeheer* focuses its efforts to attract more visitors on a specific target group, getting a clear idea of that target group's wishes. 'Big game is always a big attraction,' concludes Floor. *Staatsbosbeheer* could play into that by expanding the number of excursions it runs. But it is important that the area remains 'wild', adds Floor, because that is precisely what people find so appealing about the Oostvaarder-splassen. **DK**



Floor van Gils: 'The Oostvaardersplassen reserve is not a zoo.'



‘More open about initiation rituals’

The Wageningen student societies need to be more open about their initiation rituals. They were told this during discussions with rector Arthur Mol on Friday 4 November, held at the request of KSV Franciscus and Ceres. The smaller societies SSR-W and Argo joined the meeting too, as did the mayor of Wageningen.

The discussions were prompted by Mol's appeal at the end of September for the societies to put an end to extreme hazing rituals during their initiations. This was itself a response to nationwide concern after abuses at the Groningen society Vindicat. In an initial response at the time, KSV Franciscus and Ceres asserted that there was no cause for concern in Wageningen. This statement was later undermined by revelations by first-years who had gone through the introduction period in the provincial newspaper *De Gelderlander* and on the *Resource* website. What is more, the initiation process at KSV Franciscus this year provoked a serious complaint to the executive board. A resident living near the KSV introduction camp in Wilp complained about the humiliation of first-years, the fact that children witnessed this and the way she was treated when she filmed the scene.

PUBLIC

During the discussion, therefore, Mol asked the societies to be more aware of the impact of their activities. ‘An introduction committee should be aware that activities that are considered normal within a society are seen as very abnormal outside the society. In these times when everything is publicized straightaway, you have to bear this in mind.’ This is not just a threat to the society's image, says Mol, but also to that of the university and that of the municipality of Wageningen. Mayor Geert van Rumund appeals for a respectful introduction period, too. ‘Everyone deserves respect and that certainly includes a student going through initiation.’

COMPLAINT PROCEDURE

No firm agreements were reached. Mol: ‘I can't play the policeman, and nor do I wish to. No sanctions have been threatened. I want the societies to discuss internally what sort of introduction period is appropriate in this day and age.’ The most important thing in Mol's view is for the societies to be more open. ‘You could use short films, for instance, to show what kinds of activities you run. And make it easy for people to get in touch with you if they have seen something strange. A kinds of complaints procedure. Make sure you engage in dialogue with society.’ **IRK**



SOCIETIES RESPOND CONSTRUCTIVELY

The internal discussion about the content of the introduction period which the rector is asking for is certainly going to happen at Ceres, responds president Janneke Sloet van Ruitenborgh. ‘There are plans to thoroughly review the introduction.’ Rector Mol's idea of some kind of complaints procedure appeals to her as well, as does the proposal by *Resource* to send a reporter to write about the next introduction.

KSV Franciscus will review its introduction in the light of the talks with Mol too, says president Tom van Geelen. ‘We shall be looking particularly at how activities can come across to the outside world. We need to put ourselves in other people's shoes more on that point.’ Van Geelen also wants to open the doors more often – quite literally. ‘We are a society run for members by members, but we are a Wageningen society as well. We should tell more people about who we are and what we stand for. Last year we ran an activity for Wageningen residents. Perhaps we should do that more often.’



YES MEANS YES

Before students at Berkeley are let in to a party on the campus they will from now on have to listen to two minutes of education about sexual consent. They are required then to confirm that they know what 'yes means yes' means. The aim is to address the problem of sexual violence. Twenty two women were raped on the campus last year.

FIRST CHILD

The timing of your first child is (partly) to do with your genes. Researchers at the University of Groningen and other institutes have identified 24 genes which have an influence on that timing. The same genes are also involved in matters such as the first menstruation, voice breaking or the start of menopause. If you're worried that you don't have any say in the matter: altogether the genes only predict one percent of the cases.

DAYLIGHT

The length of the day makes the biggest contribution to our mental well-being. This factor is more important than whether it rains, the air is polluted or the sun shines brightly all day. Researchers at Brigham Young University discovered this by comparing meteorological data with data from psychotherapists' patients. The shorter the daylight hours, the fuller the waiting rooms.

