Hesource

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A look at the intake Student numbers growing Lockdown takes toll 'End of their tether' Eating in restaurants Covid-proof solutions Agricultural policy Limits or creative answers? Welcome to WUR Starting in a pandemic

Extra time for PhD researchers 'I'm doing what is strictly necessary'





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FOREWORD

More time

It sometimes seems as if the Covid crisis has given us more time — unused hours because we can't eat out, are no longer commuting and have to postpone our holidays abroad. Yet this strange pandemic gift does not apply to everyone. Labs became off limits in the lockdown and PhD students and postdocs have run up big delays as a result. Fortunately the university soon realized this and set up a fund to help them. Read their story on page 20.

However, when we interview researchers they also often tell us, 'We have more time for writing now.' One publication we are featuring in this *Resource* is Joop Schaminée's book on discovering nature; see page 22. It is an optimistic book about changing landscapes by an author who refuses to paint a negative picture of the future.

Also in this issue: a sharp dialogue between Edo Gies and Gerard Migchels on agricultural policy (page 18), the story of the antiracist movement ARA (page 26) and WUR scientists on the list of candidates for the new political party Volt (page 24). You can also read the fascinating story of what it is like starting a new job at WUR during the lockdown (page 12). More time. Of course we hope you still find the time to read *Resource*. Because it must be said, we miss you, the contact, the stories you tell us. So feel free to share your ideas with us (resource@wur.nl). We will be happy to give you our time!

Willem Andrée Editor-in-chief





BIRTHDAY

It was WUR's birthday on 9 March. But this Dies Natalis had to be celebrated online without the customary procession across the campus by professors in their academic gowns. So to create a bit of a birthday feeling, we looked up Professor Emely de Vet at home in Rijen, where she got her gown out of the wardrobe for the occasion. De Vet spoke at the Dies about how we can use our scientific knowledge to help prevent new pandemics. She was in conversation with Henk Bekedam (ex-WHO representative in China and India), Marion Koopmans (Erasmus Medical Centre) and Wim van der Poel (WUR).

Photo Dolph Cantrijn

The end of their tether

The coronavirus measures are causing a rise in mental health issues among WUR employees.

René Hoevenaren, WUR

occupational social worker: 'Since the start of the new year, more and more people have been coming to us with Covid-related issues. A lot of people seem to be at the end of their tether and to have run out of motivation and resilience. The reasons behind this include the lack of hope and of a social life and the increased pressure on parents with school-aged children.'

Last year,

staff of the

Occupational

Social Work

team (BMW

the five

The reasons include the lack of hope and of a social life

in Dutch) spoke to 674 employees suffering from mental health symptoms – about 10 per cent of all WUR employees. 476 of these people were new clients, a small rise (4 per cent) compared with the previous year. About 60 per cent of the problems were related to worklife balance. BMW notes that certain groups of employees needed help earlier in the Covid crisis.

Need help

This group includes single parents and people providing care to family members; PhD students who worry about falling behind; staff with a very small social network; teachers and teaching assistants who had to set up online education at breakneck speed; new employees; and employees who lost friends or family members. Finally, requests for help also came from employees who were witnessing first-hand the devastating psychological effect of the coronavirus crisis on young people. As

A look at student enrolment

The total number of students at Wageningen University has grown by 5 per cent to 12,973. This was the total number of enrolled students on 1 October 2020 compared with the same day in 2019. The number of first-year BSc students grew by 6 per cent, the number of MSc students by 4 per cent.

The biggest growth among the BSc programmes was in the Nutrition and Health programme: from 112 new students last year to 166 this year (a rise of 48 per cent). The BSc in Forest and Nature Conservation expanded a lot too, from 66 firstyears last year to 90 this year (up 36 per cent); likewise Biology (from 129 to 165, a rise of 28 per cent).

MSc programmes

Enrolment went down for the international BSc programme in Food Technology (from 145 to 119, a drop of 18 per cent) and Soil, Water, Atmosphere (from 78 to 58, a drop of 26 per cent). This may be due to the fall in international student numbers. The main areas of growth among the MSc programmes were Forest & Nature Conservation (from 121 to 145, up by almost 20 per cent), International Development Studies (from 89 to 111, an increase of almost 25 per cent), and Metropolitan Analysis, Design and Engineering (from 35 to 62, a jump of over 77 percent). Enrolment for the MSc in Biology also went up by about 20 per cent, from 94 to 113.

By contrast, student numbers for the MSc in Biotechnology are down by 26, a drop of nearly 17 per cent. This is partly due to students from outside Europe postponing coming to Wageningen because of the Covid-19 pandemic, says programme director Sonja Isken. LZ

Interested in the responses of programme directors Gijs Elkhuizen (Forest & Nature Conservation) and Marjolijn Coppens (Biology)? Read the full version of this article on www.resource-online.nl





There are more students of Forest and Nature Conservation. Photo Guy Ackermans



Eleven student initiatives are to receive support from WUR's Informal Student Support Network fund.

The initiatives aim to improve students' wellbeing and provide them with extra support. The projects include Giftedness, which seeks to raise awareness about and provide guidance for highly gifted students; First Generation Students, which brings together students facing specific challenges related to being the first person in their family to go to university; Science of Sleep, which teaches students current theory on sleep so they can put it into practice; and the sustainable agriculture project Wageningen Student Farm.

Woeste Hoeve

The Informal Student Support Network has been offering students the chance to apply for financial support for initiatives since 2019. This is budgeted for in the Quality Agreements, which lay down how the money freed up by the introduction of the loan system is used at WUR.

The initiatives aim to improve students' wellbeing and provide them with extra support

Woeste Hoeve, the pub in the basement of Hoevestein that runs activities for students, applied for support from the activities committee too. Jowi van Heugten of Woeste Hoeve: 'We normally run one activity in each course period and in the longer periods we run an extra theme night, but our plans might be a bit different this year because there is less scope due to the coronavirus.' Lz

resource.wur.nl FULL STORY ONLINE



Support for greener pension fund

WUR's Executive Board and staff are joining forces to persuade the ABP pension fund to make its investments greener.

That is the outcome of a discussion between the two parties. The discussion followed a petition calling on the Executive Board to speak out against investments by ABP in deforestation in the Amazon. The petition was signed by more than 430 professors, researchers and support staff.

According to the petition signatories, investing in deforestation contradicts the message WUR sends in its research and education. 'It is difficult and ethically uncomfortable to research and teach people about the consequences of deforestation for society and the environment when at the same time investments are being made in deforestation in our name.'

Oil drilling

Agreement has been reached that the initiators will talk to ABP about

the deforestation. 'It is important that we don't just point a finger at what is wrong but also come up with solutions,' says Marielos Peña Claros, the initiative spokesperson. But that is not all. She says there are other areas where ABP's policy needs to become more sustainable.

'The petition got a lot of coverage in the press'

One area is its investments in fossil fuels. Last year, another group within WUR took a stand against the investments in oil drilling in the Arctic. Peña Claros is pleased that the Executive Board has now responded so positively. 'The petition got a lot of coverage in the national press. Other universities and institutions also have initiatives targeting ABP.'

ABP is the pension fund for civil servants and people who work in education. WUR is obliged to use this fund. RK

Universities in lockdown for three more weeks at least

More campus teaching will probably be allowed from the end of March.

As of 31 March, students may be able to attend classes on campus for one day a week. Prime minister Mark Rutte and Health minister Hugo de Jonge made this announcement at a press conference on Monday 8 March. Rutte said that 'everyone who wants' will have had at least one vaccination by the summer. 'That is when we will finally be able to take major steps towards a normal life.' But we are not there yet: the number of Covid infections is still too high, albeit stable. That is why the Dutch government considers it unwise to relax measures now. But that might be possible from the end of March. Rapid tests will also be used to make education safer and prevent new infections. At present, students are only allowed on campus for practicals and exams. Vulnerable students are also allowed to visit their university in person for

mentoring. HOP



Rutte and De Jonge on their way to the press conference on 8 March. Photo ANP / Bart Maat



One World Week online

In 2020 the annual One World Week was cancelled because of the coronavirus outbreak, but the event is back this year, albeit entirely online. Lisa Nguyen of the Student Service Centre: 'During One World Week we celebrate diversity in the broadest sense of the world. That means cultural differences among international students and staff, as well as diversity in the areas of gender, religion, disabilities, and so on. It is a week in which we embrace our differences and celebrate inclusion.'

