

Resource

JULY 2021 VOLUME 15

Globus festival
goes ahead!

Small farmers
can harvest more
palm oil

**Still no
name for**
Dialogue Centre

**10,000 km
by bike**
recycling plastic

Milk fat alternative
wins Protein
Challenge

Back on Terschelling
Students get to go on
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FOREWORD

BACK AND FORTH

Everything starts with a question, and we like asking questions here at *Resource*. In this final issue of the academic year, we organized an online roundtable discussion with WUR Executive Board President Louise O. Fresco. The participants — broadly representing the WUR community — could ask whatever they wanted. The topics discussed included blended working, education, and WUR and the private sector. It was an open, candid and critical exchange (p. 12).

This *Resource* also has another debate — about a topic that has caused a stir recently. A sign saying 'no crop tops' at the entrance to the Bongerd gym sparked a fierce discussion on social media among Wageningen students. So the sports centre invited students to talk about the issue, with *Resource* in attendance (p. 18).

And we say goodbye to someone too. Henk van Ruitenbeek produced illustrations for Wageningen University's magazine for nearly 40 years, latterly mainly for the *Typical Dutch* feature in which international students and staff talk about surprising aspects of the Netherlands. But submissions have dried up. See page 24 for an interview with Henk. Editor Albert Sikkema: 'Henk has drawn some iconic images. I think he is just as good as well-known Dutch cartoonists like Jos Collignon.' Finally, if you feel like getting in the holiday mood, take the ferry to Terschelling on page 20 and join students enjoying their long-awaited field trip. Have a great break and hopefully we'll see each other on campus — in blended fashion — in September.

Willem Andrée
Editor-in-chief





LIVING CLOCK

An enormous clock, formed last Friday by about 75 WUR staff including professors in their academic gowns, tells us that it is five to 12. The message is that time is up for the ABP pension fund, which invests in Brazilian meat companies that have been condemned for their contribution to illegal deforestation. Unacceptable, say these WUR employees. Professor of Forest Ecology Frans Bongers: 'I've been working for the protection and restoration of tropical forests for 40 years now. That my pension should come from illegal felling and deforestation in the Amazon for beef cattle is hard for me to swallow.' ^{CJ}

Photo John Akerman Özgüç

Vegan alternative to milk fat wins Protein Challenge

The second edition of WUR's ReThink Protein Challenge has been won by Team Cultivated (best prototype) and Team AlgO (best business plan).

Team Cultivated uses precision yeast fermentation to produce plant-based fats that are identical to milk fat, making it possible for plant-based protein products to resemble real dairy products much more closely. Although these fats are not a direct source of protein, the jury was convinced that this could be a game changer for the protein transition.

AlgO wants to use the millions of litres of wastewater from the food and beverages industry to cultivate microal-

Besides prize money, the winners also get support to further develop their projects

gae. These microalgae rescue the nutrients from the wastewater and can then be used to make new

food products. By opting for a mobile facility in a container, AlgO's concept can easily be brought to any waste stream, says the jury.

A total of 49 teams of students from 41 universities in 18 countries took part in the challenge. Twelve teams were picked to compete in the final round: six in the prototyping category (prize money for the winner: 6000 euros), and six in the ideation category (prize money for the winner: 3000 euros). Besides the prize money, the winners also get support to further develop their projects. Numbers two and three in each category also get some prize money and support. LZ

For more information about the projects, go to rethinkprotein.nl



Photo Shutterstock

Survey of sexual and gender-based violence

How much sexual and gender-based violence (SGBV) is there at Wageningen? A student initiative termed Nouvelle WAG intends to find out with a survey.

'We've heard various stories of sexual violence and harassment at WUR,' says Dawn Cheong, a Rural Sociology PhD candidate from South Korea. 'They range from cat-calling and comments about someone's body to unwanted sexting, stalking and physical

'Incidents range from cat-calling and sexual comments to unwanted sexting, stalking and physical violence'

violence. We hope our survey will give an idea of the SGBV situation at Wageningen.'

Each year, the Social Sciences group carries out a survey of working conditions, says Cheong. 'The report for 2020 showed that 19 per cent of staff had experienced undesirable behaviour. That percentage was only 13.7 the year before. Only a few cases were dealt with satisfactorily: At pres-

ent there is no WUR-wide survey looking at SGBV that covers both students and staff. 'That makes it difficult to understand the full extent of the problem.'

The initiators have already developed a three-part plan to improve the situation. It involves identification (via the survey), prevention (information and training for students, PhD candidates and staff) and response (measures such as a hotline for reporting incidents). Responding to the initiative, the university spokesperson says that WUR has been working for some years on being an inclusive and safe university where everyone can be themselves. 'Getting a picture of SGBV is one aspect of creating an inclusive environment for work and study. Within WUR, various working groups are collaborating with parties such as Nouvelle WAG on inclusiveness. We warmly invite Nouvelle WAG to come and talk to us.' LZ

1.3

That is how many million cubic metres of gas WUR will save per annum thanks to the Thermal Energy Storage (TES) system that has been installed on campus. Heijmans has completed the work and is celebrating by offering free ice lollies all week in Orion and Forum. The TES system will let WUR save the equivalent of the gas consumption of 1000 Dutch households and avoid 2400 tons of CO₂ emissions each year. As

Green light

Globus has been given the go-ahead so the first edition of the festival will take place on Saturday 3 and Sunday 4 July. Because of Covid-19, it will be one big outdoor cafe with music, snacks and drinks, rather than a 'normal' festival. On both days there are three time slots for attending the festival, which is organized by students. All proceeds will go towards buying up tropical rain forest.

For tickets and more information, go to QR-code



Back to the drawing board

The jury of the competition to find a name for the Dialogue Centre has to start afresh. The Executive Board thinks the proposed names aren't good enough.

In line with the protocol, the jury, led by Communications director Inge Wallage, proposed two names to the Executive Board. But the board says neither name sufficiently reflects the functions the new building will have, explains jury spokesperson Eddy Teenstra. He won't say what the names were.

The Dialogue Centre, which is under construction, will replace the Aula in the town centre. Besides PhD defence ceremonies and inaugurations, it will also host receptions and meetings. The building is intended to provide a meeting point for WUR and the wider community. In 2017, board President Louise Fresco managed to get two million euros out of the government for the construction.

In imitation of the process of naming



Dialogue Centre under construction. Photo Roelof Kleis

The jury will start again, but only after the summer holiday

the Dialogue Centre. The response in March was 218 different names sent in by 233 people. But now that the Board has its doubts about the proposed names, the jury has to start again. That

Aurora, the education building, staff and students were invited to think up a name for

won't happen until after the summer, says Teenstra, what with holidays and other things.

The competition entrants were informed about the delay by email last week. The email said that the jury needed more time to complete the process with all due care. The competition will not be relaunched, says Teenstra, who thinks the suggestions sent in should offer enough choice to find a suitable name. RK



Job security and pay rise

Trade unions and universities have settled on a new collective labour agreement (CAO).

Assistant, associate and full professors and support staff who already have a temporary contract will in principle be taken on permanently after one year. This will be the case for new employees after 18 months. The agreement doesn't cover other teaching staff.

In addition to more job security, staff will get a pay rise. Salaries will go up in two stages: on 1 July by 1.64 per cent and on 1 January 2022 by another 0.36 per cent. Everyone employed

by a Dutch university on 1 July 2021 will get a one-off payment of 650

Academic staff get a 'realistic assignment'

euros (gross, on a full-time basis) by September 2021 at the latest.

To combat the excessive workload, the aim is to give academic staff a 'realistic assignment' with clear agreements about the relative amount of time taken up with teaching, research, economic exploitation and other tasks. The CAO parties think people will be working more from home even after the Covid measures are relaxed.

This will be permitted provided the job allows it. Staff will get an internet allowance of 25 euros per month and a home working allowance of 2 euros per day.

