#### **Creative with leftovers**

TERNATIONAL

Cooking contest to beat food waste | **p.7** |

#### **Attractive theses**

Which one of the ten deserves the Cover Prize? | **p.10** |

#### 'De WURwolf!'

Six things the university should give up in 2019 | **p.22** |

# RESOURTER [EN] For everyone at Wageningen University & Research no 9 - 20 december 2018 - 13th Volume

## Gert Kema scores with Dutch bananas

Behind the media stunt lies a smart innovation | p.12

#### 2 » tools of the trade

## **Oscar + Scintillometers**

160-RX

Oscar Hartogensis, researcher at Meteorology and Air Quality

#### **MEASURING TURBULENCE**

LAS MKII

A scintillometer measures the intensity of turbulence in the air via fluctuations in light. Picture the vibrations you see in the air above the road surface on a hot summer's day. Those vibrations can be used to measure the transport of heat and moisture. The optical scintillometer on the left registers heat, while the microwave scintillometer (with the large white hood) registers the transport of moisture. The machinery was developed by the Meteorology and Air Quality chair group and will be located in Amsterdam for research on the urban climate. **() RK, photo Sven Menschel** 

PHOTO COVER: GUY ACKERMANS

# >>CONTENTS

no 9 – 13th volume



>> **14** EDUCATION ADVICE Perry den Brok: 'A bit less innovation and a bit more evaluation' >> **18 POWERING ON** Argo members build their own new training loft >> 26 DUIVENDAAL 2.0 Everything in 'hospital white' and much higher rents

#### **RAT RACE**

#### AND MORE...

- 4 Delta plan for biodiversity5 Unemployment falling among
- alumni
- 6 Brightspace replaces Blackboard
- 7 Distinction for De Vos en Scheffer
- 9 Women feel full for longer after a drink
- 10 Waste affects brand appreciation
- 16 Nutcracker attracts attention
- 20 Do the *Resource* News Quiz
- 24 Rushing off to Uganda
- 27 Meanwhile in Hungary

WUR aims to educate superheroes who possess a great long shopping list of qualities, says professor of Education and Competency Studies Perry den Brok (see p.14). Nobody, he reckons, could possibly command all the superpowers on the WUR list. So the university had better improve the way it coaches students in making choices.

Good idea: students could use a bit of coaching. What with the disappearance of student grants, the higher interest on student loans and the threat of fines for delaying graduation, not many students have time to give much thought to important choices. Degree courses are getting more and more expensive, so you have to get through them as fast as you can. The time to learn from your mistakes and to take some time out has become a luxury only the more affluent students can afford. I am getting stressed just thinking about it.

The cliché has it that your university days are the best time of your life. A delightfully laid-back and carefree time before you join the rat race out in the real world. It's time to update that cliché. Your university days are the best rat race of your life.

Luuk Zegers, education and students editor

>> Everyone is welcome at the international Christmas dinner against loneliness | p.27

## BOOSTING BIODIVERSITY SHOULD BE AN EARNER

Land users who contribute to the recovery of biodiversity should be suitably recompensed from now on. That is the main principle enshrined in the new Delta Plan for Biodiversity.

The plan, which was presented in The Hague yesterday, was drawn up by Dutch nature conservation organizations, farmers, ecologists, the Agrifirm cooperative and the Rabobank. On behalf of Dutch ecologists, WUR professor David Kleijn played a leading role in writing the plan. Kleijn is enthusiastic about the 'unique collaboration' which emerged a year ago on the initiative of ecologists' network NERN and its chair, Louise Vet (NIOO director and WUR professor). Halting the continuing impoverishment of nature requires a

total change of direction, according to Kleijn. At the heart of this is the fact that measures to promote biodiversity shouldn't cost people money but should make money.

Ultimately, the bill for that recovered nature is to be paid by the consumer. And that requires a change of heart, says Kleijn. 'The current system is that we want to buy products for the lowest possible price. We've got to change that attitude. In the end we shall have to pay the real price of products, including the costs of nature conservation.'

According to the Delta Plan, the monitoring of biodiversity poses a major new challenge for Dutch ecologists. Kleijn: 'If you take certain measures, you also



Measures that increase biodiversity, such as sowing flowers on the edge of fields, should be rewarded, says the Biodiversity Delta Plan.

want to know what effect they have. And nature in the Netherlands is monitored well, but farmland is not.' The plan also appeals to ecologists to play an active role in local area development. 'They belong to a relatively small group of people who understand biodiversity. It's important that they take the initiative,' says Kleijn. 'There are many ways of doing that. Personally, I am intensively involved in making an area of South Limburg bee-friendly.'

There's a task for WUR in the Delta Plan too. It says that new

roads should result, on balance, in more biodiversity. That applies to a possible ring road around the campus, says Kleijn. 'If that road has to be made, make it so the surroundings become more biodiverse than they were. Sadly, that is not asking much. It is WUR's duty, given its status, to set a good example in this.'

The current draft of the Delta Plan is a first step. The idea is to publish the complete plan next spring. Kleijn: 'We are giving it publicity now to give all parties the opportunity to join in.' **@ RK** 

#### **GO-AHEAD FOR STUDENT HOUSING AT KORTENOORD**

The building of 312 student rooms on the corner of the Kortenoord Allee and the Nieuwe Kanaal is definitely going ahead. Student housing provider Idealis will start building in January.

At the earliest, the rooms are due to be handed over at the start of the academic year in September next year. 'We are discussing that with the contractor Plegt-Vos,' says Idealis director Sylvie Deenen. 'We have asked whether at least some of the units could be handed over then.'

Most of the student units are intended for international students. The rooms are furnished and have their own kitchen, shower and toilet. There is a common room and a laundry room. The 312 units are spread over four floors and are designated temporary accommodation for a maximum of 10 years.

The construction of this accommodation at Kortenoord has been delayed by two years because companies at the Business & Science Park (BSP) objected to temporary housing being built in the business park. Their objections were overruled in court last week.

There is no question of any conflict now, says Deenen. Idealis has even become a partner in the park management. 'As good neighbours, we are participating in the



upkeep of the park.' The BSP is working on 'revitalizing' the business park. ③ RK

#### LESS UNEMPLOYMENT AMONG ALUMNI

Unemployment among WUR alumni has fallen from 13 per cent in 2013 to 8 per cent in 2017, according to the latest National Alumni Survey by the Association of Dutch Universities (VSNU).

Silvia Blok, labour market employee at WUR, is pleased with the fall of 5 percentage points in four years. 'We're over the crisis low point.' However, WUR alumni do take slightly longer to find their first job after graduating: 3.7 months compared with the national average of 2.7 months.

Many Wageningen alumni go on to do a PhD: 21 per cent compared with an average of 12 per cent for all Dutch universities. 'That has been the case for years,' says Blok. 'WUR is a real research university and that is reflected in the figures.'

Another striking result is that 40 per cent of WUR

alumni did an internship abroad during their Master's as opposed to the national average of 16 per cent. WUR alumni were also relatively likely to be living abroad at the time of the survey (27 per cent versus 14 per cent). Education & Student Affairs says this is because of the large number of international students doing Master's degrees at Wageningen: nearly 40 per cent of MSc students are from abroad. @ EvK, LZ

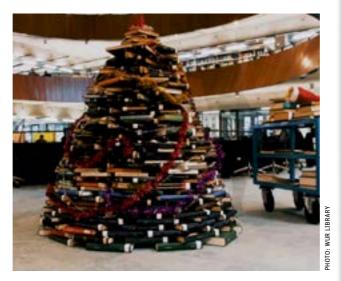
#### in brief

#### >> CHRISTMAS DECORATIONS 'Tree' made of books

Staff in the Forum library have built a 'Christmas tree' from discarded books. The edifice is nearly two metres tall and stands right in front of the entrance. The tree will remain there at least until the new year. *Resource* is looking for more unusual or splendid Christmas trees. Do you have a sparkling example lighting up your office or student kitchen? If so, share it on Instagram with hashtag #resourcewur or email it to linda.vandernat@wur.nl. **@ RK** 

#### >> HAARWEG SOLAR PARK Council gives go-ahead

A new solar park will be built on WUR land on Haarweg. Wageningen municipal council has agreed to the initiative by WUR and Wageningen company LC Energy. Solar panels covering nearly five hectares will be put up on the land adjoining the temporary student barracks. The plan prompted dozens of reactions in the public consultation procedure and certain aspects were amended. For instance, the panels will be hidden from view by a metres-wide strip of greenery, and the possibility will be investigated of using the park as a test location for research and education. The latter proposal came from student party Connect Wageningen. **@ RK** 



#### >> NEW NIGHT BUS From Utrecht to Campus

Fancy going out in Utrecht? That just got easier, with the start of a new Keolis weekend night bus service from 15 December, from Utrecht to the Wageningen campus. The night bus (line N8) used to stop at Veenendaal, but the route has now been extended. From now on, the bus leaves Utrecht Central Station at 1:30 and 4:00 every Saturday and Sunday morning and goes to the campus via Veenendaal, Rhenen and Wageningen bus station. 'We noticed people wanted to go out in Utrecht now and then,' says Nick Lighart, chair of Student Alliance Wageningen. The student union therefore put the case for a night bus to the Gelderland Provincial Council. 'We are very pleased it exists now.' () TL

## **COLUMN**|GUIDO

#### **Proud as punch**

You could hardly fail to notice the *Nederba-naan* last week. To me, this really was a moment to be proud of WUR. Needless to say, that's because of the undoubtedly outstanding science underlying the project and the marvellous articles it will generate. But I was also proud of the good media campaign that accompanied the presentation of the first Dutch bananas.

It might not strike anyone who is not especially interested in scientific communication but what I noticed was an excellent short film of the first banana harvest (a well-chosen moment). A film that was easy to share on social media. A catchy and descriptive name: the *Nederbanaan*. The launching of the easy-to-follow #nederbanaan, and ample opportunities to ask the researcher questions.

