# Resource

APRIL **2023** VOLUME **07** 

The journalism platform for all at Wageningen University & Research

Goodbye plastic Hello oat milk No elections for student council

PhDers on grants are hard up

Pilot for 'smarter' academic year

**75 extra permanent** (fulltime) jobs

Hans Zomer resistance hero, spy and student | p.20

Red alert for councils p.12

GENALLEN IN DEN STRIJD TEGEN DEN DUITSCHEN OVERWELDIGER 1940-1945

G.BERGER ELTIEN KRIJ. HE J. B. NIJHOTI

DE AMANUENSIS

OTUDENTEN

J.K.S.ANEM B: BILL SAUFOR - G.A.BEERLING - S.J.BODDE - PH.CORTS SVAND DEN A.M.C. DOLK - J.A.VAN DONGEN - G. FIJNVANDRAAT J.J.L. GEEL - B.VAN G. LDER - H.A.HAVE - D.VAN DER KNAAP - J.DE KONINK J.H.KREMER - W.E. LANGGUTH STEUERWALD - L.MEIJER - J. TH.OUDEMANS J.PINKHOF - N.G. POELSTRA - J.W. SCHOUTEN - J. SEINSTRA - J. R. SNELL I. SPRECHER - J. H. STEKETEE - A.W. SURINGAR - A.A.SYBENGA

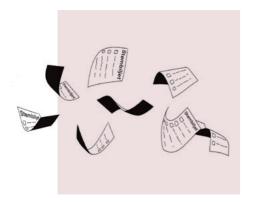
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#### **Matters of opinion**

WUR President Sjoukje Heimovaara said last year in our alumni and asociates magazine Wageningen World that we should treasure the wealth of different opinions within WUR, but that she would prefer Wageningers to debate with each other on campus, not in newspapers or on TV. That isn't really working yet. In a rather chaotic broadcast, the TV programme Zembla claimed last week that WUR scientists have conducted a 'one-sided and misleading' lobby for genetically modified food. One of the things the programme criticized was a statement by WUR professor John van der Oost about eliminating hunger with CRISPR-Cas. When confronted with Van der Oost's words, Ernst van den Ende, director of the Animal Sciences Group, called them - after some goading by the journalist - 'one-dimensional' and 'unwise'.

What Zembla didn't say was that last year WUR made five CRISPR-Cas patents available free to NGOs that aim at improving global food supplies. The patents are based on Van der Oost's research. No wonder he believes in the technology's potential. Van den Ende has reservations about Van der Oost's conviction. I suspect that's because he's worried that companies like Monsanto will run off with the patents. Because then we will be at their mercy, as the programme convincingly suggested. In short: the kind of difference of opinion that goes with the territory of academia. Perhaps just as well that it was aired freely off-campus. Talking of freedom, a reading tip: on page 20 there's an untold story about a WUR student in wartime for whom there was no happy ending. So whatever happens, let's not forget how lucky we are to be allowed to disagree.

Willem Andrée Editor-in-chief





Photo Guy Ackermans



#### No Student Council elections

The Student Council elections have been cancelled because there are not enough candidates. WUR's Student Council has 12 seats, but fewer than 12 students are standing for election, so elections are unnecessary.

Student Council president Wybrig Bakker: 'The decision's been made: there will definitely not be elections this year. We are now discussing what that means and where to go from here.' The Student Council wants to work on its visibility, says Bakker.

Other consultative bodies are struggling to find candidates too (page 12). Student participation is in decline right across the board (page 24).

Read more at www.resource-online.nl

### New coffee machines: no to plastic cups, yes to oat milk

WUR's contracts for coffee machines with Jacob Douwe Egberts and Maas are expiring. Maas won the tender for new machines and will supply all the coffee machines on campus from 1 July.

The new machines will have 'the appropriate upgrades', says Marcha Sperna Weiland, Food and Beverage contract manager at Facilities & Services. 'They will all serve freshly ground coffee, for example.' Besides regular milk for the cappuccino, coffee drinkers will soon be able to choose oat milk, a plant-based alternative aimed at contributing to the protein transition.

#### Disposables law

Also, the machines will no longer dispense plastic cups, unlike the Jacob Douwe Egberts machines that are still in the education buildings. The arrival of the new coffee machines coincides with the introduction of new Single Use Plastic (SUP) legislation. From 1 July, no free disposable cups may be provided for refreshments 'to go' and from 1 January 2024, that will also apply in places where refreshments are consumed on the spot, as is the case with



office vending machines.

'Our goal is to have only reusable cups in use,' says Sperna Weiland. 'Although we still have to look into what changes need to be made in each building. There aren't dishwashers everywhere, for instance, and we can't install them overnight everywhere.'

A large tender for the campus catering is also currently underway. From the summer, a single company will provide the catering in Orion, Forum, Aurora, Leeuwenborch and Atlas. Lz

See also pages 23 and 26.

## Pilot for 'smarter' academic year

The academic year at Dutch universities goes on nine weeks longer than in other European countries, according to a report by De Jonge Akademie. That could be more efficient, and the workload needs reducing too, thought education minister Robbert Dijkgraaf. So he allocated 13 million euros to experiments with cutting the number of teaching weeks.

Of that funding, 900,000 euros will go to WUR, which is participating in the pilot in three areas. The first is an adapted resit policy, which will take effect from Sep-

tember and ensure longer summer holidays. Policy officer Jetske ten Caat: 'With the extra funding, we can monitor this properly and see where there is room for improvement.' Ten Caat emphasizes that in the case of the resits, this is not just a pilot, but a new policy.

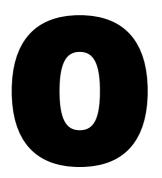
The second area WUR is involved in concerns increasing flexibility using digital developments. For instance, the opportunity to review your test could perhaps be offered digitally so that student and teacher do not have to be in the same

room at the same time.

In the third area of study, undergraduate programmes in Forest and Nature Management and Plant Sciences will look at the overlap in their curriculum, Ten Caat explains. 'How do the courses fit together and can these programmes be run more efficiently for the benefit of both students and teachers?'

The pilot will run for four years.  $\mbox{\ensuremath{\sf LZ}}$ 

Read more at www.resource-online.nl



The proposed abolition of VAT on fruit and vegetables in the Netherlands only seems to be disputed because of legal hair-splitting over definitions. Unacceptable, say Professor Emely de Vet, associate professor Maartje Poelman and postdoctoral fellow Sanne Djojosoeparto of the Consumption & Healthy Lifestyle chair group. They have put their names to an appeal to the government to stick to the zero rate. 'The government should not allow legal complexities to outweigh public health.' ME

# Farewell, dear Milou

At the end of March, the editors had to say their last farewell to Milou van der Horst (30), who started here as a student editor 10 years ago and had been with *Resource* as a freelance editor since she graduated.

Despite her ever-sunny smile, enthusiasm and interest in others, we knew that life wasn't easy for Milou. Her first *Resource* story was about herself and her years of struggling with anorexia. Her last big story, about religion on campus, made the cover of *Resource* in February. It was obvious from readers' responses that she had written an important story. If we wished anyone light in their life, it was Milou. But life became too hard for her after her mother's death. The Resource team will miss Milou terribly. wa

# Millions from ministry for more 'space and security' (i.e. permanent jobs)

Dutch universities will be getting an extra 200 million euros a year, education minister Robbert Dijkgraaf announced recently. Most of this is earmarked for funding more permanent posts for lecturers and researchers. At WUR, it means the equivalent of about 75 additional permanent full-time positions.

