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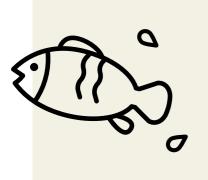
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FOREWORD

Brain teasers

'This is news.' I peer at my colleague Albert, our CRISPR-Cas expert, over the top of my screen. In the office, we just watched the Opening of the Academic Year online on our laptops. There, WUR announced its plan to make CRISPR-Cas licences available for free. Albert nods warily as he stares at the screen. The article he is writing on the issue is drawing an abundance of likes on LinkedIn, but there are also many questions. Someone responded with: 'Are the licences sufficient for actual use, or are additional CRISPR-Cas patents needed?' Quite a complicated matter, it would seem. On page 14, we delve into the question of whether the five WUR patents cover sufficient technology to enable NGOs to develop better plants with solely these licences.

Another brain teaser: for this coming year, all WUR teams and departments are required to make a housing plan that includes working remotely and shared workstations. *Resource* interviews a pioneer on page 22. 'Everyone has their own desk, but when you are away or on leave, others may use it.'

Teachers also have a puzzle to solve now that students can at last take classes in-person. Because, what if there are 450 students participating in a course, but only 75 are permitted to be in a room at any given time? Teachers elaborate on this on page 12. And also on online education, which was sometimes so successful that the teachers will continue to offer it. So the Covid crisis did have some positive effects.

Willem Andrée Editor-in-chief



NEW WORKWEAR

On the first floor of Atlas last week there were racks full of trousers, sweaters, jackets, blouses, lab coats and more. A sample of what WUR staff wear when they're at work, indoors and out. During the Look & Feel session, dozens of staff members assessed their possible new outfits. The session was part of the tender procedure for new workwear, and counts for a maximum of 20 per cent in the quality scoring. Project leader Berber Smit of HWRK consultancy: WUR doesn't want uniforms. Each part of the organization must be free to buy in what it likes.' RK

Nitrogen study not reliable but plausible

The new method used by WUR researchers to measure the effect of nitrogen deposits on nature will not yet lead to amendments to government policy, writes Carola Schouten, Minister of Agriculture, Nature and Food Quality (LNV).

Her statement is in reply to critical questions from the green party Groen Links and the labour party PvdA. The minister feels the method has not matured sufficiently. The questions were prompted by an article on the *Resource* website in which lead researcher Wieger Wamelink explains the

The minister says the key issue is the word 'reliable'

study. The new method shows that a lot of nature has already been affected by the time the critical threshold adhered to in the policy is reached. This

applies to half of the habitats found in the Netherlands.

The researchers say the new method provides reliable data on 37 of the 60 habitat types. This conclusion, however, was not included in the excerpt. The minister says the key issue is the word 'reliable'. This has been replaced by the word 'plausible' in the report.

Reality

According to the minister, no errors were found in the method, and the dose-effect relationship that was revealed is 'clear enough'. 'However, that does not mean that the results reflect reality with complete certainty. There is still a lot of doubt about that.' This doubt is not shared by lead author Wamelink in the article, however. Whether the new method will result in adjustments to the critical threshold for nitrogen remains to be seen. Nitrogen experts are discussing this at the European level. According to the minister, sections of the report will be tabled in that discussion. BK

Ordering coffee in sign language

With the arrival of the new caterer Hutten in Aurora, a novelty has been added to campus: a Foodmarket. On the ground floor of the brand-new building there are four pop-up outlets selling food and beverages.

The coffee bar Your Barista's, where you order your coffee in sign language, and lunchroom Blend are already open. They will be followed in a few weeks by, The Plant (for everything vegetarian) and World Flavors (international cuisine). With the pop-ups, Hutten meets objectives set by WUR. The food served must be healthy and must contribute to the protein transition, and disposables should be used as little as possible. The latter requirement was quite a challenge in a building with no utility room, says Kok. He hopes to deal with that by encouraging and rewarding the use of your own eating utensils.

Deaf

The new caterer focuses on the use of plant-based proteins. Kok: 'WUR wants half of all proteins used to be plant-based by 2025. We expect to meet that requirement two years ahead of time and even to reach 60 per cent in 2025. This is possible because all our soups, salads and the like are prepared in our own kitchens.' To fight food waste, Hutten deploys the Waste Factory. In this factory, the caterer's own brainchild, soups and

'Avoiding disposables is a challenge in a building without a utility room to wash dishes in'

sauces are made from waste products from the vegetable sector. The most eye-catching

feature, however, is the coffee bar. The unique feature of the coffee bar is the fact that the employees are deaf. The customers have to use sign language to place their orders. A computer screen offers a demonstration of how to do that. Deploying people with a disability is part of the inclusiveness concept. Most of the 12 Foodmarket employees come from WUR's Jops project. RK



The coffee bar in Aurora. Photo Roelof Kleis

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In a GGD (Municipal Health Service) mobile vaccination centre (a bus with an adjoining tent), students, PhD researchers, WUR staff and other Wageningen residents could get vaccinated against Covid without making an appointment. On Wednesday, 21 people did so and on Thursday 13 people had come for a jab by 14:00 hours, making 34 in total. Practical, says Lingrui Zhong, an MSc student of Management, Economics and Consumer Studies from China. 'Now you could do it in between classes.'

Dialogue Centre will be Omnia

The building where everyone meets will be aptly named. With the all-encompassing name Omnia, Marissa van den Berg (Corporate Human Resources) won the naming competition that was launched this spring. According to Van den Berg, Omnia covers the way the building is to be used: as a place that will host 'every form of gathering for spoken communication.' 'Omnia is derived from omnis, which means each', she explains. Omnia was not the jury's first choice. Before the summer break, the jury suggested two other names, but these were rejected by the Executive Board as they did not fully cover the uses of the building. So the jury pulled out all the stops to come up with a new shortlist before the start of the new academic year. Out of the four shortlisted names, the Executive Board selected Omnia. RK

Wageningen students at housing protest

Thousands of people took to the streets in Amsterdam last Sunday to draw attention to the housing crisis in the Netherlands. Steven Snijders joined in on behalf of the Student Alliance Wageningen.

What was it like?

'Very good! I was pleased to see that there were so many people, over 15,000. That reflects the urgency of the problem. There were a lot of young people, including lots of students. And I saw all sorts of protest placards – people had really made an effort. That's a good sign; it means this really matters to people. In Wageningen SP Wageningen had organized an afternoon at Thuis to make protest placards.'

What is the biggest 'housing problem' in Wageningen?

'It may sound strange, but as far as rooms go, the situation in Wageningen is still reasonable. There is certainly a shortage of rooms, but it's not as bad as in other cities. A bigger problem here is the market when you leave university. It is terribly difficult for starters to find somewhere to live. The market has exploded. There are few possibilities and the possibilities that do exist are very expensive and also risky. The prices are high now, but the market could collapse again. It's dangerous to invest all your money in a house.'



Wageningen protesters with their placards. Photo Yare Calis

What has to change?

'The priorities must change, to put it simply. Houses need to become consumer goods again instead of investment goods. In other words: you buy a house to live in it and not to get rich from it. One way of doing that is to tax profits on the price of land. And for rental accommodation: lower tax for housing corporations. Then they will have more funds to invest in building new social housing' cu

'The academic year is too long and too full'

The Dutch academic year involves too many courses and exams and too few breaks, resulting in high work pressure for both teachers and students, says the Young Academy after comparing the Dutch academic year with those in other countries.

Dutch higher education teachers spend two months longer per year on teaching and grading exams than their counterparts at foreign universities, the Young Academy states. The division and length of the academic year varies per discipline, but overall there are very few breaks between September and July. The Young Academy recommends reducing the number of teaching and exam weeks, and making the education calendar more flexible. The National Student Union (LSVb) has its doubts about the plan. 'There is a risk to trying to cover the same material in less time,' says chair Ama Boahene. Without a review of the degree programmes, their quality is at risk, the Student Union thinks. The Universities Association, VSNU, is more positive. The Association chair Pieter Duisenberg wants 'a serious discussion' with the Young Academy about the proposal. HOP



President Santokhi talking to WUR president Louise Fresco. Photo Sara Kirsten Vlekke

Surinam government seeks collaboration with WUR

The President of Surinam Chan Santokhi and Minister of Agriculture, Livestock Farming and Fisheries Prahlad Sewdien visited WUR's Greenhouse Horticulture business unit in Bleiswijk on 8 September.

The visit was part of a multi-day visit to the Netherlands by the Surinam government, the first after years of deadlock.

