

Resource

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The journalism platform for all at Wageningen University & Research

Doing research with
Darwin's descendant

Stop converting
exchange grades

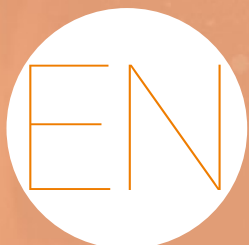
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Too many babies
get antibiotics

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FOREWORD

Brace yourselves

'How do curricula about decolonization feminism, and global justice turn our students into analytical thinkers?' he really said that, the far-right Dutch MP Reinder Blaauw (PVV) – in a debate in parliament on 11 June. Nobody in the House suggested that knowledge of these things actually improves students' thinking capacity. For example: no university in the Netherlands is more bound up with our colonial past than WUR, new research shows. What does that mean, exactly? On page 26 there's an article about decolonizing WUR that is food for thought.

Oh, and another quote from that parliamentary debate, this time Claudia van Zanten (BBB, a farmers' protest party) on the 'slow student fine'. 'Of course, the fine is also a way of motivating children a bit.' Children instead of students? Yes, that is really what she said... It provides a glimpse of how those in the corridors of power are currently thinking about higher education. A solution to what Blaauw calls the 'activist woke culture' is budget cuts, to the tune of about 970 million euros. And outgoing minister Dijkgraaf had little to say about the scrapping of the sector plans that is in the coalition agreement – plans which universities work on together and which represent 1200 permanent jobs. Universities had better brace themselves. And maybe *Resource* too, actually. So please take our readers survey and let us know what you think of us. Scan the QR code on page 5!

Willem Andréé
Editor-in-chief





NEW: *BRACHYCAUDUS LATERALIS*

He managed it last year, and he's done it again. Student Bram van den Bergh has found a species that is new for the Netherlands on campus. Once again, it is an aphid. In fact, a whole colony of them in this case, established on the stalk of the common ragwort. The aphids live there in symbiosis with ants. The ants build a shelter out of soil, and the aphids reward them with honeydew. The photo shows two green 'nymphs', as the wingless young aphids are called. A third specimen at the top of the photo is a bit older and has darkened in colour. RK

Photo Guy Ackermans

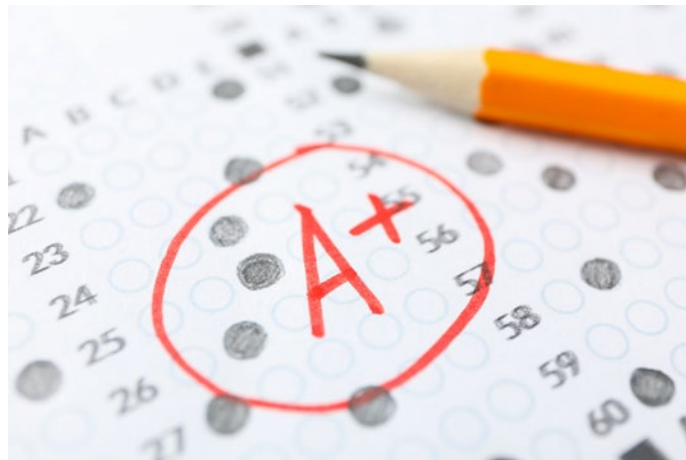
Proposal to stop converting exchange student grades

The WUR examining boards are proposing to end the conversion of the grades students get who go on an exchange. Rather than converting the grades, they advocate using a 'pass/fail' system.

At present, when students go on an exchange, the examining boards convert their grades into the WUR equivalent, explains Geert Smant, chair of the WU examining boards policy group. 'That is not easy. Teachers in different countries use different marking systems. In some countries, marks are expressed as letters and in others as percentages. There are also cultural differences, whereby it is easier to get good grades in some countries.' That means the examining board needs a clear picture of all the countries and universities where WUR students go on an exchange. 'An impossible task,' says Smant. 'How do you decide whether a grade from an institution in Spain is a 7, a 7.5 or an 8 here? That always involves making assumptions, and the examining board members don't feel comfortable doing that.' Every year, about 600 such conversions are requested.

Pass/fail

At present, an investigation is being carried out to see whether it will be possible to switch to the 'pass/fail' system preferred by the examining boards. Students would then no longer see



converted grades in Osiris for the courses they took during their exchange. Instead, there would just be 'pass' or 'fail'. But the students would still get a transcript showing the marks they got during their period abroad. 'That means the student will still have the unconverted list of grades from the university where they did their exchange,' says Smant.

If the conversion policy does change, there will probably be a transitional regime that allows students going on an exchange any time up to 1 August 2025 to request a conversion if wished. ^{LZ}

NWO looks at downsides

What undesirable effects could your research have? From now on, scientists will have to answer this question in the research proposals they submit to the Dutch Research Council (NWO), the funding organization announced last week.

Researchers responding to NWO calls already have to describe the potential impact of their research on science and society at large. Now a new question will be added: what harm might be caused? The answer will be taken into account in the assessment of the application. In other words, failure to reflect properly

on the potential undesirable effects will reduce your chances of getting a grant. Researchers will be confronted with the new question on the possible negative consequences of their research already this year as it will be part of all new calls by NWO.

NWO is taking this step in response to the public debate about collaboration between scientists and companies. For the same reason, NWO will take a more critical look at its own collaboration with third parties, for example its partnerships when setting up research programmes. NWO recently refined the preconditions for this in a new assess-

ment framework. The intention is to reduce the risk of greenwashing and dual use.

'Given the public debates on collaboration between scientists and other parties, and the undesirable influence of others on science, we find it important to reflect on what we are aiming for with the collaboration,' NWO explains. 'That also means we need to think harder about the potential undesirable consequences of scientific research and how to limit them where possible.' HOP/ME



Do you want *Resource* to continue to appear every two weeks? Do you find *Resource* sufficiently critical, independent and committed, or could that be improved? And if so, how? Use the QR code to give in six minutes your views on *Resource* (magazine, website and social media). We will be giving away three VVV gift tokens to three lucky respondents. ^{WA}

Blogging Marker mudflat interns

The new fish monitoring season recently started on the Marker mudflats. This year, Wageningen Marine Research (WMR) scientists will have the support of four interns, who will be keeping a blog.

The interns are Wageningen Master's students Gijs van Beilen (Marine & Aquaculture Resource Management), Cédulie Chapot (Biology) and Hymke Meijer (Forest & Nature Conservation) and University of Amsterdam Bachelor's student Rosa Kuiken (Future Planet Studies, with a minor in Freshwater & Marine Biology). They will be posting about their research on the Marker mudflats online in a logbook, with photos and items about their experiences and findings, both in the field and in the lab. Their blogs will be shared via the WMR website and the site *NatureToday*. ^{ME}

Bridge still occupied; impasse continues

Demonstrators from Wageningen for Palestine and the Executive Board continue to disagree fundamentally on the question of boycotting Israeli universities. Consequently, no end is in sight for the occupation of the bridge between the Forum and Orion.

The demonstrators' latest demand – for a public debate – was quashed on Monday evening because the Executive Board did not wish to collaborate on a debate. According to Board member Rens Buchwaldt, the proposed setup for the debate was 'unbalanced and unacademic.' 'It was set up so that we were asked to 'defend' ourselves, and there was only one desirable outcome.' The event took place nevertheless, but did not manage to be a debate for lack of a different opinion.

The atmosphere between the campaigners and the Executive Board had



already cooled somewhat after the (unsuccessful) attempt two weeks ago to occupy Atlas, which resulted in a scuffle and a police presence. Atlas was evacuated and was closed for a day as a precaution. The Board reported a breach of the peace, after which the campaigners refused to discuss what

happened with the Board. A report had already been filed accusing demonstrators of insulting a group with one of their slogans.

Open letter

Protests continue at other universities in the Netherlands too. The university boards are all taking the same line. In an open letter to the newspaper *Trouw*, the rectors state that they will never cut off links with a country unless the government requires them to, as was the case with Russia. 'We think it's important not to isolate critical Israeli scientists, just as we are firmly committed to supporting our Palestinian colleagues. ^{AK}

Resource polled opinions around WUR about the protest and the demands. See page 18.