DEATH

Sportspeople who think about death perform better, psychologists at the University of Arizona have discovered. The got men to play basketball and in between games had them fill in questionnaires, some of which made reference to their mortality while others didn't. The basketballers with the 'death questions' scored 40 percent higher in the next game. By performing better we unconsciously try to keep death at bay. Question of do or die!

WUR student off to Miss World competition

Health and Society Master's student Rachelle Reijnders will be representing the Netherlands at the Miss World contest in Washington. The 24-year-old student from Oss was voted the winner in the Dutch heat last Sunday in Rotterdam.

Her phone has not stopped ringing since that announcement. 'I've got a busy period ahead. I'll have to prepare properly and will be spending a lot of time in the gym,' says the new Miss World Netherlands 2016.

Reijnders reached the final of a Miss Netherlands competition three years ago, where she met the model Desirée van den Berg. 'One evening she phoned me and asked if I would be able to take part in the competition for Miss World Netherlands the next day. That was a bit stressful. I knew immediately I wanted to do it but it still required a lot of organizing. For instance, I had to get

hold of a ball gown somehow. That's not something I just have hanging in my wardrobe,' laughs Reijnders. Miss World Netherlands will be flying to Washington at the end of November, where she will be competing against around 120 women from all over the world. 'This competition is not just about looks, and there's no bikini round. What matters is how fit

you are and your attitude to life.' Reijnders will be performing classical ballet in the talent round. She also has to do some charity work. 'I'm busy arranging that now. I would like my charity to have a connection with my study.' Reijnders' dissertation on new technology in healthcare is being put on hold. 'I find my degree important, but this is a once-in-a-lifetime opportunity.' **MF**



Overhaul of course evaluation system

The system that lets students at Wageningen University & Research evaluate the courses they have taken has been revamped. There is a new computer system and the questionnaire has changed too. Students got their first chance to use it in the last few weeks when giving feedback on the first courses of the academic year. One reason for the new setup is to increase the response.

PaCE, as the new system is called, incorporates a few technical improvements, says Coco van der Wolk, policy officer at Corporate Education, Research & Innovation. For example, questions about specific lecturers are accompanied by photos and the system is linked to the lecture schedule, which means emails are automatically sent at the right time.

It also gives subject coordinators more control and a better overview. They can see when questionnaires are sent, add an extra reminder and check how many students have already completed the survey. Afterwards, subject coordinators can easily communi-

cate the results and tell students what is being done with their comments.

The idea is that the new system will enhance students' sense of involvement because they can see clearly what is being done with their input, explains Henk Vegter, head of Quality and Strategic Information. The questionnaire is also shorter.

An average of 43 percent of students filled in the course evaluation questionnaires in 2007-2008. That response rate had fallen to 25 percent last year. **RR**

See also Point of View on page 22.



List of options for talented students

Wageningen offers dozens of options for students looking for an extra challenge beyond the standard study programme. But not everyone knows about them. So now the Student Council has listed all these activities on the *Trigger your Talent* webpage.

The Student Council wants to provide more guidance for students seeking to broaden or deepen their knowledge. This was prompted by an open letter a group of students sent to the Executive Board last year about the Honours Programme. They criticized the fact that there were not enough places and said there should also be opportunities for the students who didn't get selected. It turned out that these opportunities were already available; now they are being put on display.

The overview is not comprehensive, says Student Council member Anne Swank. For exam-

ple, the 'selected topics' option (*capita selecta*) is mentioned but if you want to know more, you have to look at the study guide to find a topic that suits you. 'We mainly want to nudge students in the right direction and inspire them to look further.'

The webpage explains that students can broaden their study, for instance, by taking extra courses outside their programme. All the scientific competitions for students are also listed.

On 15 November, the Student Council is organizing a Talent Development Event to publicize the website among students, study advisers

and other staff. The event will be opened by the rector Arthur Mol, after which a student, an alumnus and a study adviser will all talk about what their extracurricular studies have meant for them.

The site will officially be launched during the Talent Development Event. Any outside activities not yet on the list can be reported via the contact form on the website. **AvdH**



PHOTO: STUDENTENRAAD

To find Trigger your Talent:

go to www.wur.nl/en/Education-Programmes/Prospective-Bachelor-Students/Talent-Development.htm
The Talent Development Event is on Tuesday 15 November, 16.00 to 18.00 in Orion east wing.