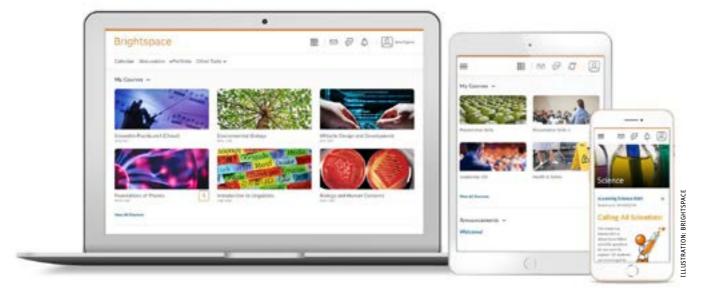
Its success in communication terms was clear from the headlines. A Dutch headline ran: 'Banana threatened by fungal disease, but Wageningen has the solution: the *Nederbanaan*'. And elsewhere readers were told: 'First Dutch bananas could help tackle worldwide fungal threat'. Now that's the sort of publicity a university wants, isn't it?

Sometimes I hear scientists expressing doubts: is all the bother with the media really worth it? In my view it is the only way for the university to hold its own in the coming century. For me, two things were harvested this week: a *Nederbanaan*, and a campaign that put our science in a positive light. Congratulations on both achievements. **G** 

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



## **BRIGHTSPACE IS THE NEW BLACKBOARD**



## After more than 15 years, WUR is saying goodbye to the electronic learning environment Blackboard and switching to the Brightspace system, to be phased in gradually in 2019.

WUR's contract with Blackboard was coming to an end and the university was legally obliged to get several suppliers to tender for the supply of a new virtual learning environment (VLE). A new system was badly needed as the version of Blackboard now in use is dated.

The new VLE was presented in Orion on 11 December. The system has been tested by a panel of lecturers and students, and according to the Dean of Education Arnold Bregt, it stood 'head and shoulders' above the other systems that were in the running (Cumlaude and a new version of Blackboard). 'Brightspace is technically well-designed. And it fits well with WUR's new vision on education. It is better for supporting the use of student portfolios and distance learning, for instance.' A further advantage is that lecturers can share content more easily using drag-and-drop to transfer files into the system. Lastly, Brightspace works more easily on mobile phones and tablets.

People are now being trained so they can help with the coming transition from Blackboard to Brightspace. Bregt: 'A smoothly functioning support structure is crucial so we are working hard on that.' Nevertheless, the transition will demand a lot of teachers, he says. 'We cannot deny that teachers will have to spend a lot of time on this. The only thing we can do is to offer as much support as possible. But people are so busy already that I understand that the average teacher is not too keen.'

The new VLE will be introduced gradually in the course of 2019. The first teachers can get started on transferring their courses from 1 March. In period 6, the first 50 courses will be on Brightspace. That means that during that period a few students will have to use both Brightspace and Blackboard. All courses will be on Brightspace by period 3 of the next academic year. **Q** LZ

#### WHAT THE TESTERS OF BRIGHTSPACE THOUGHT

Teacher and course coordinator **Jessica de Koning** of Rural Sociology was on the testing panel for the new virtual learning environment (VLE). She is pleased about the decision to use Brightspace. 'For me, it was the most intuitive of the three systems we tested. It took me the least time to figure out how to do things or where to find something. It is also easier to see students' progress at a glance, so you can cater for that.'

Assistant professor of Remote Sensing **Harm Bartholomeus** has mixed feelings about the decision to use Brightspace. 'It wasn't at the top of my list, mainly because it will be hard to get used to. The implementation can take up time and energy, and may cause frustration. But let's not be afraid of new things. A change in the virtual learning environment forces us to reflect on the way we are teaching now.'

Assistant professor **Martine Reij** of Food Microbiology was pleasantly surprised by the help function in Brightspace. 'That helped me to find pretty much everything I was looking for. I don't manage that in Blackboard even after all these years. I usually ask colleagues for help, or they ask me.'

Student of Food Technology **Thomas Nissink** has faith in the transition to Brightspace. 'When we were testing the systems I was prejudiced in favour of Blackboard because I was used to it. But I really liked Brightspace. What struck me most was that Blackboard looks like a system from 2000, while Brightspace is hypermodern: totally white and minimalist. It

works intuitively, but in a very different way to Blackboard. It's sure to take some getting used to. But all the tests went pretty much without a hitch, and if I can learn to use it in an afternoon, any student can.' **() EvK** 









#### COOKING CONTEST WITH LEFTOVERS

Cook something creative with leftovers. That is the task in the 'Less together' (*samen minder*) contest, which kicked off on Tuesday 18 December. The competition is challenging WUR students and staff to do something about food waste.

'Every year, we throw away 41 kilos of food per person,' says Toine Timmermans, Sustainable Food Chains programme manager at Wageningen Food and Biobased Research. 'That's a choice. We could stop today if we wanted.' According to Timmermans, research shows that setting a good example is an effective way of getting people to change their behaviour. Hence the leftovers competition.

Participants can give their creativity free rein and share photos of their leftovers concoctions on social media using the hashtag #samenminder. The person who comes up with the most inspirational recipe will get a box from sustainability platform Verspilling is Verrukkelijk. Go to www.wur.eu/samenminder for more information on the contest.

The competition, which will continue until mid-January, marks the start of a national campaign by a collaborative venture of companies, science institutes (including WUR), civil society organizations and the government aimed at combating food waste. **() TL** 

#### TITLES OF DISTINCTION FOR DE VOS AND SCHEFFER

Professors Marten Scheffer and Willem M. de Vos have been appointed distinguished professors at Wageningen University. They are the first to receive this new title of distinction.

Distinguished professors are leading lights at WUR and respected authorities in their field. The Executive Board wants to make use of their expertise and status by calling on them for assignments at the strategic level. For Scheffer and De Vos, this is going to include 'helping to think through our scientific priority areas, our positioning in the world, and quality control,' says rector Arthur Mol.

Professor of Microbiology de Vos is 'pleasantly surprised' by his new title and role, which he sees as 'completing' his 32-year professorial career. 'Last year, when the Microbiology chair group celebrated its centenary, I made clear that I wanted to step down as chair-holder in 2018.' He sees his new position as a nice next step. He has already been assigned the first tangible task in his new role. 'I am to chair the appointments committee for personal professors.'

Professor of Aquatic Ecology and Water Quality Management Scheffer feels honoured by his appointment. He responds by email, as he is on a working trip in South America. 'The idea is that I will focus more on the work of forging connections within our university. That is a perfect fit with my ever-growing interest (or perhaps obsession) in linking up the different branches of science with each other and with the arts.'

Scheffer and De Vos are stepping down as chair-holders, but that does not mean the end of their research careers. De Vos: 'A big gravitation project, as they are called, will be running for another five years. I will continue to publish and to supervise PhD and postdoc researchers in



▲ Willem M. de Vos



Marten Scheffer

that project. And I am also involved in several startups.' 'I will stay in the group,' says Scheffer. 'But of course I'll have less time when I start working more broadly within the university.'

Scheffer and De Vos's successors in the chair groups have already been appointed, and their names will be announced shortly. **() RK** 

#### PROTEST AGAINST WORKLOAD

WUR lecturers Elisabet Rasch (in the grey hat), Jeroen Warner (behind Rasch) and Michiel Köhne (in the middle) joined a demonstration in The Hague on Friday 14 December to protest against budget cuts in higher education. 'This needs to be heard', says Köhne, assistant professor of The Anthropology of Law and Development. He believes the growing workload could be the university's downfall. 'There are a lot of students and relatively few teachers. Everyone works overtime on the teaching, at the expense of other tasks such as writing and publishing.' <sup>®</sup> EvK



Wageningen in to Languages

opens up new worlds

## Students Language Courses

Are you a student and do you want to improve your English, Spanish, French or Dutch? Our new round of courses is starting!

#### Dutch

Social Dutch 1 & 2 - free Social Dutch 3 & 4

**Start Monday 21 January** 

#### English

English Presentation & Performance English Speaking & Pronunciation English Skills Lab 1 & 2, academic grammar & vocabulary courses Academic Writing 1, 2 & 3 English for IELTS and RATEr

**Start from 18 February** 

#### **French & Spanish**

Levels 1, 2, 3 & 4

**Start from 18 February** 

'Successful academics speak their languages'

www.wur.eu/into

## ANTICANCER COMPOUND BIOSYNTHESIS CRACKED

Wageningen researchers have figured out the complete biosynthesis of kauniolide. This compound is used in drugs to fight cancer.

Kauniolide is one of the so-called sesquiterpenes, a large class of compounds (more than 4000 have been described) that are found in plants. Kauniolide belongs to a group of compounds that are effective against cancer, parasites and bacteria. But until now it was not known how kauniolide is formed in nature. Wageningen plant scientists and chemists have now jointly managed to figure out that path. The search began with feverfew (*Tanacetum parthenium*), explains plant physiologist Sander van der Krol. Five years ago, PhD candidate Qing Liu managed to find the gene that plays a decisive role in the biosynthesis of kauniolide. Qing inserted the gene in a tobacco plant and demonstrated that it then produced kauniolide. Which was conclusive proof. But what does the protein involved, a P450 protein, actually do in chemical terms?

To answer that question, organic chemist Maurice Franssen was brought on board. He is an expert on sesquiterpenes and how plants produce those compounds. Franssen was 'amazed' when he was presented with the case of the P450 protein, kauniolide synthase. 'I immediately realized how special that protein was. Normally, P450 proteins add an oxygen atom to an organic compound. This one does that too, but then removes it again!'

'Two reaction steps combined in the same enzyme,' he continues enthusiastically. 'There are hundreds of such enzymes but none that can do this. That makes it so unique.' What is more, Qing's study fits seamlessly with work done by previous PhD candidates of Franssen who tried to decipher the biosynthesis of compounds similar to kauniolide. The chemical steps for which the new enzyme is the catalyst were already predicted by one of those PhD candidates in 1996.

Franssen then figured out the chemical process. The protein operates in successive steps to eventually produce kauniolide's typical ring structure. 'A great example of One Wageningen research,' says Franssen. The study has been published in *Nature Communications*. Van der Krol: 'Once you have the basic skeleton, you can use other P450 enzymes to modify it to produce new variants of kauniolide that could be even more effective as medication.' **@ RK** 

## **WOMEN FEEL FULL FOR LONGER AFTER A DRINK**

Women's stomachs are full for longer than men's after drinking beer or soft drinks. This may explain why women often drink more slowly, and feel bloated more quickly.

The study, published in the *Jour-nal of Nutrition*, involved 17 women and 17 men, who were asked to fast for three hours before participating. Then they were given half a litre of beer on one day and on another, half a litre of a soft drink, which they had to drink up in 20 minutes. Then they had an MRI scan.

