

# Resource

FEBRUARY 2023 VOLUME 17

The journalism platform for all at Wageningen University & Research

**Ede-Wageningen Station**  
gets poor score

**WUR will not declare**  
climate emergency

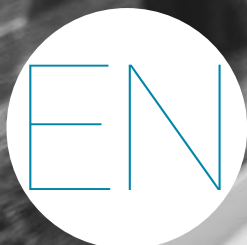
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gets green light

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Read the latest news and background stories at [resource-online.nl](http://resource-online.nl)



## FOREWORD

### Climate emergency

Erasmus University declared a climate emergency last week and the University of Amsterdam also announced that it would not start any new collaborations with fossil fuel companies for the time being. Times are changing, I hear you saying. And what is WUR doing? Well, one thing is certain: WUR won't be following suit. President Sjoukje Heimovaara made that clear to *Resource* (page 6). She believes that progress towards solutions would actually be slowed down if WUR decided only to cooperate with companies that are above reproach. Heimovaara thinks WUR should maintain its more nuanced stance and not take short cuts for the sake of a green image. There is something to be said for that. WUR should stay well away from university marketing, which it doesn't need at all. So many great things are happening in research and education here that WUR folk almost automatically contribute to a greener world. But a firmer statement on the climate emergency by Wageningen could perhaps contribute to a change of course in business, government and among the general public. That I do believe. Speaking of belief, WUR remains neutral on religion – and rightly so. Nevertheless, there are places to which you can withdraw to pray. *Resource* found out how and where (page 26). So there is still a place for believers on campus.

**Willem Andréé**  
Editor-in-chief







## ABANDONED BIKES

If you cycle to campus, you will undoubtedly have seen the red-and-white tape tied around various parked bikes. There might even be tape tied to your bike. In that case, you are advised to remove it, as the tape is the first stage in WUR's bike removal process. In March, all bikes that still have tape around them will get a label. And in April, all bikes with a label will be removed. <sup>LZ</sup>

To find out more, see [www.resource-online.nl](http://www.resource-online.nl)

Photo Luuk Zegers



# Wageningen students get room relatively quickly

**Students are waiting ever longer for a room via student accommodation providers: three years on average. In some university cities in the west, the waiting time is longer than time it takes to do the degree. The waiting time in Wageningen is relatively short, at less than two years.**

This finding comes from the Higher Education Press Agency (HOP), which asked the student accommodation providers how long it takes from registration to signing a rental agreement. The national average is just over three years, and only Hoofddorp and Wageningen are under two years. The average wait for students in Amstelveen is 5.5 years, which is longer

than most degree programmes. Waiting times have grown a lot for the housing providers in the main university cities in the west. Utrecht saw a six-month increase in the wait in the space of just

**The waiting time in the west can be longer than the degree programme**

one year. In the Amsterdam region, waiting times have increased by a month or two each year since 2019. Students who are on the waiting list have to resort to the more expensive private sector. Jolan de Bie, director of the student accommodation providers' umbrella asso-

ciation Kences, is worried. 'The shortage is too extreme at the moment and we need to tackle this together.' The government's National Student Housing Action Plan therefore aims for 60,000 extra student units to be built in the coming eight years. A student housing director has been appointed to make sure that goes smoothly (see page 22).

A new nationwide letting platform for the student accommodation providers, due in 2024, should relieve the pressure, thinks De Bie. Students will then build up waiting time in all cities rather than just one. You can register from the age of 16. HOP/LZ



## Learn sign language for charity

Have you always wanted to learn sign language? A course will start on campus on 22 February. In five evenings, you will learn the basics of Dutch sign language. The course costs 40 euros, half of which will go to the Talking Hands Foundation, a charity that helps people who are deaf and hard of hearing in Uganda. With the money that is raised, children can go to school or get practical training and courses in sign language are organized for their families. To register for the course, email [info@talking-hands.nl](mailto:info@talking-hands.nl). CJ Photo Talking Hands

## Workshop for new hall of fame

A Hall of Fame Workgroup will look at how to make the Omnia hall of fame more representative. At the moment, all the paintings on the wall are of men: male rectors and professors. Many people think that should change.

The workgroup will kick off with a workshop, to which the people who previously submitted ideas are invited. According to the workgroup spokesperson Joke Webbink, the call for suggestions for the 'wall of men' in *Resource* last November resulted in six contributions.

One of the ideas is to hang a frame in among the current portraits containing a call to be more diverse in future. 'Perhaps that will inspire people to become the first female rector, non-White rector or non-binary rector,' says Webbink. Someone else suggested adding a frame for the forgotten people. In addition to Webbink (on behalf of the Art and Heritage committee), the working group includes Chris van Kreij (Omnia manager), Anne Zaal (art historian, Art and Heritage), Margreet van den Burg (author of the book *Women, Wageningen and the World*) and Eva Siebelink (Inclusivity manager). RK

(See also page 14, *Who is Professor X?*)

# 270

This year sees the first full in-person winter AID since the Covid pandemic. In this winter edition of the introduction week, 270 new students get to know one another, the university and Wageningen. The week started last Monday with a bike sale, because how could you manage an introductory week and studying in the Netherlands without a bike? Later in the week the students get bike lessons, plus a pub quiz, a big party, an info market, a communal meal with Dutch dishes and more. LZ

## Ede-Wageningen station scores poorly

The 'station experience monitor', a survey completed by about 85,000 passengers, gives a score to each train station based on how pleasant respondents find the buildings and the experience of waiting there. Ede-Wageningen just scraped a pass, with 6.3 out of 10. Only 10 stations scored worse. That will come as no surprise to anyone who regularly has to walk through that depressing tunnel to get to Platform 3.

The best-scoring station (8.3) is Klimmen-Ransdaal in South Limburg. The listed station building dates from 1913 and has a cafe with outdoor seating adjoining the platform. Curious? It is just a three-hour train journey away.

Fortunately, there is hope for 'our' station. The rebuilding is making good progress and in 2024 the station should be transformed into a light, inviting location. CJ

## Curb on recruiting internationals

**WUR has put a stop to the active recruitment of international students. This is in response to the call to do so by the Education minister Robbert Dijkgraaf. The idea behind the temporary stop is to relieve the pressure on teachers, accommodation and education facilities.**

According to Student Recruitment team leader Renske van Dijk, this means specifically that WUR will no longer attend university fairs abroad. 'We didn't do that much anyway, but now we won't be doing it at all. We have also stopped our online campaigns for the recruitment of internationals. This applies to international students both from Europe and elsewhere.'

The reason for the minister's call is the substantial growth in the number of

international students coming to the Netherlands to study. At many universities, the internationals are mainly from Europe. The academic and applied universities are not allowed to refuse them admission, but the minister is looking for a way around that.

### Recruitment or information

WUR has a limited intake of European students, says Van Dijk: 'But we have a relatively large number of students from outside Europe. You have more possibilities for controlling the intake of those students.' A quarter of the students at WUR are from outside Europe. Incidentally, it is not clear what is allowed and what not, says Van Dijk. 'What counts as recruitment and what as providing information? The open days are

for everyone, but we no longer explicitly invite internationals. The online open days are continuing as usual.'

Van Dijk finds it difficult to assess what effect the recruitment freeze will have on the number of students coming to WUR.

**'We no longer explicitly invite internationals to open days'**

'It depends on how strict the rules become. The minister is due to come up with more details on the policy. If we are no longer allowed to provide information, that could have a significant effect. But we will only see the impact in the preliminary registrations later in the year.' RK

# Erasmus Uni declares climate emergency, WUR prefers nuance

**Erasmus University Rotterdam (EUR) released a statement this week saying it recognizes the climate and ecological emergency. WUR is not following suit. Board President Sjoukje Heimovaara explains why not.**

Climate activists occupied part of Rotterdam's Erasmus University late last year, demanding that the university break all ties with the fossil industry. This week, EUR released a statement recognizing the climate and ecological emergency. Radboud University had previously made a green move by declaring sustainability a standard component of every degree programme. This begs the question: what about WUR?

Heimovaara thinks it's 'really lovely' that universities are speaking out about sustainability. But she doesn't believe in declaring a state of emergency. 'I don't think that's a good strategy. If you look at the definition of a state of emergency, it is a legislative tool for passing laws and you can misuse it to push other important issues under the carpet. For example, when war broke out in Ukraine, sustainability initiatives were put on hold because there was talk of a food security crisis.'

## Fossil industry

Activists in Rotterdam protested in the Erasmus Building again last Tuesday, demanding that all ties with the fossil industry be severed. WUR collaborates with Shell and other fossil-based companies. Heimovaara: 'Any partnership we enter into is preceded by a screening process. What we assess every time

is whether the cooperation contributes to our strategic goals, such as stopping climate change, helping secure a fair and healthy food supply, and protecting nature and the planet. We also do a security check: is there any reason to

expect that the cooperation will pose security risks or endanger the safety of our employees? We are facing major transformations in areas such as the food supply and the climate, which are multifaceted. So we should mobilize everyone we can to move in the right direction.'