Dijkgraaf has allocated the funding on the basis of four so-called sector plans, in which the universities and research universities are to act – in close cooperation – on their 'wish to strengthen the foundations of scientific education and research', in the words of the assignment. WUR is involved in two of those plans: Technology and Science. Through the Technology sector plan, 5.5 million will go to WUR. Most of that money is for new Wageningen jobs in the disciplines of Agrotechnology & Food Sciences (14 posts) and in the design-oriented engineering sciences (12 posts). These include jobs in the further development of artificial intelligence for agriculture, and jobs working on overhauling Dutch water management.

#### Space and security

Through the Sciences Sector Plan, over 8 million euros will come to Wageningen, mainly to strengthen the disciplines of Earth and Environmental Sciences and Biology. Biology will gain just under 30 permanent jobs and Earth and Environmental Sciences 21.5 FTEs. The thematic emphasis will range from climate change, ecosystem services and health

& environment to 'adaptation to a rapidly changing world' or 'transition to sustainable landscapes'.

The extra budget has not come out of the blue. Dijkgraaf announced the funding through the sector plans last June; Resource noted mixed responses to it at the time. According to Dijkgraaf, the extra millions could do much to give university staff more 'space and security'. He says in his parliamentary memo that 'staff should be systematically involved in the implementation of the plans,' and that 'universities should facilitate their input and that of the staff-student councils.' ME

You can help others out while you eat throughout April at the student-run pop-up restaurant Happietaria. Co-organizer and International Land and Water Management student Eve-An van de Brug: 'Our goal is to raise 40,000 euros. All the money will go to rural Haiti. There are few opportunities for young people there, so they tend to move to the city and often end up in criminal circles. The organization our proceeds go to, Tearfund, trains young people in growing crops, book-keeping and marketing. They are also given their own plot of land, and once they've had training, they can pass their knowledge on to people in their community.' Until the end of April, those wishing to dine out for a good cause can eat at Happietaria Wageningen in the old chemistry building on the Dreijen. IB

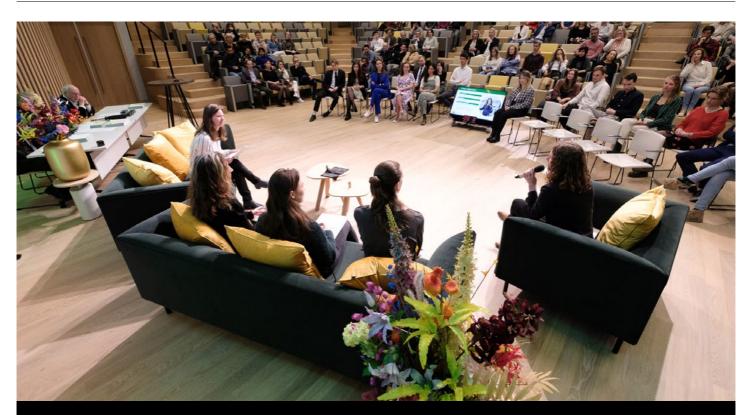
# Conflict over plaque for war victims

A plaque commemorating WUR's war victims may not be located on campus after all. WUR and the municipality are discussing a suitable location. And that could also be off campus, according to WUR spokesman Vincent Koperdraat. The plaque - a 1 x 1.5-metre slab of marble made by stonemason G. Keuzenkamp - was bricked into the Aula after the war. When the Aula was handed over (by WUR to project developers BOEi/Van Swaay) last summer, the stone was moved to the campus and put into storage because, according to WUR, it was not included in the sale. The heritage organization Wageningen Monumentaal

thinks that is wrong and wants the plaque returned to the Aula. Whether that will happen is still uncertain. Engraved on the stone are the names of thirty students and five staff members who were killed during World War II.

#### Espionage

One of them was Tropical Forestry student Hans Zomer. He was shot in Sachsenhausen camp for espionage activities in May 1942. Read his story on page 20. RK



The setting in Omnia is a bit like that of a talk show. A chat with the fresh MSc graduates, sitting on a comfy sofa. This new, more informal graduation ceremony is popular with the students, professors and lecturers alike. There's still a place for the familiar rituals, with the signing of the degree certificate and the presence of the beadles. There are graduation ceremonies throughout this week, and a total of about 400 MSc students will receive their degrees in April. RK Photo Guy Ackermans

## De Bongerd gym gets makeover

The gym in Sports Centre de Bongerd is due for a complete makeover. All the old equipment will go, a new floor will be laid and new equipment has been purchased, says the head of the sports centre, Henri ten Klooster. 'Only the strength training equipment in the Nautilus area will be kept. That section was finished in 2020 and is still in good condition.' Sportspeople can expect to find most of the same kinds of equipment as in the current gym. A new element will be a permanent outdoor fitness area where the climbing wall is currently located.

The gym will be emptied on 7 and 8 June, just before the start of the Great Dutch Student Championships (9 - 11 June). The renovation work will start immediately and the new gym will be ready on 23 July. In the interim period, a temporary gym will be available in sports hall  $4c.\ LZ$ 

Read more at www.resource-online.nl

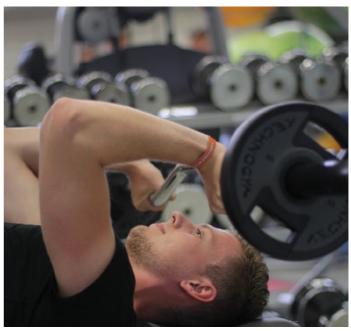


Photo Marte Hofsteenge

## PhD students on grants are hard up

A large number of international PhD students earn too little. WUR is investigating the possibilities for supporting them.

International PhD students living on grants are struggling to make ends meet. Their grants were not a fortune to start with, but inflation is making things even harder. As a consequence, some PhD students are living below the lower income limit set by WUR for a PhD student.

PhD students on grants are not employed by the university: their PhD programmes are paid for by an external financier. WUR has a lot of these externally funded PhD students, many of whom come from China. Chinese scholarship students have to get by on 1350 euros a month. That is below the IND (Immigration and Naturalization Service) norm applied by WUR, which is 1450 euros per month. 'And that's where

there's a bottleneck,' says rector magnificus Arthur Mol. 'Because of the steep rise in inflation, some of the PhD stu-

WUR is looking into at whether a supplement is possible financially and fiscally

dents who started at WUR a few years ago are now on a lower grant than the current IND standard.

#### Supplement

How big a group is affected is currently being studied. It may include several hundred out of a total of 2400 PhD students. According to figures from Universities of the Netherlands, nearly 40 per cent of PhD students at WUR are externally funded. Around 400 (nearly

17 per cent) of them are Chinese and came on a scholarship from the Chinese Scholarship Council.

WUR's Executive Board is concerned about the plight of the affected PhD students. Mol says the Board is looking into the financial and fiscal scope for supplementing their scholarships, and is discussing the matter with the regional tax office. It is not clear yet whether the support is financially feasible for WUR, either. Mol: 'That depends on the number of scholarship students living below the norm, and the period involved. The PhD interest group Promovendi Netwerk Nederland shares the concern about the difficulties faced by international PhD students on grants. The organization is planning a survey to get an overview of their working conditions and financial situations. RK

#### [Live&Learn]

A failed experiment, a rejected article: such things are soon labelled as failures in academia. As for talking about it – not done! But that is just what WUR scientists do in this column. Because failure has its uses. This time we hear from Marten Scheffer, professor of Aquatic Ecology & Water Quality.