Researcher Guido Camps and his colleagues at Human Nutrition discovered that the liquid stayed in women's stomachs longer. The amount of gas produced was the same in men and women, which suggests that the volume of liquid is the main explanation for the bloated sensation.

The scientists cannot say much about the role of carbonic acid as the was no control group in this study that got a drink without carbonic acid. Camps says the women in the study reported more nau-



sea than the men did. 'That is probably a direct result of the slower emptying of the stomach.'

Camps does not yet have a precise explanation of the difference found between men and women. 'Our guess is that the slower emptying is caused by certain female hormones that slow down the stomach. But we haven't measured the hormones, so we cannot say anything more about that now.'

According to Camps, the results are relevant to medical and nutritional research. These currently use standard times for the length of time it takes the stomach to empty. 'Our study, along with a number of previous studies that point in the same direction, suggests there is a need for separate references for men and for women.' **@ TL** 

## WASTE AFFECTS ATTITUDES TO A BRAND

Did you throw out half a tub of potato salad or an open packet of biscuits? Then there's a good chance your attitude to this food product is less positive after that, shows research by Marketing and Consumer Behaviour, published in the *Journal of Cleaner Production*.

'There is a lot of attention to the negative effects of food waste on the environment but waste can also have immediate negative consequences for the producer,' says Erica van Herpen, associate professor of Marketing and Consumer Behaviour. She and her colleague Ilona de Hooge conducted three experiments. In the first two, with a total of 500 participants, people were asked to imagine as vividly as possible that they were throwing out books, leftover food or half a bottle of juice. The test subjects reported afterwards having felt uncomfortable and valuing the discarded product less highly than they had previously done. Van Herpen: 'The disadvantage of basing your study on a scenario like that is that it is not entirely realistic.'

In the third experiment, 124 students came to the laboratory, where they made and then ate a salad. There were too many ingredients. Students in one group were asked to throw out the leftover ingredients, while those in the other group were told the food would be used up later. In both situations, the brands of the ingredients were visible in one case and not in the other. The group which threw out the leftovers and could see the brand name, gave a lower rating of that brand afterwards than the group that was told the leftovers would be used.

According to Van Herpen, this effect is due to cognitive dissonance, an effect of your actions conflicting with your own ideas. You like the food (positive) but you still throw it out (negative). Your brain then has to do something to reconcile these contradictions, such as rating the discarded food less highly.



According to Van Herpen, it is not yet clear whether this is a longer term effect. 'Although we didn't look at whether people then also buy the product less, I would think that was a possible consequence, especially if the product gets wasted repeatedly.' **G** TL

## THE TENTH RESOURCE COVER PRIZE

It is a big anniversary for the competition for the best Wageningen PhD thesis cover of the year. Battle commences for the tenth Cover Prize on Thursday 20 December on resource-online.nl.

In 2009, the science editors of *Resource* thought it would be fun to look at the annual pile of theses from a different angle than the usual.

Focusing on the outside. This gave the impetus for the first election of the best cover. In the early years, it was an expert jury that decided who deserved the Cover Prize. After three years, assessment by jury was abandoned for the 'wisdom of the crowd' and the election went online. Everyone can now vote on the website. That seems democratic, although critics rightly point out the downside: does the best cover win, or the person who mobilizes the most support? The editors hope the answer is both.

This year, 285 Wageningen PhD theses have been published – 10 fewer than in 2017. Once

again, 10 theses were selected, 6 by women and 4 by men. The theses were selected for covers that capture something of the contents of the thesis in a surprising, original or otherwise tasteful manner. The result is a very diverse selection.

You can vote on resource-online.nl until midnight Dutch time on Sunday 6 January. The results will be announced on the website and in the first number of the new year. **O**RK



## Wanted!

The Education Support Centre is looking for students to work for at least 16 hours a week from February 2019. The job is to support lecturers and course coordinators in building their courses in the new learning environment – Brightspace - that will replace BlackBoard in the course of 2019.



#### Your responsibilities

- Acquire the competencies to work in the new learning environment
- Build courses following the lecturer's instructions and/or based on the original setup in Blackboard
- Test the courses in the new learning environment
- Assist in developing training materials, manuals, Frequently Asked Questions (FAQ), instructional video clips etc.
- Participate in the helpdesk and solve the problems that are reported
- Help develop and operationalize tools in and outside the learning environment
- You will be assigned specific tasks and will be expected to work in one of the project rooms of the Training, Support and Course Implementation Team.



#### Your qualities

Students or recent graduates for support and

implementation of the new learning environment

You are pro-active and able to acquire new competences. You are a team player. You have good communication skills and can be a sparring partner for the lecturer and designers. You are able to come up with alternative options using other digital tools (FeedbackFruits, video server P2Go, Labbuddy, Turnitin etc). You can cope with stress and meet deadlines.

You will be offered a six-month contract with a possibility of extending it by another six months. You will receive a gross salary of  $\in$  980,- per month, on the basis of a working week of 16 (paid) hours.

#### Interested?

Apply by sending an email before 15 January 2019 with your motivation and CV to: eline.noorbergen@wur.nl

#### PROPOSITION

#### No more people on assembly lines

Patric Brandt is looking forward to the time when robots take over a lot of our work. But for now, he still has to do most things himself. Like planning a sightseeing tour for his parents when they come to the Netherlands for his defence. 'They will be surprised, because in the Netherlands a PhD defence is a real show compared to Germany.'

'Technology is advancing fast, especially in the area of artificial intelligence. In a utopian scenario, robots will mainly take over from people in boring jobs. That means people will have time for other, more interesting things than working on an assembly line, for example. I think in the next decade or so we shall also see more robots in the healthcare sector. They are already in use in Japan. The *Tropenmuseum*, a museum of world cultures in Amsterdam, actually has an exhibition at



Patric Brandt got his PhD on 30 November for his thesis on climate-smart dairy farming in Kenya. the moment in which you can interact with one of these robots. I understand that people are afraid, because the other scenario is that robots take over and we lose control, like in the film *The Matrix*. I'm not so worried, because for that to happen robots need to be way smarter than us, and I don't see that happening in the near

future. We do however use a lot of digital technology worldwide. I lived in Kenya for two years to do my PhD research. Even though smallholder farmers there are still too poor for investment-intense options such as precision farming, everyone has a smartphone and the development of digital technologies is booming. Nairobi is even called Silicon Savannah.

We use a lot of digital and social media and I think people are not very aware of the consequences of sharing information. Because this information is also used to make algorithms for artificial intelligence more powerful and to make future robots smarter. On the one hand, that is good but on the other hand, it makes everyone of us more predictable. Perhaps this is something that could be taught in schools, so we can avoid a future in which robots really do take over.' **Q** TL

Robots will take over the world

## The Nederbanaan: a nice gimmick, but serious too Going bananas

The media paid extensive attention to a Wageningen coup last week: the harvest of the first bananas to be grown in the Netherlands. A nice stunt, but the *Nederbanaan* also represents a promising innovation: growing food on substrate as a way of avoiding soil fungi.

text Roelof Kleis photos Guy Ackermans

#### features << 13

few days before the official first harvest, special professor of Tropical Phytopathology Gert Kema looked a bit doubtful about the proposed name *Nederbanaan*. It doesn't work outside the country. 'I would think more in terms of something beginning with 'Dutch'. That often goes down well abroad.' But at the presentation for the Dutch press two days later, it is clear that *Nederbanaan* won the day. The first banana to be grown on substrate.

#### **ANNIVERSARY STUNT**

'The idea of growing bananas in a greenhouse came from a wish to do something special to mark the WUR centenary,' explains Kema. 'When we started working on bananas, everyone laughed at us. But now it is Wageningen's pet crop.'

Kema has been doing research on bananas for years. He has made it his mission to make the banana more sustainable and to develop varieties that are resistant to the feared Panama disease. To this end, banana plants have been grown in the greenhouses on campus for years. What is new, however, is that Kema and his colleagues have now allowed the plants to grow to maturity and bear fruit. 'We have never done that before. The idea was to harvest the first bananas from the greenhouse towards Christmas. That is the stunt, the fun part of the project.'

These anniversary bananas are a nice gimmick, but much more important is the serious research objective Kema attaches to the greenhouse banana. These banana plants do not grow in normal soil but in different substrates above the ground. An idea as brilliant as it is simple. It works like this. Panama disease, which threatens bananas worldwide, is caused by soil fungi of the *Fusarium* genus. The fungi penetrate the plant via its roots and then do their destructive work. Well, if the soil is the problem, keep the plant above the ground, Kema reasons. Go bananas: think out of the box, and keep the fungi out.

#### **ROOF-HIGH**

Six rows of nine banana plants have been growing in the Radix greenhouses since the beginning of this year. Some of them stand in plastic basins in coconut fibre, and others on long 12-litre plastic sacks of rockwool. No soil is involved at all. The plants

are drip-fed through small pipes. They are quite a sight: cuttings barely 10 centimetres high have grown within a year into giant roof-high plants. The greenhouse is literally overgrown with banana plants. That is lesson number one, says Harold Meijer, Kema's 'right-hand and left-hand man' in the greenhouse. 'As the experiment progresses, you run into all kinds of problems,' he continues. 'The roof is 6.5 metres high, which turns out to be too low. The plants are also close together and are getting in each other's way. Some of the leaves are three metres long. There is no room for them like this, so you have to train them. And there are too many leaves, anyway. In the field, banana plants only have six or seven leaves, while ours have eight to ten. That's because there are no diseases here. In the next project we must plant them further apart so individual plants get more light and air.'

#### **NO PESTICIDES**

Growing bananas on substrate has several obvious advantages, the main one being less disease pressure. This significantly reduces the need for pesticides. In the Radix greenhouses, no pesticides are being used at all. Kema points out the efficient use of nutrients too. 'In the field, 30 per cent of the nutrients are washed away. None here. With substrate you can also time precisely when you want to put your bananas on the market. That is a big advantage. Currently most bananas are supplied during our summer months. But that is precisely when demand is lowest, because so much fruit comes onto the market then.' One consequence of substrate cultivation, according to Kema, is that it is an annual crop. 'A banana plant grows for about 15 years in the field, with a new plant growing out of the old one every year. That's not possible on substrate.'