The new CAO, which applies from 1 January 2021 to 31 March 2022, still needs to be approved by the trade union and university members. RK

Recycling plastic for 10,000 kilometres

To show that lots of good things are happening in the area of plastic recycling, student Robin Aanstoot will be cycling the length of the West-European coastline in the next six months.

Actually, Aanstoot is no longer a student, as he completed his Master's in Forest and Nature Conservation in June. So it's time to take off. The trip will start in Norway and end in Portugal, sometime early next year. Aanstoot plans to gather a bag full of plastic waste every day along his route. He

'I've always surfed a lot and that makes you feel connected with the sea'

also wants to put one business in every country he visits in the limelight for its plastic recycling.

'There is a lot of focus on the plastic issue, and rightly so. But I also want to show some of the many good initiatives being taken in the area of recycling.'

The preparations for this 10,000-kilometre cycling trip are almost completed. In addition to mapping the route and optimizing the bike, there was also the issue of creating a special

bike trailer that would fit a surfboard. Because for a keen surfer to cycle all those kilometres along the coast without surfing is not an option.

Surfing

Where did Aanstoot get the idea from? 'I have always surfed a lot, and that automatically makes you feel involved with whatever's happening to the sea. Moreover, I worked on sustainability during my studies, I had previously done a Master's in Sustainable Business and Innovation at Utrecht, and my thesis was about sustainable wood production. It all came together in this idea, really.'

The departure for Norway is planned for mid-July. With a bit of luck, Aanstoot should cycle into the Netherlands in October. 'I will definitely pass by Wageningen when I come through the Netherlands, as one of my interviews about plastic is on the campus.' c

Follow Aanstoot on Instagram via [re.cycle.surf](https://www.instagram.com/re.cycle.surf)



A test ride near Wageningen. Personal photo



Onion DNA unravelled at last

WUR researchers have managed to map the DNA sequence of the onion genome.

Sequencing the onion genome was far from easy, as it is very large: five times the size of the human genome. So the researchers had to place 100,000 fragments of DNA in the correct order, says plant-breeding researcher Richard Finkers. 'Of these 100,000 pieces of the jigsaw puzzle, 95,000 were blue sky, and only 5000 were different.'

Now that the sequence has been determined, breeders can develop new varieties faster, such as onions with increased resistance to drought

and mould.

Now that the sequence has been determined, breeders can develop new varieties faster

The onion is one of the world's most widely cultivated vegetables. The Dutch eat an average

of about seven kilos of onions a year. To keep pace with the increase in the global population, the production of onions must increase by 800,000 tonnes per year. **AS**



Photo Shutterstock



A protein structure (yellow) around DNA. Image Rob de Haas

Grant to make vaccines

Rob de Haas designs proteins that package DNA as virus-like nano particles, which serve as a platform for a malaria vaccine. He has been awarded a Fulbright scholarship of 7500 euros to make these proteins in the US.

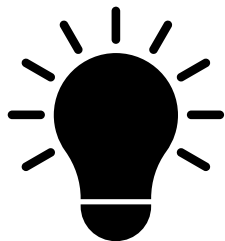
Everyone is familiar with the helix structure of DNA, the spiral shape made up of proteins in which genetic information is stored. Rob de Haas, a PhD student at Physical Chemistry and Soft Matter, is currently building proteins that fit precisely around that DNA as a kind of coating. He is doing this digitally using software from the Institute for Protein Design in Seattle. He did an internship at this institute for synthetic biology, and he is going back there after the summer vacation to make a malaria vaccine – with a Fulbright scholarship.

In the past few months, De Haas has been working on a kind of 3D computer puzzle in which he fits molecules together so that their protein structure precisely fits the circumference of the DNA. The sole purpose of the coating, which is now ready, is to provide the vaccine with a platform. 'We can put very specific malaria protein motifs on this coating at exact distances and orientations so that our bodies recognize the particles as malaria. If that works, we stand a good chance

of obtaining an effective vaccine against malaria.'

De Haas is not an immunologist, but he knows that a coronavirus vaccine is easier to create than a malaria vaccine. 'The coronavirus spike protein is easy for our immune systems to recognize, but malaria is trickier. When someone is infected by a malaria parasite, the malaria virus enters their liver via the blood within hours, after which it is difficult to trace. So we have to simulate malaria protein that the immune system can recognize quickly and easily.' The 3D composition of the protein is crucial to this.

In the US, De Haas hopes to test a first version of the vaccine on mice. Malaria vaccines have been made in the past, but in those cases the researchers adapted an existing virus. 'In our approach, in which we create proteins from scratch, you have far more control and certainty.' Designing structural proteins yourself is a new branch of science, says De Haas. 'I'm the only researcher in the Netherlands who can do this.' **LZ**



A Little Wiser

How does sunscreen work?

Sunlight consists of visible light and ultraviolet (UV) light,' explains Bauke Albada, assistant professor of Organic Chemistry. There are three kinds of UV rays: A, B and C. The C rays get filtered out by the ozone layer, while the first two reach the Earth's surface and penetrate your skin. UVB (B for burn) causes an inflammation response in the skin, making it red and painful. In other words, you are sunburnt. UVA (A for ageing) penetrates deeper into the skin, causing ageing and wrinkles. Both sorts of UV radiation also damage your DNA, which can cause cancer.

Skin damage is caused by energy-rich photons (light particles) in the UV rays. Sunscreen filters out those UV rays with chemical or mineral filters. Chemical filters absorb the photons, while mineral filters deflect them. Albada: 'As a result, the radiation does less damage – like a bullet that just grazes you.' There are also natural sunburn products such as those based on raspberry seed oil. 'Those oils contain a lot of unsaturated fats that capture the radiation and thus provide a sun protection factor of 30 to 50.'

The sun protection factor (SPF) indicates how much UVB radiation the sunscreen filters. 'It only measures how well it protects you against burning,' says Albada. 'It doesn't tell you anything about protection against UVA rays. Not that it can't protect you against them, but no research is done on that. If you want to be protected against UVA, check

whether your sun protection product contains zinc oxide or avobenzene.' The higher the SPF, the more UVB radiation the product blocks. So factor 30 lets through one thirtieth of the radiation (about three per cent) and blocks 97 per cent. For factor 50, that is one fiftieth, so two per cent. People who burn after 10 minutes without sunscreen can't spend more than 300 minutes in the sun when using factor 30.

It's important to reapply sunscreen regularly, but 'reapplying only replaces the cream that has been wiped away or sweated off,' says Albada. Unfortunately, you don't get another five hours with every new layer of factor 30, because your skin has been absorbing radiation all that time. After five hours you will have to get out of the sun. 'And applying factor 20 and then factor 30 doesn't add up to factor 50. You only get the protection level of the highest factor cream,' says Albada. It's not handy to mix two creams either, because you then dilute the sun cream with the highest factor and you get an SPF that's somewhere in between the two. TL

'Applying factor 20 and then factor 30 doesn't add up to factor 50'

Bauke Albada,
assistant professor of
Organic Chemistry.

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



Growing algae in the desert is feasible

Year-round production, plenty of sun (and therefore high yields) and an abundance of 'free' non-productive land. This makes the Qatar desert the ideal place to grow algae. PhD candidate Kira Schipper researched the potential.

There is rather too much than too little sun in the Qatar desert for algae, says Schipper, who has lived in Qatar since 2011 and works in the local university's algae group. 'The algae grow really well out of doors but may die if they are exposed to too much UV light.' Schipper and her colleagues identified about 200 local algae, most of which

grow in saltwater. She tested one species in the lab at her faculty. This alga produces a blue pigment

'There was considerable interest and financial support from the Qatar government'

that is used as an ingredient in pharmaceutical products and make-up. The proteins in this alga can be used in animal feed.