As for cooperation with the fossil industry, Heimovaara says it represents 'substantially less than 0.1 per cent of our revenue.' Surely you might as well break off that cooperation, then? Heimovaara: 'I see the dark side of the fossil industry too. But we are now working with Shell, for example, on projects for developing biobased substitutes for fossil materials. That is relevant research. I don't want to end that collaboration. Doing so might make a good impression in the short term, but it won't do any-



Climate activists occupied a building at Erasmus University Rotterdam on 28 November 2022. Photo ANP

thing to solve the big problem of climate change in the long term. At WUR, we seek the nuances and don't take short cuts for the sake of a green image. And I'm proud of that.'

## Faster

The question remains whether there isn't a real need for an international institution like WUR to speak out more firmly, as EUR is doing, and to be more vocal about how green it is, as a message to the outside world. 'Of course, we could also go for a fully vegetarian campus, for example, and it is fine for others to do so. But research done here shows that the most sustainable food system is based on a diet that includes animal proteins. I want WUR to go in the right direction to the max. I am convinced that if I were now to say that we will only work with companies that are above reproach, we would actually make slower progress. In short, sustainability is in our DNA, but that's including every aspect of it and all the related dilemmas. We mustn't be simplistic about it. That's my version of activism.'

*In the next issue of Resource (2 March), we ask readers: should WUR break its links with Shell? What do you think? Use the QR code to have your say.*



# Still not enough 'participation jobs'

**Universities in the Netherlands are far behind their targets for the 'participation jobs' for people with disabilities, the Higher Education Press Agency recently reported. WUR too has failed to meet its target, admits the responsible team leader Els Dieleman. But, she stresses, that figure is not the only yardstick. 'The story is more positive than it looks.'**

Dieleman is the founder of Jops, the team that runs and coordinates most of the efforts WUR-wide to find or create suitable jobs for new colleagues with occupational disabilities. When she was given the green light in November 2019, WUR was bringing up the rear in the national university rankings for the number of jobs for people with disabilities. Now WUR is at the top and the long-term prospects are encouraging too: job retention (longer than one year) is at 85 per cent at WUR, compared to around 60 per cent nationally.

## Life-changing

But let's take a look at the state of play. At the end of 2022, Wageningen had 111 jobs for colleagues with a disability. That is 13 more than the previous year, but still far short of the 230 that WUR had envisaged having by 2024. Dieleman doesn't give a clear yes or no when asked whether WUR can meet that target. 'This is more than a numbers game. It's about people for whom getting a job at WUR is a dream come true. A good match requires very careful and continuous mentoring, both of the candidate and of the team where he or she will work.'

Dieleman is proud that the Jops team manages to find the right match for a growing number of people. 'Don't reduce the matter to a tally of the number of these jobs WUR has managed to create at any given time. Rather, assess how many people with a disability find a long-term

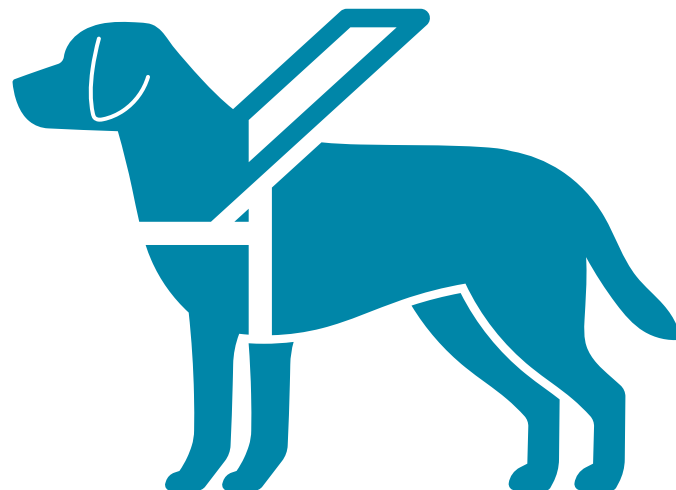
workplace at WUR where they feel at home, have meaningful and appropriate work with a fair salary, and are appreciated by their colleagues. Because that is life-changing.'

## Employed

That other public bodies do manage to meet their target – apparently, municipalities and the police are up to 10 per cent over their target – is down to

**'This is more than a numbers game. It's about people'**

represented among people with labour disabilities, while they are the people universities have jobs for. At WUR, for example, almost 70 per cent of employees with an occupational disability are graduates, while graduates make up only 6.1 per cent of this target group



at the national level. There are limited job opportunities at lower levels, partly because services such as catering, cleaning or landscaping are often outsourced. 'But WUR does impose requirements on our contractors in this regard these days,' Dieleman explains. 'Any cleaners, baristas or grounds workers with disabilities can even be employed by WUR. Specific agreements are now being made about this in the tendering process.' Dieleman emphasizes that WUR teams can also count on Jops to play an enabling role. Read more about this on [Resource-online.nl](https://resource-online.nl). <sup>ME</sup>

## The facts nationwide

In 2022, Dutch universities achieved just over half of the target of 1886 jobs for people with disabilities by 2026. Dutch research institutes managed about half of their target of 110 positions. According to the umbrella organization Universities of the Netherlands, the main reasons for not meeting the targets are the Covid pandemic, a tight labour market and heavy workloads.



## [ You win some & you lose some ]

**A failed experiment, a rejected article: in academia such things tend to be labelled failures. But do we talk about it? No way! But in this feature, WUR co-workers do just that. Because failure can be useful. In this instalment, we hear from Raimon Ripoll-Bosch, assistant professor of Animal Production Systems. Text and illustration Stijn Schreven**

'By the time I finished my PhD I had expertise in a range of fields, from animal nutrition to farming systems analysis and sustainability. After that, instead of specializing, I kept on broadening. I started studying the relationships between livestock and climate change, ecosystem services, biodiversity and even finance. That can get out of hand, which I thoroughly enjoy. But when people ask me what my domain is, I struggle to define my research. Explaining what I do often takes too long and feels vague. In research you are expected to be a one-trick pony – to have one discipline in which you are an expert. But my niche is in connecting the dots. It is hard to explain the value of generalists in science, even though they are needed in transdisciplinary research that studies complex problems such as the role of livestock in sustainable futures. My personal struggle is in the choice between narrowing down my research, which I have been advised to do, or doing what I

like and what I think is needed, which is connecting domains and exploring new relationships. In my mind, the advice to narrow down makes sense, but I don't do it. I want to learn from other disciplines – that's where I find joy. Following my own path, however, feels like letting down the people who advised me.

**'Explaining what I do takes too long and feels vague'**

I am still learning to find a balance. Working across domains is more time-consuming, and I need to balance that with my personal life and family. In new opportunities, I now often try and collaborate with specialists. I realize that as a generalist, I will never be better in a particular field than the specialists, but we can complement and learn from each other.'



## Soil transplants boost nature worldwide

**Areas in need of nature recovery can benefit from a soil transplant. That applies not just in the Netherlands but worldwide.**

Ecologists at the Netherlands Institute of Ecology (NIOO) had already shown that in the Netherlands nature revives faster if it gets an injection of healthy soil with the associated soil life and plant seeds. Now an international team has studied the effect worldwide, with 46 experiments

### Loamy soils perform better

in 17 countries. This week, an article on the study appeared in the *Journal of Applied Ecology*, with Wageningen PhD candidates Gijs Gerrits and Rik Waenink as the lead authors.

The conclusion: soil transplants work everywhere, 'from the tropics to the tundra'. In the test locations, the diversity and mix of species in the vegetation grew faster after soil translocation than when plant seeds were introduced through seeding or the addition of hay. To give one figure, plant growth was 40 per cent closer to the intended result after soil translocation than after only adding hay.

### The bigger, the better

There were however large differences between sites, which became more striking over time: either they became increasingly more successful or they became less and less successful. The researchers identified various key factors, such as the soil composition – loamy soils perform better – and the surface area – plots of more than 180m<sup>2</sup> did better than smaller plots.

While further research is needed on the factors determining the success of soil transplants, these findings already provide pointers for nature conservation, concludes the research coordinator Jasper Wubs (NIOO). 'Ecological recovery is a tricky and often unpredictable process. This study shows the basis for success lies beneath the surface.' ME



# Dendroids as internal messenger

**The use of nanotechnology in medicine is a hot topic. Anything is possible in the nano world. Delivering medicines to the right part of the human body, for example. Now Rebecca Kaup is adding a new chapter with the development of what are termed dendroids. She obtained her PhD at the start of the month for this research.**

Dendroiden zijn aan elkaar geknoopte Dendroids are chains of spherical polymers. The building blocks are called dendrimers, highly branched polymers. Dendrimers have been around since the 1980s and are studied for applications including the delivery of medicines in the body. That application makes use of the polymer's structure. The regular pattern of branches, which is symmetrical in all directions, leaves cavities in the molecule. The dendrimers Kaup used have several such cavities, which you could fill with medicinal molecules. So dendrimers are like chemical couriers.