Photo Resource

Student columnist wins prize

Resource student editor and columnist Ilja Bouwknecht won second prize in the Student Columns category at the annual conference for independent university magazines. In her *Resource* column, Ilja wrote about how to make new friends as an 'old' student. Jury member Eva Hoeke (who writes columns for Dutch newspaper *De Volkskrant*) wrote in the jury report: 'A column with mild self-mockery on a universal theme: friendships. It is vulnerable without over-dramatizing: not taking yourself too seriously is a key strength in columnists. The willingness of the French to speak English — well observed, and amusing to see that backfiring at the author's expense. The genuine effort made to figure out what is going on means it is not just about laughs — but it never turns into a sermon either. The picture that emerges is of someone you would want to be friends with.' The prize consisted of an honorary mention and a book token. WA



Fewer Dutch Bachelor's students

The intake of Dutch Bachelor's students is expected to fall by about five per cent. That means around 65 fewer Dutch students will start a Bachelor's programme at Wageningen after the summer than did in the current academic year. It looks like more international students will start a BSc degree, but not enough to make up the difference.

'This academic year, 1310 Dutch students started a Bachelor's programme. We are expecting about 1245 to do so next year,' says Geertje Braat

of Education & Student Affairs. The fall is being seen at other universities too. Braat: 'Dutch preliminary registrations are down 2.4 per cent nationally at present.'

However, the intake for Master's programmes seems to be slightly up, says Braat. 'We expect the number of Dutch students coming to Wageningen University for the first time to start a Master's programme to increase by about 10 per cent.' The definitive intake numbers will be available some time in October. LZ

Lots of questions for the police at meeting on physical safety

When should you ring 112, how should you deal with dangerous situations, and what counts as self-defence? These are a few of the questions that came up at a meeting with the police about physical safety on campus.

More than 40 students and staff members came to the session on safety in Omnia on Monday evening, 17 June. As well as five uniformed police officers, there were representatives of the university and the municipal council present to answer questions. The meeting was prompted by several recent incidents in Wageningen and on or near the campus, including the violent incident at the beginning of April, when a group of youths beat up and threw stones at a Chinese student outside the Forum. That incident caused great unease among international students and PhD researchers. After discussions between this group and WUR repre-

sentatives including rector Carolien Kroeze, it became clear that people had a lot of questions about the Dutch police. When should you call them, for instance? And what should you do if you are threatened or attacked?

Helpful

After the meeting, one international PhD says she found it helpful. 'The main message is clear. If something happens, always report it to the police. If the police see that there are frequent reports of, for example, youths shouting racist abuse, they can give that more priority.' An international student adds: 'It's good to know when you should call 112 (the emergency number, ed.) and when you should call 0900-8844 (information, advice and reports 'not requiring sirens', ed.). And also, that you can still report an incident after it is over.' LZ

Read more on www.resource-online.nl

Does the right diet help you sleep?

PhD candidate Auke Verkaar of Human Nutrition & Health is researching the relationship between diet and sleep. Earlier this month, she published new research results. Text Dominique Vrouwenvelder

'We know some foodstuffs affect our sleep,' says Verkaar. 'Take alcohol. It reduces the time we need to fall asleep but it negatively impacts the quality of our sleep in the second half of the night. Foodstuffs that contain a lot of tryptophan, an amino acid that our bodies use to make the sleep hormone melatonin, seem to have a positive effect on sleep. But in real life we don't eat individual foodstuffs; we eat combinations that make up our diet. That is why I wanted to see whether there is a relationship between sleep and diet.'

Objective data

Verkaar got access to a large volume of research data from a long-term study by the research hospital Erasmus MC, which included objective data on sleep and questionnaires on diet. For each participant, she calculated five scores as indicators of how closely their eating habits fitted the five diets she wanted to examine. 'They were: a diet in line with Dutch nutritional guidelines; the Mediterranean diet; a mostly healthy diet; an



PhD candidate Auke Verkaar could use objective sleep data measured by movement sensors. ♦ Photo Shutterstock

unhealthy diet; and a traditional Dutch diet. The traditional Dutch diet contains a lot of potatoes, cheese, red meat and processed meat.'

'In this study, we had access to objective sleep data where sleep was measured using movement sensors,' says Verkaar. 'Other researchers in similar studies only used subjective measures of sleep quality, namely questionnaires.' Verkaar hoped to find evidence that healthy diets are associated with better sleep (less time spent awake, sleeping longer or sleep of a higher quality).

Lack of proof

'But unfortunately we didn't find any convincing proof,' says Verkaar. 'We conclude there is no association between diet and these sleep indicators: none of the diets had an association with any of the sleep indicators.'

'We conclude there is no association between diet and these sleep indicators'

There were also no differences between men and women, or between young and old. At first I was a bit disappointed with the results, but in fact it's particularly important to publish such findings. A lack of proof is also valuable knowledge and can help guide future research.'

A botched experiment, a rejected article: in the sciences, such things are soon labelled failures. As for talking about them – not the done thing. But in this column, our colleagues do exactly that. Because failure has its uses. This time, we hear from WUR President **Sjoukje Heimovaara.**

Text Nicole van 't Wout Hofland • Illustration Stijn Schreven

'Twenty-five years ago I was doing plant research at TNO and Leiden University. One of my daughters and a colleague's daughter were in the same class at primary school. The two of us came up with the idea of getting primary school children interested in plants. We gave three guest lessons to a class of 9- and 10-year-olds and we had them conduct an experiment. We wanted the children to experience what plants need in order to grow. We gave each group of four children a young cucumber plant grown on rockwool, and asked them to look after it for three weeks. Some groups were told to give their plant light, water and plant food. Others were given plants in tubes, which stopped them getting any light. Yet other groups were allowed to give their plants water but no food.

'Everything went to plan in the first two lessons. Parents told us their children even started to eat more vegetables at home. My colleague and I told ourselves we were doing a good job. The last lesson focussed on the cucumber-growing experiment. We got each group to present its plant

and compare it with those of their classmates. When the groups with the pathetic, stunted or pale plants put their plants next to a healthy specimen, they were disappointed and sad. My colleague and I had miscalculated. We were experienced teachers and

'What we thought of as a nice learning experience felt like a failure to the children'

scientists, but we had forgotten that now we'd be teaching young children. What we thought of as a nice learning experience felt like a failure to the children. They had done exactly as they were told and yet the plants were half-dead. We might even have put off some of the pupils. The lesson I learned that day was: put yourself in the shoes of your audience. Of course, we should have given each group three plants and got them to look after each plant differently. If I had a second chance to give those guest lessons, I would definitely discuss my plans with the teacher first.'



Too many babies are given antibiotics

PhD candidate Emmy van Daele (Microbiology) studied how the gut microbiome, the mix of micro-organisms in our intestines, develops in babies and what can go wrong during that early phase in life. She obtained her PhD at the end of May.

Van Daele wanted to find out how the microbiome of babies takes shape. 'And what happens if they are given antibiotics, which can wipe out most of the gut bacteria in one fell swoop — including the

useful bacteria. My

'Antibiotics have long-term effects on the immune system and allergies'

research shows that children who are given antibiotics in the first two years of life are more likely to suffer inflammation

in the intestines and develop coeliac disease and gluten intolerance.'

That is a problem, explains Van Daele, because many new-born babies are given antibiotics much too readily. 'Worldwide, an average of 20 per cent of new-born babies are given antibiotics in the first week of life. In some regions, nearly 100 per cent of babies will have been given antibiotics by the time they reach six months.'

Weighing up risks

'In one of my chapters, I write that 150 of the 450 babies born in a Dutch hospital were given antibiotics in the first week because the doctors suspected septicaemia,' says Van Daele. 'But in the end only three babies tested positive in the blood test and therefore needed the antibiotics. Gynaecologists don't want to take risks, but antibiotics have long-term effects on the immune system and allergies, among other things.'

Van Daele has seen some changes since the start of her research, but change is slow because hospitals are bound by protocols. 'On the plus side, these protocols allowed me to do my research. It would be unethical to give healthy babies antibiotics purely for the purpose of science, but because this was happening anyway for medical reasons, I was able to study the effects of various types of antibiotics on children.' DV

522 species in one day

You probably need to be slightly crazy, or at any rate highly motivated and with a lot of expertise. It helps too if you study Biology. Seppe Rademaker, Allart Knoop, Ward in 't Veld and Xam Menue tick all the above boxes. The group of friends were able to spot and identify 522 species in one 24-hour period in just over one square kilometre on campus. Text Roelof Kleis

The challenge was simple, explains initiator Seppe Rademaker. 'We wanted to find as much biodiversity as possible on campus in 24 hours.' They called the venture their Big Day. So two weeks ago, on a Monday at four o'clock in the morning, there they stood in Dassenbos wood. Rademaker: 'I actually wanted to start at midnight, but I couldn't persuade my friends.'