The programme includes lectures, workshops, a dance battle and the Blindfolded Conversation, in which people have a conversation and only see who they were talking to afterwards. 'That way you get to know each other without the prejudices you have as soon as you see someone.' Lz

One World Week runs from 22 to 26 March.

Little interest in onboarding

New employees at WUR can take a two-day introduction programme. But less than a quarter actually do so.

This is shown by figures from Corporate Human Resources. Only 60 of the 250 new employees who joined WUR in November and December registered for the onboarding programme, says recruiter Edvard Jongschaap.

'You have to pamper new employees'

'Onboarding' is the term for the two-day introduction programme. The aim is to give new colleagues a warm welcome and show them the ropes. The programme has been run online since the start of the pandemic. 'The days are filled with presentations about the campus, working from home, safety rules, the library, In'to Languages and so on,' explains Jongschaap. It is hard to settle into a new environment in the Covid era, as the interviews Resource held with newcomers make clear (see page 12). WUR recruited a record 942 FTEs of regular staff in the Covid year 2020. 'Onboarding really begins the moment you apply for the job,' says Jongschaap. 'We call that the candidate experience. Candidates need to feel welcome and you have to pamper them. The entire process from job vacancy to contract is important? And it does not stop there. 'The employee journey, the process you go through as an employee at WUR, should also be positive.

That approach yields benefits, says Jongschaap. 'A positive experience makes for more dedicated staff. The job market is tight; everyone is fishing in the same pool, and applicants are discerning. This means recruitment is increasingly about developing a strong brand as an employer in the labour market.' RK



Sponges can be grown

Growing sponges in a culture medium has long seemed impossible, but now a Wageningen researcher has managed it.

Sponges are fascinating organisms. Not only can they live for an extremely long time (up to 11,000 years old!), they also contain all kinds of interesting substances: compounds to combat viruses, bacteria, tumours — you name it. The sponge medicine cabinet is highly valuable, but you do need to

The sponge medicine cabinet is highly valuable

be able to grow them And no one had managed that until recently. Now

researcher Kylie van Deinsen-Hesp has been able to grow *Geodia barretti*, a common deep-sea sponge. She recently got her PhD for this breakthrough. She gave her thesis the title *Dawn of a New Era in Sponge Biotechnology*. Developing a cell line paves the way for producing numerous new medicines.

Animal cells

The PhD candidate used a culture medium that was based on a known medium for culturing animal cells. In subsequent steps, she optimized the medium to obtain continuous cell division. Van Deinsen-Hesp thinks the culture medium should work for lots of other sponges too. 'It's a good basis at any rate. It'll just need to be optimized for the specific sponge.' RK

Covid-proof eating out: here's how

In the Samen Slim Open project (Staying open smartly), Quirine ten Bosch has developed a simulation model for Covid-proof layouts in restaurants.

Ten Bosch, who works at Quantitative Veterinary Epidemiology, has been doing research with scientists from Delft and Rotterdam on how Covid-19 spreads in indoor spaces. 'Our simulations show something different to the general models used by the National Institute for Public Health and Environment (RIVM),' she says. Ten Bosch looks specifically at what happens when a group of people come into a restaurant. How do they deal with the one-and-a-half-metre distancing rule? What route do they take from their table to the toilet?

Risk profile

Ten Bosch and her colleagues from the Erasmus Medical Centre in Rotterdam simulate the presence of a person infected with the coronavirus in an indoor space, to see how that person transmits the virus through the air, how many virus particles are in the air, and how this can lead to a new infection. Scientists from TU Delft have been modelling the behaviour and movements of restaurant guests under different sets of Covid rules. This model was developed at railways stations for the national railway company NS and has now been adapted for restaurants. It provides a tool with which restaurant owners can work out which layout and rules would serve best in their space for limiting transmission of the coronavirus.

'On the basis of the risk profile we can make the indoor space Covid-proof'

There is no such app yet, but Ten Bosch can already draw a few conclusions from the study. The length of the contact time is a crucial factor in the transmission of Covid-19. Restaurants can limit the contact time between diners by letting people in for a maximum of 45 minutes, with no overlap in the time slots. 'We can draw up a risk profile per room,' says Ten



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What's behind the explosion in gluten intolerance?

ore and more people adopt a gluten-free diet because they think they are gluten-intolerant. Yet the experts say the percentage of food intolerances is not rising. So what's going on?

Even rice cakes proclaim themselves 'gluten-free' on the label nowadays. Great. But actually, no big deal given that rice doesn't contain gluten. 'Gluten is a kind of protein found in wheat, barley and rye,' says Harry Wichers, an allergy researcher at Fresh Foods & Chains. 'Gluten-free diets are prescribed for people with coeliac disease. An estimated one per cent of the population suffer from this condition and they become very ill from the tiniest quantity of gluten. These people have an enzyme in their intestines that converts the gluten protein into another substance to which the immune system reacts so strongly that it damages the gut and causes intestinal symptoms and stunting growth. It is not easy to diagnose coeliac disease and it requires a biopsy to see the damage to the gut.'

There is another group of people with what is known as 'non-coeliac gluten sensitivity' (NCGS). Most of their symptoms are subjective and range from abdominal pain, diarrhoea and headaches to tiredness and poor concentration. These people find that their symptoms clear up if they don't eat gluten. 'We don't yet know exactly what the underlying mechanism could be here, and it is sometimes dismissed as mainly in the mind,' says Wichers. That is the so-called nocebo effect: the more you hear and read about a condition, the sooner you start thinking you might have it too. 'I am not qualified to be the judge of that. But if people feel better, they should certainly stop eating gluten.'

There are other ingredients besides gluten that can cause bowel problems: the FODMAPS, or fermentable oligosaccharides, disaccharides, monosaccharides and polyols. These are carbohydrates found in grains, applies, onions, garlic and milk. They are indigestible for some people, so bacteria in the large intestine get to work on them, causing symptoms. Since they are found in products that also contain gluten, it can be difficult to determine the cause of the problem.

According to Wichers, a gluten-free diet can't do any harm. 'There are plenty of other foods that you can get fibre, protein and vitamins from. It's good to realize that we've only been eating gluten since the emergence of agriculture, when we started growing grain. Before that we might have encountered the occasional bit of gluten, but for 98 per cent of our history, we did just fine without gluten.' Conclusion: A gluten allergy is rare, but if you feel better on a gluten-free diet, go ahead. TL

'For 98 per cent of our history we did just fine without gluten'

Harry Wichers, Allergy researcher at Fresh Foods & Chains

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

WUR to set up pandemic platform

WUR has set up the ERRAZE programme — Early Recognition and Rapid Action in Zoonotic Emergencies — in order to learn from the Covid crisis. A single Wageningen platform will bring together virologists, ecologists, economists, animal scientists and communication scientists.

We want to be better prepared for the next outbreak of a dangerous, contagious virus. In particular, WUR wants more information about zoonoses, pathogens that can be transmitted



WUR wants to identify hotspots where: places where wild animals come into contact with farm animals, pets and people. Photo Shutterstock

China too has a GMO debate

The Chinese government is moderately in favour of the development of genetically modified (GM) plant varieties but Chinese citizens on social media are overwhelmingly opposed. These findings come from the PhD research of Yan Jin.