But dendrimers have their limitations. The bigger they are — and so the more branches they have — the more reaction steps are required to make them. And each dendrimer can only carry a very small payload. The solution is to create superstructures of dendrimers that are linked together. Kaup developed a new way of creating such superstructures from dendrimers. These bundles of polymer spheres are called 'dendroids', a name thought up by Kaup's supervisor, BioNanoTechnology professor Aldrik Velders.

## Mould

Kaup used a trick to make the dendroids. First she made 'dendrimicelles', bundles of dendrimers linked together by linear copolymers. The dendrimers at the core of the bundle are then linked to one another using a chemical compound,

after which the copolymer is removed. This leaves you with the desired superstructure. The dendrimicelles essentially function like a kind of mould or template that puts the dendrimers in the right position for linking together.

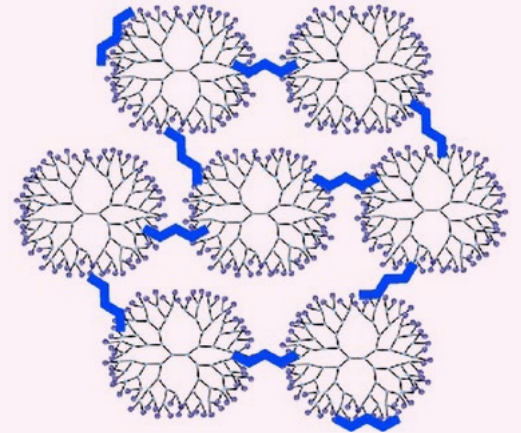
The big advantage of Kaup's method is that it leads to well-defined, reproducible dendroids. Kaup: 'You can also link dendrimers to one another in a solution, but then you don't have much control

## Kaup developed a new way of creating superstructures from dendrimers

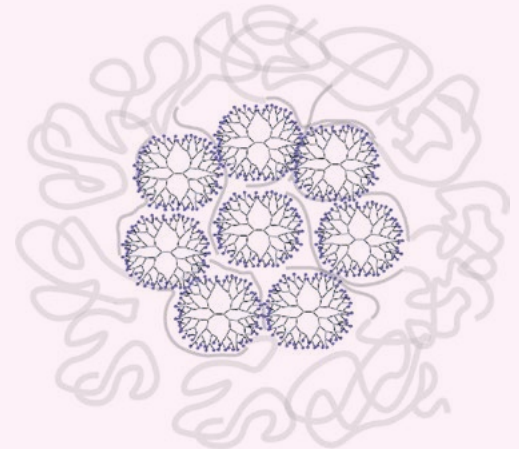
over the result. You can't really determine how many are linked together and they often end up much bigger than the dendroids. In medical applications, you need a well-defined end product and you need to be able to make the same thing every time. That's possible with dendroids.'

## Plant cells

Kaup's work is a proof of principle. The biotechnologists in Velder's group are now working with plant scientists in WUR Plant Breeding on a practical application. Rather than delivering medicines, they want to deliver genetic material to the right place in plant cells. Also, the pieces of DNA are transported on the outside of the dendroids rather than in the polymer cavities. Kaup: 'If the pH value is neutral, there are amine groups on the outside with a positive charge. They bind the negatively charged DNA. The resulting complex can then pass through plant cell walls.' <sup>RK</sup>



In a dendroid, dendrimers (highly branched polymers) are connected up chemically using a 'coupling agent'.



In a dendrimicelle, the dendrimers are held together by a polymer. This structure serves as a 'mould' for creating a dendroid.

# Green light for new Marine Sciences BSc

**Marine Sciences, the first Bachelor's degree in the Netherlands to focus on the marine domain as a whole, will start in September.**

The new degree programme is all about the developments in the marine sector, explains programme director Jan Philipsen. 'Take the huge expansion

**'We will have to see how many students actually enrol on the programme'**

of renewable energy generation at sea, and the need to preserve biodiversity

and to seize opportunities for the protein transition and climate adaptation.' Marine Sciences deals with international issues, so it is aimed at both Dutch and international students. They will get

lectures on all elements of the marine system, from ecological and socio-economic aspects to the environment and food.

## External review

After approval last year by the Higher Education Efficiency Committee, which checked whether there is sufficient demand for this qualification in the labour market, the second major test took place on 31 January with the external review by the Accreditation Organization of the Netherlands and Flanders. This involved an assessment of the new programme's scientific and didactic qualities – with a positive result. Education policy officer Jetske ten Caat is one of the new programme's coordinators, along with Philipsen. She says the marine domain appeals to school-

children planning to go to university. 'Marine Sciences was very popular at the open day in October. But we will have to see how many students actually enrol on the programme. At present 180 schoolchildren are on the "keep me informed" mailing list. That isn't the same as enrolling but it does say something.'

Over 100 people at WUR were involved in setting up the new degree programme in one way or another, says Philipsen. 'Lecturers, professors, colleagues from the Education Support Centre and from Publicity and Recruitment. And everyone is enthusiastic. Something special has been created; you could feel that during the external review.' LZ

## THE PROPOSITION

For PhD candidates, their thesis propositions are an opportunity to publicly express their professional and personal convictions about science and society. In this feature they explain their most thought-provoking proposition. This time it's Abel Boerboom, who defended his thesis on Friday 10 February. He was supervised by special professor of Nutrition and Obesity Treatment Eric Hazebroek.



'Weight discrimination is completely accepted in our society.'

'There is a stigma attached to overweight and obesity. That is clear from comments like "once past the lips, forever on the hips" and "fat people can't diet". The stigmatizing starts during childhood, when children are bullied at school. Being overweight can affect whether you get a job or are given the right healthcare. Research, mainly in the US, shows this is very common. My proposition says weight discrimination is completely accepted. That is putting it quite strongly, but that's OK for a proposition. The fact is many people don't realize this is happening. So in that sense there is acceptance. I am a doctor and I studied how to optimize stomach reduction procedures. Stomach reduction is an option for people with

obesity if lifestyle interventions don't help. I studied whether the result of the operation is better if you change the procedure in a certain respect. I find my patients suffer from weight discrimination. What can you do to stop it? That is not simple. Of course raising awareness through campaigns or TV adverts is always a good thing. But this is a complex and multifaceted problem that won't be solved with a TV ad.' RK



# Activism

Last December, *Resource* published an article entitled 'Activist scientists: acceptable?' I was pleased to see this topic getting attention as I see more and more scientists around me who proclaim their opinions and make calls to action through numerous channels.

It is often said that the risk with activism is that the general public or your colleagues will start to doubt your credibility or scientific objectivity.

**'I call on everyone at WUR to support the people who are prepared to speak out'**

the world works and what needs to change. That conviction is based on certainty, your belief and confidence that your view of the world is the right one.

In my opinion, the risk of an activist stance is partly the social cost of having to change your opinion, which can be high when you have been climbing the barricades and announcing your opinion to all and sundry through a megaphone. However, an even

But there is a bigger risk. An activist approach inevitably means you have a conviction about how



**Guido Camps**

greater risk is that your views become part of your identity. Then you don't just lose the *appearance* of objectivity, you *actually* become less objective. The best and most inspiring scientists I have known were always open to the possibility that they might have got it entirely wrong, even after they had seen their hypotheses confirmed time and again throughout their career.

Does this mean I am opposed to activism by scientists? Absolutely not. Given how cheap opinions are in our society, the contributions of scientists can be particularly valuable. So I call on WUR to support the people who are prepared to speak out, because that takes courage, and anyone who does so deserves the support of their organization. However, the activist scientists also need to take a hard look at themselves in the mirror and ask themselves whether they are still open to evidence that undermines their position. Because what if you got it wrong?

Guido Camps (39) is a vet and researcher at Human Nutrition and OnePlanet. He enjoys baking, beekeeping and unusual animals.

Robot harvests vegetables with trained eye

# BROCCOLI IN FULL FOCUS

A field full of broccoli does not grow uniformly. The variation in shapes and sizes means the farmer has to harvest selectively, picking only the mature plants every time. Robots can take over that work – as long as they can spot the ripe broccoli. Pieter Blok helped them with that in his research for his PhD (*cum laude*).



Text Stijn Schreven

**A** huge red vehicle drives slowly across the field. The broccoli harvester from the US company that Pieter Blok (Agrosystems Research & Farm Technology Group) has been working with moves at just under one kilometre per hour. ‘That’s slow, but people harvest at about half a kilometre per hour,’ Blok says. ‘So this is faster and you save on labour.’ Broccoli is the ideal vegetable for robotic harvesting, says the agrotechnologist. ‘It is a relatively exposed and easily identifiable crop, so it lends itself pretty well to deep learning.’