The four students kept going until two the next morning and were able to add 522 species to the WUR list in the Bio-blitz, the interuniversity competition to find as many species as possible on the campus. Rademaker reckons some 200 of the 522 species are new sightings. The others had already been noted by other people. Their efforts briefly put

'Even while waiting for our French fries, we went outdoors to scan the borders with our nets'

WUR at the top of the ranking, ahead of fierce rival Leuven.

That was precisely the intention, says Rademaker. 'Overtaking Leuven. It's also really cool to map the biodiversity of the place where you are studying.' There was another important reason to organize the Big Day for Rademaker



The Big Day group. From the left: Xam Menue, Seppe Rademaker, Ward in 't Veld and Allart Knoop. ♦ Photo Seppe Rademaker

personally. 'As a spotter, I want the number one position in terms of the number of species identified on campus. I was previously ranked 23 and now I'm third. So that's the competition.'

Obscure species

This 'all-time' ranking is headed by Wageninger Bram de Vries with 894 species. Second is alumnus Bas Drost with 774 species. Rademaker is next with 11 species fewer. He knows Drost well. 'He was the one who got me enthusiastic for the smaller and more obscure insects. He did his degree here but is now working on his PhD in Switzerland. I think I should manage the number one position after the summer.'

Rademaker had set jar traps a few days earlier in order to score as many insects as possible. He and his mates also scoured the ponds with nets. And they got lucky. 'There happened to be an event organized by the KNNV nature society on the Student Farm opposite

Dassenbos. They put up a large screen with light projected on it. That brought out a lot of moths.'

They didn't take breaks. 'Just a brief stop for dinner at the snack place Het Ambacht. But even then while we were waiting for the French fries, we popped outdoors to search the borders of the Campus Plaza with our nets.'

522 species is a good result, but it could have been even better. 'It wasn't that great a day,' explains Rademaker. 'The sun didn't shine and so you don't get the flying insects. You miss a lot of bees and hoverflies. After the summer, we will go out one more time, and choose a day with good weather. And this time we'll keep going the full 24 hours.'

PhD theses **in a nutshell**

Building cells

The holy grail of biologists is to create life yourself. That starts with making synthetic cells. The Indian PhD researcher Ketan Ashok Ganar has made a couple of attempts at this. He used different techniques to design cell organelles – small spaces, some of which are surrounded by a membrane. In those spaces – ‘bodies’ – biological processes such as the production of proteins based on DNA can take place, all on a tiny scale and ‘on a chip’. While he was at it, he also figured out the mechanism ticks use to latch on to their host. *Drops of Life* **Ketan Ashok Ganar** ◀ Supervisor Jasper van der Gucht RK

Tracing illegal timber

Illegal felling of tropical trees is a big problem. How can you prove that timber is illegal? The Brazilian researcher Bárbara Rocha Venancio Meyer-Sand developed a genetic method of identifying the origin of wood. She used fragments of DNA from the chloroplasts (the little photosynthesis factories) in the plant cell. With this method she can locate the origin of most samples of timber from the African tree species azobe and tali to the last 100 kilometres. If this method is combined with chemical analyses, up to 94 per cent of the wood samples can be traced accurately. We’re closing in.

Timber Tales **Bárbara Rocha Venancio Meyer-Sand** ◀ Promotor Pieter Zuidema. RK

Cleaned up by worms

Worms are crucial to a healthy soil. They keep the soil loose and fertile. The Chinese PhD researcher Ke Meng has added another virtue to the list: worms dispose of plastics. Experiments showed that the common or garden earthworm breaks plastic down into smaller fragments. Worms also break down biodegradable plastic (such as polylactic acid PLA) chemically, so it disintegrates faster. And that is good news, because the speed at which this kind of plastic breaks down depends on the climate and soil. Adding worms to the soil can speed things up, shows Meng. *Exploring the potential of earthworms to reduce microplastic pollution in soils*. **Ke Meng** ◀ Supervisor Violette Geissen. RK

THE PROPOSITION

PhD students explain their most provocative statement. This time, it's Wout van Orten-Luiten, who received his PhD on 11 June for research into the use of medication and concentrations of vitamins and minerals in the blood, with the aim of reducing harm to patients from unnecessary prescribing of medication.
Text Dominique Vrouwenvelder



‘Authentic speaking breaks through polarity’

‘Society is experiencing increasing polarization. It is difficult even for scientists to go against the consensus. You are soon labelled a crackpot, anti-vaxxer or climate denialist. This kind of framing is an indicator of polarization. Authentic speaking gives you a tool that can help bridge the divide. Authentic speaking is about expressing thoughts and feelings in a way that stays true to your own values. You speak and you listen with respect for the other person. You keep it empathic, which is a prerequisite for connecting with the other person. I learned this during a course on “authentic and genuine speaking” by Mattias Desmet,

professor of Clinical Psychology at Ghent University.

The aim of authentic speaking is to exchange ideas and have a dialogue without trying to convert the other person. It can be a way of bridging the gap without having to agree with one another. That increases the likelihood of you breaking through the polarization.’

Harmony

After my lecture, I cycle onto the campus. I can't cross the bridge between Orion and Forum because it's been occupied by campaigners in tents for a month. I've always admired the spirit and patience of campaigners for any cause. The sofas in their marquee 'living rooms' look pretty comfortable, but it does take perseverance to camp out like this for weeks on end.

Two weeks ago they tried to occupy Atlas, but that didn't go well. Their next plan doesn't sound any more promising

'Is this academic freedom, then?'

either. Will the Executive Board agree to discuss their demands that WUR breaks off its ties with Israel? In a joint statement in the newspaper *Trouw*, rectors at the Dutch universities used 'academic freedom' as an argument for maintaining those ties. I ask myself what 'academic freedom' really is. The campaigns in Wageningen seem smaller than those in other cities. The tent residents are mild and there aren't any hardened troublemakers (luckily). A teacher launched a petition that has been signed about 400 times –not an overwhelming number given the total number of WUR employees. During a previous lecture,



Sjoukje Osinga

a protest march passed by, with a lot of noise, causing all my students to rush to the window. They wanted to see what was happening, but were not terribly interested in the matter.

As I cycle along, I hear a noise. Even more protesters? It turns out to be the sound of the Wageningen student brass band 'De Ontzetting', which is giving a concert in the circle between Helix and Aurora, with spectators gathered around it. The orchestra has hung up banners with its logo, which consists of its name and a picture of a detonated bomb.

Summing it up: on one side of Forum there's a handful of demonstrators busy with an occupation – a peaceful if occasionally noisy protest against a horrific armed conflict. On the other side of Forum, a brass band (whose name translates as dismay) is playing pleasant music for a large audience, and with a bomb in their logo. And I cycle between the two. Maybe I'm typical of the average Wageninger. We prefer not to be outspoken, don't take up a position, and are quite happy to take a different route if we can't cycle over the bridge. Is this academic freedom, then?

Sjoukje Osinga (56) is an assistant professor of Information Technology. She sings alto in the Wageningen chamber choir *Musica Vocale*, has three sons who are students and enjoys birdwatching with her husband in the Binnenveldse Hooilanden.

SOCIAL WITHOUT MEDIA

They do exist: young people who don't use social media or a smartphone. *Resource* talked to three students who – each in their own way – prefer to live 'offline'. Text Luuk Zegers

'I dream of a world in which we take time for each other, look each other in the eye and listen'

If people want to reach **Rémi Féraut** (27, Bachelor's student of Plant Sciences), they're best off ringing or texting him. He does have a smartphone with WhatsApp, but there's no sim card in it. 'I can WhatsApp when I have Wi-Fi. But I leave my phone at home as much as possible, because all those group WhatsApp messages and notifications are terribly distracting.'

The only social media Féraut uses is LinkedIn. 'I started planting a food forest in France a couple of years ago. I stay in touch with agroforestry networks in the Netherlands and France through LinkedIn. Beyond that, I tried Instagram but I didn't find it very inspiring so I soon stopped using it.'

Not long ago someone forwarded a post from Féraut's sister to him. 'That summed up the paradox of our times: we can communicate more easily than ever, but the more media we have, the less we truly communicate with each other. I saw smartphones arrive on the scene as a teenager, and suddenly people were on their mobiles during meals and at parties.' Féraut dreams of a world with more genuine communication. 'In which we take time for each other, look each other in the eye, and listen to each other.'