The first Dutch bananas are a great success, says Kema. The harvest, about 800 bananas on six ripe bunches, are now ripening in Chiquita's ripening facility in Gorinchem. The bananas will then find their way via the regional cooperative Boerenhart to restaurants and hospitals in the Gelderland Valley.



▲ Gert Kema

#### **OUTDOOR SUBSTRATE CULTIVATION**

There will almost certainly be more Dutch bananas to come. 'The next step in the Netherlands is to further diversify the cultivation in a greenhouse or building,' says Kema. Not with the aim of squeezing the standard banana out of the market. You need a lot of space and heat to grow bananas. But he does see a niche market for banana varieties that are not currently for sale in the Netherlands.

The real focus on the project is elsewhere, though: on countries plagued by Panama disease. Kema: 'I want to do this trial outdoors in the Philippines. A oneyear experiment with 1000 plastic pots somewhere like a big carpark. Put a fence around them and you're done. That's all that's needed. We are going to discuss this in the Philippines.'

#### **CLEVER TRICKS**

The Nederbanaan has little to do with Kema's genetics-based quest for a resistant banana. A new and practical line, you could call it. 'In phytopathology it's important to contribute to solving practical problems. This is about the agendas of farmers and companies. That sometimes leads to long-term and fundamental research, and sometimes to clever tricks. Science for Impact, as the WUR slogan goes: that's what it's all about in the end. And this might well be a very good example of that.' **Q** 

#### Education professor thinks WUR education could be even better

# **'A graduate has to be a superhero'**

Wageningen is the best university in the Netherlands for the 14<sup>th</sup> time in a row, according to the Universities Guide *Keuzegids* and the National Student Survey. And yet there are plenty of opportunities for improving the education here, says professor of Education and Competency Studies Perry den Brok. Four suggestions for the university.

text Luuk Zegers photo Aldo Allessie

**Evaluate educational innovations better** 'The university spends over a million on educational innovations every year. A good thing in itself, but there's something odd: you can only find an evaluation for 15 of the 88 innovation projects of the past three years. That means that in 80 per cent of the projects, money has been spent without anyone at a higher level checking whether the project was successful. An innovation project can fail, but then you do want to know that it failed, and why. It's okay to fail, but you want to learn the lessons from failures.'

Brok is chair of the 4TU Centre of Engineering Education, a joint project by the three Dutch technical universities and WUR, he explains. 'On that centre's website there is an online innovation page, with a lot of the educational innovations at those universities and you also see what lessons were learned from which projects. By using something like that you can prevent people from making the same mistakes again and again.' So WUR needs to go about things in a more 'evidence-informed' way, says Den Brok. 'Don't get me wrong, it's a very good thing that there's an innovation fund. But reserve some budget for evaluations. A bit less money for innovations and a bit more for evaluating them.'

#### Make the education more flexible and modular

There was a time when people thought MOOCs (Massive Online Open Courses) would turn the world upside-down, says Den Brok. 'In the end they turned out to be just a small step forward. And yet the MOOC has had more impact on education than most people realize. Thanks to MOOCs, we are learning better ways of dealing with large groups of students. And education is becoming more flexible and more modular. On a MOOC you can get a certificate for individual components, which is valid elsewhere. Imagine: someone comes here to follow a degree programme, but has already got certain certificates, which we accept. That student can then complete a degree in a shorter time.'

This concept is increasingly being applied on teacher training programmes, says Den Brok. 'To make it easier for students to go into teaching, teacher training programmes are now divided into modules. Students can do these as electives on their Bachelor's and Master's degree programmes. That way they can get course certificates that might, for example, qualify them to teach at lower secondary school level. Some teacher training programmes are even going so far as to see whether students can do the last part of their Master's while already working. That gives you a smooth transition: getting some modules of the teacher training programme during your subject-related degree programme and finishing it off afterwards - on the job.'

This flexible, modular way of learning could be rolled out far more extensively, thinks Den Brok. 'As a university we could decide that we want to take the lead in life-long learning. And be pioneers in modular education.' Coach students in deciding which direction to go in

The Life Sciences graduate of the future has got to be a kind of superhero, with superpowers,' says Den Brok. He is referring to a long list of qualities that alumni have to live up to, according to WUR's educational vision. In random order, they must be inquiring and creative thinkers; have a nose for policy and for the market; be flexible, analytical and reflective; be competent to handle scientific knowledge and to write, argue and debate; be capable of intercultural and interdisciplinary collaboration; show leadership qualities and possess and strive for excellence. And that's just for starters. Extremely ambitious, says Den Brok.

#### 'Students have to make choices: where does your heart lie, what drives you?'

'You can never manage all that. So a student has to make choices: where does your heart lie, what drives you, what is your profile going to be? There are more and more options nowadays, so making good choices becomes more and more important. For example, as a student, you are now expected to think about whether you want to work with people, give advice, or maybe be more of an entrepreneur. In the old days, the emphasis was only on the subject matter.'

The solution: more coaching on making choices and on professional identity. 'Students can now choose for themselves which skills they



▲ Perry den Brok with the statue of *The Tutor* in front of the Leeuwenborch. A mini version of the statue is given annually to the Teacher of the Year.

want to learn. They should have to defend their choices. Then they will give them more careful thought.'



**Streamline the educational ecosystem and design clear learning trajectories** Educating 'superheroes' calls for a special learning environment, says Den Brok. 'That's why I prefer to talk in terms of an educational ecosystem. The term "learning environment" tends to make us think of traditional lectures and classrooms. In an ecosystem there is also a place for virtual learning – online or in games – and for learning through writing a business plan, internships, simple commercial activities, Academic Consultancy Training or a Student Challenge.'

Many of the components of this kind of modern educational ecosystem are already in place in Wageningen, says Den Brok. 'Only it is still a bit ad hoc. Now students often go on internships towards the end of their degree programmes. Then the student is suddenly expected to be able to do all sorts of things that have not been covered – or not adequately – in earlier courses. By making the required skills part of your education, you can prepare students better for this. In short: zoom out and design learning trajectories for those skills, in which those separate components of the education ecosystem are more streamlined.' **()** 

#### WINTER GUEST ATTRACTS ATTENTION

It is remarkable how often groups of people in camouflage clothing have stood staring at the balconies of students' rooms on the Marijkeweg recently. They are hoping for a glimpse of the nutcracker, a jay-like northern European bird that sometimes visits the Netherlands in the winter. He has just picked up a peanut, which he will hide somewhere for leaner times – just like squirrels do. 'He is not shy at all, and is a very cooperative model,' says photographer and WUR alumnus Sjoerd Schimmel, who took this photo on his downstairs neighbour's balcony. 'I was 30 centimetres away from the bird, but that wasn't a problem at all.' **@ LdK, photo Sjoerd Schimmel** 

#### Argonauts design and build their own training loft

# **Operation**<br/>**self-build**

Puffing and panting on the ergometer: there's no way around it for a rower. But where is a fast-growing rowing club to put all those machines when it outgrows its old gym? A few creative members of Argo rolled up their sleeves to build their own new training loft.

text Luuk Zegers photos Tim den Duijf and Argo

In the last few years, student rowing club Argo has grown into one of the biggest student societies in Wageningen. To be able to accommodate all its members, the club invested in a new building six years ago. But not enough thought was given to the indoor training facilities: it was getting more and more crowded in the old gym in the small loft in the boathouse. It couldn't go on like that, thought a bunch of Argonauts.

They set up Space to Breathe, a committee aiming to raise funds for a better training facility. Chair Bas Beerkens: "That was badly needed. At peak training times there were sometimes 30 people training in that small space with no insulation or ventilation. Meanwhile, the number of new members kept on growing, while there was no money for a major extension since we had only just moved into the new building.'

#### **ROWING MARATHON**

The costs of a new training room were estimated at 90,000 euros. 'A lot of money,' says Koen van Niekerk, another member of Space to Breathe. 'So as a committee, we decided not just to raise funds but to mobilize the whole club. Then you've got 650 people fund-raising instead of seven. It came to about 140 euros per member. Still a lot, but more manageable.'

The crowd-funding campaigns started on 1

January 2017, organized by individual members, teams and committees, like the cooking committee, who organized a special dinner. But the nicest event was the rowing marathon, say Beerkens and Van Niekerk. 'Our top competition team took it upon themselves to keep an ergometer running for 24 hours nonstop, on the same basis as a sponsored walk. They raised a couple of thousand euros with that one. It was such a success that it was repeated at the beginning of this year, but then with seven teams. We've got a new tradition now,' laughs Van Niekerk.

#### 'An architect is quite expensive, whereas it is not that difficult at all'

#### **BUILDING PLAN**

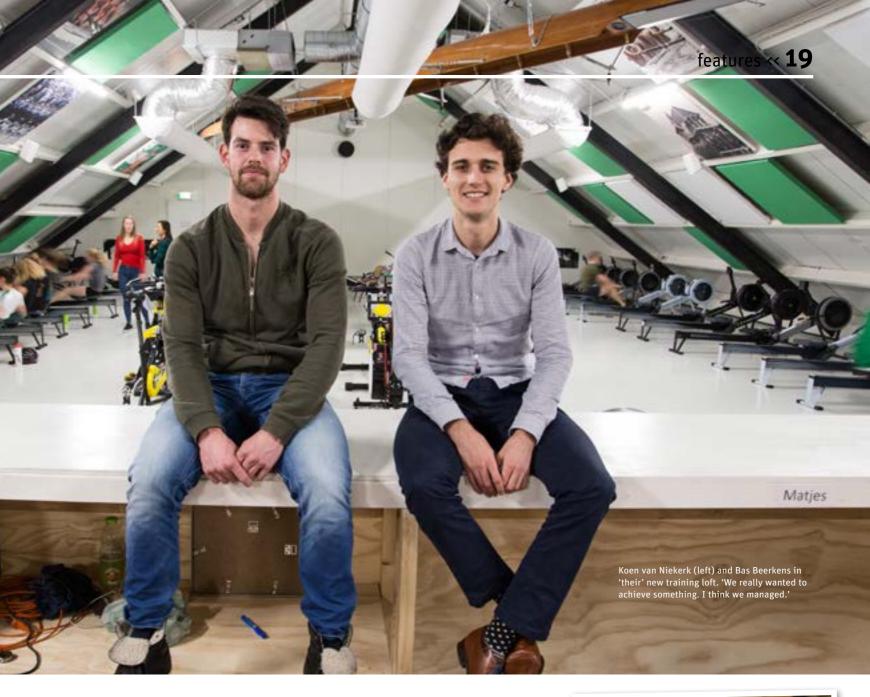
The total amount raised was presented during the Argo Sprint, the last competition of the rowing season, on 30 June 2017. About 56,000 euros had been raised: a lot of money but quite a bit less than the target. But Van Niekerk had not been sitting around all that time. While other Argonauts were raising money, he looked into ways of building a good training space as cheaply as possible. 'The simplest way was to take a good look at how the



crowded training loft in the boathouse was built, and replicate it on a larger scale. That loft only took up one third of the attic space in our new boathouse, so there was enough space to extend it.' Van Niekerk knew so much about it by now that they decided to draw up their own building plans. 'An architect is quite expensive, whereas it's not that difficult at all. As long as you keep it simple.'