The new government of Surinam wish-

es to collaborate with WUR to reduce the use of pesticides in the cultivation of vegetables, increase the rice yield and prepare Surinam for climate change and adaptation. The ministers were shown around the WUR greenhouses and listened to presentations by Robert van Gorcom, director of Wageningen Food Safety Research, and others. Gorcom wants to support Surinam in establishing a laboratory for research on residues. As



Protest at Opening: 'WUR is toxic'

Activists from Extinction Rebellion used the Opening of the Academic Year on 6 September to point out 'the dark side of WUR'. 'There is more to WUR than what is presented here in the Aula. Certain multinationals that WUR collaborates with contribute to a toxic environment,' says spokesperson Kamiel Verhelst. 'We want WUR to reconsider whether that collaboration is sustainable given the current state of the planet. We are underlining that dark side with our apocalyptic protest.' RK Photo Roelof Kleis

Bacteria from the Black Sea

There may be a medical application for new sulphur-eating bacteria.

The vast majority of bacteria have not yet been described. Daan van Vliet studied the sulphur cycle in the Black Sea and found bacteria that play an important role in the anaerobic breakdown of substances containing sulphur. He graduated with a PhD for his study this week. Van Vliet made cultures with different polysaccharides as a nutritional base. One of the substrates he used was fucoidan, a polysaccharide that is extracted from seaweed and that contains sulphate groups. Fucoidan provides a model for a large group of sulphated polysaccharides that are found in the

'Our bodies make similar substances for our cartilage'

marine environment in large numbers. The cultures produced a new genus which

Van Vliet named Pontiella. Genetic research showed that the new bacteria had 'unheard-of numbers' of genes – around 500 – for making sulfatases (sulphate-splitting enzymes). To process fucoidan, Pontiella activates about one fifth of those sulfatases.

Cartilage

The full range of fucoidan-processing genes could be of interest for applications in biotechnology, says Van Vliet. Also of potential interest is the production of exo-polymers by the Pontiellas. 'A study done with Delft University showed that the substances in question resemble substances our bodies make for our cartilage.'

This could mean the Pontiellas have potential for medical purposes, thinks Van Vliet. 'Biotechnologists are working with strains of *E-coli* to modify them so that they manufacture these kinds of substances. But it's not working very well with *E-coli*, whereas Pontiellas make them of their own accord, albeit in small quantities.' RK



Photo Shutterstock

Is this why we eat all the wrong things?

Our brain has a tendency to remember where to find highcalorie foods better than where to find low-calorie foods. This is what Rachelle de Vries proves in her dissertation entitled *Foraging minds in modern food environments*.

This preference (in scientific terms: bias) goes back to when humans were hunter/gatherers. A good memory for the location of energy-rich food provided an advantage in the struggle for survival. This is probably why the brain developed in that direction, according to De Vries.

De Vries conducted experiments both in the lab and 'in real life' at Lowlands Science 2018 to prove the bias is still present. Subjects recall the location of energy-rich foods more readily. Fruits and vegetables lose against chips and fries. This bias is universal and persistent, even when corrected for personal preferences or familiarity with certain products.

Buying behaviour

How the bias influences our buying behaviour is a complicated matter. Subjects with a strong bias expected to be able to locate high-energy foods faster, De Vries explains. 'Perception is key, and their perception is aligned with the degree to which the bias is present.' This perception then manifests itself in a tendency to buy calorie-rich foods and frequent fast-food restaurants.

'There is therefore a correlation bet-

'We are not all doomed to get fat'

ween the bias and the frequency of buying snacks', De Vries explains. 'And

this, in turn, is reflected in the BMI.' However, this does not mean we are all doomed to get fat as a result of our memory. De Vries: 'The bias remains, but we can still choose a healthy diet by keeping the bias in check. We are not slaves to this urge.'

The bias can be curbed through training. De Vries: 'My experiments showed that people with more control are better protected from the unhealthy effects of the bias.' RK



A Little Wiser

Can a confirmed vegetarian still digest meat?

or many vegetarians, their worst nightmare would be to realize you have accidentally eaten some meat. The thought alone is often nauseating for them. Besides, a lot of vegetarians are convinced that their bodies can no longer digest meat properly. But is that really so? Because it would mean that a meat-free lifestyle changes something in your digestive tract.

That is not the case, however, says professor of Nutrition, Metabolism and Genomics Sander Kersten. 'Our bodies are perfectly capable of breaking down proteins and they don't differentiate between animal or plant proteins. The enzymes that are involved in breaking down meat are the same as those that help with digesting tofu or chickpeas.'

Nor can you lose these enzymes at any point, as does happen in cases of lactose intolerance, for example, when a person doesn't drink milk for a long time. 'The big difference is that in that case, a specific enzyme, lactase, is responsible for breaking down the milk sugar lactose. That enzyme disappears naturally as you get older, because milk is normally only for young animals. So adults drinking milk is actually an abnormal situation.' You can therefore raise children as vegetarians, which Kersten has done himself, without being afraid that they won't be able to tolerate meat later.

People who switch to a vegetarian diet can develop bowel trouble to start with.

Kersten: 'That is because plant protein is hard to digest, unlike meat. It is not for nothing that herbivores have longer digestive tracts. Poor digestion can lead to problems like more gas formation due to bacteria in the colon. A lot of people report that this got better the longer they were vegetarian, which suggests that the body adjusts to the change of diet. The composition of our gut flora also changes over time, which is a possible explanation for that adjustment. As far as I know, no extensive research has been done on exactly how that works.'

Psychological factors probably play a big role in the nausea that someone who deliberately avoids meat feels after eating some. But principles and psychological factors aside, a vegetarian needn't worry about falling ill after eating a little bit of beefsteak. TL 'When our bodies break down protein, they don't differentiate between animal and plant protein'

Sander Kersten, professor of Nutrition, Metabolism and Genomics

Every day we are bombarded with masses of sometimes contradictory information on pressing issues. In this feature, a WUR scientist gives you something to hold on to. What are the facts of the matter?

Every question makes you a little wiser. Do you dare to ask yours? Email us at redactie@resource.nl

Illustration Marly Hendricks



Citizens' jury wants gene technology, with provisos

The average person on the street is in favour of novel breeding methods to improve food production, but only under certain conditions, says consumer researcher Arnout Fischer.

Fischer and his colleague Abhishek Nair brought together a citizens' jury this summer that had four half-days to reach a verdict on various new breeding techniques. The jury members were first presented with information from Wageningen plant breeders and a critique of the technology by experts including the Rathenau Institute. The presenters gave an assessment of whether we need the new techniques to increase yields, the

'The citizens' jury came up with quite a balanced judgement'

sustainability or the nutritional value of plants, or to make them climate-proof. After much discussion with the speakers and each other, the

jury reached a verdict on the last day. The jury reflected the population and was made up of men and women with varying levels of education.

Conditions

The citizen's jury was unanimously in favour of new breeding techniques, but 10 out of the 11 members did stipulate conditions. The new crops should be at least as safe and nutritious as the existing varieties, and of obvious benefit to society, through for example resistance to pathogens, heat, salt and drought. The crops must also be accessible and affordable, and an independent organization should monitor whether



Illustration Shutterstock

the climate and social goals are met. If not, the government must intervene. 'In short, quite a balanced judgement,' says Fischer.

Polarization

He acknowledges that parties that oppose gene technology, such as Greenpeace, were not invited to speak at the citizen's jury meetings. 'The pros and cons were discussed in factual terms. We did not want to include polarizing or emotional pleas from either techno-optimists or activists, as the discussion would only get bogged down in them.'

Fischer notes that the general public have a mildly negative take on new technology. 'The techno-optimists overlook two things. Mistakes can occur during the breeding process, and criminals can also use this technology. So safety and the use of the technology are important, and people want it subjected to an ethical assessment.' Nair and Fischer will soon run a second citizen's jury on the same subject in England, in collaboration with Lancaster University.

Cropbooster

The citizen's jury is part of the EU project Cropbooster-P, in which 17 European research institutes are working to make crops future-proof. René Klein Lankhorst of WUR, who heads the project, wants to launch an extensive European programme to make crops more resistant to salt, heat, and drought, and to improve their sustainability and photosynthesis. This will boost food production in the face of climate change and yield more plants for the bio-economy. This means putting plants 'on the drawing board', and breeders will need technologies such as CRISPR-Cas, says Klein Lankhorst. As

Grassland may help improve the climate

Dairy farmers should refrain from ploughing but keep water levels high and farm intensively.