'Thanks to the Energizer, I got that endless scrolling out of my system'

Social media are addictive, says Master's student of Plant Biotechnology **Koen van Raaij** (22). 'I sometimes spent three hours watching video clips on social media nonstop. A waste of time of course. And I don't think I get a lot out of it: it doesn't make me any happier or anything.' So last summer, Van Raaij bought an Energizer: a mobile phone on which you can use WhatsApp but nothing else. 'So no social media, but you can still make plans with friends. That felt good right from the start. Thanks to the Energizer, I got the endless scrolling out of my system.'

And yet after six months, Van Raaij had had enough of the Energizer. 'On that telephone you type in the old-fashioned way: to get a letter you've got to press the right number key up to three times. My friends found some of my messages extremely short and unclear. So in December I started using my old smartphone again.' Since then, Van Raaij has been using apps to regulate his phone use. 'I might set it so that I am only allowed to use Instagram once a week, for example. I look at Snapchat every other day on my laptop. The app doesn't work nearly as well on that, so you are not tempted to stay on it for long.' Now that summer's coming, Van Raaij is considering switching back to his Energizer. 'But it's still a struggle, and I haven't found the perfect solution.'



Illustration Valerie Geelen

'I might have missed one or two parties, but never those of close friends'

Braden Tredoux (24, a Bachelor's student of Environmental Sciences) from South Africa never even started using social media. 'When people around me started using Facebook, it seemed like a waste of time to me. A bit later, Instagram became a thing, but I wasn't interested in that either. I thought the process involved was stupid. If I'm on a beautiful beach, I'd rather go swimming than do a photo shoot. And the competition for likes and friends seemed unnecessarily stressful to me.' Tredoux doesn't feel he misses out on much. 'At one point, birthday parties and other gatherings were mainly organized through Facebook. I might have missed one or two, but never those of close friends. If people want me to come, they know how to reach me.' There are times when Tredoux would like an account, though. 'To stay more in touch with what friends abroad are up to. On the other hand: catching up by phone is fantastic too, of course.' ■

Social media: good or bad?

WUR professor Sanne Kruikemeier is doing research on the role of digital and social media in society. 'When we talk about social media, we often mean young people who are on TikTok all day, influencers who spread disinformation, or young girls and boys who pick up unrealistic ideas about how they are supposed to look. But using social media can have positive effects too, like keeping in touch with other people and finding inspiration.'

The question of whether social media are good or bad for us is too simplistic, says Kruikemeier. 'The reality is nuanced. For some people it can be a good idea to avoid social media for a while. On the other hand, avoiding them completely can mean you lose touch with your friends and with what's going on. So going offline can have its disadvantages too.'

One of Kruikemeier's PhD students is doing research on news avoidance. 'You often see that people who avoid news feel better at first, but that feeling can lessen again as time goes by. There might be a similar effect with avoiding social media.' Just like news, social media will continue to be part of life for most people, says Kruikemeier. 'Try to use it for things it is useful for. And if you notice that it depresses or overwhelms you, regulate your use of it. Exactly the same as with alcohol or sweets, really: if social media affect you negatively, use them in moderation.'

The politics of the Latin American periphery

Deep distrust with a glimmer of hope

When he came to Wageningen, Martijn Koster brought his ethnographic project financed with a European Consolidator Grant with him. The project is called *Politics of the Periphery in Urban Latin America*, and a photographic exhibition about it can be viewed in the Leeuwenborch at the end of June.



Text Marieke Enter

Koster has joined the Sociology of Development and Change chair group as an associate professor. He describes his research as 'at the interface between political anthropology and critical development studies,' with Latin America as its primary geographical focus. His latest project, for which he got an ERC Consolidator Grant worth two million euros, is located there too. To be precise, in Medellín (Colombia), Recife (Brazil) and Santiago de Cuba (Cuba). Together with a research team including three PhD researchers (one for each city) and two postdocs, he will study the relationships between residents of the periphery and the state, looking specifically at housing and urban development.

Fundamental agreement

Koster took the issue of housing as the focal point because it constitutes a kind of 'fundamental agreement' between citizens and the state. 'Sometimes it is anchored in the constitution, and sometimes not – but almost everywhere in the world, it is the task of the government to ensure there is sufficient affordable, qualitatively good housing in a healthy environment. And that applies to the three coun-

tries we're doing research in as well. Only it doesn't always work out too well in practice – and that is an understatement, especially when it comes to lower income groups,' says Koster. What happens when a government does not fulfil this fundamental task is at the heart of the study: 'How does that affect residents' ideas and expectations of the state, now and in the future? And does it, for example, affect the way they organize themselves politically?'

Bulldozered

According to Koster, *Politics of the Periphery in Urban Latin America*, POPULAR for short, is a typical anthropological study: it is all about how people give meaning to their reality. The researchers collect most of their data through participant observation – preferably living in the periphery they are studying for the duration of the project – and through interviews, supplemented by analysis of government documents and media. 'Clear differences exist between the three cities in terms of the interactions between residents and government. We want to compare these, so that each case study poses questions for the others: what happens to the residents of bulldozed informal neighbourhoods in one of the cities? And how is that done in another city? What are the effects? You could call it comparative urbanism,' he explains.

'Preferably, the researchers live in the periphery they are studying for the duration of the project'

What makes the project so interesting, says Koster, is that people in Latin America generally believe that the authorities are capable of bringing about change. 'At the same time, people are tremendously distrustful of government. And with good reason: an awful lot of promises are not kept, and nice plans are not carried out. And if the authorities do keep their word, it is not usually to the benefit of the people in the periphery. Remarkably, that deep distrust nearly always goes hand in hand with a glimmer of hope – perhaps the hope that the new mayor or presidential candidate will fulfil promises, or that an outsider from outside the establishment can turn the tide. A belief in social engineering persists. I find that optimism in spite of everything, that ambiguity, fascinating. We scientists often tend to want to filter ambiguities out of research. But ambiguity is a fact of life.'

Doubly marginalizing

There is another 'why' underlying this research: a deeper theoretical necessity, as Koster describes it: the development of a new epistemological framework, with a vocabulary that does more justice to the position and identity of the residents of the periphery. Koster: 'In essence, this project is about what the literature calls epistemic injustice. I am certainly not the first to do research on the relationship between citizens and the state in Latin America. What I noticed in the literature about it, is that there is a lot of talk about "pseudo" citizenship or "infor-

mal" politics. There is something denigrating about that terminology: it is doubly marginalizing in a way. People in the favelas and other poor neighbourhoods have already been let down by a government that doesn't do its duty, and that simply denies them access to many institutions and laws. And then their relationship with the government is dismissed as "pseudo" or "informal" – and certainly not as "normal" citizenship. I would like to turn that around, giving us a new way of interpreting the relationship between the state and these city-dwellers – from their perspective. That also makes a city more inclusive. Because the "periphery" includes a very big proportion of the population. In a city like Recife, it easily covers one third of the city's population – and that may well be a conservative estimate.' ■

Photographic exhibition

In the context of this project, Koster recently travelled to Santiago de Cuba, one of the study's three cities, with the award-winning photographer Sanne Derks – a PhD-holding anthropologist who will join the project as a postdoc in December. They have worked together before in Rio de Janeiro, on a photographic report about the impact of the Olympics on housing in the favelas. A selection of the work that Derks created in Santiago de Cuba will be exhibited on the third floor of the Leeuwenborch from 24 to 28 June.



Gran Panel Sovietico-homes in Santiago de Cuba. See inset. ♦ Photo Sanne Derks

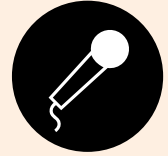




ST GEORGE AND THE DRAGON

During student sports association Thymos' annual sports night, students played games dressed as fabled characters. The final game pictured here was called 'Saint George and the Dragon.' The two teams on the mat represented the dragon and had to guard the objects around the mat. Meanwhile, two other teams tried to steal as many objects as they could from the dragon - who tried to fend them off by pelting them with balls. Inside the rope circle, the teams were safe. The team that managed to 'bring home' the most objects was the winner. Which was team Vossalina, in the red hats. LM

Photo Guy Ackermans



I support the protesters **yes/no**

For weeks, the bridge between Forum and Orion has been occupied by activists in tents who demand that WUR's Executive Board cut ties with Israeli universities. What do WUR people think of the protests, the demands, and the stance of the Executive Board? *Resource* surveyed the opinions. Text Steven Snijders • Illustration Valerie Geelen



Leon de Jonge

Animal nutrition researcher and chair of the works council in the Animal Sciences Group

'I've occupied buildings before in the 1980s when I was a student at Utrecht University. I think it's an acceptable form of protest. At the time it was about teaching reforms, among other things. I do find it difficult that the current campus protests are about a long-standing political issue and not something within the power of the Executive Board. **I don't think it's up to the Executive Board to formulate a vision on this topic.** There are other institutions for that, like the UN. I think the Executive Board has acted appropriately.'