All around the world, broccoli is usually harvested selectively. ‘Young broccoli comes from the nursery in so-called rooted plugs and is planted out with a machine,’ says Blok. ‘One plant may start growing immediately, while another needs more time to take root. If you harvest them all at once, you waste the small ones.’ At 40 to 50 eurocents per head of broccoli, this means significant losses for the farmer. Most selective

harvesting is currently done by hand. ‘Until my PhD research, there weren’t any robots that could do it.’

## Uncertain computer

Before you can get a robot to harvest broccoli, you have to take a few hurdles. ‘There are two main challenges in image processing,’ begins Gert Kootstra of the Farm Technology Group, who was involved in the project as co-supervisor. ‘The first is variation: the robot has to be able to recognize broccoli despite differences in field, soil type and light.’ Blok adds: ‘There are also variations in size, colour and texture between individual plants and cultivars.’ So Blok trained the computer system using pictures of broccoli in all shapes and variations. He sometimes made these images redder or bluer or zoomed in or

out. This taught the system to recognize the vegetable in different lights and at different sizes.

On the training images, the researchers pinpoint the location of the broccoli themselves – which takes time and money. So Blok had the computer ask the researcher questions to focus and speed up its learning. ‘The system not only gives the outcome, but also indicates the level of certainty about it,’ says co-supervisor Kootstra. ‘And Pieter reduced the degree of uncertainty. Then we could test the system he had trained on millions of images.’ After training it with 50 to 100 images, the researchers got the system to locate mature broccoli on 14,000 unlabelled images. ‘Then we selected the images the system was least sure about. It probably got it wrong there.’ The researchers annotat-

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**‘THE ROBOT HAS TO RECOGNIZE BROCCOLI DESPITE DIFFERENCES IN FIELD, SOIL TYPE AND LIGHT’**





The computer-controlled broccoli harvester. • Photo Pieter Blok

ed 50 of these images and added them to the existing training set. ‘The system is now more confident about some of the images it was previously unsure about, because it has learned from similar examples.’

### Predicting what you can't see

The second challenge for the broccoli robot is occlusion: when something else, like leaves, covers the head of broccoli. How can the robot know whether the broccoli is ready for harvesting if it can't see it, or barely? To address this, Blok took two photos: one with occlusion and one without. In the photo without occlusion, he precisely labelled the location and size of the broccoli. He then trained the system with the image of covered broccoli, but with the labels. ‘Then the system predicts what it cannot see,’ says Kootstra. And it works well: ‘The margin of error is low, even when the broccoli is more than half covered.’

It was clear from its first trial in America that Blok's system was robust enough, he recalls: ‘We had developed

and trained the system with Dutch images only. It hadn't seen any American broccoli yet, but it worked right away.’ The American customer is very satisfied. Five commercial broccoli harvesters are now being deployed in the US. The next step is to make a European version, says Blok. ‘That one is smaller, harvests fewer rows at a time and can be pulled by a conventional tractor. The European robot will soon be launched on the market.’ The successful application of his scientific findings in the form of a field robot earned Blok a distinction for his PhD.

The broccoli robot replaces about 15 workers who would otherwise harvest the vegetables manually. It will only need one operator to sit at the controls and oversee the whole process. Is it worrying that robots will take over jobs like this? ‘I don't think robots are putting us

out of work,’ Kootstra replies. ‘They will change the type of jobs we do though, probably for the better. This kind of harvesting is not nice work, and people only do it for the money. The harvesting robot creates new kinds of jobs: for technically skilled people who develop, run and repair the system.’ ■

### From field to fishing boats

Pieter Blok and Gert Kootstra and colleagues are applying the same machine-learning system used for broccoli harvesting in Dutch trawler fisheries, to analyse the bycatch. This enables fishers to see at a glance how much bycatch is in their nets, and what it is. ‘If it's a lot, the fishers have good reason to fish elsewhere,’ says Kootstra. That's because the government currently requires them to bring all bycatch ashore for registration. ‘Then the death is certain for those fish, and the fishermen need a lot more storage space.’ With automatic camera recording of bycatch, the fish can still be put back in the sea. ‘Some will survive and you've done the required documentation.’ After tests in Wageningen, the system will soon be installed on the vessels themselves.

## Unknown scientist in Omnia hall of fame

# WHO IS PROFESSOR X?

The hall of fame in Omnia includes one portrait of a mystery professor. No one knows who he is. But we can't leave it at that, can we? This is the (unfinished) story of a quest.



Text Roelof Kleis

**M**y first reaction was one of disbelief. It was late May last year and the hall of fame in Omnia had just been completed. On a table in the portrait gallery lay an A4 sheet with a Who's Who. Next to number 31, it said 'Unknown'. A more blatant indifference to your own history is hard to imagine. This was crying out for further investigation. The portrait gallery - sneeringly dubbed 'the wall of men' by Resource - displays 33 paintings of eminent Wageningen professors. Male professors. WUR does own a portrait of Mien Visser, Wageningen's first woman professor, but according to the wall's curators, the style of her portrait is so out of line with the others that it couldn't be hung among the men.

### Narrowing the field

But who was Professor X? The men's wall features two types of professors. Half of them are former rectors of the university. The other half are not, but were apparently eminent (or vain?) enough to have their portrait painted. We don't know which group Professor X belongs to. For convenience - it narrows the field - I

decided to assume that he was a rector. There have been 46 of these in WUR's 105-year history, and 17 of the portraits are known to be of a rector. That still left 29 rectors as candidates.

Fortunately, there were other clues too. The name of the painter is known: it is François Jacob Diederich (Frans) Boers, a painter of portraits and landscapes originally from Liège, who lived from 1914 to 1987 and painted from 1934 to 1987, according to Wikipedia. That narrowed the search window to 16 professors. But unfortunately, Frans Boers was not a famous artist. As far as we know, there is no list of his paintings or clients, and the internet offers only a few biographical details. The Netherlands Institute for Art History (RKD) has no further information either.

### Royal honour

A third clue was a detail on the painting itself. Professor X obviously received a royal honour. Several portraits show the same medal, which turns out to be the Knighthood in the Order of the Dutch Lion. So could the Chancery of Netherlands Orders provide a list of Wageningen knights of that order? No, responded a spokeswoman for the chancery. The online register can only be searched by name and not by place of residence or place of issue. That's a pity, but knighthood remained a selection criterion. Only candidates who had received this knighthood were to be considered.

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'THERE ARE OTHER CLUES.  
THE NAME OF THE PAINTER  
IS KNOWN'



## 'A NAME HAD APPEARED NEXT TO NUMBER 31. HOW COULD THAT BE?'

The only remaining option was to dig around for information about the lives of the 16 candidates. Googling, in other words. And one December Friday afternoon – this is that kind of project – fortune smiled on me. One of the first candidates on the list was professor of Botany Eildert Reinders (1885-1979), who was rector from 1939 to 1940. Up until 1956, rectors were appointed for just one year. A sizeable section of Jan van der Haar's *History of Wageningen Agricultural University* is devoted to Reinders. Going by the accompanying photos, it could be him. The evidence got stronger when it emerged – from an annual address by the then rector – that the professor was presented with a portrait by friends and students on his retirement in 1955. He also received the requisite knighthood in 1931. Information from the chancery included his eldest son's last known address, and it turned out that a member of the family still lives there – the son's elderly widow. She doesn't have email, but I was welcome to come by to show her the portrait, she said on the phone. So off I went one Tuesday morning to a little village north of Utrecht, with a photo of the portrait and (almost) totally convinced that the search would now come to a perfect end. Mrs Reinders-Stoutjesdijk lives in a beautiful wooden villa. She was Eildert Reinders' daughter-in-law, so she knew him well. But she was quite adamant: the man in the picture is not her father-in-law. And as for the portrait given to him at his farewell, she had never heard of it. It certainly wasn't in the family.

The 15 other rectors under consideration were all been ruled out too for various reasons. They didn't have the right medal and/or the available photos didn't match the painting. The only question mark

that still remains is over Professor of Animal Physiology Ede Brouwer (rector from 1948 to 1949). I cannot find a portrait of him as yet.

### Crossed off

A few weeks ago it suddenly looked as though the riddle had been solved after all. There was a new Who's Who on the table in Omnia. And a name had appeared next to number 31: Professor of Land Development Folkert Hellinga, who was rector from 1965 to 1970. How could that be? I had already crossed him off the list because he didn't have the required knighthood. My doubts turned out to be justified. Enquiries revealed that Hellinga was accidentally designated as the subject of the portrait.