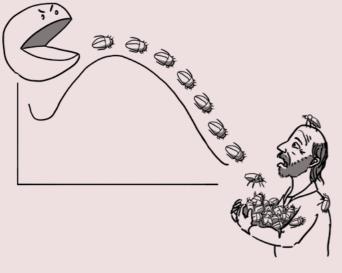
Text and illustration Stijn Schreven

'I wrote two articles when I was a student. The first was accepted without much difficulty, but my second was rejected out of hand. It was about the population dynamics of beetles and its dependence on density. A fellow student and I thought you must be able to describe the dynamics with a simple curve. But that bold idea put the reviewers' backs up. We got grumpy reviews to the effect that 'if it was that simple, we would have hit upon it too'. I didn't think they were right, but there was no arguing with them, I thought at the time. It felt unfair, like I was a junior encroaching on the territory of a big angry alpha male. We didn't resubmit the article. I still regret that. There was nothing wrong with our idea, and we may have been ahead of our time. I shelved it and moved on. By now I have a list of dozens of ideas waiting for the right time to come.

I recently realized that our idea was very similar to an approach we published about in *Science* a few years ago. That makes me curious, and I do want to take another look at it. It would

### 'The trick is to be thick-skinned'

be nice if we could still publish it 40 years later - the ultimate revenge on the reviewers. When you have an original idea in science, you soon come in for criticism. The trick is to be thick-skinned so the criticism is like water off a duck's back. To some extent that's a character trait. Science today is so harsh that it filters out hesitant people. That is a flaw in the system because the nuances that doubters contribute are precisely what is needed. In our group, we try to achieve diversity by hiring researchers with different personalities.'



# What will be done with WUR's 7.7 million

The UN Water Conference in New York in March ended on a positive note, and with an allocation of 7.7 million euros to WUR for two years of food and water research. Petra Hellegers, head of the Water Resources Management Group, explains what the plans are.

From desertification to flooding, water-related problems are increasingly putting food security at risk. With the 7.7 million in research funding, Hellegers and her colleagues are collaborating with 20 partners who want to contribute to the changes needed. They include Dutch ministries, UN departments and the World Bank, as well as the avocado importer Nature's Pride, Van der Hoeven horticulture projects and SeedNL. This Global Working Group on Water and Food is working on four action points:

#1 Increasing the resilience of water and food systems. As rainfall becomes increasingly variable and the world becomes more unstable, how do you make water and food systems more robust? Hellegers: 'By choosing different crops and drought-resistant seeds, for example, and by looking at the role of trade policy and food stocks'.

**#2** Making the local impacts of global trade visible. When most people think of saving water, they still think of shorter showers, and not the impact of their food consumption on water systems. Too few people know that globally 70 per cent of the water we use goes into food production.

#### #3 Distributing and valuing water differently.

When water scarcity occurs, the farming of staple foods is often the first sector to lose access to water. 'That is purely based on money, but we need to include other values besides financial ones when we prioritize who can claim what water and when. Like the social value of stability.'

**#4 Changing our diet. And: food waste is water waste.** 'About 40 per cent of all food is wasted somewhere in the food supply chain. In consumers' homes, through harvest losses, and losses in transport, storage and retail outlets.' A thorny issue is the ever-growing livestock industry. Livestock eat food grown using lots of water. RL

# The 'real' price of meat is high

There are risks associated with eating meat.

Eating too much red and processed meat
causes illness. And meat production is harmful
to the environment. So what does meat cost
when you factor those costs into the retail
price?

A lot, according to study by WUR economists. The calculations were commissioned by the Vegetarian Union and the TAPP (True Animal Protein Price) Coalition. Annually, excessive meat consumption leads to 253,000 new diabetes patients, 100,000 cases of colon cancer

The medical costs of excessive meat consumption are 1.1 billion euros a year

and 20,000 patients with cardiovascular diseases. For the purposes of these calculations, excessive consumption means more than six kilos of red meat per year. For processed

meat, there is no safe lower limit. The medical costs associated with excessive consumption of processed meat come to 1.1 billion euros a year.

#### Twice the price

We all help cover these health costs through our health insurance. But what if those costs were factored into the meat price? Consumer organization True Price provided the methodology for calculating the health cost per kilo of meat. A kilo of beef would cost 7.50 euros more and would come to nearly 25 euros. Processed meat (sausages, salami, pâté) would be 4.30 euros more expensive, bringing it to nearly 13 euros per kilo.

According to the researchers, the calculations are on the conservative side. The research clients had previously asked the independent think tank CE Delft to calculate the environmental costs of meat consumption. For beef and processed meat, that yielded an additional 5.70 euros. That would bring the price of a kilo of beef that included both health and environmental costs to nearly 29 euros. That is two thirds more than the current price. The price of processed meat would go up to more than twice the current price at 18 euros. RK

# No more grid congestion

The ever-growing number of solar panels in the Netherlands is causing congestion on the power grid. To address that problem, PhD student Frank Kreuwel developed a programme that anticipates the congestion.

Problems on the grid arise as soon as more energy is generated than consumed. Grid operators try to solve voltage problems by creating more infrastructure. But that is not enough, says Kreuwel, who works for the energy company Liander.

To prevent problems arising, the existing network needs to be used in a smarter way by anticipating bottlenecks in good time. And that is just what the computer programme Kreuwel developed can do. It predicts down to the minute how much solar radiation there will be and therefore how much energy will be generated. Quite a feat, given that the best weather models can only predict an hour ahead.

The problem is that you still don't know exactly when during that hour the sun will shine and how big the power peaks will be. Those peaks also depend a lot on whether it is

cloudy. If it is, a power peak can be up to 22 per cent higher than it is if there are no clouds. This cloud effect was discovered by Wageningen meteorologists a few years back. It is not just direct sunlight that falls on solar panels, but also indirect light in cloudy weather.

#### **Peaks**

That additional light makes for extrahigh peaks in supply in certain weather conditions. Which is good for the yield of the panels, but difficult for the grid manager who has to deal with them. Kreuwel applied a trick so he could make minute-by-minute predictions. He taught the computer to link the hourly forecast with the corresponding radiation intensity per minute, sourcing the latter data from the Royal Netherlands Meteorological Institute (KNMI).

'The hourly weather forecast is processed so that it provides an estimate of the solar radiation from minute to minute within that hour,' says Kreuwel. And that seems to work well. The method is already being used in numerous places around the country. RK



PhD candidate Frank Kreuwel designed a program that forecasts solar radiation levels to the minute, and therefore how much energy can be generated. Here: solar panels on the roof of the Werkspoorfabriek in Utrecht. • Photo Jeroen van de Water/Unsplash

To avoid jeopardizing the energy transition, solar and wind farms need to be made more attractive and multifunctional. That is the gist of a joint position paper by the Dutch Nature and Environment Federations (NMF) and WUR.

'Otherwise we shall get more and more of what we don't want, even though we increasingly know what we do want,' says Sven Stremke, associate professor of Landscape Architecture. To meet the Climate Agreement goals, the Netherlands needs to be generating 35 terawatt hours (TWh) of renewable energy on land by 2030. What that means is becoming increasingly obvious, with wind and solar farms springing up rapidly around the country. Many of them look almost indus-

trial and are not exactly a pleasant sight or an appealing local feature.

Such 'industrial' wind and solar farms are shooting up all over the place because of the current subsidy system, which primarily targets the greatest possible CO2 reduction at the lowest cost. Factors such as nature or landscape are low priority. As a result, there is a surge in objections to solar farms at the moment. As for wind turbines, there was not much enthusiasm for them in the first place. Partly due to all the opposition, the implementation of the regional energy strategy (RES) is running

#### Room for improvement

behind schedule.