Lorenzo

Master's student in Physics from Rome

'At my university in Rome, Sapienza, the protests are huge. Students cannot attend some of their classes because some protests are blocking buildings. Some protesters are on a hunger strike.

The rector of Sapienza did not even react to the protests.

I see that here in Wageningen, both the protesters and the Board do it in a more diplomatic way, and the protests are better organized. I think it is good that the protesters do their loud actions in the lunch breaks and they don't block buildings, so they keep the support of other students.'



Wouter*

PhD candidate at XXX

'I think the protests are great. I joined in a march across the campus once. I think the protests raise awareness in a good way; something needs to happen. At the same time, the activists are mindful of other users of the campus and they don't cause too much inconvenience. I heard that the Board sent too many police officers to the protest at Atlas, but I didn't see it myself. I mainly think **it's a pity the Board doesn't want to have a public discussion.**



Henk Hogeveen

Professor of Business Economics

'I think it's fine that people are protesting. I feel the protests are relatively friendly and peaceful. I don't see them as threatening. That was not the case at other universities. There will come a time when it **might be good to stop because the point has been made.** The Executive Board has also made its point. I don't see much in the demand from the activists for a public discussion with the Board. The Executive Board gave a response with a perfectly good explanation. If they repeated it in public, it would just lead to a shouting match.'



Eveline*

PhD candidate in Biology

'I've heard more about protests at other universities through the news than about what's going on here. Violence and vandalism detract from the message, so it's great that they are staying clear of that in Wageningen. I'm not sure what the university's role in this should be. An Israeli is involved in one of my research projects and I can't just remove his name as co-author. **Guidelines or tips for researchers on how to deal with these kinds of issues**, including when it comes to cooperation with other countries that violate human rights, would be really helpful.'



Paul Smeets

Human Nutrition & Health researcher and member of the Central Works Council

'I'm glad our activists are reasonably peaceful. Other than that I don't really approve of the protests. I think the activists are better off campaigning in The Hague. Realistically, what are they hoping to achieve? **The real influence would be via The Hague**. I think the focus on Gaza is selective; there are so many abuses in the world. The simplistic slogans and banners also bother me. Plus I think it's frustrating that a small group of activists are taking so much of the Executive Board's time. It's at the expense of their many other responsibilities.'



Merel*

Master's student in Nutrition and Health and Resilient Farming

'I'm mainly in Helix, so I don't see much of the protests. **But I think that the tents are a good form of protest**. You are confronted with the war, but it's not disruptive. It starts conversations with other students. That doesn't happen if you share something about the conflict on your Instagram story. It's better to exchange information with each other offline, like the activists are doing. I do expect more public explanations from the Executive Board. Isn't that also part of your job as a board member?'



Caroline*

Researcher at Wageningen Economic Research

'From Atlas, I saw how activists prevented visitors to the Food & Agriculture conference from entering Omnia. My heart was pounding: it looked very volatile and unpleasant. Visitors came here specifically, and had to travel far in many cases, including from abroad. **I think preventing people from entering the building is harmful**, regardless of my views on the conflict itself. As far as I'm aware, the Executive Board is open to talking with the activists. What more can they do?'

**Fictitious name. The full real name is known to the editors.*



Let us know what you think?
Respond on resource-online.nl

Jack prints the perfect soldier's snack

Young soldiers get personalized snacks from a 3D printer and eat them in the woods in Brabant province. *Resource* editor Dominique Vrouwenvelder went along with WUR researcher Martijn Noort.

There's a container outside the office of the Netherlands Organization for Applied Scientific Research (TNO) on the High Tech Campus in Eindhoven. This cabin is a mini food factory producing personalized snacks for soldiers. The snacks are not made by chefs but by a 3D printer. WUR is part of the research consortium IMAGINE (see inset), which is developing the technology for making on-demand personalized food products. By the time WUR researcher Martijn Noort and I arrive at the container — or Military Mobile Satellite Kitchen, to use its official ministry of Defence name — TNO researchers Edwin Stam and José van Uden have already spent the whole morning making little snacks dubbed Nutri-Bites with the help of the 3D food printer. We are given single-use lab coats, hairnets and overshoes and once we have donned these and disinfected our hands, we are allowed in.

The 3D food printer in the container, or at any rate the constantly moving gripper arm, has been affectionately named Jack by the researchers. The gripper arm delivers little dishes to the machine's various production stations. The Nutri-Bites are made up of four personalizable components: the 'dough' with which the cups are made, the micronutrient powder that goes on the base of each little cup, a filling and a

topping. The result is a snack that looks like something made of puff pastry but has a texture more like shortbread filled with a soft, sweet filling with the consistency of apple sauce or a thick milkshake.

Noort: 'The 3D food printer works with personal data we feed into it. The snack is adapted to traits of the soldiers such as height, weight and body type, as well

as any gastro-intestinal issues and the amount of physical exertion expected of them. So the composition of the snacks is different for each person and we think this will enable us to improve their health and performance with precision.' While Noort is explaining the philosophy behind the personalized nutrition, the gripper continuously moves the little trays between the seven stations the installation is made up of. The first production station makes the cups, the outside layer of the Nutri-Bite. Hanging in this machine are six spouts with different kinds of dough, which print four



This soldier has already taken a few bites from his personalized snack. ♦ Photo Resource



The 3D food printer is made up of several stations. The black cartridges on the left contain dough. The toppings come out of the transparent tubes next to them.

to six cups onto the tray: more for lads who do harder physical work because they need more energy. A QR code on the side of each tray that is linked to each person's information tells the machine exactly what to do.

Recipes

Wageningen Food and Biobased Research is taking care of the consumer research and the food-technological design for IMAGINE, designing the composition of the various kinds of doughs, fillings and toppings. 'Based on our scientific knowledge, we make materials with the desired nutritional value which are feasible for the 3D printer and are tasty,' says Noort. 'These recipes may be designed to contain as many healthy fatty acids and proteins as possible, for instance, or perhaps as little sugar as possible. As far as we can, we use healthy ingredients like oat bran, almonds, plums or carrots.

By constructing the snack out of a range of components, we can create a lot of different combinations. So you've got combinations like: almond flour + amino acids + apple + caramel; high-protein flour + caffeine + custard + strawberry; or plum + folic acid + peanut butter + lemon. The macro and the micro ingredients in each end product are completely personalized.'

Jack takes a tray from the dough station and delivers it to the closed oven, and then continues to print dough and fill the cups. A bit later, the door of the oven opens to reveal a set of golden baked cups. Then the pale, unbaked cups are rotated into the oven as the baked ones come out. Jack hurries over to the oven. 'His most important task in the production process is to move the baked cups as quickly as possible to a station where they can cool down,' explains TNO engineer Edwin Stam. Once the cups have cooled down sufficiently, they can be filled. Jack takes the tray to the station with the micro-nutrients, where there are seven pipes full of powder containing the amino

'It is quite tasty actually'

'There is a plum + folic acid + peanut butter + lemon snack, for example'

acid leucine, caffeine, vitamin C and zinc, among other things. The machine drops a bit of powder into each cup. Now the filling can be added – again, with a number of nutritional variants matching the personal needs of the person who will eat the snack. Flavours





'This enables us to improve a person's health or performance with precision'

include peanut butter, custard, yoghurt and chocolate ganache. At the last stage, each cup gets a topping. 'That is mainly in order to give the consumer an element of choice,' says Noort. 'All the toppings have the same nutritional value, but vary in colour and flavour, because some people prefer strawberry and others caramel.'

IMAGINE's food printer is being tested in two field labs. In Eindhoven, the test is focused on improving the performance of soldiers. Later this summer, a health-oriented test will be done with patients in the Gelderse Vallei hospital in Ede. Noort: 'We are demonstrating what we can now do and showing that this digital food production technology concept works, and we are researching which aspects need improving.' By now, Jack has put the toppings on the cups and this is the first point at which a human being is needed: project leader José van Uden picks up the tray and puts it in a box to hand out this afternoon.