MEANWHILE IN... THE US

'American politics is so contentless'

The American elections took place this week. Just before the polls opens, *Resource* talked to Jason Davis from Ohio about the campaign which has dominated his country for months.

Jason was annoyed by the lack of content in the presidential campaigns. 'Everybody is sick of it; politics is so contentless. When I call my parents and start discussing politics, we always end up discussing what politics should be instead of what it is.' In Jason's opinion this is a direct result of the huge amounts of capital that are poured into the American elections. 'Politicians spend most of the time just ensuring that they have sufficient campaigning resources. We feel like money calls the tune in politics more and more. My parents feel powerless against the lobby of the private sector.'

Jason is also bothered by the lack of attention to some aspects of the elections. Because there was voting on Tuesday for representatives at all levels and for judges. Jason had to make a total of 30 choices. 'In several cases I did not have a clue what to choose, it is just practically

impossible to cast an informed vote.' And yet he does think the other voting that takes place on that day are important too: 'Now that national politics are locked to a large



FOTO: JOSEPH SOHN / SHUTTERSTOCK.COM

extend by party controversies, decisions are taken increasingly at state or county level. However, all the media attention goes to the presidential elections, so we are poorly informed when we vote for regional politicians.'

The Master's student bears in mind when voting that the American elections are significant for other countries as well. 'In a political discussion with international students I try to listen more than I speak. My vote does matter to them, especially because I am from Ohio, a swing state.' **TF**



Jason Davis, Master's student of International land and water management from the US, comments on the news from his country.

YOU ON CAMPUS

There are many people in labcoats wandering around the top floors of Orion, but one of them caught my eye: Arda Hamamcioglu. What caught my attention – and according to Arda also that of many others – is a large scar on top of his head.

Arda (22) is currently in Wageningen on Erasmus exchange for half a year. He is doing his Bachelor's in Food technology. He is from Turkey, where he has lived in many different places around the country depending on where his father, an army doctor, was stationed.

Arda really wanted to go to Wageningen for his exchange, but this was difficult. It is the best rated university in the Erasmus scheme for his field and his university only sends one person per year. 'I just aimed for the top.' He is glad he made the selection because he likes both the country and the university.

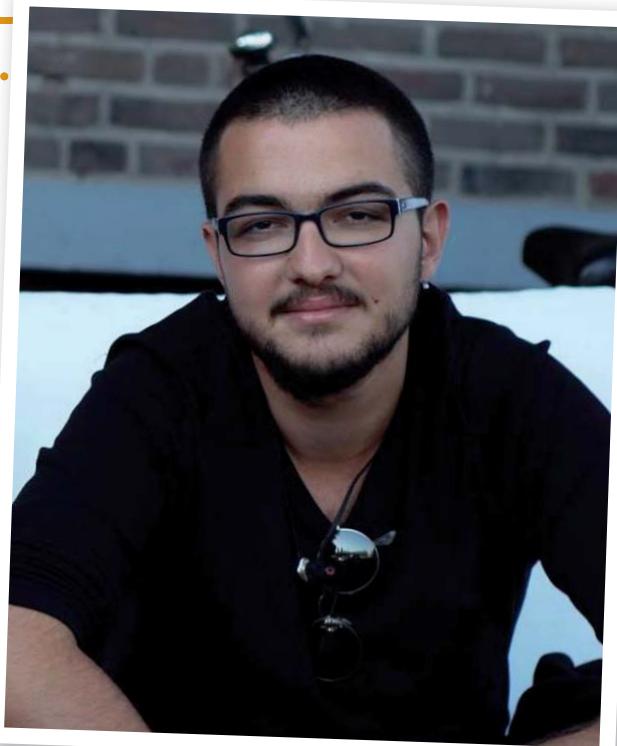
Arda has found many ways of occupying his time here. His hobbies include photography,

2D and 3D art, and mountaineering. Mountaineering is how he got his scars, not only the one on his head but also multiple scars on his hands and legs. The one on top of his head is the most prominent one, however. He got that particular scar when a friend who was climbing above him fell down. Arda tried to get out of the way and scraped his head on some rocks in the process. This was over two years ago but it is still clearly visible through his short hair.