The objections are not unfounded, though, as long-term research by WUR

shows. The spatial quality of recent energy projects is not a patch on that of the earlier innovative examples. Promising combinations with nature, landscape or agriculture are largely absent from the newer projects - with a handful of exceptions, such as a solar farm where soft fruit is grown under the panels (see page 3). NMF and the WUR experts propose that every land-based wind and solar farm should meet a number of key criteria related to people, nature and the economy. These include leaving landscape patterns intact, preserving soil quality and preferably ensuring joint ownership of the farm with the local community. They also argue that the farms should have a dual function, combining energy generation with agriculture, nature or recreation. ME

# THE PROPOSITION

PhD candidates explain the most thought-provoking proposition in their thesis. This time it's Anna Gamza, who received her PhD in Quantitative Veterinary Epidemiology on 3 April. She used models and experiments to investigate the transmission of pathogens between broilers.



## 'Scientists should have managers like athletes or artists do'

'On the one hand, we expect scientists to be extremely specialized in their field, but at the same time they have a lot of extra things to arrange and do in connection with their research. You have to network, get grants, plot your measurements, make presentations.... Top athletes and actors, for example, have a manager who makes sure they can focus entirely on their performance. All other things are taken care of for them. I myself find networking quite difficult; it takes up a lot of head space and causes stress.

In science, not only is a lot of research time wasted on these sorts of things, but good people drop out because of the stress. You already have so little time to do your PhD research. In the Netherlands, though, it's very nice that working as a PhD student is seen as a real job; and you are considered an employee and not a student. In Poland, where I come from, you get an allowance that you can't call a salary; there, as a PhD student, you need a part-time job or a grant as supplementary income. This is also the case in the UK, where I am currently working as a postdoc in Edinburgh.

It does make a difference if doctoral researchers are seen as employees, but I think the scientific system would become even more efficient if you could leave all the things that are peripheral to your research to someone who specializes in them. Then everyone does what they do best.' RL



### Only a vote!

How impartial and inclusive is WUR? One way to answer this question is to look at the upcoming elections for the Student Council and Student Staff Council. Because there is something unusual going on there. Both councils are central participatory bodies and represent students' and employees' voices on many issues - study and workplaces, and well-being, among others. I have served as a council member before, and I have constantly been keeping myself aware of different topics on discussion and have even been directly or indirectly involved. Unfortunately, the majority of students and even employees are not aware that these partic-

#### 'This situation doesn't reflect inclusivity'

ipatory bodies exist, never mind knowing what they do or how they work. To fill the positions, elections

are conducted every academic year so that the constituents may directly elect council members that represent them to fill the positions. Speaking about elections is inseperable from talking about candidates and voters, their eligibility criteria and qualifications. This applies to all students and employees at the university who are passionately and competitively willing to stand for upcoming elections. However, certain criteria would



Joshua Wambugu

surprise you. That certain groups of constituents qualify to vote but not to stand as candidates. This applies to 1,241 (50.28 per cent) of WU PhD candidates who have no employment contract. This means 'only a vote' is needed from them, and they can't stand for elections that represent their core interests. This situation doesn't reflect the inclusivity as a guiding principle that WUR advocates and the value of its researchers as crucial capital. That leaves a question, how impartial are inclusive policies at WUR? It is time to initiate policy changes that promotes inclusiveness and representation for all. For now, 'only a vote' counts!

1a. Employed PhD	1171
1b. Employee in PhD track	56
2b. Scholarship PhD candidate other provider	430
Externally financed PhD candidate	793
External PhD candidate (external funding)	18
Total	2468

Summary table representing the total number of PhD candidates under different PhD categories as of March 16, 2023. (1a and 1b represent PhD candidates with WU employment contracts, and the rest don't have). Source: Hora Finita

Joshua Wambugu (40), from Kenya, is a PhD candidate in the Marine Animal Ecology and Environmental Policy groups. He is a Social Safety Guide with the DARE Project and a member of the project's coordinating team. He loves cooking, hiking, and birdwatching.

Scan the QR code to read the interview to welcome Joshua:



Works Councils desperately seeking new members

# 'Honestly, anyone can do it'

Staff have until 25 April to register to stand for election to works councils, but there isn't much interest in these consultative bodies. 'Many people don't really know what they are; they think they're something from the 1960s.'

Text Marieke Rotman • Photos Eric Scholten

ight years ago, the Maagdenhuis, the administrative headquarters of the University of Amsterdam, was the scene of great unrest. At first, in early 2015, students and staff were protesting against budget cuts, but it soon grew into a broader demand for more say in the university's governance, which ended in the 45-day occupation of the Maagdenhuis. The protest struck a chord and students and university staff joined in from all over the country, including Wageningen. Remarkably, newspaper Trouw concluded last February that the protests did not lead to higher

turnouts at elections, or to more

candidates for works or student councils. Last week, the Ministry of Education, Culture and Science even launched a campaign to lure more people to the voting booth.

#### Waning interest

Is there also a participation crisis in Wageningen too? Turnout for the previous elections was still relatively high, between 45 and 70 per cent for the various councils. But here, too, they are faced with waning interest: 'Last year, we did not hold elections for the two PhD positions in the council: we only had two candidates,' says WUR Council chair and associate professor of Forest and Nature Conservation Policy Jelle Behagel. 'Of course, you would rather it wasn't like that.'

Large organizations are required by law to have a works council as a way for employee to have a say in



'I campaigned hard on the issue of work pressure. For years there have been programmes to reduce it, with little effect. How can that be?'

Shelley van Haalen, who works at sports centre De Bongerd and is a member of the Facilities & Services Works Council





#### '20,000 people are affected by university policy and you get to get involved. That's just a lot of fun'

Jelle Behagel, chair WUR Council and associate professor of Forest and Nature Conservation Policy

things. In Wageningen, things are somewhat complicated because there have to be separate bodies for Wageningen University and Wageningen Research. The WUR Council is the consultative body between the Central Works Council (COR) and the Joint Assembly (GV). The works councils for the various science groups, Facilities & Services, the corporate staff and Wageningen Research are all represented on the COR by WU members. The Student Council and the COR are represented on the GV by WU members. The WUR Council regularly meets the Executive Board to discuss proposed policy changes and has veto and advisory rights regarding the Board's decisions.

#### **Bridge**

'I always enjoy giving my opinion, especially on topics outside my own work.' Livio Carlucci is a lab assistant at the Agrotechnology & Food Sciences Group (ASFG). He joined their works council and the WUR Council three years ago. In recent years, the councils have introduced changes both big and small. 'For example, we have ensured that all employees from abroad can take a Dutch language course within working hours and paid for by their own department. The same applies to Dutch employees who want to take an English course. This is super-important, but it used to be

difficult for some staff, especially PhD candidates. Now it is set down on paper, although I must say that it's not working perfectly yet in practice.' That is also part of the works councils' job, he says: 'We also monitor whether policies that were decided on are being implemented properly. If not, we go back to the Executive Board for more discussions.'

#### **Awkward moment**

WUR Council chair Behagel is pleased that the resit policy has finally been amended, after several decades. Behagel: 'Last year, the board came up with a new plan: an annual maximum number of exams students could take. We made very clear that wouldn't work. It's a policy change that benefits neither teachers nor students.' The Executive Board had been wanting to revise the resit policy for years, partly to reduce the workload for lecturers. Finally, the Council and the Executive Board reached an agreement: one less resit opportunity per year. The Student Council agreed to this, with a few firm conditions. It was an awkward moment for them: the students they represent did not want to lose a single resit. Wybrig Bakker, student council president and Master's student of Earth and Environment: 'We were the bridge between the board and students.'