Soldiers

And off we go to deliver the snacks to the soldiers. The little boxes are transported to the Weerterheide military training ground, about 20 minutes' drive from Eindhoven, in a khaki cool box in the boot of a Ministry of Defence 4x4. After a bumpy ride along muddy dirt roads, the all-terrain vehicle comes to a halt in the middle of the woods. Camouflaged soldiers emerge from the woods on all sides. They are in training for the infantry, explains Mark Tamis, a Defence logistics staff member. They are spending a couple of weeks in the

woods as part of their training. 'This is a tiring time for them. They are physically on the go all day and often at night too, while they don't sleep or eat much.' The soldiers undo their helmets, park their bags on the edge of the path and place their weapons carefully with the barrels facing the woods. One by one, they walk over to the car to pick up their boxes. 'Oh, I've only got six cups again,' says one of them disappointedly, looking in the box of his mate who gets eight cups. The lads throw themselves down onto the grass beside the path, eat their Nutri-Bites and fill in a questionnaire. The questions ask about the appearance, mouth-feel and texture of the snacks. No one can compare the Nutri-Bite with anything they've ever eaten before. 'No, I really haven't ever eaten anything like it. But it's quite tasty actually. Not the peanut butter flavour though – I hope I don't get that again tomorrow.' Once the soldiers have finished their snacks, they return their boxes and fill in a few more answers. One of the questions is: How well did you sleep last night? 'Er,' says one of the lads, 'did I sleep last night? Yes, for half an hour, I think.' And off they go, back into the woods. Tonight, a computer will process the information just collected and figure out what the snacks for tomorrow should be made of. ■

This study is supported by the public-private partnership IMAGINE and co-financed by the Dutch ministry of Economic Affairs through the Life Sciences & Health Top Sector (WUR and TNO) and the High Tech Systems and Materials Top Sector (TNO). The private partners involved are the GEA Group, SoliPharma BV, Tate & Lyle, Nissin, General Mills, the Gelderse Vallei hospital and the Dutch ministry of Defence.



A soldier takes a break to eat his personalized snack. ♦ Photo Martijn Noort



The Military Mobile Satellite Kitchen from the outside. ♦ Photo Resource

Close to Darwin

Nematologist Jose Lozano spent 10 days studying tomato plants on the Galapagos Islands. With Darwin.

Text Roelof Kleis

Well, obviously not with Charles Darwin, the founding father of the theory of evolution. Charles Darwin arrived at the islands on the ship *The Beagle* in autumn 1835. As part of the Darwin200 expedition, Lozano spent three days there with Charles Darwin's great-great-granddaughter Sarah.

As a scientist, you can't get closer to Darwin than that, admits Lozano. 'It was an amazing experience. We went to search for the endemic tomatoes together. Sarah Darwin did her PhD at University College London on the systematics and genetics of tomatoes on the Galapagos Islands. That was handy as she had no trouble identifying the plants.'

Tomatoes

Like Sarah Darwin, Lozano studies tomatoes. Or to be more precise, he studies how nematodes infect the roots of tomato plants and make use of them. After the infection, the nematodes transform the host into

what is termed a feeding cell. This cluster of cells feeds the nematode. 'I also look at the evolution of these feeding cells,' he explains.

There are nem-

atodes that create very primitive feeding cells from a handful of plant cells, but others are able to combine up to 500 cells to make one large feeding cell. I try to understand this development.'

When Lozano was asked whether he wanted to look for old tomato plants on the Galapagos Islands, he didn't hesitate for a moment. 'Fantastic. This is the dream of every biologist and plant scientist.' The invitation came from Pieter van 't Hof, a WUR alumnus and now a professor at San Francisco de Quito University in Ecuador. 'I met him in Switzerland when I was doing my PhD research. We were both studying the same type of proteins at the time.'

Research on the Galapagos Islands usually focuses on the unusual birds and other animals on the islands. 'No



The Darwin200 team took soil samples from the four tomato varieties found on the Galapagos Islands. • Photo Jose Lozano

one looks at the microbiome in the soil,' says Lozano. But that is precisely what this part of the Darwin200 expedition does. 'There are some very unusual micro-organisms in the soil that can tolerate drought, salinity and heat. Those happen to be some of the biggest problems we are now having to tackle.'

Soil samples

Lozano, and the team he was part of, studied the microbiome of tomatoes. They took soil samples from the four tomato varieties found on the various islands, two of which are endemic. Lozano: 'We look at the differences in the microbiome between the endemic species, the introduced tomatoes and the ones found in continental Ecuador.'

The key question is why the endemic species do so well in the place where they are found. 'It is an incredible sight,' says Lozano enthusiastically. 'They grow in volcanic soil, which has nothing else apart from a few cactuses. That is unique and extraordinary. The conditions are so dry and yet they do well. How come? Which micro-organisms are important?'

The lab work is carried out in Quito by a WUR alumnus and former student of Lozano's. 'Iwan Astudillo Estévez, an Ecuadorian who is now doing a PhD with Van 't Hof as his supervisor.' And to add to the Wageningen flavour: the head of the Darwin200 tomato project is alumnus Hanna Hogenboom.

Why do mosquitoes prefer to bite certain hosts?

THE SMELL OF SUCCESS



Mosquitoes bite some people more than others, and that may have something to do with reproduction. That of the mosquito, to be clear.

Text Roelof Kleis • Illustration Marly Hendricks



attractive host? The simplest assumption is that it's got something to do with reproduction,' says De Swart. 'The blood of an attractive host means more eggs.'

Hungry

De Swart describes her study in her PhD thesis, *The Smell of Success*. She found 49 male students, PhD researchers and staff members who were prepared to get thoroughly bitten by *Anopheles coluzzii*, the mosquito that carries malaria. Women were not invited to participate because their hormonal swings could distort the results. The test subjects gave blood and placed their lower arms over a bucket containing 20 hungry female mosquitoes for 15 minutes. The session was repeated four times, at intervals of five weeks.

De Swart photographed every mosquito after the meal to measure how much blood had been consumed. In the weeks

that followed she monitored how many eggs were laid. The production of eggs per test subject was compared to the production measured after a mosquito had fed on the donated blood of the test subjects. 'To see whether the skin and the bacteria on it play a role in the process.' The power of attraction of the smell of each test subject's sweat was also measured in a wind tunnel full of mosquitoes.

Odour tests of this sort are tricky because creams and perfumes can distort the natural human smell. De Swart: 'Two days before the test, the test subjects were only allowed to shower using neutral soap. One day before the test, they were asked not to shower at all and not to eat bananas, garlic, chili or citrus fruits. It is known that bananas increase people's attractiveness for mosquitoes.' Test subjects were offered 100 euros in compensation for their trouble. And what did all this produce? Not the hard evidence De Swart was looking for.

Marieke de Swart is one of the favoured. Mosquitoes like her. So until 10 years ago, she was pretty scared of mosquitoes. 'I used to have a strict door policy if someone wanted to come into my room in the evening. Light out, door open, come in quickly, close the door, light on. I even taped over the keyhole.' Her strong aversion has since turned into a fascination for the 'deadliest creature on earth'. De Swart: 'Amazing that such a tiny creature has such a big impact.' That some people get bitten more than others is no fable. 'The 80/20 rule was recently confirmed by a study published in *Nature*,' says De Swart. 'Eighty per cent of bites go to 20 per cent of the people. Why is that? What is the evolutionary advantage for the mosquito of an

'Eighty per cent of bites go to 20 per cent of people. Why?'



The number of eggs laid, a measure of successful reproduction, varied considerably between mosquitoes: from 60 to over 100. 'But the difference just falls short of being statistically significant,' she acknowledges. 'And yet it does seem that there is a link. Maybe it's because of the fairly small group of test subjects, which wasn't representative either. I excluded women. And the test took place in the lab and not in the field. So many factors could be involved.'

De Swart did prove some other significant relations, though. For example, a more diverse community of skin bacteria is less attractive to mosquitoes. And the bacterial genus *Sphingomonas* correlates with more eggs. It is puzzling, on the other hand, that more *Sphingomonas* on the skin makes a test subject less attractive. But De Swart does have a



possible explanation for that. '*Sphingomonas* includes several species of bacteria. It could be that one specific bacterium from that group produces more eggs, while another causes reduced attraction.'

Blood group

Besides the role of odour, De Swart also studied that of the composition of the blood. Does the blood group make any difference, for instance? De Swart: 'No, according to a literature review I did. Some studies say that blood group B is attractive, while other studies mentioned blood group O or found no difference at all. I didn't see any difference in my study either. Although, it should be said that my population of test subjects was not at all representative in terms of blood groups.'