This is what PhD candidate Bjorn Dirks discovered when he studied the role of grassland in CO_2 sequestration. What gets overlooked in the heat of the current climate debates is the fact that grassland sequesters a lot of CO_2 . 'Half of the human CO2 emissions are absorbed by oceans, forests and grassland', says Dirks. 'We tend to view the atmosphere as a static CO_2 reservoir. But our atmosphere is more of a thoroughfare for different carbon streams.

Moreover, the absorption and emission of CO_2 vary considerably. Grassland contributes to carbon sequestration too, and in doing so it helps us achieve the climate goals.' Dirks studied what processes determine the emission and sequestering of CO_2 .

Firstly: photosynthesis sequesters CO_2 . So in the summer, when the days are long, grassland stores large amounts of



Photo Shutterstock

 CO_2 . Secondly: CO_2 emissions through decomposition and respiration increase at higher temperatures. So grassland absorption of CO_2 is highest at moderate temperatures when there is plenty of daylight. Natural grasslands sequester the most CO_2 , while pastures don't score as well due to occasional ploughing, which causes carbon emissions.

Peat meadows

Dutch peatland farmers face an additional problem. If the water levels on their land are artificially lowered, the peat decomposes, causing it to contribute to the climate crisis. When the water level is raised, the grass can hold or sequester CO_2 . But this does call for a less intensive business model, says Dirks. The more productive the land, the more CO_2 is sequestered. The popular idea that extensive farming is beneficial to the climate does not apply to grasslands, apart from peat meadows. Dirks hopes his thesis will lead to new business models for farmers that contribute to sequestering CO_2 . As

In other news science with a wink

🔶 EGG

Mathematicians at the University of Kent have developed a universal egg formula which describes every egg laid by every bird in terms of four simple variables, such as the length and diameter of the egg. But the result is still a devil of a formula. Something simpler must be possible. Still, it gives the birds something to brood over.

🔶 EGGHEADS

Embryos of wrens and other birds already learn some language in the egg, shows research by the Australian Flinders University. The researchers deduce this from changes to the heartbeat when the parent birds call. This explains why baby birds chirp away as soon as they hatch out. They've done their homework and could be called eggheads.

FAILURE?

Give it a go first, fail, and only then do you get an explanation from the teacher. That's a recipe for significantly better academic attainment levels, shows research by the Swiss Federal Institute of Technology in Zurich. The success rate for the course in linear algebra went up by as much as 20 per cent when students started working this way. The researchers call it 'failing productively'.

LONELY

Lonesome fruit flies eat more and sleep less, researchers from Rockefeller University have shown. The sociable creatures react to a lockdown within a week. The scientists have also identified the genes and neurones that play a role in this process. The study casts new light on the link between loneliness and obesity. Fruit flies are just like people. Or the other way round. RK

Average

Code red for humanity. The conclusion of the latest IPCC report calls for rapid change. Institutional investors such as ABP, the pension fund for government and education, could be catalysts for this change. Recently, social pressure has increased on pension funds to make their portfolios more sustainable. It's a daunting task to figure out which companies do not harm the environment, are socially responsible

'If no one is doing so great, it's easy to be average'

and treat their employees decently – the so-called Environmental, Social and Governance (ESG) crite-

ria. Pension fund managers purchase the information from ESG-rating providers as a compass for responsible choices. With teams of analysts and spectacular software, ESG-rating providers collect information and transform it into scores on various issues such as carbon footprint, biodiversity and human rights. Each company also receives an overall rating for ESG.

The largest provider of ESG-ratings, MSCI-ESG, maintains three categories: 'Laggard', 'Average' and 'Leader'. 'Average' is the ESG-rating assigned to the mining giant Rio Tinto, which last year blew up ancient caves and sacred Aboriginal heritage in Australia for iron ore extraction. The CEO had to step down for this irreversible destruction, but the dynamite did not overturn the company's ESG rating. Similarly, Exxon Mobil maintained an 'Average', even after a leaked internal report revealed plans to significantly increase their carbon



Lisa Becking

emissions over the coming years. How can these be average activities? The ratings are relative to other companies in the same sector. If no one is doing so great, it's easy to be average. In addition, the rating system allows for compensation. You might score poorly on biodiversity, but respect human rights. I understand that not every company can score well on everything, but some things should not be softened by averaging out.

There is an incentive for ESG-rating providers to define criteria that allow investors to select from a broad pool of sustainable companies. The 'average' basket risks becoming so large that it offers little distinction. The question is: how do pension funds determine their own ESG scores? Do they use science-based thresholds? Not only is rapid responsible change necessary, but also a critical look at the criteria on which the choices for change are based.

Lisa Becking is an assistant professor at the Marine Animal Ecology Group, a researcher at Wageningen Marine Research and a board member of the national Young Academy, partly under the auspices of the Royal Netherlands Academy of Arts & Sciences. She has an eye for art above and below sea level.

'Pleased to have interaction with students again'

Campus classes make a comeback

Most of Wageningen University's education is happening on campus again. 'Interaction again at last.' But some online course components worked so well that they are staying online.



Text Albert Sikkema

Jetske ten Caat, a member of the WUR taskforce that coordinates the organization of education in Covid times, reckons that about 80 per cent of the education is now face-to-face on campus, while 20 percent is still online in period 1. 'Those are large-group courses, for instance, that can only be taken by 75 students on campus, which means the rest take the course online. And sometimes components of courses are online, such as an explanation in the form of a 'knowledge clip' or a preparatory class with the possibility to chat. These forms were such a success during the Covid period that the programme has kept them.' But broadly speaking, nearly everyone is happy with the teaching on campus: at least there is real interaction among students again, and between students and teachers. 'We think it's very important for students to come back to the campus, but a combination of on-campus and online

Preparation

The trickiest issue for the taskforce over the summer was the uncertainty about which Covid measures would

teaching is fine too, as long as educational

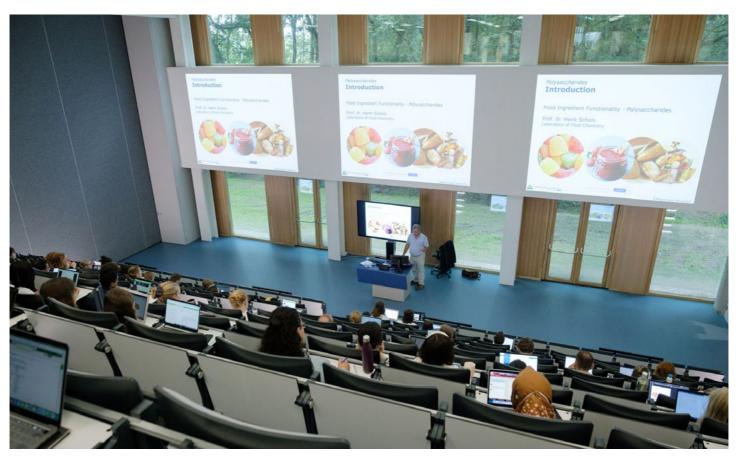
quality comes first,' says Ten Caat.

apply in the coming academic year. Rector Arthur Mol made an important decision about that back in early May. WUR assumed that social distancing would no longer be enforced in the education buildings in September, and that a maximum of 75 students would be allowed in a lecture room. With that scenario, teachers and schedulers could start making preparations. Officially, the teachers had to figure out a fallback option for a scenario in which there are stricter Covid measures and a lot of online classes, but the requirements for that Plan B were minimal. 'The government only decided on 13 August that campuses could open again,' says Ten Caat. 'We couldn't wait until then. At the beginning of May we decided to aim for campus education with a fallback scenario, so that the teachers and support staff could prepare for the new academic year in good time, and everyone could get a real break in the summer holiday.'

Not all teachers were eager for campus education because they don't all feel safe among large groups of students not wearing face masks. In such cases, the taskforce sought a solution in consultation with the programme director and the teacher. Sometimes they decided the teacher concerned would teach the course or component online, and sometimes a colleague from the chair group could do the teaching on campus.