Schipper is now testing the algae production in 200-litre tanks of saltwater in the desert, aiming to identify the optimal light intensity for algae cultivation and the effect of the uncontrolled conditions you get outside the lab.

Evaporation

One of the issues is water evaporation. 'The more water evaporates, the higher the salt concentration. Algae can cope with salty conditions, but at some point, the water becomes too saline. We are now testing whether we can add freshwater from a purification plant.' Schipper expects to see large-scale algae production in Qatar in the coming years. 'There is considerable interest and financial support from the Qatar government, the electricity you need is cheap, and this is also a way of sequestering CO₂.' One of Schipper's colleagues is testing an alga that produces plenty of omega-3 fatty acids that are suitable as chicken and fish feed. Qatar university is now considering combining algae production with fish farming in the desert. AS

Kira Schipper obtained her PhD on 8 June. Her supervisors were Bioprocess Engineering professors René Wijffels and Maria Barbosa.



Photo Kira Schipper

Invasive plants capture plastic

Water hyacinths in the Saigon River in Vietnam collect three quarters of the visible plastic waste in the river, shows a study by Louise Schreyers, a PhD student in the Hydrology and Quantitative Water Management chair group.

Schreyers analysed field data and drone images of the Saigon River collected over a six-week period. The river flows through Ho Chi Minh City, Vietnam's largest city, and has large patches of water hyacinths floating on it. This invasive plant blocks the city's canals and obstructs navigation of the river. But

it captures 78 per cent of the floating plastic debris in the river, show

Water hyacinths capture 78 per cent of the visible plastic waste in the Saigon River

Schreyers' calculations published in *Frontiers in Environmental Science*. Schreyers is now investigating where the hyacinths accumulate in the largest numbers. She seeks answers to two questions: where does the plastic enter

the river and how does it get stuck in the water plants? The size of the floating water hyacinth patches fluctuates greatly: sometimes they cover as much as 30 per cent of the Saigon River, sometimes not even one per cent. Schreyers is working with a German startup and Vietnamese officials to establish clean-up operations. Her research has relevance for other tropical rivers too. 'A lot of plastic waste in rivers never makes it to the sea because it gets trapped in plants or on the riverbed.' AS

Small farmers could harvest more palm oil per hectare

On small-scale palm oil plantations in Indonesia, the discrepancy between the potential and actual yields – known as the yield gap – is big, shows a new large-scale study that WUR researchers collaborated on. If these farmers can close their yield gap, they will prevent the loss of even more vulnerable ecosystems due to the growing global demand for palm oil. Text Laura Bergshoef

You probably showered with it this morning, ate some in your breakfast, and maybe even smeared some on your face. Palm oil is the most commonly used vegetable oil in the world. It comes from the fruit of the oil palm, and to keep up with the growing demand for it, vulnerable ecosystems are often turned into palm oil plantations. This poses a threat to biodiversity and the climate. An international research team, including WUR researchers, is targeting a new way of boosting production in Indonesia, where roughly two thirds of our palm oil

currently comes from. Instead of creating even more plantations, the farmers could get far bigger

'Palm oil farmers often use fertilizers meant for rice plantations because they are subsidized'

yields from the existing plantations, concluded the researchers in *Nature Sustainability*. By managing their land more efficiently, farmers would not only save a lot of hectares of forest – thereby keeping CO₂ emissions down – but would also benefit financially themselves. Before reaching this conclusion, the researchers first collected all kinds of data about the weather and the soils in Indonesia, focusing particularly on the small farmers who manage 42 per cent of the land used for growing palm oil. They fed that data into crop models to



Oil palm fruit on a plantation in Indonesia. By weeding around the oil palms better, farmers can see the fallen fruit better that tells them where the fruit is ripe, say the researchers. Photo Shutterstock

simulate the potential harvest. This way they discovered that current yields are on average only 53 per cent of the potential yields.

Weeding

The researchers also studied how farmers could bridge that gap. First of all, they could adapt their harvesting methods. By weeding around the oil palms better, they would see the fallen fruits better that tell them where the fruit

is ripe. That way they can avoid picking too much unripe, unusable fruit. The farmers should harvest more frequently too: every 10 days instead of every 20 days. That way they limit the amount of overripe fruit plucked.

Secondly, the farmers could boost their harvests by using more appropriate nutrients. 'Up to now, farmers have often used fertilizers meant for rice plantations, because they are subsidized by the government,' says Maja Slingerland of WUR, who has been involved in the study. 'We are trying to get the government to subsidize fertilizer meant for palm oil plantations.' The researchers are now writing a handbook for the farmers, in collaboration with local partners.

Know your country

It is July, period six is nearly over and more and more countries are 'turning yellow'. A lot of people are making holiday plans. I am too, and that's why I was reminded of a moment during my internship last year when I got to accompany a farmer when he was recording the vegetation on his grassland. There were three of us that day: the field birds man, the plants man and me, the intern.

It was a long way to that farm but we had all had to work at home for weeks, so it was nice to talk to other people for a change. Entire life stories were exchanged. And that's how we discovered that the plants man and I had been in the same region of Madagascar in the same couple of weeks in 2016. What a coincidence!

After more than two hours in the car, we turned off onto the farm. We had noticed a 'Welcome to Groningen' sign on our route and had therefore forgotten that this farm was just within the border of Drenthe province. 'Well, it's a long time since I was in Groningen,' were the plants man's first words. 'Drenthe,' the farmer corrected him, 'You are in Drenthe, not in Groningen.' I've known more relaxed introductions but hey, we were here for that grass.



Vincent Oostvogels

The farmer strode across his fields and we three ran after him. I don't remember what prompted it, but at one point I said something to the plants man about our trips to Madagascar. The farmer heard us and turned swiftly on his heels: 'Here you are talking about trips to faraway countries and you don't even know which province you are in!'

Then there's my French neighbour. He's been here a few months now, on an exchange. He visits a different Dutch town every weekend with his French friends.

'Arnemuiden, Borculo or Monnickendam... I know nothing about them, I've never been there'

And when he tells me he's been to Arnemuiden, Borculo or Monnickendam, I have to admit every time that, no, I know nothing

about the place, I've never been there. I'm already packing my bags for a trip abroad and I'm a little ashamed of myself. That farmer had a point: how well do I know my own country?

Vincent Oostvogels (25) is in the first year of his PhD research project on biodiversity restoration in the dairy farming sector. He dreams of having a few cows of his own one day.

What's ahead for WUR (and more):

In conversation with Louise O. Fresco

The academic year is drawing to a close and it seems as though we'll be saying goodbye to lockdown in September. *Resource* invited WUR President Louise Fresco, two WUR staff members and one student to discuss topics like blended working, education and WUR's collaboration with the business world.



Text Willem Andrée

May we introduce: Martine Lazzarin (**ML**), a researcher at Plant Sciences; Renee Rooijakkers (**RR**), a Master's student of Food Technology; and Ruud Bink (**RB**), an advisor from the Ecological Monitoring Network. Between them they represent (albeit broadly) the WUR community. In the online roundtable session (which took place before the press conference of 18 June, ed.) the four spent nearly an hour in discussion, ducking no issues. And of course *Resource* (**R**) stuck its oar in now and then.

Louise Fresco (LF) 'I've been impressed by the efforts and commitment of people at WUR over the past year. During the lockdown, nobody gives you a literal pat on the back to say "Well done". I've seen how colleagues had to be self-motivating – teachers, students, researchers, the support staff. We've shown resilience. That resilience will stand us in good stead now as we move on. For blended working, for example, which means working partially from home. I've been hearing that a lot of colleagues see advantages to not always having to be in the office or on campus. What is

more, blended working helps reduce CO₂ because we travel less, and we save energy by not having to travel by car or train five days a week.'

RB 'How are we going to make blended working work?'