#### **CONCRETE FLOOR**

'When the summer holiday started in 2017, we ordered eight cubic metres of concrete, and we went hard at it for a few days,' says Van Niekerk. By 'we', he means the Argonauts Marten Breeuwer and Douwe de Jong – 'handy guys with farming roots' – and himself. First, the lads had to lay a foundation for the steel



construction that the loft would rest on. 'Chiselling out holes, putting in the wire mesh and then the concrete. That's how we laid the foundation. Of course we had calculated how big and thick it needed to be; you had to put that in the planning permission application too.' A company from Ede supplied the steel frame, after which the lads got on with the carpentry.

The basic construction was up in February 2018, but there was a lot still to be done. Electricity, insulation, paint on the walls, a floor. Team Space to Breathe agreed that the new training space had to be ready before the AID 2018. They put in the electric wiring with the help of an ex-Argonaut who had done it before, the wall of the original loft was taken down and reused, stairs were built, a floor was laid, and so on.

#### **PIG SHED**

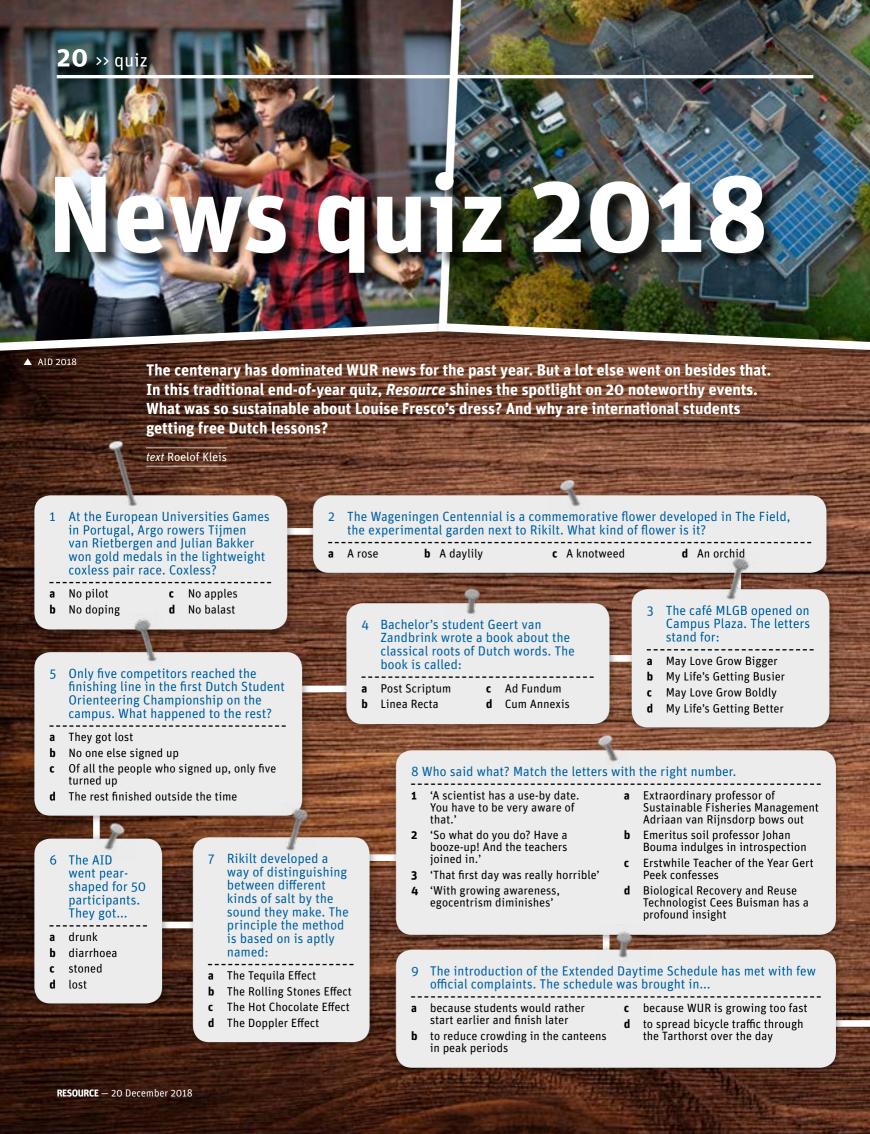
The Argonauts are particularly proud of their new and sustainable ventilation system, in which the heat from the extracted air is used to heat up fresh air from outside. WUR expertise was used in choosing this system, explains Van Niekerk, laughing. 'Marten is studying Agrotechnology. For one of his courses he had to calculate the ventilation capacity of pig and chicken sheds. With that theory as a basis, we did the sums in Excel, and we showed them to an installation company. They agreed and then installed it for us.'

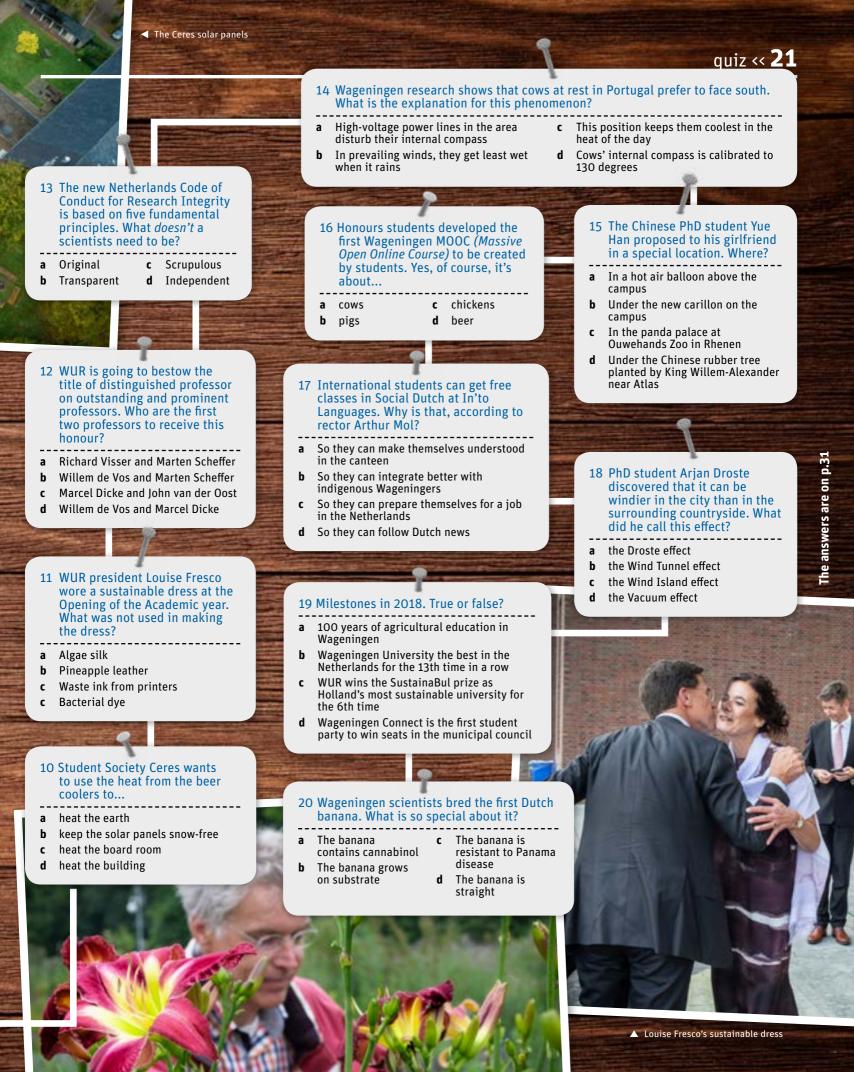
In October 2018, two years after Beerkens and Van Niekerk suggested expanding the training capacity, the new loft was ceremonially opened. The final result – which the Argonauts call the 'high-rise' – is three times the size of the old training loft and contains a lot more ergometers, spinning bikes and weight-training apparatus. 'At the opening, an honorary member who is active in the rowing community throughout the Netherlands said this was the best indoor training facility in the country,' says Van Niekerk proudly. Beerkens adds, 'We wanted to achieve something. I think we managed.' **Q** 



#### **STUDENT ACHIEVEMENTS 2018**

December is the time to look back on the year gone by. On resource-online.nl over the coming weeks, we shall look at the biggest, most beautiful, most important and most unusual student achievements of 2018. From the greening of Ceres to the GNSK's sporting achievements. Keep an eye on the website during the Christmas holiday.





The Wageningen Centennial

## A GOOD RESOLUTION FOR WUR?

A new year is around the corner and resolutions start coming to mind. 'No more binge-watching.' 'Really stop smoking this time.' 'Never get blind drunk again.' Which bad habit should WUR give up in 2019?

text Echica van Kelle and Tessa Louwerens illustration Henk van Ruitenbeek

#### **Nathan Liberty**



Exchange student on the BSc in Plant Sciences

'Wageningen University should stop using plastic cups next year. That would require students and employees to bring their own cups. It would be a crazy move, but it would also

make sense. It's much more sustainable. **The focus should not only be on machines; the Spot and other cafés could also stop using disposable cups.** But I wouldn't be here to experience the change next year, as I'm returning to Massachusetts in a few weeks. There, the plastic and paper cup use is even worse than it is here. Maybe I'll look into making the same change at my home university.'