Permanently online

Many practicals were already being run on campus during last academic year, but thanks to the scrapping of social distancing rules, they can now be run old-style again. But there are exceptions even for practicals. The BSc in Business and Consumer Sciences always ran computer practicals in computer rooms, with teachers walking around and looking over students' shoulders at their screens when they had questions. Last year, when everyone was working at home on



WUR decided back at the beginning of May to aim for campus education (with a fallback scenario). 'That way everyone could prepare and then get a real break in the summer holiday,' says Jetske ten Caat of the taskforce. Photo Guy Ackermans

their own laptops, this practical was run on Teams, says programme director Paul Berentsen, which meant students could put their hands up virtually and the teacher could take over their screens. 'That worked so well, we're going to carry on doing it that way,' says the teacher. For the MSc in Development Studies, too, the rule is: we teach on campus as much as possible, but if a course (or a course component) works better online, we do that. An example of that was the course Perspectives and Themes in International Development Studies, which is taken by Master's students with varying levels of knowledge. The course lectures, which are attended by more than 75 students, are taught partly on campus and partly online. 'The groupwork and the tutorials

'In an online lecture you're talking to yourself'

are on campus, but the knowledge clips that support the students' level of knowledge and group discussions are online. That way you can cater very specifically for students with a variety of academic backgrounds,' says programme director Marleen van Maanen-Nooij. Even the Statistics course, which was run entirely online last academic year, is back on campus this year. Coordinator Evert-Jan Bakker has 450 students, while only 75 are allowed in a lecture room. How is he dealing with that? On Monday and Wednesday mornings, 75 students are taught in the lecture room, with another room next-door where another 75 can watch in via a livestream. This regime is repeated on Monday and Wednesday afternoons. That way, 300 students can take the course on campus. The rest can take it online.

The only disadvantage of this approach, according to Bakker, is that at each lecture, only 75 students can ask questions

directly. But his class is a lecture, which leaves little time for interaction anyway. The students can ask questions during the practical which takes place on campus the day after the lecture in groups of over 20 students. An online practical is also provided for students who have tested positive. Although his lecture could easily be given online, Bakker is glad to be back on campus. 'In that kind of online lecture, you are talking to yourself and there is no interaction with students. Fortunately, that is back again.' This academic year there are a total of about 75 courses with more than 75 students, says Fred Jonker, who takes care of the teaching timetable. But that doesn't always mean that some of the students have to take these courses online. Sometimes teachers offer the course twice on the campus, so everyone can take the course in-person. And many big courses work with smaller seminar groups which can take place on campus, says Jonker. 🔳

Free CRISPR-Cas patent licences

WUR is going to grant licences for five patents in the field of CRISPR-Cas free of charge to NGOs that aim to improve the global food supply on a non-profit basis. What can they do with those patents? Text Albert Sikkema

UR president Louise Fresco announced this plan at the Opening of the Academic Year on 6 September. The patents are based on research by microbiologist John van der Oost. Van der Oost did his research on the immune system of bacteria with funding from the Dutch Research Council NWO. 'I was given that NWO money for something else entirely, but during the study we shifted our focus and quite quickly discovered that we could use the defence system of bacteria against viruses for DNA modifications in all organisms. I am happy that I was allowed to use that grant flexibly.' Years later, and again with funding from NWO, Van der Oost discovered a thermophile bacterium in a compost heap in Ede that had a stable CRISPR-Cas9 system for DNA modifications. His research generated five patents registered in the names of WUR and NWO. He hopes that non-profit organizations will use them to develop new drought-resistant and salt-tolerant plants, for example.

How did Van der Oost come up with the idea of making his patents freely available?

One evening he saw his colleague Christa Testerink, professor of Plant Physiology, talking on TV about her research on salt-tolerant crops and her collaboration with the International Rice Research Institute (IRRI)

There is a lot of legal action regarding CRISPR-Cas

in the Philippines. Van der Oost was disappointed that European plant-breeding companies don't use CRISPR-Cas to develop improved plant varieties and he thought, maybe the IRRI would be interested. That proved to be the case.

The plan was worked out in discussion with patent expert Paul van Helvert, WUR President Louise Fresco, director of the Plant Sciences Group Ernst van den Ende, and plant biotechnologist Richard Visser.

But Van der Oost's patents are managed by the Broad Institute in the US, aren't they?

They are. WUR received a large sum of money four years ago from Editas Medicine, an American biotech company that wanted to use the enzyme Cas12, patented by Van der Oost, for medical purposes. WUR put the Cas12 patent under the management of the Broad Institute, part of Massachusetts Institute of Technology. The five patents that Van der Oost, NWO and WUR are now making available are not managed in the US. No one has previously granted licences for CRISPR-Cas patents free of charge.

What do the American patent-holders think of this move?

That's an unknown factor. Van der Oost hopes the research institutes with a lot of CRISPR patents will follow his example. His aim is that the CRISPR technology should not only be used by wealthy companies. He also hopes his action will lead to a broad acceptance of the CRISPR-Cas technology and gene editing in society.



John van der Oost at the Opening of the Academic Year. Photo Guy Ackermans

What is CRISPR-Cas a solution for?

Mainly for modifying complex characteristics in plants. Drought resistance and salt tolerance, for example – both characteristics involving a great many genes. With traditional plant-breeding, you stand very little chance of breeding in and activating 10 important genes. With the help of CRISPR-Cas, you can edit those 10 genes specifically.

Is CRISPR-Cas a technological or natural process?

CRISPR-Cas is a defence mechanism that bacteria use against viruses in nature and was discovered there. Between 60 and 70 different CRISPR systems that have been discovered to date, including the one discovered in a compost heap in Ede. Each different CRISPR system allows researchers like Van der Oost to develop applications with which they can modify the DNA of plants and animals. These applications are technological. ■

WHAT IS THE SCOPE OF THE WAGENINGEN CRISPR-CAS PATENTS?

Will WUR's five patents cover enough technology that NGOs really can use them to develop better plants? Or will they need other licenses too?

It's complicated, says Wageningen patent expert Paul van Helvert. WUR holds five patents in the so-called "Thermo-Cas-family". WUR says these patents are independent, which means no additional patents are required to apply this technology. 'Whether additional technology is needed that falls under other patents depends on the specific application', says Van Helvert.

Moreover, WUR will need to monitor the independence and scope of the patents continuously. Another patent holder could contest the scope of the Wageningen patents. There is a lot of legal action regarding CRISPR-Cas. There haven't been any court around this 'Thermo-Cas family' yet, but that may change. WUR has submitted patent applications for the five patents in 14 countries, which amounts to 70 patenting procedures. This is necessary because patent legislation and the renewal procedures differ per country. Some procedures have been finalized, while others are still pending.

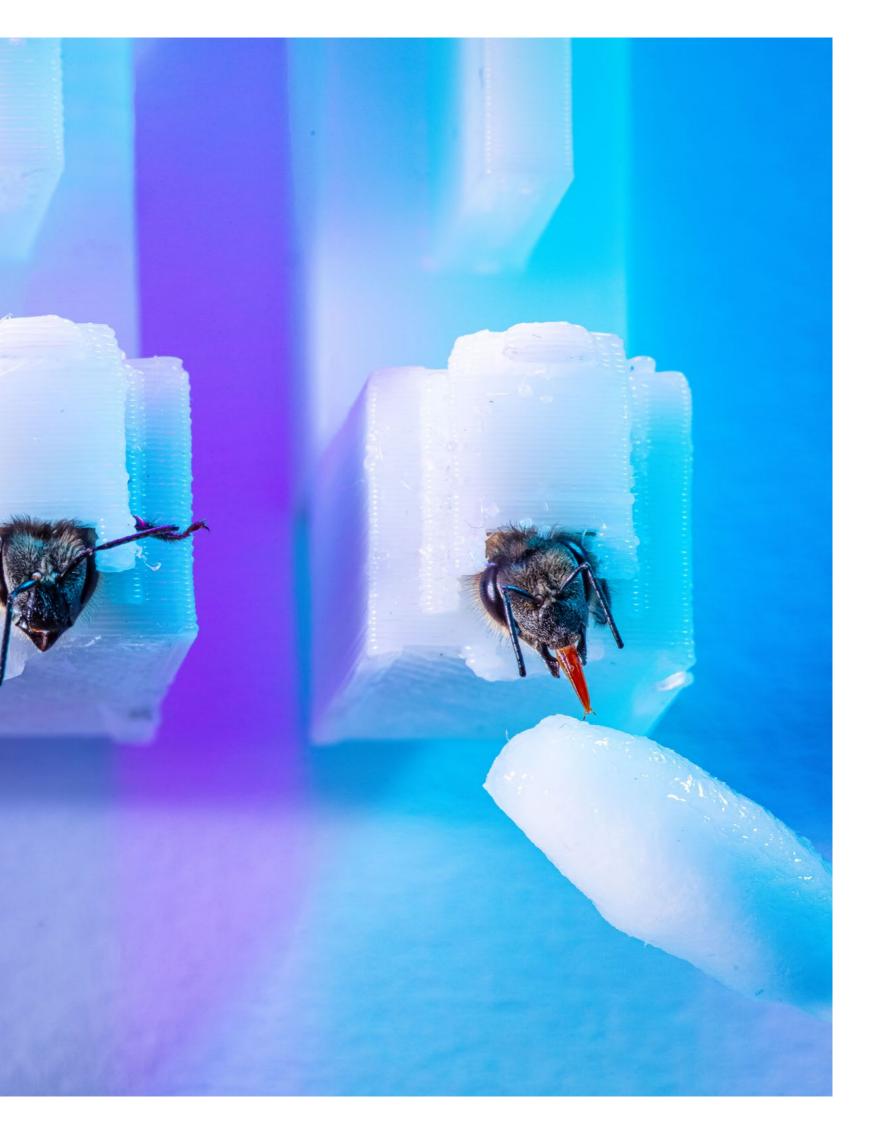
Patent procedures take many years, and throughout that time, a third party can contest the patent. If you wait until the patent has been granted everywhere, it will already be up for renewal in some countries. So patent holders and licensees enter into an agreement based on an estimate to ensure that investments in further development are protected.