So this remains a story without a happy ending, at least for now. The list of possible (non-rector) candidates is long and *Resource* editors are not at a loose end that often. Who can help us identify Professor X? ■

*To be continued (no doubt)*



Professor X (by Francois Jacob Diederich Boers)









## ON-SITE RESTORATION

The painting titled *XXVIII* by the Dutch artist Jerry Keizer (1938-2016) can now be returned to its rightful place in Axis. The 1.80 by 1.80 metre work has been restored by Han Boersma over the past few months in the secluded recesses of the Forum library. The painting was badly damaged in 13 places, all of which have now been stabilized. Little tears and holes have been repaired too. Keizer worked mostly with black and white paint. Many of his paintings have a rough structure because they were created with multiple layers of paint.

Photo Lotte Kniest



# MOOC, with an M for Meaningful

If members of the public count butterflies in their neighbourhood, scientists get a lot of data. And ordinary citizens get a better understanding of local biodiversity, which can help them find solutions. This symbiosis between science and society is at the heart of the online course Transformative Citizen Science, on how to use citizen science to initiate sustainable transitions. Text Marianne Wilschut

**H**ow can I investigate whether Athens traffic is affecting the decline of bird species in the Greek capital? And how do I muster support for the conservation of a marine reserve near Curaçao? Just two examples of projects by participants in the online course Transformative Citizen Science for Sustainability that launched last December. Some 270 people from 52 countries took part in this Massive Online Open Course (MOOC). A further course is planned for early May. The start of this MOOC coincided with the launch of the WUR Citizen Science Hub, a platform where various organizations can share their knowledge and experience of citizen science. Universities can ignore citizen science no longer. Whether you're talking about archaeology, astronomy or climate science, in numerous fields citizens are helping scientists with observations, measurements and calculations. Well-known examples of citizen science projects at WUR are the Nature Calendar, which

maps the effects of climate change on nature, and Tekenradar.nl, where people can report a tick bite.

## Own health

'Citizen science has become increasingly important for scientists, especially when it comes to sustainability issues,' explains Arjen Wals, professor of Transformative Learning and co-initiator of the MOOC. 'When citizens measure air pollution in their neighbourhood, count butterflies or monitor their own health, scientists gain access to a tremendous amount of data. At the same time, the citizens gain insights into air pollution or biodiversity in their neighbourhood, which helps them to identify solutions. This is how you get a symbiosis between scientists and society. That symbiosis is central to Transformative Citizen Science, which is what this MOOC is about.' Transformative Citizen Science goes a step further than classic citizen science and ties in with the 'Science to Impact' initiative involving organizations including the Dutch universities, which aims to

bring science closer to society. It empowers citizens to contribute to change on issues that matter to them. 'Sustainability is the leitmotif in this course,' says Waltz. 'We focus particularly on issues such as climate change, biodiversity, health and inequality. These are areas in which citizens often come up against big companies and government bodies, which can sometimes make them feel powerless. With Transformative Citizen Science, we want to give citizens scope for action, thus generating more optimism. That is sustainability too.'

## Analysing data

In the course, which participants can take at their own pace online, there are videos in which experts explain the four forms of citizen science: scientific, curiosity-driven, policy-driven and more action-oriented. 'You will also learn how to collect and analyse data reliably and how to deal with issues of privacy,' says Mirjam Schibler, the moderator of the MOOC. 'And you learn how to make a plan for your project and how to implement it and communicate about it. Each

participant has to submit a project proposal, on which the other participants can give feedback via the online notice board. The response was good, but a little more interaction wouldn't hurt. It was nice to see how much effort people put into their projects. They were obviously very committed to the issues they wanted to solve. Their biggest concerns were the environment and biodiversity.' The evaluation showed the first cohort to take the course appreciated the combination of theory and practice. 'Useful to know how to collate the data I have collected and how to generate engagement,' was one of the responses on the evaluation form. 'I now have more insight into how to make citizen science transformative,' was another response. The participants were diverse. Schibler: 'There were students among them, but also staff from civil society organizations, policymakers and scientists who

were curious about how to use citizen science for their research.'

### Ethics

Ethics came up in the MOOC too. Because is it desirable for scientists to help parents who plan to investigate air pollution around their children's schoolyard or neighbourhood residents who want to examine the nuisance caused by the stench from a neighbouring farm? 'This form of citizen science is activist in character,' agrees Waltz. 'Not every scientist will consider that legitimate. In the MOOC, we show different ways you can engage with citizen science as a scientist: do you see it simply as a source of data, or do you see it as a

project that you can learn from together with the participants, or do you side with citizens who need your help? That is what the discussion is about.' Waltz thinks science benefits from Transformative Citizen Science too. 'The Science to Impact movement wants to improve relationships between universities and the wider community and to restore citizens' trust in science. Projects like this can help with that. You have to learn to speak each other's language. The M in MOOC usually stands for Massive, but for this course we want to make it M for Meaningful.' Whether many students' projects will actually be implemented, course moderator Schibler finds it hard to say. 'But some projects, like the Greek study on the impact of traffic on birds, were already at an advanced stage. So there is a good chance that people will make a go of those ones.' ■

*The second edition of this MOOC will be available on 2 May. More information via [www.wur.nl/en/show/transformative-citizen-science-for-sustainability.htm](http://www.wur.nl/en/show/transformative-citizen-science-for-sustainability.htm)*

## 'We want to give citizens scope for action, thus generating more optimism'



Citizen science on campus: citizens helped scientists map species on Biodiversity Day last June. ♦ Photo Guy Ackermans

Ethicist Bart Gremmen:

# ‘Ethical reflection is much needed in the livestock sector’

How acceptable is it to dehorn cows? Are mega-barns ‘normal’? Animal ethics and livestock farming can stir up strong feelings. Now personal professor of Ethics in Life Sciences Bart Gremmen has written a book on the subject. ‘It is hard to resolve impasses without an understanding of the underlying principles.’

About five years ago, Gremmen dedicated his inaugural address as personal professor to the ethics of livestock farming systems. Now he has published a book entitled *Dierethiek & veehouderij* (Animal Ethics & Livestock Farming), in which he unpacks the question of how animals can be kept as a source of food in an ethically acceptable way including the inevitable dilemmas involved, and with the help of lots of examples. From the fledgling farm love affair that ran aground on the hard fact that bulls are killed for economic reasons (for fans: Olke and Alberdien in the Dutch reality show *Farmer Wants a Wife*) to the endless casuistry about the ‘unusable’ male chicks in the poultry industry.

The timing of his book has a lot to do with what he sees happening both in society and at his lectures, says Gremmen. ‘Despite the public debate, some people have a more or less blind faith that Dutch livestock farming is doing pretty well. Particularly those from a farming background are quick to experience strong criticism or radical proposals as absurd. And yet of course there are some big question marks hanging over the sector. Ethical reflection is much needed in livestock farming.’

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‘An analysis with the ethical compass is the best way to arrive at a sound moral judgement’



Text Marieke Enter

**In the book, you meticulously deconstruct the ethical principles underlying the divergent views on livestock farming. Does understanding them help us to understand each other better and avoid polarization?**

‘That’s the idea, yes. Animal ethics is a relatively new field. Until late last century, everything revolved around humans; plants and animals were outside the moral framework. Since then, various forms of animal ethics have developed and are now competing with each other mostly without our being conscious of them. Without an understanding of the underlying ethical principles, it is hard to resolve impasses. Then you are left with one group that disapproves of livestock farming and another that is all for it. End of story.’

**And then people look expectantly at you, as an ethicist: ‘Show us the way’?**

‘People hope that you can use common sense to solve dilemmas, based on a few simple principles. I wish that was so, too, but unfortunately it is not possible. There is no universal moral compass in livestock farming. Different ethical starting points come into play, which can lead to opposite outcomes on the same issue. This starts with the fundamental question: is livestock farming permissible for food production? Depending on the underlying animal ethical perspective do you consider





Personal professor of Ethics in Life Sciences Bart Gremmen. • Photo Guy Ackermans

it permissible, for example, to deny animals their natural habitat; do you think animals deserve the same individual rights as humans? the answer is just as likely to be yes as no. Both are valid.'

#### **But the ethical compass you set out in the book does offer guidance?**

'Yes, but only if you accept that livestock farming is permissible. Most of the population does, judging by their use of animal products. In theory, society might want to abolish livestock farming, but in practice that doesn't happen. Then you end up with what philosophers call pragmatism. That means that issues are not black and white, but you are willing to shift positions between the two extremes on an axis depending on the context. For livestock farming, I distinguish two such axes: one that is about the intrinsic value of animals high or low and one that's about their degree of autonomy. Form a cross with these two axes and you get a kind of compass with four points on which various ethical livestock farming issues can be plotted. The overall picture of that plotting yields an ethics of livestock farming.'

#### **Is that compass applicable to other issues as well?**

'There is, of course, a lot to be said about pets from an animal ethics point of view, too. Consider pets that go completely crazy because of the way they are kept, or issues in dog breeding, like the now banned short snouts in dogs that were bred for them until they couldn't breathe properly. That's just animal cruelty; you hardly need an ethical compass to make that clear.'