Last October, the Council brought education dean Arnold Bregt and students together in Forum. 'There was a chance to ask the policymakers questions, and various pennies dropped on both sides.'

This allowed the Student Council to enter into negotiations. 'We made demands regarding scheduling, for example. We didn't want resits straight after the Christmas break. Also, the resit period at the start of the summer vacation went from one to two weeks, giving students a bit more breathing space, and there is an extra resit opportunity for students in the final year of their programme under certain circumstances.'

#### Thank you

Close involvement in policy-making is a time-consuming business. Shelley van Haalen works at sports centre De Bongerd and is a member of the Works Council for Facilities & Services. 'We meet every Tuesday, in varying combinations of people. I spend the rest of the hours reading documents and preparing on issues we want to raise. For instance, I have been working hard on the issue of the workload. There have been various programmes over the years aimed at reducing it, but we haven't seen much of an impact. How can that be?'

Heavy workloads also seem to be part of the problem in recruiting people for the works councils. All the members *Resource* spoke to are

concerned about the low number of applications. The ASFG council, for instance, has room for 15 members, but there are currently only nine. The Facilities & Services council could only fill seven of the nine spots, while there will be 11 seats next time round. The Student Council is also struggling to find new recruits (see page 24). Members give various explanations, such as the high time commitment. Carlucci says he gets an average of one and a half days' compensation a week from his employer, but when he first started it was hard to really free up that time. 'You don't immediately have fewer tasks in the rest of your work.' Moreover, says Van Haalen, people worry about how their boss will feel about them not being available for a day. 'But,' she says, 'that's the manager's problem. Making time for employee participation is a legal requirement. The response should be: thank you for wanting to do this!' Also, people don't always know about the works councils. Chair Behagel: 'Many people don't really know what they are, and they think they're something from the 1960s.' And lastly, he thinks people are more focussed on their careers nowadays. This individualization

stops PhD students from joining in,

for example: 'They want to finish

their PhD as soon as possible, and

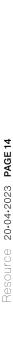
after that their contract expires.

And yet the financial compensa-

#### 'I always enjoy expressing my opinions, especially on topics outside my own work.'

Livio Carlucci, lab assistant at the Agrotechnology & Food Sciences Group and member of the works council and the WUR Council

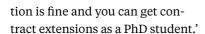






#### 'When it came to the decision on the resit policy, we were the bridge between the board and students'

Wybrig Bakker, Student Council president and Earth and Environment Master's student



#### **Bubble**

All the members we spoke to agree that the councils play a vital role. 'The managers sometimes lose touch with the shop floor,' says Carlucci. 'Then ideas come up that are well-intentioned but are not going to work.' 'You can't leave it all to the people in Atlas and the Executive Board,' says Behagel too. 'It's important to join the conversation and test how things go down with staff.' Bakker from the Student Council says, 'Within a large adult organization like this, student issues are sometimes overlooked. For example, during the coronavirus pandemic I could see that it took a toll on students' mental wellbeing. Partly at our insistence, this issue was put high on the Executive Board's agenda. We now have a flexible team of psychologists, so students can always be seen within three weeks.'

Who should run for election to the councils for the coming term of office? Carlucci: 'Anyone with an opinion. Although I would particularly encourage women, non-binary colleagues, PhD candidates and foreign colleagues, because they are seriously underrepresented at the moment.' Bakker: 'I think everyone has something to say about this organization, and it's important to make your voice heard.' Van Haalen: 'My own motivation was to get to know the organization and my colleagues better: Facilities and Services is so broad. It's good for your network. And honestly, anyone can do it.' '20,000 people are affected by the university's policy and you get to get involved in that,' adds chair Behagel. 'It's good management experience. And I personally really enjoy working with students.' And it's satisfying when tangible results are achieved. Carlucci: 'Getting something done after two years of hard work is really energizing.'■

Interested in joining one of the works councils? You can put yourself forward as a candidate until 25 April. If you're interested in helping to formulate new policies and discuss the major dossiers of the university and Wageningen Research, you can stand for election to the works council of your own workplace and, from there, possibly also get a seat on the WUR Council. The period of office is three years for staff members and one year for students and PhD candidates.

Those who sit on a works council are compensated for the time they spend on it. That is one day per week; there is further compensation for those who additionally serve on the WUR Council (see the intranet for the regulations). For students, the Student Council is a full-time position, for which financial support is also available.

There is a joint kick-off for all new members and the councils run their own training days. In addition, members can take courses during their term of office to develop relevant skills.







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#### Contamination in the circular economy

# RISKS FROM WASTE STREAMS

The possibility of using waste streams such as potato peelings, food packaging or excess manure instead of burning them is the big attraction of the circular economy. But such use is not without risks, warn researchers from Wageningen Food Safety Research. In a recent publication, they provide some guidelines for limiting the risks. Text Tanja Speek

here was a scare in 2004 when researchers at the then RIKILT, now Wageningen Food Safety Research (WFSR), suddenly found high levels of dioxin in milk. The researchers went straight into action. The type of dioxin they found had the fingerprint of a particular clay that often gets contaminated with these dioxins. They soon discovered the source of the contaminated milk: a dairy farmer who was feeding his cows on potato peel from his neighbour, who produced French fries. He had just switched to a different way of separating the good potatoes from the bad. Previously he used a salt bath, and now he used a bath with clay, which turned out to be contaminated. That is an example of using waste streams without enough consideration for the possible risks for the next link in the food supply chain. And that's a pitfall that Stefan van Leeuwen and his colleague Bjorn Berendsen of WFSR want to overcome. 'People often see us as pointing the finger, but you want to avoid having to change the way you do

things later,' Berendsen explains.

Van Leeuwen and Berendsen have devoted the past five years to research on the effects of pollutants when using waste streams. 'At the time, targets were set under minister Carola Schouten for setting up a circular economy and that provided a lot of incentive to use waste streams. We point out the risks, based on our experience.'

#### PFAS in pizza boxes

There is more to reusing waste products that feeding livestock on crop residues, though. It also covers things like recovering phosphate from sewage sludge for fertilizer, or using recycled paper sludge to improve soil. Even those streams are not without risks, as was demonstrated when pulped paper was used on German fields and the groundwater became contaminated with PFAS. Van Leeuwen: 'Many paper food packaging, such as pizza boxes, used to have a protective layer with PFAS, so that grease and moisture would not leak through the paper. The PFAS comes off

the paper and leaks into the groundwater.' Van Leeuwen and Berendsen are taking a broader look at this system in their research. They examine how contamination with substances such as PFAS or antibiotics from residual waste sludge behave in soil. Do they affect soil life? And do antibiotics break down, and if so, into what kind of substances? 'The new breakdown substances can actually be even more harmful,' Berendsen explains. 'And we look at what they do in a crop. We are running tests in greenhouses with radish and spinach. Do the plants absorb the substances and where do they usually store them? In the leaves or in the roots?' Bad news for the crops? 'Not at all, it can actually be very helpful if plants can

#### 'PEOPLE OFTEN SEE US AS POINTING THE FINGER'



An example of the danger of using waste streams was seen when groundwater in Germany became contaminated with PFAS through the use of paper sludge from things like pizza boxes. These used to be covered in a protective layer containing PFAS so that grease and moisture would not leak through the paper. • Photo Shutterstock

extract pollutants from the soil like that. But of course, it does mean you mustn't eat them,' says Van Leeuwen.