In summary: NGOs will be able to develop improved plants with the Wageningen patents independently of other patents until there is proof to the contrary.

COVID TESTERS

Three bees in little while plastic harnesses sniff at a saliva sample on a cotton bud. If they stick out their tongues, you know the sample is infected with Covid-19. This is the surprisingly simple rapid Covid test developed by the startup InsectSense, which was founded by Aria Samimi from Iran. 'Insects' sense of smell beats our best technology,' he says. 'We train honeybees in minutes and after that they work accurately and at top speed,' After a couple of hours of tests, Samimi releases the bees again. InsectSense is located in the StartHub and works with the Laboratory for Entomology and Wageningen Bioveterinary Research. MB

Photo Eric Scholten



'God's involvement is very practical'

Farming on Biblical grounds

What does the Bible have to say about agriculture? And what does that mean for modern Dutch farmers, many of whom are Christians, and how they work with nature, the landscape, and biodiversity? Judith Westerink provides some guidance in the brochure *Good Farming*.



udith Westerink, a researcher into Biodiversity and Policy at Wageningen Environmental Research, is a Christian. Ten years ago, she set up a network for Christian researchers, policymakers and farmers seeking to reflect on what the Bible means for the agriculture of today. 'What do we read about agriculture in the Bible, and how can we apply that to the farming of today? How does God see it?' She integrated these questions into a Bible study guide called *Good Farming*.

What prompted you to write this guide?

'Astonishment. For me it goes without saying that as a Christian, you take good care of nature and treat the environment with care. It amazes me that there are so many problems related to the environment and biodiversity in the agriculture sector. The newspapers are full of it. How can that be, when so many farmers are Christians? I started rooting around and talking to other people about it. Eventually I thought, I should start writing this up.'

Does the Bible contain a lot of agricultural knowledge?

'The Bible was written in the context of an agricultural society. The prophet Isaiah said that farmers got their knowledge from God. Being a farmer is part of being human. It is all part of the divine plan that there are farmers and that includes their expertise. God's involvement is very practical, right down to the level of your farming methods.'

Give an example?

'Take what is called the Sabbatical Year. God decreed that farmers should let the land lie fallow every seventh year. Weeds should be allowed to grow then, so that wild animals could benefit from them. That is very useful for restoring the ecology and the soil fertility. I can really see the point of a rule like that.'

And what does it mean for the modern farmer?

'That's exactly what we need to figure out. That's the tricky part. It would be a big step in our society to shut down a farm every seven years. I don't see that happening. But maybe we could try leaving one seventh of the land fallow for a year on a rotating basis. The EU agricultural policy's set-aside scheme was good for biodiversity. A lot of arable farmers now include some form of fallow period in their rotation system.'

You write that God took pleasure in making Creation so diverse. Are modern farms destroying biodiversity?

'Yes, though not deliberately. Individual farmers make decisions, but they are also stuck with decisions that were made before their time. They are stuck with the way the farm was handed down to them by their fathers. They are stuck with their bank loans. They are stuck in a system. You can't just blame it all on that one farmer. We play a role as consumers too, by buying discounted meat for instance.'

Good Farming targets farmers. Intensive farming destroys biodiversity. Surely that's not Biblical?

'I want to turn that around. I would expect to find biodiversity on a Christian farmer's land. You make it an individual matter by focusing your question on the individual farmer. I'm saying: neither our farming methods nor our eating habits are remotely in line with Biblical values.'

Are Christian farmers thinking about this?

'The environment was always seen as a leftie subject but that is changing. The churches are giving more thought to the environment and the climate. More and more Christians are making the connection between their love of nature and their love of the Creator. This can be a new idea for Christian farmers, to think about how you run your farm from the point of view of your faith.'

'IT IS PART OF THE DIVINE PLAN THAT THERE ARE FARMERS'

'YOU CAN'T BLAME IT ALL ON THAT ONE FARMER'

The book is called *Good Farming*. What is a good farmer?

'As I understand it from the Bible: a good farmer who has respect for the Creator lets the soil rest, takes good care of his animals, nurtures biodiversity and is part of a community.'

And are we non-farmers that community?

'We, the consumers, are. We all have our opinions about farming, but we don't talk to farmers enough. We consumers have got to do our bit as well. Buy organic and local, for instance. Make sure the farmer gets a fair price for his or her products. Take responsibility. You can do all sorts of things to help farmers be good farmers.'

What is your aim with *Good Farming*?

'For people to use it and start thinking about it. For it to deepen their relationship with the Creator and with Creation. For that to lead eventually to a change in behaviour. Which might be a drop in the ocean, but it's something.' ■



'Neither our farming methods nor our eating habits are remotely in line with Biblical values.' Photo Guy Ackermans

High water was a great research opportunity

LOOKING FOR SAND

The high water in the Maas River last July stirred up the riverbed a lot. PhD researcher Hermjan Barneveld is documenting the deposition of sediment. The summer flooding was a great opportunity for him.

Barneveld studies the sediment balance of the Maas. Which means he calculates the amounts of sand flowing in and out of the river.

That balance has changed a lot over time. 'Through human intervention, less sediment flows into the river than it could transport,' explains Barneveld. 'Dams, for example, slow the current in the river, so less sediment is transported downstream. There is then in fact a shortage of sediment there, lowering the level of the riverbed.'

The original idea was that he would make use of existing measuring data to this end. But then came the high water. 'It would be a shame to let that opportunity slip,' says Barneveld. 'In a river like the Maas, that sediment only moves at high water. That's when the water has enough power to shift gravel and sand.'

Big holes

The consequences were particularly dramatic for the Grensmaas, the relatively steep stretch of the Maas between Maastricht and Roermond. Barneveld: 'The river there is five times steeper than downstream. There is no shipping on it because that goes through the Juliana Canal. The river is still fairly



Students travelled along the Maas in August with researcher Hermjan Barneveld, looking for sediment. Photo Roelof Kleis

natural there. At high water, the water rushes past at speeds of two to five metres per second.'

Unlike the rest of the river, the bed of the Grensmaas is made up of gravel. In places, these layers are several metres thick, and in other places no more than a few decimetres. So thin that the water rushing over the bed washed away the gravel and dug deep holes in the older underlying layer of fine sand. 'Erosion gullies 15 metres deep have formed in about eight places,' says Barneveld. That sand and other sediment formed by erosion of the riverbanks was deposited downstream on flooded flood plains. With the help of 13 enthusiastic students, Barneveld travelled along the Maas for two weeks in August, looking for sediment. Equipped with a simple gauge (a PVC tube with markings on it) and an app on a mobile phone, the team documented the sediment layers. Sand samples were collected here and there to identify the composition of the sand. 'The idea is to use all the data to document the sediment balance of the Maas,' explains Barneveld. 'We know that the high water took a lot of sediment with it. But where was that deposited, and how much? And can we determine its origins from its composition? You would expect the sediment upstream to be coarser because it's heavier, and therefore does not get transported as far. But we saw on our trip that it doesn't always work like that.' RK

'IN A RIVER LIKE THE MAAS, SEDIMENT ONLY MOVES AT HIGH WATER'



UNIque houses

There are student houses and then there are weird and wonderful student houses. In this feature we visit those UNIque houses.

Dirk: 'Huize van Zaad is above De Zaaier café. There are stairs running down to the café from our balcony, and then on to Unitas and the beer cellar. The café terrace doesn't bother us. It's just annoying that everyone smokes under my window in the winter.'

Calvin: 'I quite like the buzz of conversation; it helps me fall asleep. It was really weird when it was so quiet during the lockdown.'

Dana: 'At the side of the house you hear people talking as they leave. Lots of gossip – everything comes out once people have had a few drinks. After dates you hear people say, 'So... are we going to continue at home?'

Bente: 'Manny, whose real name is actually Manfred, has been living here longer than any of us. We think he's about 13, which is quite old for a pedigree cat.'