Arda picked up the striking scar on his head while mountaineering

'My hair used to be longer but now I prefer it short. It helps with the recovery and it is cleaner.' Arda is not sure to how much the

scars will fade but he is quite indifferent about it. 'These things happen in this sport.' Since the Netherlands doesn't have mountains, Arda now focusses more on his other hobbies. He is working with companies to help them design brands. His website, arda-hamamcioglu.com, is his pride and joy. 'I am not even sure I will be a food engineer after finishing my studies. I am looking for the spot where my hobbies and work overlap.' **AvdH**



PARTIES

In the party mood? Wageningen Party Promotion (WUP) tells you where to find one. See too www.wageningenup.nl.

LUCA - HELEMAAL KNETTER 2,0

Saturday 12 November from 23:00 to 04:00

The Radio 538 night shift team are coming to café Luca. Worth staying in Wageningen for, so invite your friends from back home to come and party here this time.

SHOUT – YOU ARE MY CANDYCRUSH

Thursday 17 November from 22:00 to 03:00

The sweetest party this year. Like walking into Willy Wonka's chocolate factory – but you don't need a golden ticket: admission's free. And with good music and a dancefloor into the bargain.

DE BONGERD SWIMMING POOL – THE DIVE-IN CINEMA

Friday 18 November from 19:30 to 23:00

This is a first in the Netherlands: watch – or rather, experience – the film Jaws in the swimming pool. Complete with actors, special effects and... a shark. Tickets for sale on www.dive-in-cinema.com



Halloween was celebrated in a lot of places at the end of October. Like this student house on the Vanenburgstraat.

PHOTO: SVEN MENSCH

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.

'I have never felt so white'


'Although Sint Eustasius is a Dutch municipality, I experienced a huge cultural difference. It felt like stepping back in time. Power cuts happened regularly and we even had a day with neither electricity nor water. The traces of colonialism are still very tangible. I actually went to a conference on racism; I have never felt so white. Racial separation is still happening there, consciously and unconsciously. For example, most government communication is in Dutch, while Dutch is the mother tongue of only a small proportion of the people there. Despite all this, the people are unbelievably friendly. When they pass by you in the car, they wind down their window and have a chat.

Together with a fellow student, I studied the level of support among the local population for various methods of mosquito control. The island has a lot of mosquitoes that can spread diseases such as dengue fever and Zika. It is very difficult to change things on Sint Eustasius, because as well as the mosquitoes there are so many other problems. To change something, you would actually need to involve the entire island. The enormous quantities of refuse, including abandoned cars and water wells, provide plentiful breeding grounds for mosquitoes. What's more, a large part of the population has little confidence in the government. I found that disheartening.

There were indeed lots of mosquitoes; it is really irritating. Even DEET and long trousers did not help; they pierced through everything. The only thing that helps keep the mosquitoes out is to put the air conditioning on really high. But in the student

house where we were staying, we didn't have any air conditioning.

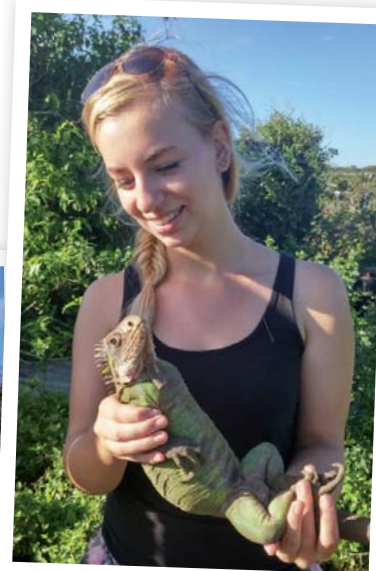
I enjoyed being there and doing the research with someone else. We were able to share our experiences and put things into perspective together, like that conference on racism. We shared a room, but that only made it more fun.