#### **Marianne Geleijnse**



Professor of Nutrition and Cardiovascular Disease WUR should stop publishing lists of the most frequently cited Wageningen researchers. We are in a rat race for the most publications and the highest h-index. I am getting a bit tired of

it. It doesn't do justice to people, or to the efforts and originality of a lot of colleagues. I myself am privileged enough to be part of an influential consortium of scientists who get published in top journals, so I end up in the top ten. But there are more than 1000 people involved: on my own I would never manage such a long series of articles. Personally, I am not at all happy that I'm on a list like that because it makes me look like some kind of career tiger who is only after a few high scores. It's fine to put people in the limelight, but a citation index gives a one-sided picture. Instead, you could bring in the team or the project. So no more lists. It leads to internal conflict and the wrong corporate culture, in which we can't cope without chair massages anymore.'

#### **Hidde van Maltha**



#### BSc student of Forest and Nature Management

'WUR should give up the WURwolf. I saw an advert inviting people to sign up to be the WURwolf, but I wouldn't do that. **We present** ourselves as a serious university and

**a furry mascot is not appropriate.** It also evokes associations with furries (people who dress up or have avatars as animal characters, ed.) and I'm not sure that's what a university should want.'

#### Willem de Vos



Distinguished Professor (until recently chair-holding professor of Microbiology)

WUR should stop delegating tasks to the lowest level. Chair groups are being given more and more administrative tasks which actually belong in

**HRM or other departments.** The secretaries say they are spending more and more time on running the chair group: forms have to be filled in, boxes ticked, and so on. Last year I had to make phone calls myself because somebody needed a permit to be able to work and teach here. You can't do much about the bureaucratic rules but we can try to arrange things as well as possible internally. We are an international university, so we get a lot of foreign guests. There is a role for HRM there too. The same goes for housing, which the chair groups have to sort out them

selves. WUR has all kinds of long-term goals for which budget is available. And yet in practice I often see that money being used to keep people busy and to stop gaps, rather than to stimulate true innovation. That requires a change of mentality from giving everyone money to making choices and stimulating excellence and innovation.'

#### Karina Gonzalez

#### **MSc student of Food Technology**

'With the new schedule, there is no fixed time for lunch anymore. Before, everyone had a break at 12:15 and you could have lunch with your friends. Now it's more difficult to meet them, as everyone has different

courses and schedules. I think WUR should give up the different lunchtimes. Also, the Spot seems to be reserved for special events every day and I often get turned away. Now I just tend to sit outside the Spot so I don't have to move again. But these are just small issues. I really like Wageningen's "bubble" and its atmosphere and am happy I have the opportunity to study here.'

#### Karin Schroën



Personal Professor of Food Technology

WUR should stop putting such an emphasis on personal grants. Currently this is often a criterion for progressing on the tenure track. I am sometimes on the committee at NWO, and I

know how that selection is made. There are a great many very good proposals that don't get onto the list. That is no reflection on the quality of the candidate. It is extremely difficult to get those kinds of grants, and it also depends on your subject area. So it creates inequality. If you are in engineering, for example, you quickly get labelled as an applied researcher and you'd need a lot of luck to get a grant. If you've been acquiring a variety of project for years in a row, and your group is running well, that is worth just as much as getting a personal grant. WUR is eager to have a social impact, so then it should have a bit more courage to decide for itself what is good. Without necessarily needing an external stamp of approval.' **(a)** 

#### 'Citation lists create a rat race; I am getting tired of it'



## Master's students put degrees on hold to work in project

We're three months into the new academic year and many students are just getting into the swing of things here in Wageningen. But three student have already impulsively set their studies aside and left for Uganda to do the real thing: working in a development project.

text Gina Ho photos Thomas Heger, Ard Schakel and Tom Smits

homas Heger (23) started his MSc degree in Plant Science back in September this year. Through an old friend, he got involved with KHAP, a sustainable agriculture project based in Kumi, Uganda, which was started by a Dutch foundation four years ago. In a group project, Heger got to know Ard Schakel, an MSc student of International Land & Water Management, and Tom Smits, who studies Biobased and Circular Economy. He told them about the project and a bold plan started to emerge. The three now live and work together in Uganda.

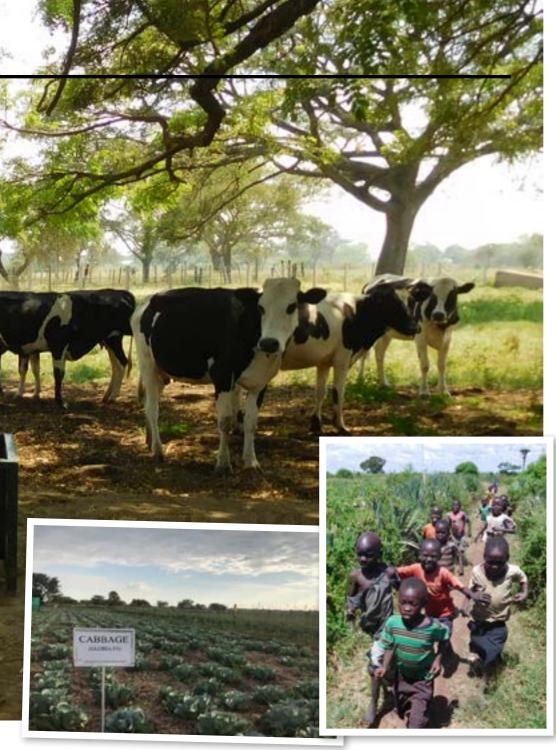
#### Why did you decide to take time out from studying and go to Kumi?

**Heger:** 'For my Bachelor's thesis on Plant Science, I went to a Caribbean island that was invaded by a weed species. That was supposed to be for just three months, but I ended up staying a year. It was great to see the difference you can make in the real world. I really enjoyed that and I wanted to do something similar here in Kumi.'

Ard Schakel, Tom Smits and Thomas Heger (left to right).

#### 'Compared to the problems people have here, taking a break is nothing to worry about'

Smits: 'I've pretty much just arrived at Wageningen and I did debate whether it was the right time to take on such a project. But I thought, if I went to Uganda, I could see things here for myself and I could learn from Thomas and Ard. Compared to the problems that people have here, taking a break in your studies is nothing to worry about.'



**Schakel:** 'For me it just made sense to come here, because I also want to see my knowledge make a contribution in the real world. When I told my study adviser about this project, she actually said: Why don't you go as well?'

#### *How did you fit this project around your studies?*

Smits: 'The arrangements with WUR went quite smoothly as we were not involving WUR in this project at this time. I still spoke to my study adviser and explained what the project was about and how I could see it benefitting my learning. She was enthusiastic about what we were going to do and understood that this was a great opportunity.'

**Heger:** 'We're looking into getting credits for our projects via Capita Selecta, where we would be supervised and examined by a university department. It's okay for us if that doesn't work out; it would mean a little bit of delay in our studies but only by a month or two.'

#### What challenges do you see for the people living in Kumi?

Heger: 'The farm we're working on has been running since the 1960s. However, during the civil war in the 1980s, the farm and pretty much the whole area was destroyed. There's a lot of land here but it's not usually used in ways that benefit people. Also, drought is a problem here for around four months a year, so as well as land use, there is also a water management issue. The project here is about improving dairy production as well as the lives of local people. We need multi-disciplinary solutions for complex problems, which is what we're trying to do here.'

#### What have you been doing for this project so far?

Smits: 'There are some problems that never crossed my mind until I came here. For example, kids here walk seven kilometres to school, and by lunch time they would walk home for lunch because school doesn't offer it. We are looking into sustainable crop rotations which could supply porridge for children in schools.' Schakel: 'I'm looking at how to connect water harvesting and crop production. Also, I'm using GIS to identify where more fodder trees need to be planted for the dairy cows, so they can get shade and protein from these trees.' Heger: 'I'm thinking about what crops are best here for dairy productivity, and also which crops could best benefit people living here. We go out and talk to people a lot on farms, at the church, at markets and so on, because building relationships is a big part of the project. It's important to us that the people and businesses here are self-sufficient without foreign influence, otherwise it creates dependency. We want to have a sustainable strategy, not for one or two years but for the next ten to twenty years.'

#### What do you think is the missing link for the community's development?

Smits: 'To me the missing link here is a longterm vision. For example, a farmer could potentially sell a cow and invest in a simple irrigation system that would benefit in the long term. But people here farm for food security and understandably, they are more focused on short-term profits instead – which is where I think our work fits in.'

#### What's next for you guys back in Wageningen?

**Schakel:** 'The three of us operate under the name Passiflora, and we want this organisation to also become a platform where students can connect with multidisciplinary projects and put their agricultural knowledge to use in developing areas.'

Smits: 'It gives me goose bumps just thinking about it – I feel that there's a gap at WUR for a link between entrepreneurship and agriculture. I want to encourage people to do something that could make an impact going forward, even if it'll be uncomfortable at first.' Heger: 'There's a lot of skills and knowledge in Wageningen, but I feel that few people are doing stuff with that knowledge to improve parts of the world where it's most needed. Most people go to work for a big company after they graduate, but I believe that there is another way.' **③** 

#### SMART

The bigger the brain, the smarter the person. This is true, shows research by VU University Amsterdam and the University of Pennsylvania, although the link is weak. Statistically, only two per cent of the difference in intelligence can be explained by brain size. This came out of a comparison of the brains of 13,600 Britons with the achievements produced by their grey matter.

#### LANGUAGE LOSS

More than half the 7000-plus still living languages are threatened with extinction, according to an international study by universities including the University of Amsterdam. 2019 is the UNESCO year of the indigenous language. Of the 3500 threatened languages, 600 are now only spoken by a group of very elderly people. The study of unwritten languages is important for what linguists can learn from it about how we acquire language.

#### **OFF-BALANCE (1)**

People are not very good at estimating whether they are balanced. We fall over backwards if we tilt to about 8 degrees, but we think that only happens at 14 degrees, showed experimental research at Ohio State University. The researchers used a kind of plank which test subjects had to lean against.

#### **OFF-BALANCE (2)**

So we overestimate our capacity to preserve our balance. But it gets crazier. When the test subjects were restored to an upright position, their estimates were wide of the mark again. At an angle of six degrees, they thought they were standing straight. And they'd had no alcohol.

## **Rent hike worries Duivendaal tenants**

The student rooms in the former WUR headquarters at Duivendaal are to undergo thorough renovation at the beginning of 2019, and the rent will go up a lot, the new owner, Xior Student Housing, has announced. Much to the dismay of Duivendaal residents.