Since 2002, the Chinese government has allowed imports of over 50 GM crops for use in animal feed or building materials. But so far the government has not given permission for GM crops to be grown in China, with the exception of a few non-food crops. The Chinese ministry of Agriculture plans to gradually introduce the cultivation of GM crops. The government has invested 35 billion dollars in the development of

such crops. But Chinese consumers are critical of GM crops. Jin investigated the online

from animals to humans. 'Wageningen Bioveterinary Research already does a lot of work on zoonoses, how they infect the host and how they spread, says programme coordinator Joukje Siebenga. 'But this programme looks more widely. We also know a lot about the ecology of viruses and wild animals, and how climate change affects their distribution and contacts. We will be combining that knowledge in ERRAZE. For example, WUR wants to identify global hotspots where zoonoses can be transmitted from animals to humans. These are places where wild animals come into contact with farm animals,

tropical rainforest areas where livestock farming is on the rise. Intensive livestock farms in the Netherlands, where bird flu can pass from migrating birds to chickens, are another such hotspot. By making use of knowledge about climate change and changing land use, ERRAZE

'Google sees flu epidemics before RIVM'

will also show how these hotspots are shifting. Another aim of the Wageningen pandemic platform is to have targeted surveillance of the hotspots so that unknown viruses can be detected more quickly. That requires greater collaboration between virologists and epidemiologists, as well as behavioural scientists and economists. 'Google sees flu epidemics before RIVM, from people's search behaviour. We need to analyse and combine that data too.' As

debate about GMOs on Weibo, the Chinese Twitter, between 2013 and 2020. That debate was dominated by anonymous opponents of GM crops. Jon found 778 clear opinions about GM crops, 632 of which were

Chinese consumers are critical of GM crops, in part because of various scandals opposed to such crops. That is because of various scandals. For example, the Chinese government was not transparent about the approval of insect-resistant GM rice, whereupon Greenpeace proved in 2014 that GM rice was being grown in China without official permission. That led to a lot of criticism on Weibo. Jin's results are in line with previous Chinese research, which showed that the Chinese people distrust the government when it comes to food safety — as the melamine affair showed. AS

Zebras give away poachers

Prey animals such as zebras, wildebeest and impalas can serve as informers to reveal the presence of poachers.

This finding came out of research in which prey animals were tagged with transmitters in Welgevonden Game Reserve in South Africa. The study made use of the fact that poaching big game also disturbs that game's prey. These prey animals then serve as informers, an indirect signal that poachers are at work.

Wageningen researchers have been working on the development of this concept for some time, explains Henjo de Knegt (Wildlife Ecology and

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Conservation). In Welgevonden, 135 zebras, impalas, wildebeest and elands were tagged with GPS and an accelerometer. Game wardens simulated the behaviour of poachers so they could study the animals' reactions.

And that works. Using a smart algorithm, the computer can accurately detect 86 per cent of the disturbances recorded in the mountain of data obtained. This proves

that the concept does work, says De Knegt. But an off-the-shelf alarm system is not yet available. There are no large predators such as lions and hyenas in the research area of Welgevonden. Can the alarm system differentiate between a poacher and a lion?

De Knegt thinks it probably can. 'Prey animals are familiar with lions and have lived alongside them for thousands of years. Lions only hunt now and then, and for the rest of the time they pose no danger. Human beings trigger a very different response, probably a stronger and longer-lasting one.'

'We expect prey animals to react differently to lions than to poachers'

To find out if this is the case, a new experiment is now underway in the Kenyan national park Tsavo. 'In an environment where tagged lions and hyenas are roaming around as well,' says De Knegt. 'With more data and better sensors, we expect to be able to differentiate between predators and humans.'

The Wageningen study shows that poachers have a big effect on both big game and the 'sentinel' animals, as they are called. It took three quarters of an hour for the tagged animals in Welgevonden to calm down. After a disturbance, they seek each other out more and move to less accessible terrain with more undergrowth. This behaviour costs the animals a lot of energy. RK

lottery





THE KEY MOMENT

Losing the

'The turning point in my life was not a crossroads at which I chose my own path. Instead, the choice was made for me. At secondary school I was interested in technology and I liked creative activities. I found a degree programme that fitted the bill perfectly: learning to design and programme digital games. But the selection was done by lottery and I wasn't picked. That was that for the future I had in mind. I could of course have taken a gap year and tried again, but I didn't want to put my education on pause. Since I was also interested in biology, and especially in the sea, I opted for a degree in Applied Biology.

I felt like the odd one out on that degree programme. I was the weirdo in the class who got excited about data analysis, while most of my fellow students much preferred fieldwork. When I graduated, I knew it wasn't the end of the road for me. I went on to do the MSc in Biology at Wageningen, specializing in Marine Biology. For

Turning points: sometimes you spot them immediately and sometimes only in retrospect. In this series, members of the WUR community describe a decisive moment they will never forget. This time, Mari-Lee Odendaal, an MSc student of Marine Biology, who was not selected for her first choice of degree subject.

each period I selected the courses that interested me most. I soon detected a pattern: they were nearly all courses related to bioinformatics. Now I have finished my Master's and I'm looking for a job or a PhD position in marine biology, bioinformatics or data science. The latter involves visualizing data as well, which gives it a creative

'If I had been picked I could never have combined my passions for the sea and for technology'

aspect. Exactly what I have liked ever since secondary school. So, by a roundabout route I've got where I wanted to be. This is not the same as designing games, of course, but when I was 17 I wasn't

aware of all the options and I had never heard of data science or bioinformatics. If I had been picked for Game Design after secondary school, I could never have combined my passion for the sea with my love of technology. I have always let myself be guided by the doors that opened for me, and I am curious to see what's next for me. NVTWH

Welcome to WUR

Starting a new job is always a bit nerve-racking. How do you find your way around? What are your colleagues like? Well, they are not there. At least, not physically. Many of the new WUR staff have got to know their jobs, the campus and their colleagues mainly on-screen. So what is that like? It's doable, say the new colleagues *Resource* spoke to. But it would be very nice to meet each other in the flesh. To see a student for once, to eat in the canteens, and to walk around the campus. Read on to hear about our new colleagues' experiences. Text Roelof Kleis, Tessa Louwerens and Luuk Zegers



'You miss having someone to look over your shoulder'

Dirk de Baat, controller at the Centre for Development Innovation

'I started on 1 July last year. The application procedures of the foregoing months were all online, which was a new experience. On my first day at work, I had an extensive talk with my line manager and the coordinator, and I collected the things I need for my work. After that, I haven't been back on campus



tion. n om

'In my previous job in Antwerp, the practical research continued on location. So there, I went into work three days a week. Since I started in Wageningen last December, I've been working from home nearly every day. I have two young children. It is a kind of constant source of stress that I need to finish my work by

'Whenever I don't know everyone, there is a round of introductions first'

Romy Lansbergen, seaweed researcher at Wageningen Marine Research

'I started in October 2020. In the first few weeks I could still go into the office, but after that, less and less. I haven't heard of "onboarding". I did go through an induction process with one-on-one online meetings scheduled with various people from the organization. We have a small team in Yerseke that meets weekly for coffee breaks. I find everyone very understanding, so whenever I'm in a meeting where there's anyone I don't much, except just once in September, when a bit more was allowed. But then you are still sitting on your own in a room, so I might as well work at home. I like working independently, so working at home doesn't cramp my style much. I saved up my questions and rang a colleague once a day. But you do miss having someone to have a look over your shoulder, to look at things with you. By now I have seen most of my colleagues



face-to-face at least once. We have a meeting every Monday morning, but that is mainly about work. I think it would be nice to get to know my colleagues personally. Online contact is not the same as really meeting someone.' BK

'I have been made welcome by my colleagues'

Yannick Vermeiren, assistant professor of Human Nutrition and Health

the time the children get home. I took part in the online onboarding. That was nice, but it would have been nicer on campus. Once a week, I drive to Wageningen from Oud-Turnhout in Belgium to work in Helix, where I am made welcome by the few colleagues who are in the office. You meet the rest of your colleagues on Skype, Teams and Zoom. When there's something