I thought there would be lots of fresh fruit and vegetables on the island, but I was disappointed. You could buy a broccoli, for instance, for 12 dollars and the fruit was also expensive. All the food is imported because virtually nothing is grown on the island. I really like fruit, so eventually I got over the price and bought it.'  MvdH



THE WORKS

Who? Els van Coeverden,
MSc Health and Society
What? Internship at the National
Institute for Public Health
and the Environment (RIVM)
Where? Sint Eustasius, Leeward
Islands



Read all interviews on
on resource-online.nl.

announcements

Call for presentations Netherlands Annual Ecology Meeting (NAEM) 2017

This year's keynote speakers are Hanna Kokko (University of Zürich), Sander van Doorn (University of Groningen), Margie Mayfield (University of Queensland), and David Kleijn (WUR). Call opens on 15 November. Venue: Congrescentrum 'De Werelt,' Westhofflaan 2 Lun-

teren. Registration: www.nern.nl/NAEM2017

Invitation for the crash course on WU Education: Governance, policy and organization

The course (one evening) addresses four issues. One, governance and organization at WU. Two, funding of courses and other financial issues. Three, the main agenda items of Programme Committees: the annual Education Modification

Cycle, the Education and Examination Regulations and the accreditation of study programmes, including the internal quality assurance system. Four, the tasks, responsibilities and mandate of a Programme Committee and its members. Lecturer: Stijn Heukels, Policy Advisor. Date: November 23, 19.30-22.00. Venue: Forum, VIP rooms 031-034. Next courses are on: January 25 & April 19, 2017. Subscribe via: Marita.Kleffen@wur.nl.

Subscribe to the Global Guests program

The Global Guests program is the best job opportunity for international students. In this program international students will give guest lectures at secondary schools in the Netherlands. It's appreciated if you could relate the topic of your presentation to sustainability and preferably to your experiences from your home country. The rewards are up to 35-50 Euros per school visit. You'll receive a professional training and an unforgettable experience. Contact: otherwise@wur.nl.

WWW.ST-OTHERWISE.ORG

Join the United Public Speaking Program

OtherWise has teamed up with the United Netherlands. In this program United Netherlands offers its internationally awarded public speaking experience to motivate students and young professionals who are interested in international affairs, social responsibility and business. In the course of five sessions you'll be trained in all aspects of public speaking e.g. body language, use of voice, structuring your speech, framing and debate. Dates: 22, 29 November & 6, 13, 20 December, 18.00-21.30. Venue: Forum, 031/034. Deadline application: November 14 via www.united-netherlands.org/public-speaking-program-2/

Volunteers wanted by Food Bank for December campaign in Hoogvliet


As part of the national campaign by regional radio and TV channels, Hoogvliet supermarket in Wageningen is organizing a collection for the Food Bank. We urgently need volunteers who are able to spend up to two hours in Hoogvliet collecting products donated by customers. You will work in pairs. We need people for Friday 9 December, Saturday 10 December and Thursday 15 December between 10.00 and 18.00. Email actievoor@voedselbanknederveluwe.nl with your name, email address and availability.

WWW.VOEDSELBANKNEDEVELUWE.NL

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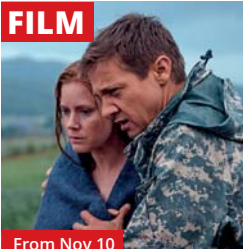
FILM



From Nov 10

Snowden
Thriller about Edward Snowden


FILM



From Nov 10

Arrival
Thriller with Amy Adams

FILM



From Nov 16

Fantastic Beasts and Where to Find Them 3D

€2 STUDENT DISCOUNT ON FILMS & EVENTS





MCB-51403: Capita Selecta Commodity Futures & Options

Always wondered about what is happening at the trading floor of exchanges like the ones in Amsterdam, London and Chicago? Wondered about how (agribusiness) companies manage their risks using commodity futures and options? Wondered about how it would be if you were trading commodity futures in Amsterdam, Frankfurt and Paris?

The *Marketing & Consumer Behavior Group* organizes a unique course that will introduce students to commodity futures and options markets. Students will develop an understanding of the markets and how they work, gain knowledge about the theory behind futures and options markets, identify their economic functions, and develop an analytical capability to evaluate their economic usefulness. This course is taught by Professor Joost M.E. Pennings (*Marketing & Consumer Behavior Group*, Wageningen University). There are only 40 seats available.


If you are interested in taking this course (3 Credits) please register with Ellen Vossen at MCB (room 5029, De Leeuwenborch, e-mail: Ellen.Vossen@wur.nl, tel. 0317-483385). You can also pick up the materials here. Lecturers are on Fridays in period 5 (24 March-28 April, but no lecture on Friday 14 April), one day in a week, 10.30-12.15 hrs.