#### Massive job

It sounds like a massive job to map so many aspects of so many substances. But Van Leeuwen says, 'We start broadly. That way, at least you find out where the substance is not, so you can rule out that area. We know surprisingly little about how a lot of substances behave in the environment. Substances like plant protection products have already been extensively studied, but we still know surprisingly little about flame retardants or many veterinary drugs, for instance.' 'Like deworming drugs and painkillers, for instance,' adds Berendsen, 'and a group like PFAS includes thousands of different substances, each with different properties. You have to research that almost substance by substance.' There are long-term concerns as well. 'Especially about the substances that are very difficult to break down. These can continue to accumulate in a circular system. So what will that do in 10 years, or in 1000 years? You're affected by the legacy of the past in the present and future,' Van Leeuwen acknowledges.

#### Think ahead

For their publication, the researchers established a framework with five steps for identifying the risks: what waste product do you want to use, what are the potential contaminants, how do those substances behave, what are the risks and how bad are they? They hope this will make it easier to think ahead about the safe use of a residue stream. 'Solving a problem once it's happened takes more time,' says Van Leeuwen. The researchers are collaborating a lot with other groups at WUR. 'That's what I like about this research into circularity,' says Berendsen. 'It connects the different disciplines. We are now working a

# 'SOLVING A PROBLEM ONCE IT'S HAPPENED TAKES MORE TIME'

lot with ecology groups, process specialists and animal feed experts. They teach us what to look out for in an ecosystem or in animal feed production, and we bring in our knowledge on how to measure the way substances behave.' The researchers are seeing a gradual change in the thinking about the risks of using residue streams. Van Leeuwen: 'First of all due to stricter rules from the European Green Deal. You can also see that producers are starting to think about developing alternative substances that are already safe and do not pose a risk in our food. The Dutch take it for granted that their food is safe. We are working hard to keep it safe and keep that feeling.' ■

# STUDENT, SPY, RESISTANCE HERO

We in the Netherlands commemorate the victims of war every year on 4 May. One of them was Hans Zomer, who was a student in Wageningen just before World War II. His young life came to an end at the hands of a German firing squad.

ohan Jacob Zomer, who went by the name of Hans, was one of the students and staff of the then Agricultural College who did not survive World War II. His name, along with those of 29 students and five staff members, appears on a plaque that hung in the Aula since 1946. A silent tribute to their bravery and the sacrifice they made. Hans Zomer had the courage to work for the resistance movement, and paid for it with his life.

Hans Zomer was born in Probolingo in East Java on 6 November 1920, the son of a naval officer. The Zomers



Jaap Sickenga (1918) studied in Wageningen in the year 1937, after which he pursued a degree in Dutch in Amsterdam. Along with Hans Zomer, he was arrested for espionage in his parental home in Bilthoven. In the weeks between his death sentence and execution, he wrote poems from prison in Maastricht. He dedicated them to his fellow prisoners. The poem below (in translation) is on the monument in Maastricht to the 24 men executed at Sachsenhausen.

We are threatened By a different death Than by the bullet – Indifference. If you succumb to that You die before your time.

Jaap Sickenga 2-2-1942



Text Roelof Kleis

had lived in Indonesia for three generations, until his father took a new job with the railways, got into a conflict there and left for the Netherlands with his wife and son, who was still a baby. 'My mother, his sister Geertruida Catharina (Cathrien) Zomer, was born in Arnhem,' says Hans van Tuikwerd. 'The family lived in 't Spijkerkwartier, which was still a good neighbourhood back then. Hans went to primary school and secondary school there.'

It is no coincidence that Van Tuikwerd's name is Hans. The youngest in a family of four children, he was named after his uncle Hans Zomer. A fact he is proud of. 'It means a lot to me. I used to look like him too. I've always been intrigued by his story. I was born in 1956, not long after the war. I was fascinated by that period. I grew up in the shadow of the war, which had a huge impact on my parents. As his namesake, I want to honour Hans's memory.' So he keeps a small 'museum' in his study in his home in Hilvarenbeek, where a portrait of Uncle Hans hangs on the wall.

#### **MI6**

Hans Zomer only studied in Wageningen for one year. 'After secondary school, he wanted to go to Den Helder and become a naval officer like his father,' says Van



The Bronze Lion posthumously awarded to Zomer in 1946

Tuikwerd, 'but they considered him too young at 17. That's why he came to Wageningen.' The yearbook of '38-'39 lists him as a first-year Tropical Forestry student. He was a member of Ceres and passed his first-year exams. In 1939, he tried again to get into the naval college in Den Helder and was accepted this time. So strictly speaking, Zomer was no longer a Wageningen student when the war broke out, having left a year earlier. But after the war, he had obviously not been forgotten here.

After the German invasion, Hans Zomer fled to England as a sergeant-at-arms. Van Tuikwerd: 'He sailed for Falmouth on 14 May 1940 with 26 fellow midshipmen on the naval ship the Medusa. He was 19 and had only started his training eight months earlier.' In the year that followed, he was recruited by the British intelligence service MI6. And so, on 12 June 1941, he was flown back to the Netherlands as a spy and radio operator, and parachuted into the Drenthe village of Vledder in the company of Wiek Schrage, a police

'I HAVE JUST RECEIVED THE NEWS THAT I HAVE TO SAY GOODBYE TO YOU FOREVER HERE ON FARTH'



Portrait of Hans Zomer. Artist unknown ◆ Photo Roelof Kleis

inspector tasked with building a resistance organization. 'They even seem to have sung the Wilhelmus before they jumped,' he says. That was typical of Zomer, according to Van Tuikwerd. 'Hans Zomer was not an adventurer. He was known as a bit of a loner, but as someone with a strong character. His actions were driven by a sense of duty. He was a Protestant and loyal to the authorities, the monarchy and the church. That was decisive in their letting him do this work at such a young age. He was given the opportunity to refuse, but he wanted to do it.'

#### **Oranje Hotel**

Little is known about the two months before his arrest, according to Van Tuikwerd. Zomer changed addresses often to keep away from the Germans. 'He knew he could be detected while he was transmitting.' His wanderings eventually brought him to the home of the Sickenga family in Bilthoven, whose son Jaap had also studied at Wageningen, one year before Zomer. Sickenga was collecting intelligence on the Soesterberg military airfield. That data was transmitted to England using Zomer's equipment until the Gestapo traced the transmitter and picked them

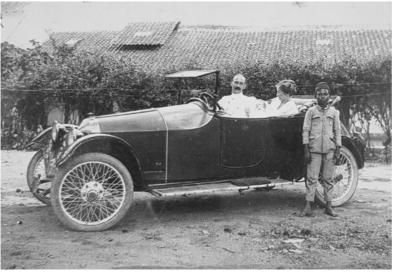


both up on 31 August (Queen Wilhelmina's birthday). Zomer and Sickenga were taken to the infamous 'Oranje Hotel' in Scheveningen.

In late March 1942, a group of men including Zomer and Sickenga were transferred to Maastricht. A court martial followed at the Minnebroeders' monastery. On 22 April, most of the group were sentenced to death for espionage and/or resistance. 'After he was sentenced, he had a visit from his parents and my mother,' says Van Tuikwerd. 'He was very calm during



The minesweeper HMS Zomer (1961) • Personal photo



The Zomer family in Probolingo, East Java. The baby is Hans Zomer • Personal photo

#### 'HE WAS GIVEN THE OPPORTUNITY TO REFUSE, BUT HE WANTED TO DO IT'

that visit and asked them to be strong and trust in God. He still had hopes of avoiding the death penalty. He hoped they would take into account the fact that he was still a minor. He wrote a lot more letters from Maastricht.'