I don't know, I can often find good guides on the intranet. And I also have supervisors with plenty of experience in Wageningen, who know the ins and outs of the university. I'm happy about that. I hope that after the summer I will be able to sample the university's true atmosphere, with the students, staff and cafeterias. I may not be a student anymore, but I do like to have people around me.' LZ

know, there's a round of introductions first. It's a pity that I can't talk to my colleagues face-to-face and get to know them outside work. Apart from that, I notice it's nice to get to know people in smaller groups. In a big group it's harder to speak up and make your presence felt, particularly when you're new.' TL







'I started on 17 February last year, a few weeks before the first lockdown. Founders' Day was just around the corner, and that kept us very busy so there was no chance of a quiet introduction. I've still seen far too little of the campus. The

'I've still seen far too little of the campus'

Nikolien van Gelderen, Events team leader at Communication Services

onboarding that was planned for April was cancelled. I still really only know Atlas. That's a nuisance because when my colleagues talk about a location, I can't picture it. I've got to know my colleagues themselves a little as we go along. That's a bit difficult at the start, too: I don't know them and they don't know me. Now I'm not afraid of approaching people; I find my own way around. But WUR is a very large organization, and it's not easy to get a sense of how an organization works when you are working remotely. Who does

what? To add to that, my job - organizing events – has changed utterly. Since the lockdown, everything had to be online or in a kind of hybrid form. I had to learn a lot of new things. Online events have their pros and cons. The big advantage is their sustainability: no one has to travel for an online event. And it also makes it accessible to more people. Online events are here to stay as an additional option, but nothing beats face-to-face contact. We are social beings and we long to meet each other for real again.' RK

'I already knew most of my colleagues well'

Mark de Rover, teacher of Food Microbiology and Food Quality and Design

'When I started my job on 1 November 2020, I already knew most of my colleagues well. I had done my Bachelor's thesis and two Master's theses at Food Microbiology, one of the two departments where I work now. In that period, I was also often a student assistant, and I helped with education both before and during the coronavirus crisis. Some colleagues who are starting in the

department don't know anyone at all, and it might be hard for them to connect with their colleagues. The induction process was not very clear to start with, but after a week I got a lot of help from a colleague in the same job as me. If I don't know where to find something, I just approach my colleagues. There is also an induction process in which we discuss what I come up against and what I'm planning to do each week, and so on. I miss the direct



contact with students, and the sociable coffee breaks. We do have them online, but that is not quite the same.' LZ



'I started my postdoc not long after the Covid-19 outbreak began. Luckily I had already met some of my colleagues in March when it was still possible. I did join the online onboarding, which was nice and helped me to feel welcome

'The timing of the onboarding is important'

Furgan Asif, researcher in the Environmental Policy group

and connected. In the period that it was allowed again, I worked from the office as much as possible so I could meet some of my colleagues. I think the normal challenges of making friends and finding your way in a new country are exacerbated by the Covid situation. Practical things like moving furniture are difficult if you don't know anyone who can help you. I was fortunate that

one of my colleagues was kind enough to lend me their car so I was able to pick up some furniture. While the onboarding was a good initiative, the timing is also important: when you've just started it might not be a priority, since you are busy with other things and it seems like a formality. WUR could do more to communicate why it is valuable to attend. And perhaps there could be a liaison officer for expats, to help them find their way in Wageningen.' TL

as a scientist.

claims'

COLUMN

Fasting

We scientists often tend to communicate with the outside world reactively: over the past few weeks alone, our division has been asked questions such as 'how healthy is Christmas stollen?', 'how sustainable are meat substitutes?' and 'how bad for you is salt?' A report in the media or a wild claim by a journalist sends people to us for scientific clarification or to find out the truth of the matter. Nothing wrong with that, but it does put you on the back foot

'Competitors often have fewer scruples about making extreme

For a start, you've got to contend with an existing narrative, and correcting or toning down

an established story is difficult and not very mediagenic. Secondly, competitors with less expertise often have fewer scruples about making extreme claims that are more likely to get them quoted. As an example, our participation in a discussion about amyl amides was cancelled recently because the editors 'had found a food blogger who had a good story too' and who was 'so nice and spontaneous'.



Guido Camps

Yes, we're busy, and yet, we've always got other things to do, but I still think we scientists must be proactive in putting across our own message. By telling a story, we create our own media moment. Then we're the ones that other people react to, and we call the shots because we can choose the news outlet in which to tell our story.

But you also need to have something appealing to offer, and that means dressing up a complex story with a mediagenic element. In sales talk, that's called a 'hook'. Professor Sander Kersten and I wanted to tell a complex story about fasting and the fact that you shouldn't necessarily eat all the time. But to spice it up a bit, we added a 'hook' by saying that I would personally fast for five days and we would then measure all sorts of things. I'm not saying that all our scientists must starve themselves for five days for the sake of a media moment. Just that we could make a bit more effort now and then to make our great stories more gripping.

Guido Kamps (37) is a researcher at Human Nutrition and at OnePlanet. He enjoys baking, bee-keeping and unusual animals.



Modified bacteria in the filter

How does that modification process work and can it do harm?

Methane conversion

The bacteria will convert methane (CH_4) into CO_2 . To do this, the students will insert the genes of a methane-eating bacterium into another bacterium that is more suitable for biotech applications. The filter needs to remove low concentrations of methane in the shed.



Ammonia conversion

The students are using enzymes from two types of bacteria for the ammonia conversion. One of these bacteria converts ammonia into nitrate and the other converts nitrate into nitrogen gas (N_2). The aim is to create one bacterium that can do both conversions.

JTION FOR / FARTS

Ten Wageningen students plan to make a biofilter that removes methane and ammonia in cowsheds. They will use bacteria to convert these gases into less harmful forms. They are taking part in iGEM, the international competition for synthetic biology. In October, they will present their project in the finale at the iGEM Jamboree.

N,

CO₂



Bacterial biofilters are often large. The students want to make their biofilter as small as possible by using a smart design. They are also consulting dairy farmers on the filter design.

Kill switch

The students will tinker with the bacteria until they can carry out the desired conversions. But are those modified bacteria safe? The students plan to incorporate a kill switch in the bacteria so that they only work in the biofilter and die outside it.



Agricultural policy: limits or creative answers?

The left-wing and right-wing parties in the Lower House of the Dutch parliament take diametrically opposite stands on agricultural policy. This was apparent in the agriculture debate that WUR helped organize. The left stands up for nature and climate targets; the right supports the farmers, the economy, the country's export position, and business. Photos Guy Ackermans



Do we have to choose between nature and the economy? Or can these interests be brought together in a shared vision? A debate between Gerard Migchels, a parliamentary candidate for the Christian Democratic Alliance (CDA) and Edo Gies, a supporter of the liberal democratic party D66. Gies works at Wageningen Environmental Research and wants livestock numbers halved; Migchels works at Wageningen Livestock Research and wants to see sustainable agriculture without cutting the numbers.

Gies: 'I want to put the quality of our living environment front and centre. Agriculture must operate within limits that safeguard the climate, minimize nitrogen emissions, and increase biodiversity. That means an agricultural transition towards extensive farming, using technology and innovation to make farming more sustainable and reduce livestock numbers. Halving livestock numbers, as D66 proposes, is the elephant in the room that right-wing politicians don't want to talk about. But you won't create sustainable agriculture with technology alone.'