However, the researcher did find striking differences in how the test subjects' blood responded to exposure to pathogens. The blood of attractive hosts produced significantly more cytokines: signal substances produced by white blood cells as part of the body's immune response. De Swart: 'Especially IL-22 (interleukin-22), which is associated

with a response to fungal infections. That suggests that attractiveness for mosquitoes could be linked with the immune response to fungi. Mosquitoes might choose hosts that react more strongly to fungi.'

De Swart also had a brief look at ethnicity as an explanatory factor in attractiveness. 'I saw no difference, but most of the test subjects were European,' she says. 'Genetics will undoubtedly play a role, but I think that nurture – the culture and environment you grow up in – and diet are much more important. Eating bananas makes people more attractive to mosquitoes. And I think there are a lot more links of that sort with diet. Something similar might apply to the immune system. There are such big individual differences in how the immune system is "brought up". I think that variation is much more important for explaining the differences in attractiveness to mosquitoes I think that's much more important than something like ethnicity.' ■



HOW DO YOU DECOLONIZE WUR?

WUR's colonial past is undeniable and substantial. What should be done with that legacy? Decolonization is the order of the day. But how do you go about it? And is it even really possible?

A few facts for those for whom this is new territory. No university in the Netherlands is more bound up with colonialism than WUR. In fact, 'without colonies, there would never have been a WUR as we know it,' says Dean of Education Arnold Bregt frankly. 'Wageningen University started as an institute with a strong link with the tropics.' And that is no exaggeration, as we can see from the work of historian Larissa Schulte-Nordholt, who studied WUR's colonial history at the behest of the Executive Board. Her study is being published in the near future. 'When a national agricultural college was established in Wageningen in 1876, it was not intended as a colonial institute,' says Schulte-Nordholt. 'But that is what it turned into quite soon after that. The first colonial courses were taught in 1892. Four years later, they were followed by a full tropical programme.' Money was the driver. The plantations in the colonies were pouring money into the Dutch economy. Several tropical courses followed, but according to Schulte-Nordholt, tropical education only really took off when Wageningen became an academic higher education college in 1918. 'At the end of the 1920s, 70 per cent of the students here were preparing for a career in the Dutch East Indies.' That strong focus on the tropics changed gradually after World War II when the Dutch East Indies gained independence as Indonesia and the Dutch were kicked out. WUR lost a key market for its graduates at a blow.

'There always was and is that value judgement that Western knowledge is superior'



Text Roelof Kleis

That was really when the decolonization of WUR began. 'The institution had to reorganize itself,' says lecturer Esha Shah, who will be launching the new Master's course Decolonizing Science and Technology in September for the Knowledge, Technology and Innovation chair group. These changes went hand in hand with new knowledge discourses and terminologies, says Shah. The designation colonial agriculture disappeared and the focus shifted from the exploitation of commercial farms to development aid. Schulte-Nordholt: 'The Dutch experts were no longer in charge in the tropics, but became consultants. Indonesians, often educated in Wageningen, took over the leadership positions.'

Racial hierarchy

So the hierarchy changed, but the knowledge didn't. And it is precisely in that knowledge and the frame that underlies it that Shah and others identify as the crux of colonial legacy. Within that frame, Western knowledge is seen as superior to non-Western knowledge. 'By calling knowledge "non-Western" you isolate other knowledge systems and create a distance from them. And this is not a horizontal distance, but a vertical, hierarchical one. Racial hierarchy lies at the heart of colonialism: the superiority of the white way of seeing, of knowing, and of being in the world. You should never forget that. In one way or another, either



A sugarcane plantation on Java in the early 20th century.

obviously or very subtly, there always was and is that value judgement that Western knowledge is superior. Colonialism may have disappeared but in a sense it also hasn't.

For David Ludwig, the decolonization of the sciences means that we must consider how today's WUR still reflects its colonial legacy. Ludwig is an associate professor at KTI. 'That legacy is in the literature and the theories we use, for instance, and in the types of people we choose to appoint, the kinds of projects we do, and the economic links we have with the former colonies. The latter is crucial. We work a lot with partners in the global South. Those relationships are typically unequal because of the economic differences. Decolonization means addressing that inequality. Create a more equal form of global collaboration. Involve people in the sciences who have often been excluded in the past.'

'Decolonization means giving a voice to all stakeholders,' agrees Bárbara Rocha Venancio Meyer-Sand, who receives her PhD this week for a study about tracing (illegally) harvested timber. Along with her PhD ceremony, a symposium is being held on decolonization,

entitled Learning from each other: sustainable and impactful partnerships in tropical forest research. A subject close to the Brazilian researcher's heart. 'Research questions are often thought up in the Global North. But what about the people living in the places where you want to collect your data? They have knowledge too, they have needs, and they have questions. And their questions might be much more relevant. So involve local researchers in the project from the start. I work in tropical forests, which they know in a way I can never match. They can see what's going on, they can see the patterns. If we develop projects without recognizing that knowledge, we miss out on a diversity of perspectives. And ultimately, that produces science that has less impact than it could have. So involve local researchers in the project from the start and ensure that they get access to the research's outcome.'

Enshrined

This kind of transdisciplinary approach is gaining ground. 'Transdisciplinarity brings together scientists and people from outside the academic world, so as to develop better and fairer solutions to problems,' explains Ludwig. 'It involves people in the develop-



ment of scientific knowledge who, historically, have always been excluded from the process.' This kind of approach helps, Ludwig believes, but he is critical too. 'I wouldn't call it decolonizing as such. Inequality remains, even if you do involve local communities in your research process. The differences are enshrined in the way the world works and how the global economy works. Decolonization is a very ambitious word. To be honest, I don't think we have any idea what it would mean to decolonize Wageningen. I don't think it can be done without fundamentally restructuring the organization. And I don't think WUR is ready for that.'

Some things have changed and still they also haven't, thinks Esha Shah. 'The fact that I'm working here, as a woman of colour, is evidence of some change. Still WUR doesn't have a lot of people like me. The global South is very underrepresented among the staff. You can count the number of women like me on the fingers of one hand. I am a rare species.' Shah sees this as a remnant of colonialism. 'And look at the PhD population. PhD students from the global South, a significant number of the PhD students, are nearly always sandwich PhDs and not employed by WUR. A different set of rights, rules and salary structure apply to them. That is worrying. What is more, a majority of our teachers are white men. All international students and sandwich PhD's are taught by Dutch white men and then sent back to the post-colonies. Where else do we need to look for colonisation?

With her new course, Shah is paving the way for a more decolonized curriculum. 'The aim is to get rid of the idea of developing the global South,' says programme leader Bregt. 'I see a nice example of that in the approach to the Master's in Development and Rural Innovation, where it is no longer assumed that our knowledge is superior. Instead, interconnections are looked for. Our nitrogen problem in the Netherlands has come about because we transport nutrients here from other countries. Problems connect countries, and we need to look at them without value judgements. It's not about development. There are things that haven't gone well here too. We need to link, share and use knowledge from different places. That is the line we want to move towards in our education.'

'To be honest, I don't think we have any idea what it would mean to decolonize Wageningen'

For Schulte-Nordholt, decolonization is a question of ridding agricultural knowledge of the colonial element. 'It's about the question of how scientific cultures have come about. Why do we know what we know? Who benefits from it? Who decides which knowledge matters, and who owns it? Where does research funding go to? I think that students should learn a lot more about the history of colonization and slavery. You can't decolonize if you don't know how colonization came about. The new Master's is a start, but I'd like to see many more courses like that at WUR.' ■



The former headquarters of the forestry department in Bogor, Jakarta, Indonesia. ♦ Photo Resource

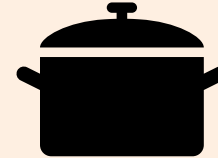


You see great-looking people in the coolest outfits around the Wageningen campus. In this feature, we put one of them in the spotlight. This time Valex Nacci, a Master's student of Urban Environmental Management. Text and Photo Coretta Jongeling



'I like to keep moving. I like to be able to run, jump or climb onto something whenever I need to. That's not possible in really tight shirts and pants, so I prefer to wear casual, oversized clothes. It's also a more gender-neutral look, clothes that both girls and boys could wear. I feel at home when I'm dressed like this. I found the pants I'm wearing today in a second-hand shop. They fit perfectly and I really enjoy them because they give me a bit of a professional look, and I don't have a suit or anything formal. My socks are Gymshark socks that a friend of mine gave me for going to the gym with them. I like socks. You look at an outfit and you never notice the socks – until you do. And then that's the only thing you can look at. My shoes are really chunky, I don't like narrow ones. I actually got these in two colours because I couldn't decide. I'd love to shop secondhand more, but it takes a lot of effort. I really enjoy the feeling of giving something a second life. I tailor it myself or cut it. And I don't feel bad because I haven't bought something new, something that probably took a lot of resources to make.'