Calvin: 'He always sits downstairs on the terrace. And he just wanders into shops. He's often at the hairdresser's or in the phone shop.'

Bente: 'Sometimes people phone the animal rescue service because they think he's lost.'

Calvin: 'He was even taken home once by someone who thought he wasn't been looked after. We were rather offended by that. We comb him every day, he gets special hypo-allergenic food, and everyone here in the house keeps an eye on him. He was away for a few days on that occasion, and we were very worried.'

Dana: 'He is not as sweet as he looks, by the way. He often lies in front of the Hema looking cute, being like 'stroke me!' But he regularly lashes out at people. House: Huize het Z

Residents:

Bente Leus (BSc student of Plant Sciences), Dana Kelder (MSc student of International Land and Water Management), Calvin Damen (MSc student of International Land and Water Management), Dirk Willemsen (BSc student of Plant Sciences), Jori van den Hoogen (MSc student of Food Technology)

Unique because:

the (possibly) most famous cat in Wageningen lives there



Calvin: 'During lockdown we started the Zaad Olympics. We created a minigolf course in the attic, and we had games like bowling with onions, peeling an egg with one hand, and egg-andspoon races round the block.' CJ

If you too want your UNIque house in *Resource*, send an email to resource@wur.nl



Manfred the white house cat (left) 'looks sweeter than he is' and doesn't like being picked up. From left to right: Dirk, Calvin, Jori, Dana and Bente. Photo Guy Ackermans

Geert Wiegertjes' accommodation plan

YOU SHARE YOUR OWN DESK

All WUR's chair groups and departments are tasked with drawing up a housing plan this year that includes working from home and sharing workstations. While the Executive Board is holding discussions with the WUR Council about the Strategic Housing Plan, the Science Groups are pondering the implementation of the plan. But Geert Wiegertjes, professor of Aquaculture and Fisheries, already has his housing plan, complete with a refurbishment plan and the architect's drawings. Text Albert Sikkema

What is the gist of the plan? 'The key thing is: everyone has their own desk, but if you work at home or you're having a day off, someone else can use your desk. I pair up staff members and they work out together how they are going to divide up the time.'

What do the staff think of that? 'I have discussed the idea with the PhD researchers, the analysts and the academic staff. Those three groups have different jobs and needs. The academic staff will get their own meeting rooms because they mainly come to campus for meetings. When they want to work undisturbed on an article or a research proposal, they work from home and another member of staff can use the room. That way, I can accommodate 10 to 14 academics in seven rooms. They decide among themselves who works at home and who works on campus. I have given up on the intention I had to have everyone present on campus one day a week. I'm aiming at a hybrid solution, and I rely on technology such as WhatsApp.'

And the PhD students?

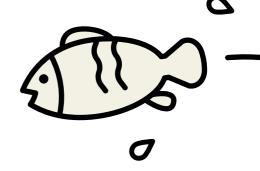
'Most PhD researchers would prefer to have a nice place on location five days a week. That is difficult in the new situation. If PhD researchers are doing experiments in the lab, they get a place to sit with their laptop in a shared space. On the other days, they get a concentration spot in a room with seven desks and partitions between them. They will have the right to a quiet workstation on three days, and on the other two days they can pull up a chair in a shared space. They will have to coordinate it among themselves too.'

And the analysts?

'The analysts are in the lab a lot and need a desk of their own for roughly half their time. In practice, that means that five analysts can share a room with three desks in consultation among themselves.'

You will save a lot of office space.

'In exchange for that I will make sure everyone has a nice, spacious place to work, with seven square metres per person.



That is an improvement on the four square metres per person we've got at present.'

I thought WUR worked with 10 square metres per person? 'Yes, but that's including the central meeting rooms. Effectively, that works out at seven square metres per person. The point is: the more desks in the available rooms, the less space per person. I want pleasant work environments, so Zodiac will need extensive renovation. The rooms we've got now are totally unsuitable, especially for meeting purposes. The rooms for the academic staff need to be smaller and in other cases walls need to be taken out to make spacious common rooms. We are going to integrate the corridor so we use space more effectively.

My largest room will be 50 square metres, with seven workstations. We now have an average occupation rate of 40 per cent and we are aiming at an occupation rate of 100 per cent. But I know that won't happen; 80 per cent would be a lot.'

How will you hold group meetings when all this is in place?

'The staff rooms are for meetings of two or three people. There will be screens in them so that you can meet with bigger groups through an online connection. There will be two small meeting rooms available to everyone, but you will have to reserve those. You can find large meeting rooms somewhere in Zodiac outside your own group's zone. We also aim to have a shared kitchen or common room for the more informal discussions.'

Sharing an office means working from home a lot. 'Most members of staff want to work from home for one or two days a week. That's OK with me. I have just appointed a new staff member for whom it was even a condition that she could work from home half the time. Fine, I'm interested in what you do, not where you do it. The hardest part will be the coordination. I'm assuming staff will do that themselves.'

And the secretaries?

'We have three, who work part-time. They will have their own room, not an open space, because there are a lot of confidential conversations at the secretariat. They will have their own room with two workstations, so they will share their desks too. So will I as a professor, incidentally. Everyone has their own desk and room, but your desk must be cleared at the end of the day, so there will be lockers where you can put your stuff.'

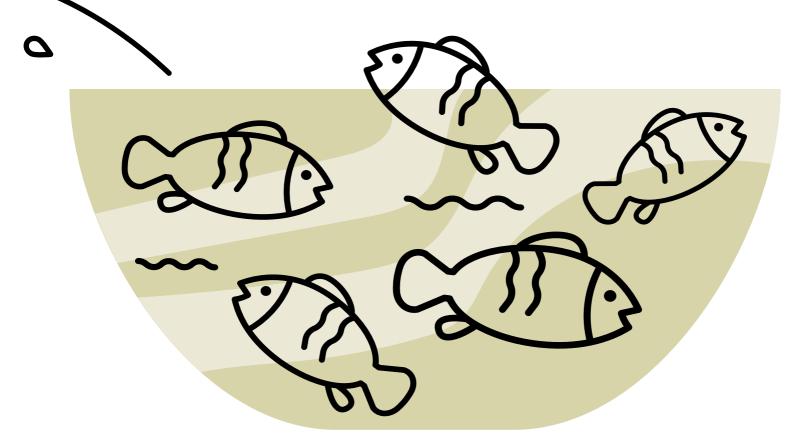
Has everyone agreed to this? 'There is one analyst who doesn't want to share his workstation. He is close to retirement, so I'm letting him keep his

'ACADEMICS DECIDE AMONG THEMSELVES WHO WORKS FROM HOME AND WHO WORKS ON CAMPUS'

own desk. A few PhD students didn't like the idea of not always having a desk of their own, but they did agree to it.'

How will you check whether it's working well?

'By regularly discussing what's going well and what isn't. We must be honest about anything that doesn't go to plan, too. The purpose of this pilot is to get experience of hybrid working and use that experience in further changes to Zodiac. I think this could be a model plan for other chair groups, but time will tell.'■



At Aquaculture and Fisheries, everyone keeps their own desk and room. But they do have to share that spot with one colleague. Professor Geert Wiegertjes: 'For example: five analysts will share a common room with three desks in it, in consultation.' Illustration Shutterstock/Alfred Heikamp

WUR STUDENTS INVEST IN NEWCOMERS

About 30 WUR students are helping young newcomers to the Netherlands by practising Dutch with them in the international bridging class.



Text Luuk Zegers

t's just after one thirty on Friday afternoon on 3 September. The children in the international bridging class (ISK) are playing football fanatically in the school playground. The first week of term after the summer holiday is over, and their first tutoring session is about to start. The tutors – all WUR students – arrive and greet their pupils with warm smiles. Chairs and tables are put outside: the sun is shining and the temperature is pleasant. At about quarter to two, each tutor looks for their two pupils to start the lesson amid lots of chatter and laughter.

'What did you do in the summer?', one of the tutors asks her two pupils. 'Played football,' they say. And a typically Dutch holiday job: picking cherries. 'I worked every day, and I earned 500 euros! What did you do?' The tutor tells them about her holiday, during which she went horse-riding. 'Have you ever done that?' The answer is no, but they have ridden a camel.

Every Friday afternoon and Saturday morning, a group of WUR students come to the international bridging class for a tutoring session. Each tutor is teamed up with two pupils and they work on the lesson material together for three hours. Attention is paid to the pupils' personal development as well, says Master's student of Biobased Sciences Bodil Boelens (23), who used to teach the bridging class and who started the tutoring project. 'A personal relationship is forged with the pupils and that supports the learning process.'