#### **Forever**

He wrote his last letter on 10 May. 'I have just received the news that I have to say goodbye to you forever here on Earth. I cannot deny that it is a blow to me and not easy. But I am glad that I can still talk to you for a while. Whatever happens, have faith in God's omnipotence and God's love.' That night, the group of condemned men were put on a transport to an unknown destination. It was not ascertained until long after the war that Zomer and the others had been transported to Sachsenhausen near Berlin. There they were executed on 11 May, 15 hours after leaving Maastricht. 'A classmate of Hans's saw him arrive there,' says Van Tuikwerd. 'He reported it to the navy when the war was over, but the information never reached the family. It was terrible for my grandparents never to know where their son died.'

Hans Zomer was not forgotten, however. After the war, in 1946, he was posthumously awarded the Bronze Lion for bravery. In Wageningen, he was included on the above-mentioned commemorative plaque. The navy named a minesweeper HMS Zomer in 1961. (The ship has since been decommissioned.) In Maastricht, the execution of the 24 men is commemorated annually at a monument on the Patersbaan. Hans van Tuikwerd is there this year, as always. And he always wonders what he would have done. 'Suppose this had happened to me, would I have been as steadfast? Would I have done what he did? Fortunately, thanks to the courage of Hans Zomer and others, we have never been faced with that situation again.'

## AT LAST: THE END OF THE PLASTIC CUP

The end is in sight for disposable cups on campus (see page 4). And not before time, according to Paula Medina of WUR's Green Office. 'We have been trying for five years to make the tableware on campus more sustainable, but apart from the Billie Cup, we didn't get far.'

Medina is disappointed in WUR: 'We should be frontrunners in this field. Sadly, we are only abandoning disposable plastic now we're forced to by law.' She is referring to the Single Use Plastic legislation (SUP) which prohibits free disposable cups from 1 July for drinks 'to go' and from 1 January 2024 in places where drinks are consumed on the spot. The law also applies to the plastic-coated paper cups available next to office coffee machines.

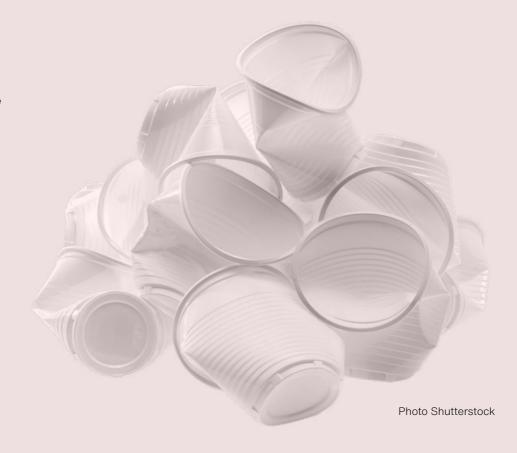
#### Plastic or paper

Erna Maters, Social Responsibility policy officer at Facilities & Services, understands the Green Office's frustration. 'Plastic cups don't belong on a sustainable campus,' she says. 'At the same time,

'Sadly, we are only abandoning disposable plastic now we're forced to by law '

the impact of stopping using those cups is very small compared to sustainability measures in areas

such as energy or mobility. You have much more impact if you can reduce the use of fossil-fuel cars or the number of flights. Even just looking at catering, what is on the menu is more important than the tableware you use.'



Plastic cups have been a thorn in the side for many people. And yet they are more recyclable than paper cups, which are plastic-coated. Maters: 'Separating the paper from that coating requires additional processing, and that increases the environmental impact.' Which cup is the most sustainable depends on several factors, such as how often cups are reused.

#### Contracts

So, when it comes to sustainability, no cup stands head and shoulders above the rest, says Maters. 'If everyone now buys a new cup, that has a big environmental impact too. And repeatedly washing them with hot water and detergent is not very sustainable either.' A tip from Maters: use a cup you already have, or get one from the charity shop.

Annet de Haas, head of Location Facilities, also says WUR was keen to get rid of disposable crockery earlier. 'But you can't arrange that sort of thing overnight. We had eight-year contracts for the coffee machines. You can't tell a company halfway through a contract period that they must stop using disposable cups if that's not in the contract.'

In the Vision for Food & Beverage at WUR\*, the basis for the new catering tender, there is a strong focus on avoiding needless packaging and using reusables or glass, says Haas. 'If plastic is still needed for reasons of food safety or hygiene, we opt for variants with the lowest environmental impact.'

In collaboration with Clara Vinyeta Cortada.

Read more at www.resource-online.nl

# No longer interested in participation

The Student Council elections are due soon, but not many students are interested in standing for election. It is difficult too to find students for programme committees, professorship appointment committees or the Board of Education. What is going on here?

UR students are often engaged, critical and outspoken, says Dean of Education Arnold Bregt. All the more surprising that students seem less and less willing to get involved in decision-making at the university. 'It was hard enough before Covid, but student participation has declined everywhere since then,' says Bregt. Rector Arthur Mol sees this too: 'For two years, students weren't very connected with the university. So an entire cohort hasn't had the opportunity to learn from more senior students what taking part in the decision-making involves.' Student Council chair and Earth and Environment Master's student Wybrig Bakker also thinks Covid has played a role. 'If you started your degree during that period, you couldn't enjoy activities alongside your degree. Now students are busy again with their societies, but perhaps they aren't yet up to joining a programme committee or the Student Council. But it's really important to do that because if we don't get involved, we don't get a say in decisions.'

#### Code red

The problem is not limited to Wageningen. The national forum for university participatory bodies LOVUM recently sent an open letter to *Scienceguide.nl* 

claiming it was 'code red' for consultative bodies in higher education. 'Healthy pushback is crucial for a properly functioning university,' says the letter. LOVUM called on the minister and university administrators to make participation more attractive. For students, that means not just a proper financial allowance but also making sure they are 'seen, heard and appreciated'.

#### Time and money

Neither Bregt nor Mol think money is the primary reason for the declining interest among students in consultative bodies in Wageningen. Bregt: 'The financial implications were the same before Covid as now, but this problem is much worse now.' Mol: 'Of course students on councils and committees would be happy to see the allowance increased, but I think we already have pretty reasonable compensation for committee and council work. WUR pays the most per student in committee grants of all the Dutch universities.' Bakker, however, thinks financial considerations do play a role. 'If you're covered by the student loan system and don't qualify for a basic grant, taking a year out for committee work or the Student



Text Luuk Zegers

Council is expensive. We get FOS (student financial support scheme, ed.) and a small extra allowance, which together come to 545 euros per month. But we still have to pay the rent, which in my case has risen to 400 euros a month. And even though as full-time members of the Student Council we don't attend lectures, we still have to pay over 2200 euros in tuition fees.' So participation costs time and money, concludes Bakker. 'If you want to make it more appealing, change the rules to let students on councils and committees borrow from the Education Executive Agency for an extra year, or get a year's exemption from tuition fees.' A year without paying tuition fees raises other problems, though. To be on the Student Council, you have to be registered as a student, and to register, you have to pay tuition fees. Sophie Galema was chair of the Student Council in the 2018-2019 academic year. She is in favour of a higher allowance, even though she doesn't expect it to persuade more students to opt for council or committee work immediately. 'When I was on the council, the compensation was

more of less enough but I would recommend compensation for both the tuition fees and the rent. Now you spend one more year with a student loan and you start earning one year later. That would make the system fairer.'