You can find all the flavours of the world in Wageningen. Anna Hallingu (20), a Bachelor's student of Environmental Sciences from Estonia, shares one of her favourites: Kirju Koer.



Flavours of WUR

Kirju Koer

'I love this recipe because when I was a kid, my mother always let me and my sisters make it for every birthday or holiday. It is so easy to make that we could be trusted not to mess it up. Also, it kept us busy and out of the adults' way for a while. We always felt like we were being trusted with an extremely important job and took great care in making it.

'When I moved to Wageningen and tried to make it here for the first time, it did not turn out so well. Some of the ingredients are just not available here, for example marmelaad (no, not jam or marmalade, but a colourful jelly candy). But now I have found that apricots have a similar texture after being in the fridge.'

- 1 Crumble the cookies into little pieces of around a cubic centimetre.
- 2 Melt the butter.
- 3 Chop the apricots into small pieces.
- 4 Mix all the ingredients in a bowl.

Ingredients (for two persons) :

- About 200g plain cookies
- 300g tin condensed milk
- Dried apricots (to taste)
- 100g butter
- 3 tablespoons of dark pure cocoa powder

- 5 Shape the mixture into a sausage shape (approx. 10 cm in diameter), wrap it in clingfilm or baking paper and place it in the fridge for an hour.
- 6 Take it out of the fridge, cut it into small slices, and it's ready.

Enjoy!



Anna Hallingu

Limelight

Not much culture in Wageningen? We beg to differ. During the 9th edition of the Woetstok festival, Wageningen bands pay tribute to both rock stars of the past and contemporary artists. Text Steven Snijders



ZA
29-6-2024

Torckpark
13:00-23:45
Entrance free

Woetstok Wageningen

Cover bands, mainly from Wageningen, bring a famous band or performer to life in a 40-minute set. The audience can dance to the music or snack on food lounging on a picnic blanket on the grass. That's the concept for Woetstok Wageningen. Mirjam Hack, chair of the Woetstok Wageningen project group: 'This is a festival for and by Wageningen folk. The name refers to the famous Woodstock festival in 1969, but we've got a range of music styles and musicians

that goes beyond the original performers at Woodstock. There's rock, pop, retro disco and much more. That makes it nice for young and old.' A secondary school band that plays numbers by ACDC kicks off the festival. Early in the evening the Ka-Booshkas perform: eight WUR current and former students who channel Kate Bush. José Visser, singer with the Ka-Booshkas: 'I was sitting on a tram and I imagined myself performing. The idea gave me gooseflesh. That fantasy has come true. Kate Bush doesn't perform much, so we fill that gap. We are going to show off the

expressive, theatrical and eclectic side of Kate Bush. Eccentric, exploratory, and full of energy. But we will also perform sensitive numbers. *Jig of Life* has an unusual Irish rhythm, with the violin.' Angelo Braam, the Ka-Booshkas' violinist: 'With this number we'll definitely get Wageningers dancing. My violin also provides some special effects.' Special effects with a violin? You can find out what that means on 29 June. For more information and the whole programme, see loburg.com/woetstok.



Meanwhile in... Japan - Government launches dating app

WUR is incredibly diverse, with hundreds of internationals working and studying here. In this column, we ask one of them to comment on certain events in their home country. This time, BSc student of International Land and Water Management Sahara Steven (20) from Japan, talks about the recent launch of a dating app by the Japanese government. Text Youssef el Khattabi

'I was surprised when I first heard about the government's initiative to launch a dating app. It doesn't sound like a very Japanese thing to do. Maybe if it had happened in the US, I'd think, oh, that's interesting. But Japan is a really conservative country. Online dating has become more socially accepted these days, but for the government to initiate something like this sounds really new to me.

I hadn't realized the low birth rate in the country was a problem. A bigger issue is the high percentage of elderly people. Japan has the highest percentage of people over 65 years old in the world, and it's increasing. Soon, 40% of the population will be over 65. We know how difficult it will be to support the elderly in the future. The burden on working-age people will be massive. So I understand why the government is trying to encourage a higher birth rate among Japanese people.

I don't think the app will really work, especially not for people in their 20s. At that age, people prioritize their careers and social life over starting a family. People over 30 might be more receptive to the idea, but I don't think it will significantly increase the birth rate. Dating apps are generally seen as platforms for casual hook-ups rather than serious relationships. And if people do end up in serious relationships through these apps, they often don't tell anyone how they met. I wonder how it will be with a government app. There might also be privacy concerns and social stigma. Also, it's only being launched in Tokyo, which makes sense because Tokyo is more open-minded compared to the conservative countryside. It will be interesting to see how it plays out.'



[column]

MIGRANTS ALL

A while ago, I found myself on the phone with my mother. At some point in the conversation, I dared to say: 'Mom, I am not sure what I'm going to do with my life when you are gone', to which she replied: 'You must go on, as everything in life does'. This conversation made me reflect on the feelings migrants like me, like you, like us experience when we leave home. Deciding by choice to migrate from my home country Panama to the Netherlands has meant both fulfilment and a burden, an undeniable duality of migration. I am convinced all of us migrants can relate to the yearnings for a better life, better education, more professional and personal choices for a promising future, or even just the excitement of living in another country. Moving abroad certainly make us grow through exposure to different and more diverse environments, it teaches us to cope better and faster, and it gives us a more thorough understanding of the world. All those benefits come with a price, the sacrifice of not being around the people you love. I think one of the most difficult realities to face when living abroad is being physically absent in all the meaningful moments or festivities where memories and new emotions are created. And physical absence inevitably makes you confront the effects of time on your loved ones, ageing. Nevertheless, being able to choose to migrate is a privilege that not everyone can afford, especially in our world where masses of humans are being forcibly excluded and annihilated. So, whenever you feel homesick and doubt overwhelms you, remember that the sacrifices are worth it, that you are fortunate to be able to exert your willpower to choose to be where you are. And above all, don't forget: 'Wherever you go, go with all your heart' (Confucius).



Willy Contreras-Avilés

Willy Contreras-Avilés (34) is a second-year PhD candidate in Horticulture and Biochemistry of medicinal cannabis, from Panama. He likes to dance (perrear), cook Italian food, and swim.

(Advertisement)



Colophon

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According to phenologist Arnold van Vliet, the gadfly functions very like a watchdog • Photo Shutterstock



ENDANGERED GADFLY DISCOVERED

The Bioblitz on campus has revealed a rare gadfly.

Can you imagine? You've just got into your stride when you hear a buzzing sound. That is what happened to the new rector Carolien Kroeze. When she went looking for the source of the sound, she discovered a fly. Experts decided it was the *Pediculus resourcii*, a gadfly that can really get under your skin. The rector is enthusiastic about the find, especially since it turns out the species is endangered. She affectionately calls the insect her 'gem'. Professor Liesje Mommer, the initiator of the Bioblitz, is pleased too. 'It is yet more proof of how useful our Bioblitz is. Although I should say this is not the first time this particular gadfly has been spotted in academic ecosystems, but it is under increasing pressure.'

According to Mommer's colleague and phenologist Arnold van Vliet, the gadfly functions very like a watchdog. Van Vliet says it is no coincidence the insect was found in the vicinity of the rector. 'It is a natural habitat for the gadfly — somewhere the insect will feel at home instantly.' Contrary to what is often claimed, says Van Vliet, this gadfly is not a parasite. 'It is a more unusual kind of

symbiosis. The fly is very sensitive and responds quickly to anything fishy, secreting a provocative substance and making its host jumpy. This insect keeps you on your toes.'

Experts say however that the watchdog gadfly is under increasing pressure. There is climate change affecting the academic environment too, as has been seen in Delft and Eindhoven. In Wageningen, a readers' survey is need-

'The gadfly is sensitive and responds quickly to anything fishy, secreting a provocative substance'

ed for *Resource* to confirm the importance of this gadfly.

Van Vliet says the decline is reflected in the counts on waarneming.nl.

'A gadfly was spotted every week a few decades ago, but only once or twice a month now. It is therefore good to hear that our rector plans to cherish this tricky insect.'