Telling the time

Boelens came across the bridging class by chance. 'After my Bachelor's in Environmental Sciences I wanted to work for six months and travel in South America for six months. At a conference I got chatting to Hans Brandwacht (the bridging class coordinator, ed.). He was urgently looking for a teacher of Dutch and asked if I wanted to come and have a look.' No sooner said than done: Boelens went along, had a chat with teachers and pupils and was invited for a trial day's teaching, in spite of not having any real experience in education. 'I was given a pile of books

and asked to use them to teach a lesson. It went surprisingly well so I got the job.' Boelens is enthusiastic about her time as a teacher. 'Some pupils' parents work at WUR, and they often learn the language a lot faster. But there are also pupils who have only been to school for two years, or not at all, and who can't write yet. I helped some pupils learn to tell the time. The heartfelt gratitude of those pupils when they succeed - that is so wonderful.' After six months of teaching, Boelens went off travelling, as planned. But two months later, Covid-19 threw a spanner in the works, and she found herself in lockdown in Peru. 'Hans phoned me to ask whether I was back in the Netherlands and could start work again. During the lockdown, classes were online for

'AS A STUDENT YOU INVEST A LOT IN YOURSELF; HERE YOU INVEST IN OTHER PEOPLE.'



Bodil Boelens: 'If you read a book with one or two pupils, or go out and about to explore the Netherlands, you make faster progress.' Photo Sven Menschel

a while but some of the children aren't used to using a laptop, and others have a home situation that isn't supportive. Luckily, when I got back, we were allowed to work in the classroom, socially distanced with half the class at a time. That was very nice, both for the teachers and for the pupils, but the pupils still got behind in their education.'

Colleagues wanted

The teaching team put their heads together: what could help the pupils to catch up?

The idea of a tutoring programme came up, and Boelens and Brandwacht set it up. 'I thought, I'm sure I'm not the only student who finds this work inspiring,' says Boelens. 'On the grapevine and through the Wageningen Student Plaza Facebook group, we started looking for students who wanted to be tutors.'

After several rounds of interviews,

INTERNATIONAL BRIDGING CLASS

In the international bridging class, 17 children ages between 12 and 18 learn Dutch in two years. After that they join regular Dutch secondary school classes. All the pupils have left their countries of origin for a range of reasons. There are pupils who live in the asylum-seekers centre as well as children of expats working at WUR.

a team of 25 WUR students was formed, who started tutoring in October 2020 after a doing a course. A success, because although the programme has been running for less than a year, it's already hard to imagine the bridging class without it. 'Classroom teaching is very important, but you make faster progress if you read a book quietly with one or two pupils, or go out and about together to really get to know the Netherlands,' says Boelens. 'That's not possible during the routine classes but it can be done in the tutoring programme.'

Nearly all the students who started tutoring last year are still involved. They get a lot out of the tutoring too, says Boelens. 'It's lovely when your pupils learn something new and make progress, or when they start to confide in you. As a student you spend a lot of your time investing in yourself; here you invest in other people.' It's time for a break now, and the photographer has arrived. The pupils are playing football again, but don't mind sitting for a quick photo call. It should be quick, though. After three photos, one boy asks, 'Can I go now?' The photographer asks for just a moment's patience. Done. The boy flies off to join the football with his classmates.

The bridging class (ISK) is looking for new tutors. Dutch speakers who are interested can send an email explaining their motivation and attaching their CV to info@groeikracht.net by 30 September.

The City Poet

For the next three years, student Ellen van der Kolk has a job on the side. She is Wageningen's new 'City Poet'. A first. Text Roelof Kleis

t was bound to happen. With WUR such a big presence in Wageningen, the City Poet was sure to be someone 'from the campus' at some point. And that someone is Ellen van de Kolk, a student of Food Technology. She won the title City Poet of Wageningen for work including a poem on the theme of 'dream mayor'.'

She has been writing poetry as long as she can remember, she explains on a stroll around the campus. She published her first volume of verse at primary school. 'I was 12 at the time. All short poems that I had been writing since I was eight. It was a load of nonsense, I now think. But at the time it was nice to publish it for my family and my friends.'

Writing poetry at eight years old. Isn't that a bit weird? 'I *am* weird! I never wrote a lot. Sometimes I was a bit embarrassed about it. Because I'm not actually the dreamy type. Running, my other passion, is a much more normal activity. But I've accepted it by now: this is just the way I am. I do things my own way.'

And after that first volume? 'At secondary school, I entered a national poetry-writing competition for 12- to 18-year-olds several times. After a while I noticed that the people who reached the finals wrote much longer poems than I

'As a student you have a different perspective'

did. Then I started writing longer poems. And that worked because I won immediately, in 2015. There is a film on You-Tube of my winning poem, *Weet je nog* ('Do you remember'), with an animation using little clay puppets. The jury said, Ellen, you really can write very well. I thought, OK, maybe I'm a bit better than I think I am.'

Once she got to Wageningen, the main focus was on running with the athletics club Tartlétos. The high point was representing the Netherlands in the cross-country event in the European championships in Tilburg in 2018. She only wrote poetry 'in fits and starts'. Until she met Ivanka de Ruijter, the City Poet of the past three years. De Ruijter was working on creating a pool of people interested in succeeding her in the role.

Were you eager to be the City Poet?

'I didn't think it was my thing at all at first. Later I thought it would actually be nice if a student took part. As a student you have a different perspective. I started imagining being picked, and what I would do if I was. In the end, all I wanted was to win.'

You recited your poems for the jury off by heart. Why? 'I like reciting. If you can recite, you can put a lot more expression and variety into it. Like Amanda Gorman – that's terrific. When I saw her, I thought, what am I doing here? I am nowhere near as good as that. But I put that thought to one side.'

What is your poem *lk weet het nog gewoon* ('I still remember it well') about?

'I want to tell a story. It's nice that people are then free to imagine whatever they like. There is a woman in the poem who is wearing red overalls. Do they mean she's very left-wing? And her green eyes – do they stand for nature? No. I chose red overalls because I always used to wear them myself. And bright green eyes, because brown or blue are so commonplace.'

But you wouldn't say your

poems are about nothing? 'Certainly not. But I do like leaving room for interpretation. This poem is about a dream I really had. Only the ending is different. I bring in an element of doubt there as to whether it really was a dream.'

What are your plans as the City Poet?

'What you do as the City Poet is left very much up to you. People will approach me to ask if I can write a poem for an occasion. But generally speaking, I can choose what I do myself.'

Would you like to write poems about events on campus? 'Yes, I think that would be very nice.'



One of the poems with which Ellen van der Kolk won is about a dream she really had. 'Only the ending is different. I bring in an element of doubt there as to whether it really was a dream.' Photo Duncan de Fey

THE KEY MOMENT

Reorganization

'I like that fact that my work supports other people's enjoyment of their job, because I've experienced for myself how important that is. I trained as an agricultural technician at WUR and was then a Barn Climate and Emissions researcher for 17 years. A reorganization resulted from a shortage of assignments, and I was a candidate for redeployment. There wasn't much work in my field anywhere else either, so I decided to retrain. That was a very dark chapter in my life because as a dedicated researcher, my work was a big part of my life. I then gave some serious thought to what I was looking for in my next job. In the course of some career guidance, I realized that my strong points were my analytical and technical skills, and that I wanted to use those. I could use those qualities within quality management, and I took a course in that. I got an internship with the Occupational Health & Safety and Environmental Service and gained a knowledge of safety and environmental issues there. Combined with my knowledge of quality management,



Turning points: sometimes you recognize them at once, and sometimes only in retrospect. In the series The Moment, WUR folk talk about a moment they'll never forget. This time, Quality, Health & Safety and Environment consultant and head of Corporate Emergency Response Martin Wagemans. A reorganization taught him the importance of enjoying your job.

that enabled me to stay on at WUR: quality management is usually combined with health, safety and environmental issues in a QHSE department.

Although that reorganization period was a very hard time, I seized all the opportunities I got. And that worked out well, because using my technical and analytical skills is still what I like best about my work – espe-

'As a dedicated researcher, my work was a big part of my life'

cially the analysis of health and safety risks and how you arrive at recommendations for limiting those

risks. I do that preventively as a Quality and Health & Safety advisor, and in response to situations as an emergency response officer.