Migchels: 'In my vision of the future,



Text Albert Sikkema

there's a key role for stewardship. We must pass on the Earth to the next generation in a good state, paying attention to people, planet and profit, and therefore staying within the ecological limits. Ammonia emissions have already gone down by 64 per cent in the past 30 years, and in the coming 15 years they should be halved again. Using technical innovations makes that possible. If we phase out artificial fertilizer, and process and apply all the available animal manure, we can farm within the ecological limits and keep the livestock we have now. I want to look for creative solutions within the ecological frameworks. I am an ecomodernist.' **Gies:** 'I don't know what you base that optimism on, because ammonia

'Halving livestock numbers is the elephant in the room'

Edo Gies, a supporter of the liberal democratic party D66



candidate for the Christian Democratic Alliance (CDA)

emissions haven't gone done in the last 10 years, whereas there were innovations and measures then too. When the milk quota disappeared, livestock numbers increased immediately. The agriculture sector is always pushing against the ecological boundaries. Now we are setting limits for agriculture with phosphate rights, but we are not achieving the targets for clean air and water. We must bring down the emission ceiling for phosphate and nitrogen, to halt pollution of our living environment.' **Migchels:** 'In terms of phosphate, we have almost achieved balanced fertilization, where plants absorb everything we add to the soil. As for nitrogen, the ecologists say we must halve emissions. I think we can do that by rewarding farmers who achieve that target. That way you create a learning environment for farmers. What is more, it is much better and cheaper than buying out a farm here and a farm there. I want to appeal to farmer's professional skills. And I want to keep the national herd big, because it is needed for innovation and employment opportunities.' Gies: 'Surely you could develop tech-

nology with a smaller national herd too?' Migchels: 'If I propose to dairy farmers that they should only keep dairy cows in places where you can't easily grow food, as professor of Animal Production Systems Imke de Boer proposes [in her proposal for a new food system written





for the Rockefeller Foundation, ed.], they say: in that case I'd better stop. But they could go back to mixed farming with a new approach. Instead of maize, they could grow vegetables and potatoes, for instance, and they could cut down from 120 to 60 cows. They can't do all that at once, because they've got barns that haven't depreciated yet and a debt with the bank. They need time for this transition, which can easily take a generation.'

Gies: 'Yes, we need time for that transition and that's why we must start using all the available instruments now. Which means that as well as technology and innovation, we must reduce livestock numbers. The government can do that subtly by ending livestock rights when farms close, for instance. If livestock numbers are cut by even 20 per cent, we can relax a little on the nature and environment targets. I want clear limits from the government so we can ensure we achieve the goals in time.' Migchels: 'I'm not in the least worried about ensuring that, because sensor technology is under development that will let us monitor how fast livestock farming is becoming sustainable. In the

Network of Experimental Farms, we are working on continuous measurements of ammonia and methane in barns, which can be linked with farm management. In five years' time we shall have an IT system with which we can register such environmental services precisely, and reward farmers for them .' Gies: 'We still need to impose clear limits on agriculture, limits within which farmers can operate. I think the Remkes commission drew up clear limits for livestock farming, but they are much stricter than current government policy.' Migchels: 'I am hoping that the implementation of the nitrogen legislation will allow the provinces to set the targets. In each province, farmers, nature managers and citizens can then work out how that can cut down ammonia emissions - in the Achterhoek region or around the former peat colonies, for instance. So, make plans together, rather than setting farmers and other citizens against each other. Like that we can make "people, planet, profit" meaningful.'

Extra time for PhD researchers

'IT HELPS, BUT NOT ENOUGH'

WUR is compensating PhD students and postdocs for delays caused by the Covid crisis. A gallant gesture but not always enough. And the question arises: will there be a new round this year or was this a one-off measure?



Text Albert Sikkema

ast year, 148 PhD students and 17 postdocs received compensation from WUR because their work had suffered delays due to the coronavirus crisis. One of the PhD students was Anna Bohnenkamp from Germany, who does research at Bioprocess Engineering on the sustainable production of bulk chemicals using *E.coli* bacteria. During the first lockdown last year, the lab closed for two months, which meant Bohnenkamp could not start any new experiments. In the months that followed, Bohnenkamp had limited access to the lab due to the Covid restrictions. 'That made the experiments less efficient.' She has been granted an extension of two months, so her PhD contract now runs until 1 June this year. 'I'm behind by far more than that, but I'm happy with every month's extension I can get. I have published two articles and I need to write one more. After that, I can write the other chapters

of my thesis. I did have plans to do

more research in my last year, but now I'm concentrating on what is strictly necessary. I am sacrificing a bit of quality and leeway, but I have accepted that. For now, the big source of stress is finishing my thesis on time. There's no question of taking a holiday. All the PhD students are working as hard as they can.'

Same rights

The university soon realized that PhD students were being held up by the coronavirus restrictions and set up a fund for compensating them for that. For PhD students on contracts, about 650,000 euros was available from the budget for PhD salaries. On top of that, the Wageningen graduate schools earmarked 300,000 euros from their

own budgets for compensation for PhD students on grants. In doing this, the graduate schools observed a principle important to the Wageningen PhD Council, that PhD students on grants should enjoy the same rights as those on contracts. The PhD Council therefore appreciates the support package for PhD students on grants, says Robin Barten, a PhD student in Bioprocess Engineering. The decision to consistently award PhD students with children the maximum possible extension of three months meets with the PhD Council's approval too. The Council played its part in this, as several of its members were on the committee that assessed the applications. Almost all the applications by PhD students were approved, says Janneke van Seters, head of the PhD Office at WUR. The few applications that were turned down were by PhD students

whose contracts only end in 2022. Some of the applicants were so hampered by the coronavirus crisis that the contract extension was nowhere near enough to enable them to catch up. One example is Rayner Gonzalez, a Cuban postdoc in Breeding & Genomics. In a two-year project, Gonzalez is studying the DNA variation among African and European indigenous cattle breeds in relation to their ecosystems, looking at things like climate, altitude, production and disease. Gonzales seeks to identify the genes and the performance of various indigenous breeds, and the hypothesis is that the African breeds are more resilient to stress than the European ones. Due to the coronavirus restrictions, Gonzales has been sent DNA from the African breeds but only a fraction of the phenotypic data on the different



Illustration Studio Geniek

breeds that he needs. So the African side of his research is at a standstill. He is now working with cattle breeds from Finland, Portugal and the Netherlands. At the end of February, additional information from South Africa arrived at last, but he is still waiting for information about the cattle from Egypt and Uganda. He estimates that his project has been delayed by a year. His two-month contract extension helps, says Gonzalez, 'but is not enough.' He can write one or two articles about variation in the Dutch cattle breeds, but he cannot compare African and European breeds, which was the idea. Sadly, there is no chance of a year's extension of his contract.

Lingering effect

The big question is: will there be a Covid fund next year for PhD students whose contract ends in 2022? The PhD Council

'THERE'S NO QUESTION OF TAKING A HOLIDAY'

calls the funding 'a good start' and notes that most of the compensation awarded is for time lost in the lockdown of March and April 2020, and is therefore no more than two months. Yet the Covid restrictions such as limited laboratory time and little or no opportunity for fieldwork have gone on longer than that. The lack of laboratory or office space limits fieldwork and travel bans are still hampering PhD students, including those who aim to complete their research in 2022 and 2023. These PhD students have not received compensation yet, while their research too has suffered serious delays, says the PhD Council. But according to Van Seters, it is uncertain whether the university's budget stretches to compensating PhD students for delays after 2021. The lockdown last year meant that research had to be abandoned abruptly, but by now the chair groups and PhD students have had time to make their research plans more Covid-proof. 'The Executive Board take the view that, in addition to the financial compensation provided by the university, the chair groups have a responsibility to find solutions within the PhD projects,' says Van Seters, 'by planning less lab work, for example, and more literature research. That might mean the PhD students produce fewer or different publications, but their learning goals must come first.'

Nature, made in Holland

There is plenty to discover in *De ontdekking van de natuur* (Discovering nature), Joop Schaminée's latest book. The main discovery being that nature in the Netherlands is thoroughly human-made. Text Roelof Kleis

rofessor of Systems Ecology Joop Schaminée (Wageningen and Nijmegen) wrote the book together with historical ecologist Rob Lenders (Nijmegen), professor of Economic History Jan Luiten van Zanden (Utrecht) and historical ecologist Thomas van Goethem (National Institute for Public Health and Environment RIVM). The book came out of Athena, a citizen science project that brings historical sources together in a study of the history of nature. It produced so much material that a book was inevitable.