#### **And for science: is the compass useful when considering whether WUR should want to do certain kinds of animal research, as professor of Animals & Sustainable Food Systems Imke de Boer wondered aloud?**

'When WUR does research, it is often to tackle a particular problem. That solution may bring new problems in its wake, but hopefully not as bad or the same as the original problem. My plea is to consider at the earliest possible stage which values are at stake in the research topic. Run it through an analysis with the ethical compass. That is the best way to arrive at a sound moral judgement that isn't clouded by prejudices, assumptions or fallacies.' ■

**Bart Gremmen** has been a professor of Ethics in Life Sciences at WUR since 2006, initially as extraordinary professor and since 2016 as personal professor. Readers of the trade journal *Food&Agribusiness* are also familiar with Gremmen as a columnist. Fabienne van Veen, to whom he has dedicated his book, writing that he hopes 'she will use the ethical compass to formulate her moral judgement on the livestock farming of the future', is his six-year-old granddaughter.

#### **Book launch**

The book *Dierethiek & Veehouderij* (published by Noordboek) will be presented in Orion on Friday afternoon 24 February, with contributions from Wageningen animal ethicist Bernice Bovenkerk, Trade Union for Animals founder Marjolijn de Rooij and Joanne Malotau of 'Citizen Farm' De Patrijs and the Caring Farmers foundation. You can register via [tinyurl.com/54rvu7y8](https://tinyurl.com/54rvu7y8)

Meet student housing director Ardin Mourik

# ‘MORE OLD - STYLE STUDENT HOUSES’

The Netherlands needs 60,000 more affordable student housing units by 2030. A national student housing director has been appointed to oversee that process: Ardin Mourik. *Resource* had coffee with him in Utrecht.

## Student housing director, what exactly is that? And why did you get the job?

‘The task is to make things happen and it stems from the 2022-2030 National Student Housing Action Plan. I was appointed by the Ministry of the Interior to ensure that the agreements in that plan are implemented. The main agreement from the action plan is to provide a total of 60,000 affordable student housing units between now and 2030. The student housing sector is very fragmented, and it needs someone who can bring the various strands together. I have a track record as director of Kences (the branch organization for student housing cooperatives, ed.), I’ve worked at the Ministry of Education and I have executive experience as a member of the Provincial Council. In short, I know the worlds of government, education and housing. That’s how they ended up coming to me.’

## Is it feasible: 60,000 units by 2030?

‘Yes, but it does call for some creativity. It is not just a matter of newbuilds, but also about redesigning existing buildings. One option is to change buildings

with studios into accommodation in which several rooms share facilities. ‘Not all cities have space for newbuilds. In Amsterdam, for example, between 13,000 and 16,000 additional housing units are needed, yet that is where the shortage of space is most acute. I will make sure municipalities talk to their neighbouring municipalities. There are possibilities in Amstelveen, Diemen and Purmerend, for instance, but they call for good public transport as well. I look at the big picture. I try to help municipalities, but I also tell them: you signed this action plan, now you have to make it happen.’

## You advocate more non-self-contained student rooms. Why?

‘It seems that for the past 15 years, all new student accommodation has been studios, with hardly any old-fashioned student houses. Yet you can house more students in smaller spaces in shared houses. Student houses are also much better for wellbeing: there is a lot of loneliness among students. I lived in student houses myself and I thrived on it. It has enormous added value for young people to experience that. It



Text Luuk Zegers

doesn’t have to be 15 people to a house; it can be done on a smaller scale. But please, let’s start building more old-style student houses again.’

## Your assignment also includes dealing with peak demand in February and September, when a lot of new students arrive at university and need a room. What are your plans for that?

‘To cater for peak periods, which is especially crucial for international students, we are looking at new options, such as host families, boarding with a landlady and so on. These are most emphatically temporary arrangements: you need to help international students for the first few months to give them time to find a room.’

**In Wageningen, rooms are reserved for regular international students and exchange students from outside the EU. They can have the**





Student housing director Ardin Mourik argues for more student houses and fewer studios: 'You can house more students in less space. Student houses are also a lot better for welfare: there is a lot of loneliness among students.' (Pictured: Het Zaad student house in Wageningen.) ♦ Photo Guy Ackermans

### **rooms for two years, after which they have been registered as students for long enough to find something else. Should that be the norm?**

'I know the Wageningen student housing provider Idealis well and what they're doing is impressive. But no one manages it elsewhere in the Netherlands. The other day I even saw an international student on TV who said she flies into the Netherlands every week to attend classes. She sleeps on someone's couch during the week and then flies home again. That's crazy of course. It's one thing for a Dutch student to commute for the first few months, but it's just not on for international students.'

## **'Room-sharing is not a bad idea at all in peak periods'**

### **No rooms are reserved for European exchange students, on the basis that they can get sublets among the larger group of outgoing WUR students. But that was hard for some exchange students last summer and the emergency solution was room sharing. How do you view this?**

'Room-sharing is not a bad idea at all at peak times. In some European countries, nearly everyone shares, two to a room. I'm not saying it should become the norm, but it could be a good temporary solution.'

### **Should there be special peak arrangements for Dutch students too?**

'It is not feasible to arrange accommodation for all students at peak times. But it may feel unfair to them if rooms reserved for peak times are vacant for a quite a while when they still don't have a room. It's easier for Dutch students to commute, although not ideal. The main thing is,

we've got to build new housing to take that pressure off. With 60,000 housing units, we'll be well on our way.'

### **And the private sector?**

'The vast majority of rooms in the private sector are far too expensive, but that market isn't regulated. The Ministry of the Interior wants to combat exploitation in that market by making regulation mandatory. If that happens, room rates in the private sector will go down by hundreds of euros in many cases, and sometimes by half.'

### **What is the biggest challenge?**

'Internationalization. What can the Ministry of Education do to manage it? At the moment it's as though the floodgates are open and we're sitting back and seeing what happens. But we can't handle it, not in terms of educational institutions and not in terms of housing. So something must be done at the national level. Should you really be offering all those courses in English? The answer to that question varies from institution to institution and city to city, by the way.'  
'And as well as that: build like crazy. ■'



## The battle for the landscape: the floodplains

# Opposing Manhattan on the Rhine

The floodplains near Wageningen narrowly escaped development with lots of high-rise buildings 50 years ago. Thanks to opposition from concerned people at WUR. Text Roelof Kleis

**W**hat is the most popular walk in Wageningen? Undoubtedly the one along the dyke that skirts the town centre. It's a delight in all seasons and at any time of day. So take a good look at the picture accompanying this story. Or even better: the related scale model in De Casteelse Poort museum. The floodplains as envisaged 50 years ago, with high-rise buildings as far as the eye can see. Manhattan on the Rhine.

The megalomaniac plan was swept off the table thanks to the D66 Housing minister Hans Gruijters, who scrapped it. But just as much thanks is due to people like Beatrice Kesler, then a university lecturer at the Agricultural College. She and her allies – most of them from the College – doggedly fought the plans to build on the floodplains. At the end of this month, Kesler – now 81 – will give a lecture on that battle for the landscape.\*

### Opposition

Kesler really got involved in the opposition to the plans in 1969 pretty much by chance, she says on the phone. She has now been living in northern France for over 20 years, running La Gabrielle holiday accommodation. 'I was living in De Nude at the time. I was married, had a baby and had just graduated from the Agricultural College as a residential ecologist. These plans for the floodplains had existed for a long time, but I had never really looked into them. Until one day I was approached with the question whether I knew

anything about demographics and population growth. A group was working on an objection to the building plan. They wanted to know if the demographic data it was based on were correct.'

At that time, the plan to build all over the floodplains was already at an advanced stage. The seed had been sown as early as 1951 by Mayor Maarten de Niet. 'De Niet was a man with a mission,' says Kesler. 'The town needed more allure and he wanted to facilitate the growth of the Agricultural College and institutes in the city. This required a substantial expansion. The problem was that the Agricultural College owned almost all the land around the town and used it for experimental plots. So De Niet turned his attention to the floodplains, seeing no other option. But nobody has ever seriously questioned the inviolability of those experimental plots.'

### Unlikely

Kesler soon realized that the projected population growth was improbable. 'The mayor's firm belief was that the town was going to grow. But the figures were highly unlikely. They thought there would be 14,000 students in the 1990s. WUR has only just reached that number now. In terms of population growth, they counted on a city of 45,000 to 50,000. The population still hasn't reached that level. But such growth called for 5,600 new homes.' The real shock came when she studied the plans herself. 'My hair stood on end. Ninety per cent of the construction consisted of high-rise buildings, with blocks of flats of up

to 15 storeys. At the time, Wageningen already had the Pomona flats and the ones on Asterstraat. That was quite enough high-rise for such a small town.'