LF 'WUR is not going to lay down any rules for it. Because every team is unique. Just take lab work, for instance – you can't do that from home. It's important for us to create a flexible system. You can have online meetings alongside face-to-face ones and walks – managing by walking around. And we must also be aware of staff and students who can't create a good workspace at home: WUR and its managers need to find appropriate options that work well for the individual as well as the group. There is not going to be a one-size-fits-all solution.'

RR 'Is WUR ready for the students who will come back to the campus, and for blended working?'

LF 'Yes, but a lot depends on the

government as well. How many people can be in the workplace at the same time? Will the one-and-a-half-metres rule still apply? We don't know yet. Hygiene measures are still important to us: hand-washing is effective. We shall have to grow into the new reality. And we bear in mind the chances of a new wave of the virus. Most of the buildings have enough space, certainly now we have the new building, Aurora, as well. But I'm curious to know what you all think of blended working?'

RB 'Six months ago I'd have said, never! But I see it differently now. I can work faster at home than I thought, but it is tiring too because of the nonstop focus on a screen, and the constant switching of language and subject. I haven't yet experienced what it's like to work partly from home and partly on campus.'

ML 'Blended working works well for me. When I have to do experiments, I come to the campus; if I need to concentrate, I work at home. One thing to pay attention



Martina Lazzarin (ML), Ruud Bink (RB), Renee Rooijackers (RR) and Louise Fresco (LF). Illustration Studio Geniek

to: many of my colleagues come from overseas, and from countries where there is still a lot of Covid. They haven't seen their families for over a year, and that is tough on them. What I'm looking forward to myself now we are getting more freedom is the conferences, the symposia, the trips. That is food for the mind. Working online can never be a good substitute for that.'

RR 'And education, Louise? How do you see the future for education?'

LF 'The main cause for concern for me is the students who started last year and have hardly any idea what student life is like. We must make sure they get up to speed in their degree programmes after the Covid year. Because "learning to study" is all part of their education. And we are going to devote time to the new

first-years too. The student coordinators are already intensely involved with this. We are lucky that the new education building Aurora is ready in time. It is a spacious environment with high ceilings, which means people can meet up, even if there are still restrictions. We want to give students a real feeling of being at university again. I'm convinced that our coordinators, and our teachers of course, will find good and appropriate options for this group.'

R 'Registrations of prospective Bachelor's students were 15 per cent down in mid-March. Informally, we gathered not everyone saw that as a problem. The number of registrations has caught up again now, but would it really be so bad if it was a bit lower?'

LF 'Growth is not an end in itself for WUR. But we do have degree

'WUR is not going to lay down any rules about blended working'

'Growth is not an end in itself for WUR'

programmes here that are crucial for nature and health, so you want enough students taking those. A slow growth that is manageable. And that's what we've been seeing. What we don't want, for example, is everybody opting for a degree in AI (Artificial Intelligence, ed.) Of course, some degrees are more popular than others, but in generally there is a reasonable balance here. And



‘We want to give students a real feeling of being at university again.’

that’s good because we want students from all kinds of disciplines to meet each other.’

RR ‘What lessons have we learned from online education? Will there be blended learning from now on, for example?’

LF ‘Our teachers have been very creative. I met one teacher who sent his students a minilab by post, and I heard about distance practicals being taught. We must see what works well. Whatever the case, you can’t graduate from WUR unless you have been on the campus for most of your studies. Because a degree here is also an academic training. We want to produce people who think about issues such as the environment, nutrition, and how we use nature. These are things you learn by being on the campus and together. Some of it can be blended. That cuts down travelling time for Dutch students and helps foreign students who are worried about travelling because of Covid-19. But a complete Wageningen Online degree is not something I think will happen.’

ML ‘You mentioned AI, and those students are good at programming. Here in Wageningen, everything is mixed so I see them working with students who have other skills. They learn to collaborate. Should that continue in research teams in future, that combination of skills?’

LF ‘You can’t generalize, but my experience is that the best teams are those in which disciplines complement each other. In which people learn from each other and share their unique perspectives. But if you don’t know anything about programming, then it’s difficult to join in the discussion on some

topics. You do need a basic knowledge. Not everyone has to become an AI expert, but if you just know a little bit about it, that makes the conversation more fruitful.’

ML ‘In connection with that, I get the impression that the applied sciences are seen as less scientific than the fundamental sciences. That’s reflected in assessments by journals and ratings too. Is the one more scientific than the other?’

LF ‘Certainly not. A practical problem from the applied sciences can turn out to be a fantastic fundamental problem. And that works both ways, just look at CRISPR-Cas. That generates collaboration between Wageningen Research and the university. That cross-pollination is important, and I believe in it. But the evaluation of scientists – and staff in general – should be broader than it is if you base it entirely on publications and grants. Teaching should be valued, as should the impact of the research and the role of researchers in society. A researcher who goes into a secondary school and tells an inspiring story about a Wageningen topic can have a tremendous impact on young people.





It's impossible to compare that with a scientist who publishes a lot in a high-ranking journal. We must look at all the areas in which we have an impact.'

R 'What does the future of WUR look like? What are the concerns? And what are you looking forward to?'

LF 'We are evaluating our strategic plan, so it is too soon to say anything definite. Over the past few weeks we've been pondering the question: do our ideas have an impact? A lot of things are heading in the right direction. The collaboration within WUR on subjects such as circular agriculture or biodiversity, for example. I hope Resource will follow up on that one. And it's not only about what we do. The world around us is changing. Covid-19 has shown us the power of science – how quickly scientists analysed the genome, and how quickly they came up with a vaccine – but distrust of science has grown too. The polarized reactions on social media are certainly something that affects us as well. And there is widespread concern about the future. Where are we headed with the planet? That will be an important aspect of the debate from September.'

RB 'How can you prepare the WUR community for that?'

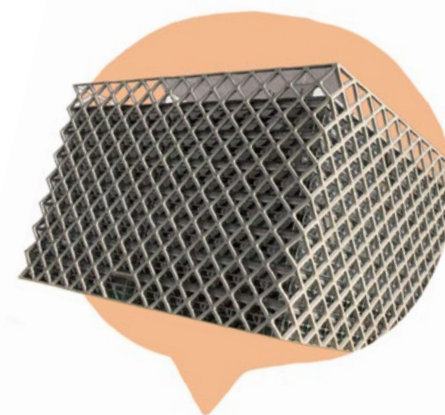
LF 'It's a time of challenges and opportunities. You can see that the outside world is asking a lot of questions, and that forces us to think about who we are and what we want. And we are doing that. There was an online debate on

biodiversity recently. What are we going to contribute in that area, as a research institute? How do we use our knowledge, and what is controversial? So I'm pleased that we now have a dialogue programme and that the Dialogue Centre will open next year. It's becoming more and more important that we keep up a (science-driven) dialogue with society. But there's no need to be in constant discussion. That is not feasible and it's not what everyone wants. For those who do want it, there is much to be gained in restoring confidence in the sciences.'

R 'There is still a lot of discussion about collaboration between WUR and the private sector. Should we seek collaboration, or should we be aiming instead for more independence?'

LF 'You should put the question differently: who do we need in order to have an impact? We need the government, citizens, and the private sector too. That raises the question of how we can collaborate with businesses. What do we need in order to do so, and how can we do so transparently? I think things are moving in the right direction, and everyone is learning from collaborating. Including the business

'Who do we need in order to have an impact? The government, citizens, and the private sector'



world. The big sectors are investing increasingly responsibly. Why is that? Not just because they suddenly start feeling very responsible, but because the IMF and the banks say that industry must take more responsibility for the future.'

RR 'Some people think that WUR withholds information in that respect. How can WUR be more transparent, and how can we do more than talk about it?'