I now use the experience I gained during the reorganization in working towards my work goal: I try to prevent health and safety problems wherever possible so my colleagues can continue to enjoy their job to the full. Attention to health and safety is often given less priority than teaching, doing research or cutting costs. So I sometimes meet with resistance to my recommendations, and that can be difficult. But my work matters, and I like that. I've been working in Zodiac for 15 years now, and fortunately with great pleasure.' MVDH



Flavours of WUR

Spaghetti Aglio Olio e Peperoncino

All the flavours of the world can be found in the WUR community. Matteo Grella (22), an MSc student of Food Technology, shares a favourite from Italy.

'When I was a kid, my father was working so he had to cook fast. He knew two simple recipes that I could choose between. The sauce for this dish has just three ingredients: garlic, olive oil, and chili peppers. I added anchovies but you can also leave them out.

You can book me as a chef. I will show you how to prepare a dish step by step. That way you enjoy a nice meal and learn how to make it yourself into the bargain. Interested? Book me on Instagram: matteo_grella98.'

- **1** Heat the oil on a low heat.
- **2** Add the anchovies and stir until they are absorbed into the oil.
- **3** Add the garlic and whole chili pepper.
- 4 Meanwhile, boil the spaghetti in a large

pan of water.

- **5** When the garlic cloves are golden brown, remove them from the pan. Leave the chili in until the pasta is done, or until it bursts.
- **6** Drain the pasta, saving a little of the water.
- 7 Add the cooked spaghetti and the saved water to the oil and stir well.
- 8 Serve garnished with breadcrumbs and mint leaves and a couple of anchovies.
- **9** Tip: Put the garlic clove and pepper on the plates. They can be crushed and added to the pasta for an amazing flavour bomb.
- **10** Buon appetito!

Ingredients (for two):

- 250g spaghetti
- A generous splash of olive oil
- 1 chili pepper
- 3 cloves of garlic, pealed
- 3 anchovies, plus extra to serve
- 12 mint leaves blended with 4 soupspoons of breadcrumbS



Matteo Grella (22) MSc student of Food Technology

Diversity Week 4-8 October 2021

Together Towards An Inclusive WUR



Check out the full programme, information and registration at www.wur.eu/inclusion

WAGENINGEN UNIVERSITY & RESEARCH

Vacancy Do you have a passion for education? There is a vacancy for a student on the Board of Education from November 2021.

The Board of Education is the legal board of all accredited study programmes at WUR and consists of 4 professors and 4 students. The activities of the BoE take up about one day a week. This includes a meeting every two weeks on Wednesdays between 9:00 and 12:30.

Interested?

English, before 28th of September, 2021, to **boardofeducation.secretary@wur.nl**. The (online) interviews with candidates will

www.wur.eu/boardofeducation



Your responsibilities / opportunities

- To represent students from Wageningen University in the board that decides upon the content and quality of accredited study programmes and advises the Executive Board on various educational issues.
- To deal with a variety of topics, such as new study programmes, quality of courses and teachers, new education policies and education innovation.
- To take an in-depth look at the management of your university.
- · To enrich your curriculum vitae with education management experience.

Your qualities

You have a passion for education and ideas to develop and innovate the WU education

You are proactive and you have a critical attitude. Preferably, you have prior experience on a (programme) committee, a board or similar. You study in the domain of Social Sciences (BBC, BEB, BCL, BGM, BIN, MME, MCH, MID, MDR).

The appointment is for one year, with the possibility of two re-appointments. You are compensated with three months of FOS (financial compensation for board activities) per year.



IN MEMORIAM

FLORENSKE BREMMERS

We are deeply shocked and saddened by the sudden death of Florenske Bremmers on 7 September. A sweet, honest, beautiful and gentle friend to many people. She was certainly in for a party but she also enjoyed spending an evening fanatically playing Catan or curled up with a blanket on the sofa watching a Disney film. She did her BSc and MSc in Biology in Wageningen. She was an ambitious student with clear views of her own, which she was not afraid to share. On excursions she thoroughly enjoyed other people's enthusiasm.

Florenske's passion was marine biology and for her thesis research she could spend hours working with her corals. She had business development ambitions for taking her

Master's thesis work further. She went to Kenya for a short research project on coral, and then continued to pursue this interest at home with her various aquariums. Like a true biologist, she had her own little vegetable garden on the veranda. She was an adventurous person with a clear vision of her own, who loved travelling.

Dear Florenske, we hope you have now found peace at last. We shall miss you.

On behalf of the Biology programme and students who knew Florenske

NICOLETTE VAN TIENHOVEN

Our management assistant Nicolette van Tienhoven passed away at the age of 54 on 31 Augustus after a period of acute illness. She was told a few months ago that no further treatment was possible. We kept in touch with Nicolette, who stayed positive in spite of the situation. She was only with us for two and a half years but had quickly become a linchpin of the Club of 100 and of our business unit. She tidied up the membership administration and set up a CRM system tailored to the needs of this group of companies. She saw the importance of close contact with our 75 members and organized newsletters and reports of the club meetings and the advisory board. Nicolette was a pleasant and reliable colleague who was

easy to communicate with. She made her position on things clear and could almost read your mind. She was no quitter and wanted to keep on working as long as possible. We are deeply saddened, and we and all our colleagues will sorely miss her, as will the members of the Club of 100. Our thoughts and sympathies are with Nicolette's husband, children, family and friends at this difficult time.

On behalf of the management team of the Greenhouse Horticulture and Flower Bulbs business unit, Sjaak Bakker and Jan Willem de Vries, and on behalf of the chair of the Club of 100, Maartje Jung

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student life and do you know what's going on? Do you like writing and asking a lot of questions?

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Colophon

Resource is the independent medium for students and staff at Wageningen University & Research. *Resource* reports and interprets the news and gives the context. New articles are posted daily on resource-online.nl. The magazine is published every fortnight on Thursday.

Contact Questions and comments for the editors: resource@wur.nl | www.resource-online.nl

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[no]WURries

'I'm a first-year who wants to live in Wageningen. I've been to a few viewing evenings at student houses to get a room, but in vain so far. How should I tackle this **hospiteren** business? What are the dos and don'ts?

> J, BSc student of Biology (name known to the editors)

Be yourself

'I have just moved from Maastricht to Wageningen to do a minor here, so I know the problem. I was lucky enough to find a room through the *hospiteren* process. The main tip I would like to offer from my own experience is just to be yourself during the evening. That will also help you see whether it's the right house for you. Tell people plenty about yourself, but don't take up all the attention. Good luck!' Tessa Geurts, BSc student on the minor in the Psychobiology of Eating Behaviour

No gifts

'The point of *hospiteren* is to find out whether it clicks between you and the residents of the house. That's important, because you will live there for most of your time at uni. Talk about what you enjoy, such as your sport or hobby. Then you will come across as enthusiastic and cheerful. It's also a good way to control your nerves. But make sure you don't talk all the time. Ask the residents questions too and take an interest in them. Focus your attention on the residents, however tempting it is to start talking to the other candidates because you are all in the same boat. Lastly: don't take any gifts along. That is embarrassing for the residents and it feels forced.'

Anouk van der Windt, BSc student of Biotechnology

Luck

'I reckon the two most important dos are:
1. Be honest. Don't say anything because you think it's what the others want to hear. Be open about who you are, what you expect from the house and what they can expect from you.
2. It is nerve-racking to be assessed, but try to enjoy the evening as well, and to see it just as a conversation with cool strangers.
But whatever you do, no advice is failsafe and there's always an element of luck in finding a room. So good luck!'
M.V., MSc student of Biotechnology (name known to the editors)

Desirable

'My best tip is: always be yourself. During hospiteren a lot of people give 'desirable' answers, but you never know what the house residents are looking for. And a lot of people see through phony answers: there really aren't many people who love washing up and cleaning and tidying. If you try to show them who you are without exaggerating or being attentionseeking, you'll stand the biggest chance of a good match and a good time in a student house.' Coretta Jongeling, online coordinator at *Resource* (been through *hospiteren* six times)

Honest

'Make sure you've got a nice photo of yourself on social media because the impression you make there can affect the decision whether to invite you. If you are invited, treat it like any other formal appointment and arrive on time. It can be tempting to say you are never noisy and always do your washing up. But only say that if it's really true! Be honest, and a little humour goes a long way. Good luck!' Jacob Zornu, MSc student of Aquaculture and Marine Resource Management

> After a year and a half of online education, I have got used to peace and quiet when studying and working on assignments. Now that classes and practicals are back on campus, I am finding it **difficult to concentrate** in a crowded room. Does anyone have tips on how to cope with this transition?

> > A., BSc student of Biotechnology (name known to the editors)

Do you haveadvice or tips for this Wurrier? Or could you use some good advice yourself? **Email your tips or your question (100 words max) by 25 September to resource@wur.nl,** subject noWURries.