Kesler joined the concerned citizens a year after the town council had approved the zoning plan. The province had ratified it in 1969, despite objections. All that remained was the proceedings at the Council of State. The plan came up for discussion twice there: first in 1972 and then a modified plan with fewer high-rise buildings was discussed in 1975. Kesler addressed the latter session. Only three members of the initial opposition group were left, due to relocations. 'But various campaigns and publicity spurred others into action too. An issue that initially only interested people at the municipal council and in the Agricultural College administration had now reached the ears of town residents. And they did not support the floodplain plan at all.'

### Party

Apart from high-rise buildings, the plan was controversial for other reasons too. Kesler: 'It was clear from the start that it was going to be very expensive. The dyke had to be raised, and the whole site had to be raised by one and a half metres. All the infrastructure had to be built at once. Because it was so costly, high-rise buildings were needed to make it viable. Later, the plan was revised to cater for the objections to high-rise build-

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'It was clear from the start that it was going to be very expensive'

ings. But then the houses became so expensive that no social housing was possible.' In the spring of 1976, seven years after the town council gave the plans the green light, minister Gruijters ditched them once and for all. Against the advice of the Council of State, incidentally. So was it party time? 'Oh no,' says Kesler. 'As far as I can remember, we weren't directly informed of the minister's decision. We just read about it in the newspaper.' But that didn't diminish the satisfaction. Kesler still visits Wageningen and its floodplains very regularly. 'My daughter lives there and my granddaughter studies at WUR. I still walk along the dyke regularly. The floodplains have become a beautiful nature reserve. What do I think of that? I think, we nailed it in the end!' ■

*\*Beatrice Kesler's lecture is on Tuesday 28 February at 20:00 in the Wageningen Public Library. Admission is free.*



The model of the floodplains plan: the expansion of the town would consist of 90 per cent high-rise buildings, with 15-storey flats. • Photo Guy Ackermans



# FAITH ON CAMPUS

Where on campus can you go to practise your faith? Although WUR is politically and religiously non-aligned, it does have places you can retreat to, to pray for example. Where are these places and do they meet the requirements? *Resource* investigated. Text Milou van der Horst • Photos Guy Ackermans

**W**UR itself does not publicize its prayer rooms, or ‘quiet rooms’ as it calls them. ‘WUR is a secular organization, so we don’t support particular political and religious activities and we don’t designate rooms for prayer specifically,’ says Joris Fortuin, head of Integral Facilities Management. ‘But we do provide places that people can withdraw to.’ These rooms are quite hard to find though, *Resource* discovered. Most of them are tucked away in a side wing or on one of the higher floors. Plus, you have to happen to know that the Churches & Contemplation webpage provides an overview, albeit outdated. And in some cases you need to ask for a key card at reception.

## First aid and expressing room

The quiet rooms are intended for a range of purposes. In some of them you can take a power nap and in others you can carry out medical procedures or pray. Three of the six quiet rooms are also for breastfeeding mothers to sit in to express milk. These spots can be reserved via an Outlook calendar. Fortuin: ‘For each building, the man-

agement of the science groups or other organizational units allocates the rooms to particular uses according to the needs of their employees.’ The building managers don’t usually know whether the rooms actually meet those needs: no research is done on that. But Fortuin would welcome a user survey. ‘It has been a while since we set up the quiet rooms.’ The administrators and Fortuin are also open to making changes to the quiet rooms. They would have to discuss this with the building and site managers. Gaia’s building manager Marrit Nolten has received the occasional request for a modification: ‘Someone asked for facilities for washing your feet. But we couldn’t install a water pipe just like that.’

## Radix room busy

A few phone calls with building managers reveal that, with the exception of the one in Radix, most of the quiet rooms are not heavily used. Judging from the Outlook calendar and the birth announcement cards and baby pictures on the walls, expressing milk is the

most common activity in them. But in Radix, the quiet room does get intensive use, especially by foreign students and guest staff, says Radix building manager Sonja Nooy. It is mainly Muslims who use the room, which has prayer rugs and Korans in various languages. And there is a low washbasin, although it is not very user-friendly as women can’t perform the washing ritual, which involves taking off their head coverings, secluded from the men. And the floor can get very wet.

Zaki Ruhyaman, a board member of the Wageningen Muslim student organization Avicenna, confirms that many members pray in Radix – even taking it in turns at busy prayer times. ‘The ideal number for prayers in the room is a maximum of four people,’ he says. ‘But

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**‘WE WOULD LIKE TO ORGANIZE A CHURCH SERVICE DURING THE WINTER AID AS WELL’**



The quiet room in Radix is heavily used, especially by foreign students and guest staff who come there to pray.

sometimes there are 30 people waiting, so we settle for praying nine at a time.’ Ruhyaman would therefore like to see more quiet rooms on campus, preferably one in each teaching building. ‘It takes time to go from Aurora to Radix between appointments, for example, and that can be stressful. That’s why our members often just look for an empty classroom. But they are hard to find at busy times. Besides, you don’t want to be disturbed or to disturb others. And an ordinary classroom does not have suitable washing facilities or storage space for prayer mats and Korans. The quiet room in Orion is not adequate either, for the same reasons.’

### One service a year

Christians need a designated prayer room too, says Linda Juma of the Christian Student Fraction (CSF). She has asked for one several times, even.

‘There are only one or two places where you can pray quietly or do Bible study.’ Currently, CSF members usually use the quiet room in the Forum Library for these purposes, but it is often occupied, according to Juma. ‘And not all the other quiet rooms are suitable because they are used for other purposes too. The room in Radix, for instance, is furnished with Korans and prayer mats. We want to connect with God alone.’ Joël Kampen of the Association of Reformed-Church Students at Wageningen (VGSW) would also like to see a space created for large joint services: ‘Unfortunately, the university only allows the Christian students associations to organize a joint welcome service on campus once a year: during the summer AID.’ According to Josine van der Horst, a student chaplain at the student platform and chaplaincy Spectrum, the AID committee is currently pushing for

## ‘SOMETIMES THERE ARE 30 PEOPLE WAITING TO PRAY’

that welcome service to have a broader ‘religious and spiritual character’: ‘There should be room for Muslims and Buddhists as well.’ But in general, WUR is keen to maintain its secular status, says Van der Horst. ‘That is why the Christian student associations hold their celebrations off-campus, in places like the Arboretum Church or the Grote Kerk in the town centre.’







An arrow on the floor of the Radix quiet room points towards Mecca.



Other joint activities such as Bible study groups are held in student society club-houses or at members' homes.

### Hindu holidays

Aravind Thanikai Arasu is a Hindu, but does not feel the need for a special room for his religious activities. 'I pray in my room,' he says. He doesn't think other Hindu students miss a physical space of their own, either. He belongs to an Indian student association that celebrates Hindu holidays such as Diwali and Holi in small groups. 'Those celebrations are open to everyone, including non-Hindus, just like they are in India.' The association has organized Diwali and

Holi celebrations in the Bongerd several times. 'The fact that we can celebrate these festivals at the Bongerd shows WUR's willingness to facilitate opportunities for students to attend diverse religious and cultural events.' Bongerd director Henri ten Klooster agrees to some extent: 'We don't involve ourselves in the specifics of the activities. But to me the Holi festival seemed to bring people together through colours more than through religion.'

### Meditation

Spectrum organizes a well-attended mindfulness meditation session for staff and students in the Forum Library twice a week. So does WUR facilitate that? 'Everyone can benefit from mindfulness,' says Ania Ektate, who does not call herself a Buddhist but practises the teachings of Zen Buddhism. She is a Spectrum board member and runs the meditation sessions. 'We would like to have a designated space for meditation, with storage space for the mats and cushions,' she says. 'But the Forum Library is very open to our meditations. I think that's because people realize that meditation helps against stress.' ■

### Support and dividing line

There is a long tradition of student chaplaincies at most universities, including WUR. Until 2012, the student chaplaincy was housed in Duivendaal, where fortnightly church services and Bible studies were held. In 2012, the student chaplaincy merged into Spectrum and its focus broadened to spirituality rather than Christianity alone. WUR still has three student chaplains, who work at Spectrum but are employed by a local Protestant church, the Protestant Church of the Netherlands and the Mennonite congregation respectively. The chaplains are there for everyone, whether religious or not. Van der Horst: 'Unfortunately, we no longer have a Catholic chaplain, but we do have a Zen Buddhist life coach. We would like to have an imam on the team as well!' The chaplains are not paid by WUR, but the university pays for the books and office space in the Building with the Clock, provided they do not use the building for religious activities. Van der Horst: 'It is nice that WUR offers space for our activities.'

Avicenna board member Ruhyaman thinks the dividing line drawn by WUR is a bit too rigid at times: 'As a Muslim student organization, we do a lot for people's mental health too. Together with Spectrum, for instance, we recently organized a lecture on depression from the perspective of the Koran and the Bible. We held that meeting in Thuis because WUR policy meant it could not be held on campus due to the religious angle'. Actually, Spectrum quite often uses venues off-campus, Van der Horst explains. 'It would be handy to have our own space on campus, but at present we often make use of Thuis, which is spacious and low-threshold.' A bit more publicity for Spectrum would be welcome too, says board member Ania Ektate. 'Everyone knows where to find a student psychologist, dean or GP and we refer students to those bodies too. It would be helpful if WUR in turn referred students to organizations like Spectrum.'