LF 'We are free to choose who we collaborate with, and who we work with is no secret. We share all our research data on our website. You can't keep back information: to do so would damage trust in us as a research institute and in our scientific results as well. But you are right: the perception is the problem. We are going to tackle that, and we'll stay in dialogue about the dilemmas. Input from our staff and students is essential for that.' ■

IN THE PICTURE





MAKING THE BEST OF IT

Online PhD ceremonies are a bit of a non-event. The beadles Renata Michel and Lily Kroon found a solution to this and created an alternative mini ceremony around the signing of the degree certificate. They captured the short ritual on camera as a souvenir for the new Doctors of Philosophy. Formal photos of course, but they took the time afterwards for some more playful shots. Here's a compilation. Old-style degree ceremonies might be back in the autumn. **RK**

Photos Renata Michel & Lily Kroon



From different angles

No crop tops in the gym?

A sign saying 'no crop tops' at the door of the gym provoked discussion among Wageningen students as to whether Sport Centre Bongerdt (SCB) should have a dress code. *Resource* attended a discussion about crop tops in a group including students Claudia Espejo Valle-Inclan and Iris van den Belt and sports instructor Ellen van Kalsbeek. The discussion was moderated by the SCB director, Henri ten Klooster.

Text Albert Sikkema • Photo Guy Ackermans



Ellen: 'I've been a sports instructor since 2002. We have unwritten rules at the sports centre. They come down to: keep your chest, butt and belly covered – in other words "suitable sportswear". The sports centre opened again on 19 May after the Covid-19 closure. We had hired new sports assistants and they had some unpleasant discussions with students about their clothing. So to protect these assistants, I turned the unwritten rules into a house rule, 'no crop tops'. This guideline had no sexual associations for me; it was similar to "no flip-flops".'

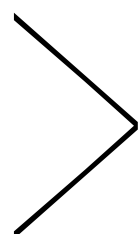
Claudia: 'I came into the gym one Monday. I was wearing a crop top because it was a very hot day. I saw a sign saying "no flip-flops" and I saw people in the gym staring at me. I felt very uncomfortable. I stayed, but I felt picked on. I spoke to another girl in the gym about it and she told me the instructor had told her to cover herself up, and that she wasn't dressed decently. I talked about it with my friends later and we all felt we didn't want to be targeted like this. Women wear crop tops. What's the problem!?''

Ellen: 'The student weightlifting club Wageningen Beasts started out as a

group of muscular men who threw weights and barbells around, intimidated other people and wore vests. Other users, especially women, felt uncomfortable in that atmosphere, so we decided to set up a dress code then. It had a positive effect, and now Wageningen Beasts is a club with more women members than men.'

Iris: 'Yes, I read that explanation, but I don't agree with it. It's wrong to ban crop tops for that reason. That was a case of bad behaviour. If you don't want that kind of behaviour, you must make rules that prohibit that behaviour. Crop tops are gym wear, and they are normal clothing to me. By prohibiting them, you imply that it makes a difference what you wear. Whereas the issue is behaviour that makes other people uncomfortable. I don't mind what other gym members wear, as long as they don't bother me.'

Ellen: 'I agree that the sign was not well-chosen. I apologize for that. Let's forget this sign, and maybe we can skip the crop top rule. What we want is a diverse and



'Wearing a T-shirt is a small sacrifice to make for an inclusive sports centre'

Ellen van Kalsbeek

Claudia Espejo Valle-Inclan

> ‘Why should I cover up my belly but not my biceps?’

inclusive sports centre. We have a very diverse group of students and staff. We also see that fashions change and that people want to show their bodies more than they did a few years ago. But that might be intimidating for other users too.’

Claudia: ‘A few students I know were told by the fitness instructors in front of the group that they were not supposed to wear crop tops. To me, that’s intimidating. I don’t see a difference between my belly and my biceps. Why should I cover up my belly but not my biceps?’

Henri: ‘The rule we created to make women feel more at ease in the gym has turned against us. None of the fitness instructors has a problem with crop tops. What we’re concerned about is the users. We always ask students whether they feel safe.’



Iris: ‘Feeling safe has to do with other people’s behaviour, not with clothing. So banning items of clothing doesn’t make sense.’

Henri: ‘Other international students have told me they feel differently about clothes and bare bellies.’

Claudia: ‘They must respect our customs. If I go to a traditionally religious country, I cover up my belly. But we are in the Netherlands, where people are free to wear what they like. This is a Dutch gym. We are free women and we can wear what we like. I’m not giving up my freedom because they are not comfortable with it.’

Ellen: ‘Wearing a T-shirt is a small

sacrifice to make for an inclusive sports centre. If I go to other gyms in Wageningen, I enter a totally different atmosphere. Everyone there is under 30 and they all look extremely fit and muscular.’

Iris? ‘What is the proposal now?’

Ellen: ‘I say we want chests and butts covered in the gym.’

Claudia: ‘I’ve never seen anyone in a bikini in the gym, so I see no need for signs.’

Henri: ‘Let’s just say that users should wear appropriate clothing and not specify it any further. I propose that we meet again in October to evaluate this guideline.’ ■

< ‘The issue is behaviour that makes other people uncomfortable’

Iris van den Belt

What do you think? Respond to this article on [Resource-online.nl](https://resource-online.nl)

Back on Terschelling

'A FIELD TRIP AT LAST'

Sixty students are finishing a year in which most learning was online with a 10-day field trip on one of the Wadden islands.

Ten days of fieldwork on Terschelling are the core component of the course in Plant, Vegetation and Systems Ecology. The fieldwork was cancelled last year because of the coronavirus, and the teachers kept a Plan B in mind for a long time this year too. But thanks to the good virus figures, tight organization and hard work behind the scenes by teachers and support staff, 60 students set off for the Wadden Sea 'as usual' on Sunday 13 June. The ferry to Terschelling was a happy moment for Wiladatus Sakdiyah (24). 'Two hours of sailing in the sun and enjoying the view, gazing at the horizon. There were seagulls everywhere and a friend and I saw seals through the binoculars. Everyone was happy.' This is Sakdiyah's first visit to a Wadden

island. She comes from Indonesia, and she came to Wageningen in August 2020 for her Master's in Climate Studies. 'I considered postponing my arrival by a year because of Covid but in the end we were welcome to come. I expected that we would have some classes on campus and some online, but because of the lockdown it was soon fully online.' Spring brought hope and easing of measures, but when Sakdiyah registered for Plant, Vegetation and Systems Ecology it wasn't certain that the fieldwork on Terschelling would go ahead. 'It is the last course for my Master's so I'm happy it is going ahead on location. I learn so much more here than at my computer.' 'During online lectures, there is



Text Luuk Zegers

often silence when a teacher asks whether anyone has any ideas. Here the atmosphere is different, more enthusiastic. We are challenged to do research ourselves and prompted to think critically.'

The 60 students on the course are expected to observe a Covid protocol. That means things like wearing facemasks, everyone sleeping in their own tent, and doing a self-test every morning at eight o'clock. 'It is totally worth it,' says Sebastiaan Grosscurt (24), a Master's student of Forest & Nature Conservation. 'You are working in the field for nearly two

'TERSCHELLING IS GIVING ME THE CHANCE TO FEEL LIKE A REAL WUR STUDENT AFTER ALL'



Photo: Runa Magnusson



Sebastiaan Grosscurt (24, in the red cap) doing fieldwork on the island of Terschelling. Photo (via Whats App) Laura Schefold

weeks, something which wasn't possible for a long time in the Covid time. We are learning to do research and enjoying nature at the same time. And it is a nice opportunity to meet our fellow students.' There's a big difference between online classes and fieldwork, says Grosscurt. 'Seeing a slide with a picture of a plant and some information is nothing like really seeing, feeling, smelling and picking that plant in nature. You learn to apply knowledge in practice straightaway; you get much more out of it.' And the social side of things is important too, he emphasizes. 'I came to Wageningen in September for my Master's programme. So I mostly knew my course mates from online groupwork. Now we go into the field together for the day and after that we've been playing football, frisbee or cards and having a drink together. We watch the Dutch team's European Cup games on a screen in the big tent.