The book aims to bridge the gulf between biology and history. What do you mean by that?

'To understand the present, you've got to know about the past. That provides a basis for reflection and a perspective on the future. That goes for nature too. Historical landscape ecology is a new subject area. I am currently supervising a PhD student who is working on the history of peat-cutting in the Peel area. Such interesting things are coming out of that research. Half of the peat in the Peel had already been dug out before commercial peat-cutting started there. Just by people cutting turf for their own stoves at home.'

You focus on biodiversity. Isn't there more to nature than that?

'The main story is that of the changing landscapes and the ecological communities and species they harbour. We seek to put that in a historical perspective. So there

De ontdekking van de *natuur*, the development of biodiversity in the Netherlands from the ice age to the 21ste century. Published by Prometheus



is much more to it than biodiversity. Actually, I think that's an ugly and confusing word. A wealth of species is not the only important thing in nature. The uniqueness, interchangeability and vulnerability of that diversity are also important factors.'

Thanks to human intervention, a lot of nature has been lost but - in the Netherlands at least - surely a lot of nature has been created too?

'Absolutely! That has always been my message. Our location in the delta of the big rivers makes for a lot of biodiversity. And human influence is very important too. Humans have enriched the landscape tremendously. Without humans, the only diversity here would be of forest vegetation, apart from a handful of dynamic spots along the coast or the big rivers. Our nature is domesticated and is 95 per cent human-made.'

So the present situation is just the next stage in that development. What are we getting so upset about?

'We are getting upset because we are losing things of value to us. Top predators, spectacular species. Besides, I think plants and animals have their own right to exist and have an intrinsic value in our world. They don't have to be useful to us or deliver an ecosystem service. I think we have a responsibility towards nature anyway. I am a big fan of the semi-natural landscape. Openness, thickets, a bit of water, and some woods. That is heaven on earth for us northern Europeans. Just look at the work of the landscape painters of the 17th century. But that paradise can't exist without human intervention. It would all turn into forest.'

'PLANTS AND ANIMALS DON'T HAVE TO BE USFFUI '

You call that intervention the Second Domestication of nature. What do you mean by that?

'The First Domestication was the transition from hunter-gatherer societies to agricultural ones. We learned to manipulate animals and plants. Animals were bred and plants were cultivated. In fact, we are now busy with a second phase of making nature do our bidding. We are doing all we can to give nature space and to create new nature. There are countless projects, large and small, that aim at developing nature. You couldn't name a creature or a plant that we don't have a working group for.'

Isn't it arrogant to want to control nature?

'We take a critical look at that issue in this book too. You don't have to applaud all the developments you see. It is and will always be manipulation. You might also say, just leave it alone! But the consequence of that is that we would lose very many species. A lot of the species in our country exist because of human intervention over thousands of years. And then there's the question of our responsibility. If we stop intervening, things will happen that we cannot justify. Look at what is happening in the Oostvaardersplassen.'

Is De ontdekking van de natuur a hopeful book?

'I'm optimistic. It is becoming increasingly clear that we have reached a limit. The call to stop ultra-intensive livestock farming, for instance, is getting ever louder. Projects such as "Room for the River" lead to amazingly beautiful nature. I'm optimistic about the current level of awareness of nature, biodiversity and the role that people play in them. At the same time, I could also paint a very black picture of the future. But I don't want to do that. Things are changing. The only question is: are we too late?' 🔳



'Humans have enriched the landscape tremendously. Without humans we would only have a diversity of forests here.' Photo Guy Ackermans

TWO WUR SCIENTISTS ARE **VOLT CANDIDATES**

Jeroen Koendjbiharie, a postdoc at the Laboratory for Microbiology, and Fons Janssen, who will graduate soon with an MSc in Biotechnology, are both on the ballot paper as candidates for Volt, a new party in the parliamentary elections. Resource asked them about their motives and the relationship between science and politics.



Text Tessa Louwerens

underrepresented in politics, whereas a lot of the big issues are typically scientific topics such as the nitrogen problem climate change, and cyber security. I think we need more people with scientific expertise in parliament, and I want to set a good example myself.'

Why politics?

Fons: 'I was politically active during my student career. I helped revive the student union and I used to be a member of the Young Democrats. But that didn't suit me at all, I wanted immediate action. I am about to graduate as a biotechnologist and I've learned a lot about agriculture, the climate and the environment. But I see that this kind of knowledge is rarely applied in politics. I joined Volt two years ago. After that it was a small step to run for election.' Jeroen: 'As a scientist I am curious by nature and I want to make a meaningful contribution to society. Science is

And why Volt?

Jeroen: 'Volt is the only pan-European party, with a joint programme for EU countries. Problems like the climate and migration go beyond national borders. And take corporate income tax, for example. That is a race to the bottom, with the Netherlands attracting companies with its low tax rates. The dot on the horizon is a fully parliamentary democracy in the EU, rather than the consensus models we have now, which lead to slow and often weak decisionmaking. That doesn't mean you move everything to Brussels, it means that what gets decided at the European level is decided democratically.'

Fons: 'The great thing about Volt is that we work across borders. We do a lot with our fellow party members in Germany and Belgium. In 2015, I was visiting a friend in Paris when the terrorist attack happened at the Bataclan. That opened

my eyes to the fact that we in Europe share a common destiny. So I think the existing national parties should merge to form European parties.'

What do you intend to stand for?

Fons: 'I want to focus my efforts on agriculture, climate policy and the border regions. The Hague favours the big cities in the west of the country too much. Less is spent on schools in Limburg than in Rotterdam, and the public transport system is not organized fairly either. Limburg is marginalized

'I think WUR should make itself heard, and in politics too'



Fons Janssen (left) and Jeroen Koendjbiharie. Photo Sven Menschel

as a border region, whereas from a European perspective, Limburg is at the heart of the Meuse-Rhine region. We in the Netherlands are far too preoccupied with our little patch of land. A European party can propose solutions that national parties wouldn't come up with. Take nitrogen: 35 per cent of nitrogen deposition in the Netherlands comes from over the border, and not just from farmers but also from the burning of fossil fuels. Looking at CO₂ emissions, the Dutch steelworks are major emitters, but they also provide the material for wind turbine production in Denmark. Biodiversity doesn't observe borders, either. For nature policy, the Netherlands does have a vision of a European network, but so far it's just a paper tiger.' Jeroen: 'For me, sustainability and democratic reform are important points. I see more and more protest voting for populist parties. People think, rightly or wrongly, that everything gets decided by a small clique in The Hague. I would

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like us to try a different model, in which many more decisions are taken locally and bottom-up. Citizen forums, for example, with seats allocated by lottery and in which party politics and political careers don't play a role. And if there is funding to develop an area, let local people decide how best to use it, rather than the municipal council. You increase popular support for decisions that way. People feel they are taken seriously if they are given responsibility.'

Scientists in politics, is that a good idea?

Jeroen: 'Diversity is very important in politics, and that's about having different personalities, knowledge and skills involved as well. As I said, parliament could do with more scientists. People who not only look critically at the legal

side of things but can also explain why something like biodiversity is so important. At present the scientific advisors are often in the background. If you ask me, that should be reversed: politicians with a range of scientific knowledge at their fingertips, who seek advice on the legal aspects.' Fons: 'Science is more important than ever, especially in these times of misinformation and disinformation. Scientists must be proactive on this point, otherwise you can too easily be swept aside by the loudmouths. We explicitly mention WUR in our manifesto, because a lot of important political themes are related to WUR's areas of expertise. Take gene technology for making our crops climate-proof, for example – that is something WUR argues for, but which politicians take very little notice of. I think WUR should make itself heard, and in politics too. On subjects like CRISPR-Cas, for example, or in-vitro meat. On the latter, the US and Singapore are ahead of the field now, whereas we have the best researchers on it here in the Netherlands.'