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agenda

Thursday 10 to Wednesday 23 November

FILMS FOR STUDENTS

Weiner: satirical portrait of the politician and slick anti-hero Anthony Weiner; *Once Upon a Time in the West*: famous Western by Sergio Leone, with music by Ennio Morricone; *Down to Earth*: inspiring account of one family who lived with tribal communities (sold out, extra screenings in December); *Bacalaureat*: convincing protest drama about corruption in the Romanian education system; *La pazza gioia*: feel-good comedy about a female friendship in Tuscany; *Food4all*: a critical festival about our food system. Venue: Wilhelminaweg 3A, Wageningen.

WWW.MOVIE-W.NL

**Thursday 10, Friday 11, Sunday 13
and Sunday 20 November
'THE BALD SOPRANO' BY
IONESCO, PERFORMED BY
TOTEEL**

Theatre company Toteel consists of a group of enthusiastic amateur actors from Wageningen who organize everything, including the sets and costumes. The group is putting on this absurd play by Ionesco (in Dutch), directed by Karin Verbeek, in which the confusion created by words and language gives an absurdist take on the emptiness of existence. Performances: 10, 11 & 20 November at 20.30, 13 November at 15.00. Admission: 10 euros. Venue: De Wilde Wereld, Wageningen. Reservations: toteel@live.nl.

**Sunday 13 November, 16.30-19.00
JAM SESSION IN DE ZAAIER**

Anyone can join in, both experienced musicians and beginners. Keyboards, guitars, bass guitars and drums are provided and there is a modest sound system for singers and instruments that require an amplifier. The set is built up from 16.00 and musicians can play from 16.30 to 19.00. Register via jam-sessie@jazzinwageningen.nl. Venue: Café De Zaaier, Herenstraat 33, Wageningen.

WWW.JAZZINWAGENINGEN.NL

**Thursday 17 November, 15.30
ROB GOLDBACH VIROLOGY
LECTURE 2016: NEW INSIGHTS
INTO ZIKA VIRUS
PATHOGENESIS BY PROF.
MICHAEL DIAMOND**

Prof. Michael Diamond of the Washington University School of Medicine, Division of Immunology (US) is an expert in the field of arboviruses (viruses transmitted by insects) such as dengue, yellow fever and Zika. The renowned virologist has almost 20,000 citations, an h-index of 80 and more than 330 publications in leading journals (*Science*, *Nature*, *PNAS*). This third Rob Goldbach Virology Lecture is one of the activities organized by the Rob Goldbach Fund, which was set up in 2010 in memory of Rob Goldbach, professor of Virology (1987 to 2009). Venue: W.01 Radix.

**Friday 18 November, 18.30
CERES BUSINESS CLUB PRESENTS
THE WAGENINGEN EDITION OF
THE COLLEGE TOUR**

Freek Vossenaar will be interviewing Onno van de Stolpe, CEO and founder of Galapagos, one of Europe's largest biotechnology firms. Van de Stolpe did his degree at Wageningen and he will share his experiences and the lessons he learned. If you want to witness this, then come to W.S.V. Ceres. Admission is free. Venue: Ceres, Generaal Foulkesweg 1B, Wageningen. For more information, see Facebook.

**Thursday 24 November, 9.00-18.00
SYMPOSIUM 'CURRENT THEMES
IN ECOLOGY: NETWORKS IN
ECOLOGY'**

Why are there so many species on earth? This is one of the most fundamental questions in understanding life on earth. In this symposium we will address a wide variety of novel approaches to understanding how ecological networks function and the consequences for biological diversity and ecosystem dynamics. Venue: Congrescentrum 'De Werelt', Westhofflaan 2, Lunteren. Registration: www.nern.nl/CT2016. www.pern.nl

**Thursday, 24 November,
12.30-13.20**

**LUNCH WORKSHOP WAGENINGEN
WRITING LAB 'OPTIMIZE YOUR
PERSONAL WRITING STYLE'**

In this workshop, you'll discover your personal writing style, learn about typical pitfalls and how to avoid them. We will set to work practising some techniques that will help you to make your writing style a strength in current and future writing assignments. Be on time, as participant numbers are limited to 20. Free access. Venue: Forum Library, room C0309. info.wageningenwritinglab@wur.nl