Terschelling is giving me the chance to get to know my fellow students and to be a real WUR student for a while after all. I didn't have that feeling until now.' Beach wheel chair The first few days on Terschelling were devoted to excursions, says Master's student of Biology Maartje van den Bosch (22). 'Then we divided into small groups to do research ourselves. My group is looking at the differences in insect diversity and numbers between wet and dry dune areas with different levels of acidity. We work with pitfall traps: little dishes you dig into the ground. The dishes contain a mixture of water and washing up liquid, and the insects that fall into them die. After 48 hours, we take the dish out of the ground and see how many insects have fallen in, and which species they are. We also look at the vegetation and take soil samples to measure the acidity level. When we

get back to Wageningen we will study the organic matter. In short, it's nice broad research.' What purpose does the research serve? 'Above all, it's a good way of getting experience of fieldwork and of the best way to set up research. It's an introduction to practical work.'

That practical work sometimes poses unexpected challenges became clear to Van den Bosch on the second evening. 'After the excursions we went to play football and I tore my ankle ligaments. Really annoying, because I couldn't join the rest of the excursions – it's no good if you're on crutches.' But she's trying to

'WE ARE VERY GRATEFUL TO OUR TEACHERS FOR ORGANIZING THIS'

'SEEING A PICTURE OF A PLANT IS NOTHING LIKE SEEING, FEELING AND SMELLING THAT PLANT'

make the most of her time on Terschelling anyway. 'Everyone is very concerned, which is nice. One of the supervisors drives a van around and brings me to the excursion locations that are accessible. On Saturday my group went to the beach to set the pitfall traps. I was very keen to go along so we got hold of a beach wheelchair, with those really thick tyres. One big guy in my group pushed me straight across the sand to the research locations. So I could join in after all.'

Soil chemistry

Master's student Iris Verstappen (23) is studying Earth & Environment. 'In my degree programme I have learned a lot about the soil. Now I want to include the

context as well, meaning what grows in the soil. That's why I came along. I didn't know much about plants so I'm learning an awful lot every day. About plants but also about how you set up a study, you collect data and analyse those data.' Verstappen's group is doing research on whether you can predict the soil chemistry of a spot by having a look at the plants growing on it. 'Different plant species demand different soil types. We look at the acidity level, the moisture content and the nutrient level of the soil, and whether they suit the vegetation

there. The real question is whether you need to take a soil sample, or whether it's enough just to look at the plants.' 'We are learning things here that you don't learn at your computer,' says Verstappen. 'Details too, like it's better to take notes in the field in pencil, because when it rains, ink from your pen smudges. We've literally got our feet on the ground here.' Or in the mud, like the students who went walking on the mud flats on their day off. Sakdiyah: 'Personally I needed a weekend off, so I had a nice day on the beach with friends. Chilling out a bit.' The students realize that organizing the Terschelling trip took some doing. Van den Bosch: 'Months of work went into organizing this properly. Not just on the education side, but also in terms of Covid.' Grosscurt adds, 'It's great to experience this. My fellow students and I are thoroughly enjoying it. We are very grateful to the teachers.' ■



The social side is important too, like drinks at the campsite. Photo Marieke Koster

‘The drawing is my signature’

Typical Henk

Henk van Ruitenbeek has been illustrating Wageningen University’s magazine for nearly 40 years, for the last decade or so as the illustrator for the Typical Dutch feature. His last contribution is published in this last *Resource* of the academic year. Editor Albert Sikkema asked him what is ‘typical Henk’.

He is 67 years old now but without batting an eyelid he says, ‘I think I’m still getting better. I mean, technically better, that I put the idea on paper better or more sharply. Or I’ve become more tech-savvy, that might be it. I’m self-taught – when I was a student here I used to draw a bit and then I was asked to send a bunch of pencil drawings to the editors. The designer liked them, the pencil style especially I think, so I was allowed to illustrate articles. I had a limited repertoire to start with, but then I had to illustrate subjects I knew little about and I had to familiarize myself with those too. And I started studying, getting hold of books to

learn more about drawing techniques and drawing in perspective better. I also gave my drawings names and evaluated them. Did a drawing hit the nail on the head, or was it hard to understand? ‘You see, I have my own opinions of course. So I start drawing with an opinion on the topic, but if I see that I’m too influenced by that opinion, I think, wait a minute, this is a bit too easy, so I’m going to draw something else. Or I’m seduced by a particular image. I might read a story and feel there must be a donkey in my illustration. Then on second thoughts, I wonder what that donkey has to do with the subject. At other times I just want to introduce an element of beauty – I feel that particularly

‘I don’t want to copy things or take well-trodden paths’



with ugly subjects.'

'The worst thing the editors can do to me is to get me to illustrate an article because they can't come up with a photo to go with it. It's like: this is abstract, that's one for an illustration. That happens quite a lot. I'm not complaining, and I've never said, "I can't do anything with this" because that would feel like admitting defeat. So I would just set to work on it. Articles about education policy, reorganizations and IT developments were hard, with lots of obscure jargon. You have to read them three times to get the point. You can poke fun at the jargon but that's amusing once and doesn't really get you anywhere.'

'I write too, a spoken column for a musical

salon in Wageningen, and plays. In the texts I write for youth theatres, I like to use a few nice words that the young people don't know yet, and that I don't use often myself. A new word to savour, as it were. That's what I want for my

'Sometimes I just want to introduce an element of beauty, especially with ugly subjects'

drawings too. I don't like clichés. I don't want to copy things or take well-trodden paths, but nor do I want to draw a cartoon showing real people. But perhaps I don't want to do that because I'm not good at it. I distrust my own motives.'

'I get quite a lot of response to my illustrations for Typical Dutch, especially from WUR staff and Wageningen residents who don't work at WUR – they know my drawings too. I enjoy receiving a compliment and I pay more compliments myself these days too. A compliment can make your day.'

'I stopped signing my drawings years ago. It just happened without my noticing. It's not necessary anymore – the drawing is my signature.' ■



Illustration Henk van Ruitenbeek: 'Sometimes I'm seduced by an image. I might read a story and feel there must be a donkey in my illustration. Then on second thoughts, I wonder what that donkey has to do with the subject.'

Irregular Opening Hours – Summer 2021

Forum

	Date	Monday to Friday	Saturday and Sunday
The Building	3 July - 30 July	8 am - 8 pm	Closed
	31 July		10 am - 6 pm
	1 August		10 am - 6 pm
The Library	3 July - 4 July		10 am - 6 pm
	5 July - 30 July	8 am - 6 pm	Closed
	31 July - 8 August	8 am - 10 pm	10 am - 6 pm
	9 August - 10 August	8 am - 10 pm	
	11 August - 29 August	8 am - 6 pm	Closed
Student Desk	5 July - 13 August	0.30 pm - 2.30 pm	Closed
IT Service Point	5 July - 13 August	8 am - 5.30 pm	Closed
WURshop	12 July - 8 August	Closed	Closed
Restaurant	5 July - 27 August	Closed	Closed
Grand Café	5 July - 27 August	10 am - 2 pm	Closed
Wageningen in'to Languages	5 July - 13 August	9 am - 5 pm	Closed

Due to precautionary measures regarding the Corona virus, opening hours may change