'Activism calls for stamina'

Worldwide BlackLivesMatter (#BLM) demonstrations, a petition calling for an investigation into discrimination in Wageningen, and the founding of the Anti-Racist Association ARA Wageningen. The antiracism movement moved into top gear last summer. Where has it got us? 'A lot has been happening behind the scenes, but WUR moves slowly."

ARA Wageningen's four priorities

- 1 A helpdesk We need a clearly visible helpdesk for discrimination and unacceptable behaviour, where you get additional help (psychological support, for instance, and the forwarding of your complaint to people who can work on solutions).
- 2 Staffing policy How can we prevent – possibly unconscious - discrimination in recruitment and career development procedures? Look into admission procedures and exclusive language use.
- 3 Institutional racism in education and research How do education and research maintain stereotypes, and how can they combat them? Do courses look beyond Europe or North America? How much diversity is there on discussion panels? Where does the literature that is used come from?
- 4 Awareness-raising We need lectures and training courses on racism and discrimination, and safe spaces for sharing experiences and listening to others.

et's go back to June 2020. ARA members Jerry Gumbs (a student of Environmental Sciences) and Percy Cicilia Jr (an artist, activist and city-maker in Wageningen) launched a petition calling for an investigation into discrimination, which was signed by large numbers of people. A discussion followed with the WUR Executive Board, and later in June ARA-WUR was established: a group of students, WUR staff and local and international Wageningen residents who wanted to tackle racism, discrimination and unequal treatment together. The 'WUR' in the name was recently replaced by 'Wageningen'. 'The university is not the only place where racism is present,'

institutional racism, and that means taking a larger view and looking at the whole of Wageningen. This is not just about individual cases of discrimination, but also about communication, diversity among staff, the housing market, and bias in education and research.' The next step was to develop a vision, working with WUR's diversity and inclusion policymakers, staff at Human Resources who draw up HR policy, and also people like education director Arnold Bregt. Cicilia Jr: 'Since then, people haven't heard from us very much, but behind the scenes we certainly haven't been sitting still. We have held weekly discussions with everyone involved for about four months. We tabled a draft proposal for a three-year plan (see inset) in January. Now we are waiting for the Board's response.' It was a lot of work and it wasn't always easy. 'Sometimes things seem to move

really slowly. It is very time-consuming,

says Gumbs. 'We are talking about

and we are all doing this alongside our studies or jobs,' says Gumbs. 'Activism calls for stamina, I know that. Both the problems and the changes are often hard to see or to measure. What is more, it comes close to me personally, which makes it emotionally taxing. If I talk about racism, people often say, give us an example then. That is not taking the problem seriously. There isn't just one example; it's something that a lot of people experience all the time, day in day out.'

Nevertheless, Cicilia Jr does think there are signs of change. 'Last week the Wageningen police put out a description of a missing girl as an "unkempt Eastern bloc type". That drew a flurry of angry reactions on social media and quite rightly got into the newspaper. The fact that it didn't go unnoticed is a sign that more people are aware of racism.'



The #BLM protest in Wageningen on 14 June 2020. Photo Sven Menschel



Text Coretta Jongeling

Gumbs: 'I realize that the university is a cumbersome organization. It's a bit of a dinosaur, very large, heavy and old. It makes sense that change takes time. And when I hear from activists from other cities how it's going there, I think we've achieved quite a lot.'

'At least we've got some solid ideas on paper now,' adds Cicilia Jr. 'They always say, let's have less talk and more action. We've nearly finished the talking part of things, and now we need to decide who is going to take action and where. Who will be doing the implementation, how are we going to supervise it, and how are we going to monitor and evaluate it?' There is no need to reinvent the wheel, though. Cicilia Jr: 'There is a lot of existing knowledge in Wageningen.

Among student parties, for instance, who often receive reports. They know what's going on. And there are enough people working at WUR who know about diversity and inclusivity. We are a horizontal organization and we like to collaborate and motivate people, not to take over other people's work. We are actively recruiting new members, and anyone who would like to help is welcome - do get in touch with us.' After ARA recommended that WUR should identify and tackle institutional racism, an implementation proposal compiled by ARA, Education & Student Affairs and Corporate HR was presented to the Executive Board. On Monday 8 March the board gave a positive response; more details about the implementation will be announced soon.



Key people: Simon de Vries

They are indispensable on campus: cleaners, caretakers, caterers, gardeners, receptionists – the list is long. *Resource* looks up these key people. This time, meet Simon de Vries (59), building manager at Wageningen Marine Research. Text Milou van der Horst Photo Oscar Bos

'I took the job here 12 years ago because I didn't want to do only building management. My boss guaranteed me variety, and I certainly got that. I can be solving a technical problem and get a call to ask if I can help collect research material from five beached sperm whales. That happened in 2015. It was fantastic. How often do you get so close to a mass stranding of whales? A colleague and I did things like sawing off jawbones and collecting and labelling teeth. It's intensive work and you need a strong stomach for it because it's incredibly bloody. I can usually cope but once I

'I was asked to help with five beached sperm whales'

couldn't face the meat in my evening meal after looking at dead meat all day. Occasionally I collect a beached porpoise or seal for research. Sometimes they have already rotted quite badly, and you don't get that smell out of your clothes. Every year I also help my colleagues tag about 25 to 50 seals. You've got to have your wits about you because they can bite. Those kinds of jobs are the icing on the cake, as most of the time I work on technical problems in the building. I like to solve them myself. My father always said, if you don't manage, just keep trying until you do. That has become my motto too. But with all the computer systems, equipment has become so complicated nowadays that I more often have to outsource the troubleshooting.

I provide technical support for research projects too. I maintain the equipment, keep an eye on dosages and replenish chemicals. To do that I often have to read manuals in technical English, or to work with the inventors of the machines, who might be Japanese. That is incredibly interesting, mainly because of the cultural differences. I'm a real jack-ofall-trades in the organization. Actually I still don't know what I want to do in life. If I had my career all over again, I would be a dentist because of the precision work, and the fact that you work both with people and with technology. How do I see my future? A few more nice years in my job alongside my other work as a hobby farmer and building my daughter's farmhouse.'





Campus ◆ residents

GreenFood50

Marc Arts called the company he founded in 2014 GreenFood50 because the world population grows by 50 million people a year. Arts, who previously worked on food ingredients at DSM, came across a WUR quinoa project in Chile. After communicating with the Plant Sciences Group, which was breeding this superfood, he decided to develop quinoa-based ingredients on the Wageningen campus. And in 2019, his company took over the production chain for this crop from the Dutch Quinoa Group.

'The quinoa seeds we supply for baby food are inspected on 600 points'

protein-rich and gluten-free, and contain a lot of iron, vitamin E and unsaturated fatty

Quinoa seeds are

acids. Moreover, WUR has bred the crop so that it no longer contains the bitter substance saponin. All this makes quinoa an interesting ingredient for sports nutrition – GreenFood50 is working with Papendal Sports Centre – and for plant-based products, health bars and granola. GreenFood50 buys quinoa seed from about 30 Dutch arable farmers and supplied food companies in 20 countries – including Danone – with quinoa-based ingredients.

The company employs four permanent staff and four WUR undergraduates. Arts does projects with the Field Crops group at WUR and with farmers, who currently produce between two and three tons of quinoa seeds per hectare. He works with Wageningen food technologists on processing the quinoa into ingredients. All the quinoa farmers work without pesticides. 'That is necessary because the quinoa seeds we supply for baby food are inspected on 600 criteria points.' As

About 100 companies are housed on the campus. *Resource* introduces them to you. This time: GreenFood50 All the flavours of the world can be found in our WUR community. PhD student Chanoknun Wannasin (29) takes us to Thailand to share her favourite Tom Kha.