Student of Environmental Sciences Ivo de Graag (21) has a 14-square-metre room in Duivendaal, for which he pays landlord Socius 310 euros a month. Under the new landlord Xior, the rent will more than double, going up to 463 euros. 'Add the deposit of 500 euros, and you've got to transfer nearly 100 euros to Xior in January. Not all students can cough that up just like that. I have already spoken to someone who can't afford the first month and is therefore leaving.'

Project coordinator Hielke Jan van der Leij is overseeing the transition from Socius to Xior. He understands that not everybody is happy about it, but he defends the higher rents. 'We calculate it using a points system for setting rents. At first the tenants were paying substantially less than



HOTOS: SVEN MENSCHEI

The indoor garden at Duivendaal.

normal in exchange for temporary contracts and no long-term rent control. Now they will get a proper rental contract, for which you pay the going rate. That seems like a lot all of a sudden.' Xior could also have made the current residents leave, rather than offering them a new contract, says Van der Leij. 'We could have ended the temporary contracts based on the Empty Premises Act, and then everyone would have been out by 1 March. That would have been easier for us,



The residents do not get much time to think about the new terms. They have until 23 December to sign the new contract, sent to them on 16 December. If they don't sign, they must vacate their rooms by 1 March. <sup>()</sup> EvK en LZ



The new owner will replace the cluttered studenty kitchens with 'fully furnished built-in kitchens'

## International Christmas dinner against loneliness

On 27 December, international students can sit down to a Christmas dinner together in the Bornsesteeg student residence. For student party CSF, student chaplaincy Spectrum and the Tinku foundation, the aim of the dinner is to tackle loneliness. 'Everyone is welcome.'

'The idea came out of a meeting about loneliness in Wageningen, organized by the Tinku foundation,' says Robin Baas of the Christian Student Party (CSF). 'It came out that about 3000 people in Wageningen feel lonely. Risk groups are young people, the elderly, and people from other cultures. International students come under the third category. I can imagine that you feel more isolated if you can't get together with your family at Christmas.' The dinner takes place on Thursday evening at 18:00 in the common room at the Bornsesteeg (house number 3). It is a potluck dinner, which means everyone brings along a dish. CSF will organize the drinks. You don't have to sign up in advance; you can just turn up. Baas: 'This is the first time we're organizing something like this, so we don't really know how many people to expect.'

After the dinner, CSF want to continue fighting loneliness among international students. 'We want to see whether we can follow up the dinner with more events in the holiday, so we can get together more often.'

There are other activities for students staying in Wageningen over the holidays. K.S.V. Franciscus is throwing an open party on Friday 21 December, the PopCultuur foundation and Thuis are hosting live

Christmas music, games and other activities on Saturday 22 December, and Unitas will be throwing its annual party in the Junushoff theatre on New Year's Eve. **(b)** EVK

#### MEANWHILE IN... HUNGARY 'Hungarian people aren't as racist as they are portrayed'

Last week, thousands of Hungarians marched for academic freedom and against the 'forced' relocation of the Central European University (CEU) from Budapest. The relocation is the latest offensive in Prime Minister Viktor Orbán's long-running attack against George Soros, a Hungarian-American billionaire philanthropist who founded the university.

'The CEU was offering US-accredited English-taught programmes, which is why it was a liberal university and an attractive one to go to. Since about 2014, Prime Minister Viktor Orbán has been putting up billboards showing George Soros along with headlines saying he's an infiltrator, he's responsible for bringing the migrant crisis to Hungary, and so on. Orbán is attacking Soros to get people on his side, and people buy into that because he uses fear.

Orbán first became prime minister in 1998, when there was a complex political transition going on. The overall sentiment in Hungary then was that "we are worth less than western European countries because



Zoltán Csengő is a Dutch-Hungarian MSc student of Organic Agriculture. He reflects on recent events in Hungary. we are a post-communist satellite state, we don't have the capital or the economy, and we're on life support from



the European Union". Orbán made Hungary a proud country again – he made people feel that they belonged. In the 2018 election, he won two thirds of the votes.

From what I can see in western media, Orbán is portrayed as a dictator like Putin or Erdogan. A lot of critique from western media is valid, but I think they over-generalize, and Orbán uses that to say to the Hungarian people, "Look what they're saying about me, they're attacking our nation". This just feeds the hatred of the EU, and that's dangerous. Erdogan in Turkey is using a similar narrative against the EU. In Hungary Orbán is actually a centre-right politician, we just don't hear about the extremist right-wing parties there, who actually won 17 per cent of the votes in the last election. Hungarian people aren't as racist or as afraid of immigrants as they are portrayed – if they were, those parties would have the majority now. They're just more conservative." **@ GH** 

# ON CAMPUS

Throughout the day, the Campus Plaza is full of students looking for something to eat. Elisa Koops (22) is sitting in front of a plate of sushi in the new restaurant MLGB. 'I don't even like sushi, but I'm here with a friend to be sociable.'

anceBuddy. The idea is that children with a problem related to diet and health get a student as a personal buddy who can help them learn to pay attention to their diet and exercise.'

Elisa is doing the Master's in Health and Society because she is interested in the effects of food on society. 'Exercise and a healthy diet are extremely important. In September I became chair of a new organization: Bal-



#### 'I always wanted rabbits but my mum said I'd have to wait till I left home

The project is still in its infancy. 'We already have 15 students ready to become buddies, but we don't have any children yet.' Elisa is now trying to link up with organizations that could put the buddies in touch with children. 'We are trying to make ourselves known to community centres and dieticians, for example. The first step is to create confidence in BalanceBuddy.'

Alongside her degree, Elisa spends a few hours a week on her new board job. 'I am



happy I found BalanceBuddy, as it fits well with my degree programme and with what I want to do. It is a nice opportunity.' At home in her student room, Elisa has two rabbits, Juni and Kameel. 'I always wanted rabbits but my mum said I'd have to wait till I left home. So I did. I wanted to give them original names, not Thumper or anything like that.' Juni and Kameel get attention not just from Elisa but also from hordes of fans on Instagram, where they are very popular going by the name Junikameel. <sup>(1)</sup> AvdH

## Did you know there is a Study **Programme Committee?**

**Blogger Donatella Gasparro was** quite surprised when she found out there was a committee that discusses the strengths and weaknesses of a study programme.

'A while ago, at the end of my first year here, one of my closest friends from my programme told me they were looking for new student members for the Study Programme Committee, or SPC. "Wait, the study what?" was my very first reaction. It probably depends on the programme, or even the year you are in, but I had never heard or read about the SPC before that occasion.

Long story short: after some months of getting informed and getting involved, I eventually became part of it. And had the very first meeting a couple of weeks ago.

#### SPECIFIC TOPICS

But what is this Study Programme Committee, you may ask. It's a committee that discusses specific topics regarding a degree programme (Master's or Bachelor's), including strengths and weaknesses, mandatory courses, evaluations, requirements and so forth.

The committee is composed of a wide variety of teachers from the chair groups directly involved in the programmes, and - surprise - also quite a few students' representatives. This is a great place to bring up your thoughts, doubts, tips and ideas about your degree programme. And, as you may have experienced, here in Wageningen, our perspective is often taken seriously.

#### **NO INFORMATION**

I think it is quite a waste that this bit of information is not that easy to find. A lot of students simply don't know where some issues should be addressed or ideas proposed. And the SPC is definitely one of those places!

So, if you have anything you'd like

## BLOG



Donatella Gasparro is a Master's student in Organic Agriculture, from Italy. You can read all of her blogs on resource-online.nl/blog.

to see change or improve in your programme, reach out to the student members and your point will be taken care of. Study Programme Committee student members also have quite a fast turnover: you may even have the chance to be one of them, if you fancy a spot in the board room.'

#### student << 29

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.

## **'Argentinians are very** *tranquilo*'

'International Land and Water Management is the only Bachelor's in which it is compulsory to do an internship. I wanted to go to South America because I had never been there before and because I wanted to learn Spanish. I tried to avoid the most dangerous countries and Argentina caught my interest. I have been here for two and a half months now. To start with, there was another student from the university, but he has gone home. I have since built up quite the social life so it is anything but lonely.

For my internship I look at the effects of climate change on an irrigation system that is located near the city. I use this data in climate models and look at different scenarios. I also go into the field to interview farmers about their perception of how the climate has changed and the strategies they use to deal with that. Eventually I will also write my Bachelor's thesis about this.

#### EATING LATE

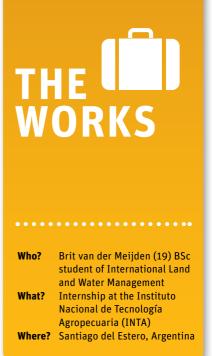
The way of life in Argentina took some getting used to. The rhythm of the day is adapted to the siesta. This is due to the climate, since it often goes up to 40 degrees in summer, and temperatures can even rise to 50. I do not have the luxury of a siesta, because we often go into the field in the afternoon. On weekdays I often eat dinner with friends, but that is only around 11 o'clock so I often only get to bed at around 1 o'clock. And yes, then the alarm goes off again at 6 in the morning. I have got used to that now.

Two weeks before my internship started, I did a Spanish course in Buenos Aires. But the real way to learn a language is through ordinary life. Now I can keep up perfectly, but that

More interviews on resource-online.nl was very different two months ago. Before I came out here, I already tried to learn some Spanish by watching Spanish series and so on, but Argentinian Spanish is different. When I have finished my internship, I plan on travelling through Argentina and Chile for a month. I have already taken a number of weekend trips, but the country is so vast, I have only seen a very small part of it so far. The nearest city is six hours away by bus. It's a little scary, because I'm travelling alone, but mainly I'm excited and I think it will be a cool experience.