Orion

	Date	Monday to Thursday	Friday	Saturday and Sunday
The Building	5 July - 1 August	Closed	Closed	Closed
	2 August - 15 August	8 am - 7 pm	8 am - 6 pm	Closed
	16 August - 29 August	8 am - 7 pm	8 am - 6 pm	Closed
Bike basement	5 July - 1 August	Closed	Closed	Closed
	2 August - 15 August	Closed	Closed	Closed
	16 August - 29 August	Closed	Closed	Closed
Restaurant (only grab & go)	5 July - 1 August	Closed	Closed	Closed
	2 August - 15 August	8 am - 7 pm	8 am - 6 pm	Closed
	16 August - 29 August	8 am - 7 pm	8 am - 6 pm	Closed
The spot (only grab & go)	5 July - 1 August	Closed	Closed	Closed
	2 August - 15 August	8 am - 7 pm	8 am - 6 pm	Closed
	16 August - 29 August	8 am - 7 pm	8 am - 6 pm	Closed

Due to precautionary measures regarding the Corona virus, opening hours may change. See the Spot, Restaurant and Bike Basement for changing measures

Leeuwenborch

	Date	Monday to Friday	Saturday	Sunday
The Building	5 July - 11 July	7 am - 10 pm	10 am - 5 pm	Closed
	12 July - 31 July	7 am - 10 pm	Closed	Closed
	1 August - 15 August	7 am - 10 pm	10 am - 5 pm	Closed
	16 August - 29 August	7 am - 10 pm	Closed	Closed
The Library (study facilities only)	5 July - 29 August	8.30 am - 6 pm	Closed	Closed
Restaurant/ Coffee Bar	Until 30 August*	Closed	Closed	Closed

*Coffee Bar / Restaurant opens from 30 August

Due to precautionary measures regarding the Corona virus, opening hours may change

A T. REX ON THE ROAD TO EDE

What if dinosaurs roamed our planet once again? Student Ron ten Caat wrote his first book about this scenario.

Tuin der Giganten (Garden of the Giants) is his first novel: a fantasy book for young adults. Ron ten Caat, who studies Animal Sciences, wrote the book during his weekends as a way of relaxing. 'During the week I am a normal student, but at the weekends, I write. One afternoon, and another chapter is ready. Writing is a form of relaxation for me – it calms me down.'

Ten Caat started writing at an early age, 'I was already writing stories at primary school. One of my first was entitled *The King's Cat*. It is about a boy who finds a stray cat that turns out to belong to the King. I have always written those kinds of stories. I have an active imagination and I'm always daydreaming.'

That imagination, coupled with a fascination for dinosaurs, is the basis for *Garden of the Giants*. 'Many children have a passion for dinos, which they grow out of later. I got stuck in it,' he laughs. 'They are animals, but far larger and stranger than the ones we know. Only their fossils remain. So, you can fantasize to your heart's content about what they looked like.'

The idea for the book arose when he was cycling from the campus to his house in Ede with his best friend, Lidian Bakkenes. 'She said, "What if we suddenly saw a huge T. rex here



Photo André Weima

in the field? What would that be like? What would you feel?" An exciting idea that prompted me to write this book. I showed her each new chapter. And she designed the cover.'

The protagonist of the book is Maya, a 19-year-old girl living in Atlanta who is searching for the meaning of a stone she found one day. The year is 2165, and dinosaurs have returned. Humans have retreated into fortified cities. The stone

turns out to be of value for the repressive city government, *The Cult*.

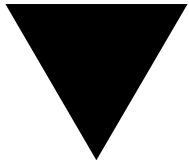
'When I write, it is as if I'm watching a movie,' says Ten Caat to describe how he works. 'I retreat into my own world and just write what I see. I do have some notion beforehand of which way the story is going, but I add new things as I go along. Then before you know it, you have a book.'

And, before you know it, there's another book. 'Yes, I am already working on my second book. It's great that the dinosaur book was published, but it hasn't diminished my passion for writing. This was just the beginning. I want to continue learning to write and gradually build a portfolio.' RK

**'I HAVE A LIVELY IMAGINATION
AND I'M ALWAYS DAYDREAMING'**

Tuin der Giganten

Available through the local bookstore



Key people: Joost Rijk

They are indispensable at WUR locations: the cleaners, caretakers, caterers, gardeners, assistants – the list is long. *Resource* seeks out these key people. This time, meet Joost Rijk (28), at the Farm of the Future and the Agroecology & Technology Field Lab in Lelystad.

Text Marieke Enter ♦ Photo Guy Ackermans

‘Every Monday morning one of the researchers and I make a round of the fields to decide what needs doing that week. I often make a quick phone call during the week as well, and we sometimes have to adjust our plans as we go along. We are working with nature, of course, with the seasons. Particularly at this time of year, the weather is a very decisive factor for the state of the crops. My father thinks that has an almost therapeutic effect. He does have a point: you do your best to create optimal growth conditions but you can’t control everything. You might have irrigated yesterday, for instance,

and then today an unexpected shower brings 40 millimetres of water. Yup, it happens. But if it does, your potatoes are waterlogged.

‘The Farm of the Future covers 22 hectares on which we grow seven different crops: barley, wheat, broad beans, potatoes, onions, carrots and mixes of grass and clover. The field lab is bigger: 60 hectares. There we grow the same mix as well as cabbage, alfalfa, green beans and oats. Altogether, it makes for quite a diverse range of crops, with different times for sowing, fertilizing, weeding and other work for each crop. We’ve got a close-knit team of six people who do that work. I may be the manager but I work alongside my colleagues rather than above them. We’ve got to get the job done together –

partly because it really isn’t an option to outsource it. The contractors’ machinery is far too big and heavy for our system of tracks, with which we want to avoid compacting the soil.

‘Of course I feel under pressure at times – quite a lot of eyes are on us. As pioneers of the agriculture of the future, we regularly do things no one’s ever done before, and not everything is a success. But it’s better to have a disappointment here at the pioneering stage than later when the whole agriculture sector is using the method in question. I try to emphasize that on Twitter too, when I share our results. I enjoy being a bit provocative. I see it as all part of my job to talk to people about what we are working on and the future of agriculture.’

‘We regularly do things no one’s ever done before’





Campus ♦ residents

FarmVent

Last November, *Resource* published a story about FarmVent, the Wageningen start-up that designs indoor vending machines dispensing fresh herbs for use in restaurants and supermarkets. At that point, MSc student Nikolaos Alfieris's company was competing in the 4TU Impact Challenge.

'The idea originated during my Bachelor's degree in Robotics in Greece. After that, I did a pitch at Orange Grove, the business incubator at the Dutch Embassy. They put me in touch with StartHub Wageningen. Now I am doing a Master's in Biosystems Engineering at

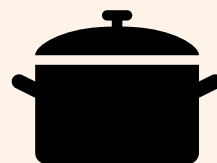
Herbs grow in water in the machine under LED lights

Wageningen and also working on the business plan for FarmVent.' Alfieris's idea is to offer supermarkets and restaurants vending

machines with mini indoor herb gardens, in which basil, oregano and thyme grow under LED lights. Consumers can buy a tray of fresh herbs from this vending machine. Alfieris already has a showcase full of basil plants in the FarmVent office in Plus Ultra II. He wants to have a prototype ready by the end of this year. He intends to rent the indoor herb vending machines to his customers. 'That way, we will be responsible for the entire growing process.' FarmVent consists of four people. Alfieris met the co-founder Orfeas Voutsinos at Orange Grove; he is doing a PhD in Plant Sciences at the agricultural university in Athens. The other two members are MSc students in Utrecht and Wageningen. Alfieris is still looking for new team members, especially people who can work on business development and the technological aspects of vertical and indoor farming. AS

There are about 100 companies on campus. We introduce them to you in *Resource*. This time: FarmVent in Plus Ultra II.

All the flavours of the world can be found in the WUR community. Giorgio Omodei (25), a Master's student of Organic Agriculture, makes a dish that reminds him of home in Singapore.



Flavours of WUR

Sweet and Sour Chicken

'I grew up in Singapore, where my mother, my sister and I would visit the same restaurant almost weekly to order this dish. Trust me, it never gets boring! For me, this dish has great sentimental value, especially now that it's eight years since I left home.'