Flavours of WUR

Tom Kha

I was both surprised and delighted when I found galangal (Thai ginger) and lemongrass in the supermarket in Wageningen. The first dish that came to my mind was 'Tom Kha', the traditional Thai coconut soup, and I knew then that I wouldn't have to miss Thai cuisine that much. Traditionally, Tom Kha soup is made with chicken, but it's also popular with mushrooms and other vegetables. 'Kha' means galangal, which is a very important ingredient with no substitute for this dish.

- 1 Boil the chicken/vegetable stock together with the lemongrass, galangal and lime leaves.
- **2** When the water is boiling, add chicken. Skip this step for the vegetarian version.
- **3** After the chicken is cooked, add the coconut milk, mushrooms and other vegetables.
- **4** Wait until it's all well-cooked. To avoid a mess from the bubbling coconut milk, leave uncovered and stir it once in a while.
- **5** Add the fish sauce/salt, sugar and lime juice.
- **6** Turn off the heat, add the coriander.
- 7 Enjoy the soup!

(The lemongrass, galangal and lime leaves are to give scent and flavour to the soup, but you don't eat them.)

Ingredients for 2/3 persons:

- Chicken stock/vegetable stock/water: 2 cups
- Coconut milk: 1.5 cupsBoneless chicken in
- Boneless chicken in bite-sized pieces: 300-400g (skip for the vegetarian version)
- Mushrooms and other vegetables, e.g. cabbage and tomato: 150-200g (400-600g for the vegetarians)
- Lemongrass: 2 stalks cut into 2cm pieces
- Galangal: 1 chunk cut into slices
- Lime leaves: 4-5 leaves roughly torn
- Fish sauce: 2 tablespoons (use 1 teaspoon of salt for vegetarian version)
- Sugar: 1 teaspoon
- Lime juice: 2.5 tablespoons
- Coriander: 2 tablespoons
- Chillies (optional): 2-3 crushed to release some spiciness



Chanoknun Wannasin (29) PhD student at Hydrology and Quantitative Water Management

In other news science with a wink

BIODIVERSITY

There is nothing wrong with the biodiversity of viruses. Researchers from the European Bioinformatics Institute in Cambridge have identified 140,000 different viruses in the human gut. Half of these viruses were unknown to science. The virologists took specimens from 28,000 individuals worldwide to get this picture. So it may still only be the tip of the iceberg.

BREEZE

The images that the Mars rover Perseverance has sent back to Earth are breathtaking. But what really leaves you speechless is the first sounds from Mars that NASA has released. You do need to use your imagination: the sound itself doesn't amount to much – just a gentle breeze and the rattle of metal parts of the vehicle. But hey, from Mars!

Neanderthals could talk, according to a group of researchers at Binghamton University (New York). The researchers base this conclusion on 3D models of the skulls of Neanderthals in which an inner ear is visible. That is not the case in other ancestors of Homo sapiens. Conclusion: they could hear. We already knew

Neanderthals could make sounds. The question is, of course, whether those sounds were meaningful.

MALE PILL

The male pill is within reach. Scientists at the American Lundquist Institute have discovered a substance that renders sperm immobile. The little swimmers don't get anywhere. The substance works safely in lower mammals but remains to be tested on humans. The active substance is triptonide, which sounds suspiciously like Superman's kryptonite. Only that made him stronger. RK

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Resource

Diary of a caretaker

Dragon

A friendly African lady addressed me one day: 'Mr Eugene, I have an issue. I just arrived a few days ago, and I can't sleep at night. Is it possible for you to come to my room? I want to show you the problem I have.' A few hours later, I was walking down the corridor towards her room and there she was, waiting for me with a big smile on her face. When I entered her room I saw that she had rented furnished accommodation from Idealis. She looked at me and pointed at the bed. I looked from the bed to her. I couldn't see what she was getting at. She pointed at the bed again and I looked at it again. 'You see? That's my problem.' I still had no idea what she was trying to tell me, so I asked her to explain. 'I bought a linen package from Idealis and on the duvet cover is a big Chinese fire-breathing dragon. Sometimes when I wake up in the night, I look at my duvet cover and the moonlight is shining on those big creepy dragon eyes and I get really, really scared. I jump out of

'l looked at her and did my best not to laugh'

the bed, take the duvet cover and throw it into the corner of the room.' I looked at her and did my best not to laugh. This was a problem I had never encountered before. But I

could see in her eyes that she was perfectly serious. So I stifled my laughter and told her to come to the Idealis office for a new, plain linen package. 'Thank you Mr Eugene for not laughing at me, and for solving this problem.



IN MEMORIAM **JILLERT SANTEMA**

Jillert Santema passed away on 14 February. A lab technician, Jillert was a friendly and special person. His relationships with his managers were not all plain sailing, because nobody should tell this Frisian what to do. He was a true loner who enjoyed life in his own way. As a bachelor, he often had his evening meal with his peers in the canteen, and he liked to organize evening scavenger hunts. 'Turn left at a bottle of beer' gave him a laugh, because many took a wrong turn upon passing an empty beer bottle

Jillert synthesized fluorophores. His passion was education, and he was a walking encyclopedia. He was strict and was known to grill students about the fine details of glycolysis. His annual group tours to places the Dutch rarely visit were important to him. Afterwards he proudly gave slide shows explaining local customs. After he retired, we didn't see much of him. Jillert walked his own path for nearly 80 years.

On behalf of the Laboratory of Biochemistry Willem van Berkel

Colophon

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

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[no]WURries

'Our new housemate made a very different impression when he visited to see if he was a good fit to how he really is. He hardly says a word, spends most of his time in his room and makes a huge mess there. It's full of mould-covered plates and rubbish. Our house is quite tidy and we want to keep it that way. We've already tried to raise the subject light-heartedly but the message doesn't get through. Does anyone have a solution?'

Students S. and housemates (names known to the editors)

Nonviolent communication

'There could be many reasons why your housemate is shutting himself off. I think you should approach him individually. There is a useful framework for difficult conversations by Rosenberg that helps you get your message across peacefully. Don't judge; instead tell him what you observe (I see that you do...). Describe what effect that has on you and why it makes you feel that way (It makes me feel... because I value...). Finish with a request (Would you be willing to...?). At first this method feels unnatural, but once you experience the benefits it won't seem so strange anymore.'

Jos Hazenbosch, MSc student of International Development Studies

Straight up

'I would simply be frank and straight up with him. Your new housemate might not have picked up your subtle message last time. Therefore I think you should sit down and have a very clear, open conversation with him about what is bothering you and try to find a way to fix it. Try to come up with a compromise that works for all of you. Setting an ultimatum or getting upset will probably not help the situation. Good luck!' Esmee Zutt, MSc student of Plant Biotechnology

Rental contract

'It's great that you've already discussed it with him — that's the first step, of course. But it's a shame the message hasn't got through. A situation like that can have a big impact on the atmosphere. Personally, I would speak to him again, possibly by setting up a 'house meeting' to discuss his behaviour. If he doesn't respond to the feedback and you don't see any other option, have a look at what the rental contract says. If your housemate's behaviour doesn't meet the conditions in the contract, you might be able to evict him on that basis.' Sanne van Doorn, MSc student of Biotechnology

Why?

'If your housemate is acting differently than before, there is probably a reason for it. Perhaps something has changed in his personal life. If he is going through a hard time, that could explain why he is spending a lot of time in his room. It is also possible that he too is disappointed by his new housemates. Perhaps he didn't receive the warm welcome he expected. Even a sociable person can put up a shield in such a case. Try talking to him face-to-face to find out what's going on. And do your best to make him feel welcome in your house.'

Bertha Nkhata, MSc student of Urban Environmental Management If you have advice or tips for this Wurrier or if you need some advice yourself, email your tips or question (100 words max) before 20 March to resource@wur.nl subject noWURries.

fo "Staff are at the end of their tether, yet the work carries on – the research, the teaching. How can they stay motivated? Who has tips? What energizes you and what makes you happy? Share your tips here with your colleagues.

> René Hoevenaren Occupational Social Work, WUR