# THE SIDE JOB

**You've got to make ends meet somehow. We can all borrow from Uncle Duo, but there are also students who earn money in unusual ways, such as Maartje Vijgenboom (25), a Master's student of Biology. She puts her senses to good use as a 'sniffer' in a sensory lab.** Text Steven Snijders

'It isn't always pleasant, like when I have to assess the smell of a pigsty. I am never told what I will smell, and it usually remains unclear to me what the smell is exactly: it's just a bit gassy or a bit soapy. And my colleagues and I don't talk about it so we don't influence each other. I work at Bureau Blauw, an institute for air quality research. I get asked

## 'On my first day it felt weird to sniff at a machine'



Photo Jacco Löwer

a lot of questions about my work, so it's nice to be able to explain it here. Bureau Blauw takes samples from factories and tests them for odour concentration. It might be about one particular substance from a production process, for example. As a panel member, I assess the perceptibility of the odour. And I sometimes also rate the pleasantness of the odour on a scale of -4 to +4.

'Before I smell the substance, I smell some buthanol to "reset" my nose. Comparable to taking a bite of a dry cracker and a sip of water when you're on a tasting panel. Then two tubes come out of a machine. One tube contains the odour sample, the other a placebo.

The machine mixes clean air with the odour sample in the appropriate concentrations. At first the smell is at low concentrations and the concentration is gradually increased.

'When I heard about this work in my first year as an undergraduate, I was sceptical. On my first day, it felt weird to sniff at a machine. But it is a chill way of earning some money, and I can do my own work between the tests. Sometimes I study during my working hours. I do have sharp senses, but you don't have to have an extremely good sense of smell to do this: what they really want is a panel that is representative of the average Dutch person's sense of smell. So you can't join if your sense of smell is especially strong or poor. My friends really think it's definitely the right job for me. And it isn't always nasty. I got to smell coffee once too!'

## Maartje smells all sorts

**Who:** Maartje Vijgenboom

**What:** Smelling samples

**Why?** Maartje has a good sense of smell

**Hourly wage:** €11.16 per hour (minimum wage)

Do you have an unusual side job or know someone else who does? Send an email to [steven.snijders@wur.nl](mailto:steven.snijders@wur.nl)



You can find all the flavours of the world in the WUR community. Anna Celli, a project assistant at WUR Student Challenges from Italy, shares a recipe for Amaretti cake.



Flavours of WUR



Anna Celli  
from Italy

## Amaretti cake

'I grew up in northern Italy, where winters hit a bit harder than you might assume and we don't like to skimp on butter. This cake is no different: it is the perfect indulgent buttery cake for the winter months and, in my eyes, it's the Italian amaretti-flavoured version of a brownie. It is also one of the first and easiest desserts I have ever made, and it never fails to impress! I'd encourage you to give it a try at a board game night, as a Valentine's gift or simply as lovely wintry comfort food!'

1 Grind the amarettini in a bowl and add sugar, flour and cornmeal.

- 2 Add the eggs and cooled-down melted butter.
- 3 Mix thoroughly and pour in a baking tray. The batter should be around 2 to 3 cm thick in the tray.
- 4 Bake in a preheated oven at 180°C for 25 to 35 minutes. The top should be crunchy, but the centre should still be gooey. Let it cool down and enjoy!

### 10-euro lunch voucher

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[resource@wur.nl](mailto:resource@wur.nl)

### Ingredients (for 2 people) :

- 200g of melted unsalted butter
- 200g of sugar
- 2 eggs
- 100g of flour
- 100 g of cornmeal (NOT corn starch or cornflour)
- 100g of amarettini or Dutch *bitterkoekjes*



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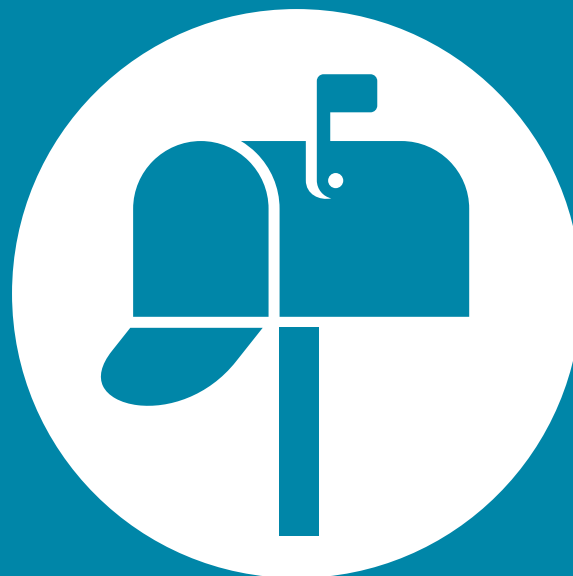
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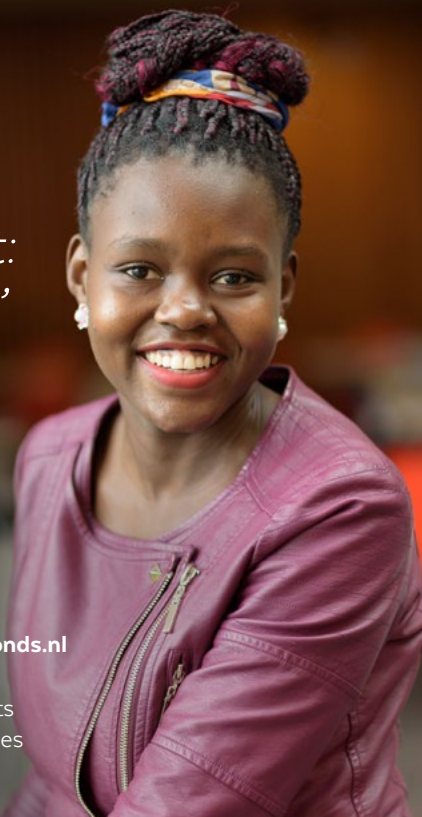
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*Resource* is the independent medium for students and staff at Wageningen University & Research. *Resource* reports and interprets the news and gives the context. New articles are posted daily on [resource-online.nl](http://resource-online.nl). The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

**Contact** Questions and comments for the editors:  
[resource@wur.nl](mailto:resource@wur.nl) | [www.resource-online.nl](http://www.resource-online.nl)

**Editorial staff** Willem Andrée (editor-in-chief), Helene Seevinck (managing editor), Roelof Kleis (editor), Luuk Zegers (editor), Marieke Enter (editor), Coretta Jongeling (online coordinator), Thea Kuijpers (secretariat).

**Translations** Clare McGregor, Meira van der Spa, Clare Wilkinson

**Design** Alfred Heikamp, Larissa Mulder

**Overall design** Marinka Reuten

**Cover Photography** Guy Ackermans

**Printing** Tuijtel, Hardinxveld-Giessendam

**Subscription** A subscription to the magazine for one academic year costs 59 euros (135 euros if abroad). Cancellations before 1 August.

**ISSN** 1389-7756

**Publisher** Corporate Communications & Marketing,  
Wageningen University & Research







## ATLAS FOOTBRIDGE TO GO

The Atlas footbridge will be removed in the spring. The 65-metre-long bridge will be replaced by a door on the ground floor.

This is in response to the many complaints over the years from both students and staff. 'Staff working in the building have to walk up the footbridge at least twice a day,' explains building manager Art Hill. 'Most days, it's either pouring with rain or blowing a gale, or the sun is beating down mercilessly on the asphalt. According to our survey, the bridge makes people less keen to come to work and reduces their enjoyment of their job. Another issue is that a lot of the women who work in Atlas wear high heels and the footbridge is a nightmare for them.' The Student Council is also pleased with the plan. Chair Maia Hermes: 'While not many courses are taught in Atlas, when they are it always causes problems with students arriving too late. You need to leave home earlier to allow for the footbridge, which adds at least five minutes to the journey time. Our preferred option is for no student to ever again have to visit this intensely boring building, but even a normal door on

the ground floor would be a huge improvement.' The footbridge was part of the original design for Atlas. 'Won't the removal of the bridge destroy the architectural integrity?' 'We think the building will be fine without it,' says building manager Hill. 'The original design also had greenery growing up the grid on the exterior of Atlas. But that didn't work out in practice because there isn't a single climbing plant in the Netherlands that can reach so high and stay green all year round. So there is not much left of the original design anyway!' Incidentally, the footbridge won't be dumped as waste; it will be reused as a footbridge over Mansholtlaan. After that road is expanded to 10 lanes, it will be too wide to cross any other way.