- 1 Season the chicken with salt, pepper and a dash of sesame oil.
- 2 Simmer the rice in a pan with some garlic, ginger and salt, then turn off the heat and let it steam.
- 3 Heat sunflower and sesame oil in a large wok, add chili and the remaining garlic and fry gently.
- 4 Add onions and bell peppers and fry for 5 minutes.
- 5 Add tomatoes, pineapple and a pinch of salt, and fry for 5 minutes.
- 6 Add soya sauce, apple cider vinegar, and brown sugar and cook for 5 minutes.
- 7 Beat the egg in a bowl with pepper and put some of the cornflour in another bowl. Put the flour in a third bowl with some salt, pepper, and chili powder.
- 8 Roll the chicken pieces in the cornflour, egg, and flour (in that order).
- 9 Heat some oil in a pan and fry the chicken in small portions until golden brown. Drain on kitchen paper.
- 10 Reheat the sauce and bind it with cornflour. Then add the chicken.
- 11 Serve with the rice and garnish with sesame seeds and spring onion. Enjoy!

Ingredients (for 2 persons) :

- 400g Pandan rice,
- 300-400g chicken pieces
- 2 bell peppers and 2 onions, diced
- 1/3 of a pineapple and 2 tomatoes, roughly diced
- 6 cloves of garlic and 50g of ginger, finely chopped
- 1 chili pepper
- 1 egg
- 200g all-purpose flour
- 100g cornflour
- Sunflower oil
- Sesame oil
- 50ml soya sauce
- 50ml apple cider vinegar
- 3-4 tbsp brown sugar
- Sesame seeds
- Spring onion, finely chopped
- Salt, pepper and chili powder
- Sunflower and sesame oil



Giorgio Omodei (25)
Master's student of
Organic Agriculture
from Singapore

Which dish reminds you of home?
Share it with *Resource* so we can all enjoy it too! resource@wur.nl

In other news science with a wink

◆ GREY

Stress gives you grey hair. But it works both ways: a reduction in stress brings back the original colour, shows research by Columbia University. Hair follicles respond to daily stress levels. But stress is only one of the factors in going grey. Less stress doesn't help against grey hair caused by ageing. Dyeing it does always help.

◆ DEMENTIA METER

Canadian researchers at the University of Ottawa have developed a dementia meter. The algorithm uses a series of

questions about health and lifestyle to predict the risk of dementia in the coming five years. The calculator is part of Project Big Life (see the website), which offers meters for other things too, like life expectancy. But remember: it's about the risk. Nothing in life is certain.

◆ COVID-PROOF

Aerosols have a ball in orchestras. But it doesn't have to be that way, researchers from the University of Utah have shown. In a new seating plan for the players, the risk of spreading the infection is 100 times smaller. The wind

instruments are pushed to the edges, close to the ventilation. The percussion can go in the middle. Will the music sound different?

◆ JUST A PHAGE

Our guts are brimming with viruses, shows an extensive study by the Universities of Berkeley and Stanford. The researchers identified 54,118 different viruses, 9 out of 10 of which were unknown. It's life, but not as we know it. The good news is that most of the viruses found are phages, viruses that attack bacteria. So these phages are working for us, in a way. PK

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A lovely long trip

My boyfriend and I are vacationing in Portugal for two months. I didn't sublet my studio in Wageningen. When I tell people this, they almost always say: 'Huh? Aren't you a skint student?!' Well, I'll let you in on my little secret: Portugal is not at all expensive. A

Money is no reason not to live abroad as a digital nomad!

small Airbnb apartment in Porto, where we are currently staying, costs some 800 euros a month in the low season, going up to 1200 a month in the high season. As there are two of us, it costs each half that amount. Not bad, is it? The other expenses are the same as in the Netherlands (groceries, for example) or cheaper (dining out). We've also continued working so we still have an income. Money is no reason not to

live abroad as a digital nomad! For us, with work and study still mostly online, this was the perfect time to give living and working abroad a try. Our days are largely similar to the ones we have in the Netherlands: after breakfast we work or study for a few hours and at the end of the day, we go out or enjoy the weather in the apartment's communal garden. Wonderful! Safe to say, we are fans! If working abroad is a step too far for you but you still want to take an extended vacation, I have a tip for you: book Airbnb places for exactly four weeks. In many cases, you get a 50 per cent discount when booking for four weeks, making it a much cheaper option than booking for three weeks, even if you return home after three weeks. Have a great vacation!



Emma Mouthaan (25)

Master's student of Molecular Nutrition & Toxicology and is also taking a Master's in Writing at VU University Amsterdam. Emma blogs on studying and finances for the website The Stingy Student.

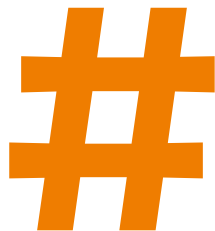
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Colophon

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.

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'I feel under quite a lot of pressure. Holidays help me relax but the moment I get back to the office I feel overwhelmed by the volume of work waiting for me. It makes me feel just as stressed as before the holiday. Who has tips to help me get better at starting up again?'

Ruud Wilbers, assistant professor of Nematology



Alternate

'Sadly, stress after a holiday due to the work that's piled up is normal among researchers. Before I go away, I plan all the tasks, major and minor, that I need to do when I get back. That helps me to be more relaxed during the holiday. As soon as I get back, I stick to my routine and my list of tasks. I alternate between major and minor tasks, and by working like that I get some satisfaction about the progress I'm making. Who knows, maybe that approach could work for you too.'

Catarina Vila Pouca, postdoc in the Behavioural Ecology Group

Extended out-of-office

'Devote the last working day before the holiday entirely to rounding things off properly and getting an overview of the tasks you need to tackle after the holiday. Start your out-of-office message in Outlook from that day, so people know not to expect a response from you. And let that message continue until after your first day back at work. That gives you some extra starting-up time. And don't go straight from relaxation mode into firing on all cylinders. Keep the first day back at work free for you to get an overview and to prioritize. And reserve time in your first week to catch up with your colleagues.'

Corporate social work team, WUR

Stand-up meetings

'It helps me to make a schedule straight after my holiday, with everything that needs doing. I make a distinction between urgent tasks with a deadline, like grading papers, and tasks that are important to me as a researcher, such as writing an article. That way you avoid only throwing yourself into tasks with a deadline. Also, after the holiday I schedule "stand-up meetings" with my colleagues. These are 15-minute discussions that you conduct standing up. You share what you are going to do that day, what's nice and what poses a challenge. Especially now that we are working online a lot, that is a nice way to start after the holiday.'

Tamara Metze, associate professor of Business Studies

Surf your stress

'Life isn't a sprint. It's more like a series of waves: things that require attention come and go. It takes time and energy to focus effectively after a holiday, so make space for it. Plan important activities outside the days just before and after your holiday. That way you create a wave of focus during your working weeks. Surf your stress!'

Thomas Heger, MSc student of Plant Sciences

Empty diary

'Don't plunge straight into your work in your first two days back, but keep them free in your diary. Use the time to work through your email so your inbox is totally empty again. Plan the first few days or even weeks. And remember: a bit of work pressure is not a bad thing, but work stress is. If you are actually suffering from the latter, talk to your line manager about it to figure out how to solve it together.'

Bram de Vos, general director of ESG

NEXT WURRY

'I will be starting a degree at Wageningen after the summer. I've had all kinds of information about student societies and study associations; it sounds fun but I'm not sure whether becoming a member is a good idea. I want to get to know people but I also want enough time left for my study. Who has tips?'

Jelmer (18), soon-to-be Nutrition & Health first-year

*Do you have advice or tips for this Wurrier? Or could you use some good advice yourself? **Email your tips or your question (100 words max) by 22 August to resource@wur.nl, subject noWURries.***