#### A LOT OF STRESS

I would really recommend travelling to Argentina. The people here are really nice and genuine and they invite you for dinners and all that. I have learned to be more flexible. Your plans are constantly being changed, in your work and in your social life. The people here have a very chilled view of life, they are very tranguilo. This makes me realize how much stress we have in the Netherlands. At first I certainly experienced culture shock, because in the Netherlands things are well-organized. If that was not the case here, I would get irritated, but now I can enjoy it. And now I will probably have to get used to the Netherlands again once I am back. My life here is totally different.' <sup>(C)</sup> EvdG









## Forum - Irregular Opening Hours Christmas Holidays 2018/2019

	2018/2019	The Building	The Library	Student Desk	IT Service Point	WURshop	Restaurant	Grand Café	Wageningen in'to Languages
Friday	21 December	8 am - 10 pm	8 am - 10 pm	10 am - 12 pm	9 am - 12 pm	9 am - 2.30 pm	11.30 am - 1.30 pm	9 am - 2 pm	9 am - 5 pm
Saturday	22 December	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Sunday	23 December	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Monday	24 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	Closed	Closed	Closed
Tuesday Christmas	25 December	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Wednesday Christmas	26 December	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Thursday	27 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	Closed	Closed	Closed
Friday	28 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	Closed	Closed	Closed
Saturday	29 December	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Sunday	30 December	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Monday	31 December	8 am - 8 pm	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Tuesday New Years Day	1 January	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Wednesday	2 January	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	10 am - 2 pm	11.30 am - 1.30 pm	Closed	Closed
Thursday	3 January	8 am - 8 pm	8.30 am - 5.30 pm	10 am -12 pm	10 am -12 pm	10 am - 2 pm	11.30 am - 1.30 pm	Closed	Closed
Friday	4 January	8 am - 8 pm	8.30 am - 5.30 pm	10 am -12 pm	10 am -12 pm	10 am - 2 pm	11.30 am - 1.30 pm	Closed	Closed
Saturday	5 January	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Sunday	6 January	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed

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



#### Orion Irregular Opening Hours Christmas Holidays 2018/2019

Friday 21 December		Saturday 22 December to Sunday 6 January	
The Building	8 am - 6 pm	Closed	
Bike basement	8 am - 8 pm	Closed	
The Spot	11.30 am - 1.30 pm	Closed	
Restaurant 8 am - 4 pm		Closed	

#### Leeuwenborch Irregular Opening Hours Christmas Holidays 2018/2019

	2018/2019	The Building	Coffee Bar/ Restaurant	The Library	
Friday	21 December	7 am - 6 pm	8 am - 5 pm	8.30 am - 5 pm	
Saturday	22 December	8 am - 5.30 pm	Closed	Closed	
Sunday	23 December	Closed	Closed	Closed	
Monday	24 December	7 am - 6 pm	Closed	Closed	
Tuesday Christmas	25 December	Closed	Closed	Closed	
Wednesday Christmas	26 December	Closed	Closed	Closed	
Thursday	27 December	7 am - 6 pm	Closed	Closed	
Friday	28 December	7 am - 6 pm	Closed	Closed	
Saturday	29 December	8 am - 5.30 pm	Closed	Closed	
Sunday	30 December	Closed	Closed	Closed	
Monday	31 December	7 am - 6 pm	Closed	Closed	
Tuesday New Years Day	1 January	Closed	Closed	Closed	
Wednesday	2 January	7 am - 10.30 pm	10 am - 2 pm	Closed	
Thursday	3 January	7 am - 10.30 pm	10 am - 2 pm	Closed	
Friday	4 January	7 am - 10.30 pm	10 am - 2 pm	Closed	
Saturday	5 January	8 am - 5.30 pm	Closed	Closed	
Sunday	6 January	Closed	Closed	Closed	

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



#### In memorian

#### Wim Wolff (1940-2018)



Our much-appreciated ex-colleague Wim Wolff passed away on 27 November. Wim Wolff was a big name in the world of research on estuaries.

and their conservation and management. His specialism was the Wadden Sea

Wim's academic career began in 1965 at the Delta Institute in Zeeland. In 1975, he went on to head the department of Estuarine Ecology at nature conservation institute RIN on the island of Texel. His first job there was to bring together all the scientific knowledge about the Wadden region. That led to the authoritative text, Ecology of the Wadden Sea, written jointly with many researchers from Denmark, Germany and the Netherlands. Wim's qualities as a researcher and eloquent writer came into their own here. Wim had natural authority, which enabled him to influence the government

bled him to influence the government and bring researchers and policymakers together. But it was equally important to him to reach a wider audience, which he did though his books about coastal zones, *Op de grens van zout en zoet* and *Oosterschelde*. The latter certainly contributed to the decision to keep the Oosterschelde estuary open to the sea.

As part-time professor of Aquatic Ecology at WUR (1989-1995) and professor of Marine Biology at the University of Groningen (1996-2005), Wim supervised numerous PhD candidates in their coastal research all around the world. But we shall remember him above all for his tireless efforts towards a scientifically sound vision on the management of the Wadden Sea. It is in part thanks to Wim Wolff that the Wadden Sea has held on to much of its natural wealth and is still one of the few relatively natural coastal systems in western Europe.

On behalf of all current and former staff at Wageningen Marine Research and Wageningen Environmental Research, Peter Reijnders, Norbert Dankers, Cor Smit, Jan Veen

#### Wageningen in'to Languages opens up new worlds

28-31 January Winter Boost Camps

- Pronunciation Boost 28 Januar
- Granmar Doost 29 January
- Presentation Boost 29 January
- Storytolling 30 January
- Emailing in English 31 January
- Meetings in English 31 January



Give your English a quick boost!

www.wur.eu/into

#### Announcements

#### Water polo and 'aquafit' trainer wanted

Renkum Swimming and Polo Club is looking for a trainer (m/f) for the men's water polo team and for aquafit classes in the new Doelum swimming pool. Interested? Contact Rita van der Horst (penningmeester@rzcrenkum. com). We are also looking for volunteers who would like to teach young children to swim using the KNZB 'superspetters' method (www.rzcrenkum.com).

#### Agenda

#### Thursday 20 to 31 December **FILM HOUSE MOVIE W**

Leave No Trace: drama about a father and daughter, who live in a nature reserve. Mary Shelley: a biographical drama about the author of Frankenstein. Fanny och Alexander: a Swedish family chronicle, the perfect Christmas film. Wilhelminaweg 3A, Wageningen. €6.50/€5.

OVIE-W.NL

#### Tuesday 15 January 12:30-13:20 WAGENINGEN WRITING LAB LUNCH WORKSHOP: 'PLAN FOR SUCCESS'

How do you start on your writing assignment in an effective way? We'll provide you with the theory behind the writing process and guide you in applying this theory to your own assignment. Don't forget to bring your assignment! Be on time, as participant numbers are limited to 20. Free admission. Venue: Forum Library Room 259. Info: info.wageningenwritinglab@wur.nl.

#### Friday 18 and Saturday 19 January STUDENT DRAMA SOCIETY PERFORMS 'MOORDWIJVEN' BY CORINA RUES-BENZ

This year the actors get to dazzle audiences with their Founders Day play from the stage of a real theatre: the Junushoff in Wageningen. Tickets are available at wstv.nl.

#### Answers to the News Quiz 2018 (p.20-21)

1a, 2b, 3d, 4b, 5c, 6b, 7c, 8[1b;2c;3a;4d], 9c, 10d, 11a, 12b, 13a, 14c, 15a, 16d, 17b, 18c, 19d, 20b

#### Colophon

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

#### Address

Droevendaalsesteeg 4, 6708 PB Wageningen (Atlas, building 104, bode 31). POBox 409 6700 AK Wageningen. Secretariat: Thea Kuijpers, resource@wur.nl, 0317 484020 Website: www.resource-online.nl. ISSN 1389-7756

#### Editorial staff

- Anton van Elburg (acting editor-in-chief) anton.vanelburg@wur.nl, 06 5429 8594
- Lieke de Kwant (Magazine editor)
- lieke.dekwant@wur.nl, 0317 485320 • Linda van der Nat (Website editor)
- linda.vandernat@wur.nl, 0317 481725
- Roelof Kleis (ecology, social sciences, economy), roelof.kleis@wur.nl, 0317 481721
- Tessa Louwerens (animals, nutrition), tessa.louwerens@wur.nl, 0317 481709
  Albert Sikkema (plants, animals, organization)
- Albert Sikkema@wur.nl, 0317 481724
  Luuk Zegers (students and education)
- luuklfl.zegers@wur.nl, 0317-481233

#### Others who work on Resource

Guy Ackermans, Alexandra Branderhorst, Evelien Castrop, Cathy Chen, Susie Day, Corine Feenstra, Teun Fiers, Marijn Flipse, Stijn van Gils, Eva van der Graaf, Berber Hania, Anne van der Heijden, Gina Ho, Hoger Onderwijs Persbureau (HOP), Lotje Hogerzeil, Anja Janssen, Femke Janssen, Echica van Kelle, Anja Koelstra, Piotr Kukla, Helena Ligthert, Clare McGregor, Sven Menschel, Jeroen Murré, Rik Nijland, Henk van Ruitenbeek, Julia Schäfer, Inge van der Wal, Joris Tielens, Pascal Tieman, Clare Wilkinson

Design Geert-Jan Bruins, Alfred Heikamp

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.

#### Advertising

External: Bureau van Vliet, T 023-5714745 m.dewit@bureauvanvliet.com Internal (reduced rate): Thea Kuijpers, resource@wur.nl. T 0317 484020

#### Deadline

Deadline for submissions: one week before publication date. The editors reserve the right to edit and/or shorten announcements.

#### Publisher

Marc Lamers, Corporate Communications & Marketing Wageningen University & Research



## >>TYPICAL DUTCH



#### A unique bus experience

I am probably the only student in Wageningen that doesn't have a bike. I prefer to walk and take the bus, as is my habit back home in Greece. Bus transportation in itself is therefore not new to me. Still, you are in for a unique experience once you board a Dutch bus...

I'm going to describe a typical Dutch bus journey for you. To begin with, there are no strikes, there are no cancelled routes, the bus is always on time. You arrive at a bus station or stop and you wait patiently in line to board the bus. People are not jostled up against each other.

When you go inside, you scan your *ov-chipcard* in the yellow machine. And – here comes the part where you have to pay attention! – you must say good morning/afternoon/evening to the driver. In return, he will say hello to you. It is worse than a crime to board the bus without saying hello to the driver.

During the short trip (maximum duration about 10 minutes), a lot of Dutch people eat. The first time I saw this, I thought it was really strange, but then I observed that there are small rubbish bins in the bus to throw your trash in, so obviously it is not prohibited to eat on public transport. When you arrive at your destination, you scan your public transport pass again (be careful: if you forget you will pay more) and of course, you say goodbye to the driver. If you ask me, buses in the Netherlands are the best means of transport that I have ever taken.

#### Georgia Chatonidi, MSc student of Food Technology, from Greece

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

#### It is worse than a crime to board a Dutch bus without greeting the driver