**Thursday, 24 November, 16.00
SEMINAR 'WATCHING BACTERIAL
GENOME TRANSFER' PRESENTED
BY WEES (WAGENINGEN
EVOLUTION AND ECOLOGY
SEMINARS)**

Prof. Dr Berenike Maier (Biophysics, University of Cologne) will present her research on the molecular mechanisms of DNA uptake, competence development and fitness effects. Dr Maier will also present a workshop beforehand for MSc and PhD students. The seminar is followed by drinks and discussion. Venue: Orion C3033.

WWW.WEESWAGENINGEN.NL

**Wednesday 14 December,
9.00-15.30
INTERNATIONAL SYMPOSIUM
'NUTRIENT POLLUTION IN WATER
SYSTEMS: SUSTAINABLE
SOLUTIONS FOR EUROPE, CHINA
AND THE WORLD'**

Speakers: Prof Dr Huub Rijnaarts (WUR), Dr Michelle L. McCrackin (the Baltic Sea Centre, Stockholm University), Prof Dr Lin Ma (Chinese Academy of Sciences, China), Prof Dr Wenqi Ma (Agricultural University of Hebei, China) and others. Registration is not compulsory but much appreciated, via: maryna.strokal@wur.nl (preferably before December 2016). Venue: Atlas (Atlas 2) Droevendaalsesteeg 4, Wageningen.

WWW.SENSE.NL

**Thursday 15 December, 8.30-18.00
1ST SYMPOSIUM WUROMICS:
'TECHNOLOGY-DRIVEN
INNOVATION FOR PLANT
BREEDING'**

In the past few years, exceptional progress has been made in the application of -omics based technologies in plant breeding. This first symposium brings (plant) scientists and plant breeders up to date with the latest scientific developments and the opportunities to stimulate innovation in both fundamental and applied science and in industry. Venue: Orion, Combi Room. Maximum number of participants is 300. Registration: www.wur.eu/wuro-mics.

Deadline for submissions: one week before publication date (max. 75 words)
Email: resource@wur.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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(Atlas, building 104, bode 31).
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ISSN 1389-7756

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Design

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Translators

Clare McGregor, Susie Day, Clare Wilkinson

Printer

Tuijtel, Hardinxveld-Giessendam

Subscriptions

A subscription to the magazine costs €58 (overseas: €131) per academic year. Cancellations before 1 August.

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Publisher

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>>>TYPICAL DUTCH



ILLUSTRATION: HENK VAN RUITENBEEK

‘Seeing Sarah’ in the dark

The building was empty, it was dark outside and many of my colleagues had already gone home. ‘I hate this time of the year when it gets dark early. If I were still in Malaysia at this hour, I would constantly pray not to bump into a ghost,’ I said to myself softly and laughed at my own joke. As I opened my office door, I saw a disfigured being with a resemblance to my friend’s supervisor sitting on her chair. ‘What the ****!’ My heart stopped beating for a while. I was still in a state of shock when my friend came in and said: ‘Oh, it seems you have met Sarah.’

‘Sarah’ and ‘Abraham’ are two of the most gruesome creatures that you can find here in the Netherlands. They only appear on your 50th birthday, have mutated bodies, wear almost the same clothes that you wear and have your picture stuck on their head. If you are lucky, you will see them during the daytime and their ridiculous appearance will make you laugh until your belly hurts. But if you bump into them at night, they might give you the shock of a lifetime (well, they did me for sure).

Making a Sarah or Abraham figure on someone’s 50th birthday is one of the Dutch traditions that I find amusing. What is the symbolic meaning behind these dolls and why do people say that people turning 50 are ‘seeing Sarah’ or ‘seeing Abraham’? I’m not so sure myself, and I bet even the majority of the Dutch don’t know what lies behind their weird birthday celebration. Maybe frightening people is their idea of fun. **© Mas Muniroh Binti Mohd Nadzir, PhD candidate in Plant Breeding, from Malaysia**

**Why do people turning 50
‘see Sarah’ or ‘see Abraham’?
I bet even the majority of
the Dutch don’t know**

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 euro and Dutch candy.