#### **Best year**

The return of the basic grant from September will make the financial picture more appealing. There is also a proposal to increase allowances for students doing committee work. But that will probably not be enough to resolve the problem of the lack of interest among students. So what is the solution? Rector Arthur Mol: 'We need to do a better job of explaining the benefits of participation for both the student and the university.' Bakker: 'I agree. You learn different things in the Student Council to what you learn in the lecture room. You get to know people, you build a network and you have a say in the university's policy. That is really cool and educational. But how can we get that message across to all the WUR students?'

Former chair Galema has a go. 'You work together intensively as a group to achieve things. You discover your own strengths and you learn how to collaborate. You represent the students' point of view in the organization. Quite apart from that, I found it the best year of my student days. People often don't realize how much fun it is.'

#### In what way?

In Galema's time, the Student Council had a say on the layout of Aurora. 'There weren't enough spots for independent

#### 'If we don't get involved, we don't get a say in decisions'

learning on campus. Thanks to our input, Aurora now has an open layout that invites people to study together.' Bring Your Own Device was another topic of discussion. 'We made sure that students who couldn't afford a laptop would be able to borrow one free of charge.' There are quite a lot of issues people are concerned about, says Galema. 'Equality, growing student numbers, climate change. You can help tackle these issues in the Student Council with your ideas.' Mol, Bregt, Bakker and Galema are all agreed on the importance of students getting involved, but there does not seem to be a clear answer on how to make involvement in consultative bodies more attractive. Bregt: 'If there was a simple solution, we would have found it by now.'

How do you think student participation could be made more appealing? Have your say at www.resource-online.nl



Illustration Valerie Geelen

# OATS AS THE NEW MILK

Oats are fantastic: incredibly nutritious, cholesterol-lowering and glutenfree. But only a small proportion of the grain is used for oat milk. The rest is used as nourishing animal feed, which some vegans don't approve of. From 1 July, all coffee vending machines on campus will offer oat milk (see page 4). But how nutritious and sustainable is the new creamer really? Our reporter Rianne Lindhout investigated the matter.



started out by buying my first ever pack of oat milk. Since my experience trying soya milk a while back, I had kept well away from plant-based milk substitutes, but this was not bad. The taste was much more neutral than soya milk but still a bit like liquid muesli. It also tasted slightly sweet, even though there is no added sugar. What is oat milk exactly? René Smulders happens to be attending a conference on oats when I contact him. He is the Plant Breeding business unit manager and also does research into oats. According to him, 'It's basically an extract in water. The Dutch Oatly factory in Vlissingen removes the husks first and then grinds the grains. The starch is broken down by enzymes, which are then inactivated at 95 degrees centigrade. The liquid is homogenized, the minerals calcium, iodine and iron are added and the drink is sterilized.'

Heat is required for the sterilization too, so the production of oat milk requires a lot of energy. Even so,

it is still much more sustainable than cow's milk, as is shown in a graph on the Natuur & Milieu website. Oat milk scores much better in terms of CO2 emissions and land and water use. Smulders: 'In general, cultivating oats doesn't require much use of pesticides, and oats improve the soil quality in a crop rotation system. The fact that oats are used as animal feed — mainly for horses, young calves and chickens — makes oat milk much more sustainable than cow's milk.' When milk is produced via a cow, a lot of the food inputs are lost in the form of greenhouse gases and manure.

#### Limited nutritional value

How about the health benefits of the oat drink? 'Oat drink has limited nutritional value because few of the nutrients in the oat grain end up in the milk,' says Marjolijn Bragt, Nutrition for Optimal Health programme leader at Wageningen Food & Biobased Research. 'Cow's milk contains three to four per cent high-quality protein, plus lots of micronutrients such as calcium, vitamin B2, vitamin B12 and iodine. The oat drink contains about one per cent protein, which is also relatively poor quality.' She does add that some of the micronutrients naturally found in dairy milk are often added to

the oat drink. 'Oat drink and cow's milk are comparable in the number of calories; oat drink contains slightly less fat and more carbohydrates than dairy milk.' Bragt recently joined WUR after previously working as a researcher and manager at FrieslandCampina. 'I would have given these answers even without that background, but I'd like to bring Kasper Hettinga in on the discussion.' He is an associate professor in Food Quality & Design. He confirms that 'Milk is a really easy way of getting an awful lot of macronutrients and micronutrients inside you in one go. You can't really replace that with any single product.'

Bragt: 'You need to see the differences in nutritional value in the context of someone's overall eating patterns. If we all stuck more to the Nutrition Centre's Wheel of Five food groups, it would be a good start for both health and sustainability.' Swap a glass of juice or soft drink for a glass of water and you are doing a good thing on both fronts. At present, the Dutch get 30 per cent of their daily energy intake from the Wheel of Five food groups, whereas the recommendation is 85 per cent. Hettinga: 'Our current diet contains more protein than we need.'

#### Hot potato

There are many nutrients that we eat more of than we need, hence the obesity epidemic, but protein is a hot potato. The nitrogen crisis and the related biodiversity crisis are basically about the production and consumption of animal protein versus plant-based protein. In 2018, the EU published a report on plant proteins and how to promote their consumption. Which means reducing consumption of animal proteins. But the Netherlands – a member state – has not heeded the call yet. According to the National Institute for Public Health and the Environment (RIVM), the Dutch eat an average of 80

#### Oat milk has taken off

In the Netherlands, oats are the fastest growing and now leading ingredient for plant-based milk substitutes, according to an ABN AMRO report in 2021. 'The share of oats compared with other plant ingredients, such as soya, almonds or rice, rose from 9 per cent in 2017 to 34 per cent in 2020. As a result, oats overtook soya as the main ingredient for plant-based dairy drinks.' Total supermarket sales of plant-based dairy drinks are also booming, with an increase of 31 per cent in 2020. As sales of regular milk 'only' grew by 7 per cent, the market share of plant-base variants increased from under 11 per cent to 13 per cent in 2020. According to catering platform Entree, the market share of plant-based dairy products in restaurants and coffee bars was as much as 15 per cent in 2021. Plant-based frothy milk - soya or oat milk for coffee drinks — accounted for as much as 27 per cent by volume.

#### 'IT SEEMS AS IF YOU HAVE TO CHOOSE WHETHER YOU ARE FOR OR AGAINST PLANT-BASED PRODUCTS'

#### Oat milk or oat drink?

Marjolijn Bragt, Nutrition for Optimal Health programme leader at Wageningen Food & Biobased Research, points out that you are not legally allowed to refer to the drink as 'oat *milk*' in the Netherlands. She recommends using 'oat drink'. A quick check with the dairy sector. Spokesperson Stephan Peters of the Dutch Dairy Association says, 'You can only call it milk if it comes from the mammary gland of a mammal. That is an EU rule and the only exception is coconut milk.' He doesn't think *Resource* risks prosecution though, and he knows vegans persist in using the term. 'The Food and Consumer Product Safety Authority did intervene though when soya drink packs displayed "This is not MILK". That is completely misleading.'

grams of protein a day, whereas the Dutch Health Council says a man weighing 80 kilos needs only 66 grams. We are Europe's leading dairy consumers, eating 329 grams a day. But the Health Council still recommends the Dutch should keep up their consumption of dairy products. At the same time, it recommends increasing the share of plant protein from 40 to 60 per cent. Huh?

Bragt and Hettinga both say reducing your meat





consumption can be a way of following both recommendations. Hettinga: 'Animal products provide various minerals and vitamins that we can't get to the same extent from plant-based food products. If you cut your consumption of meat, dairy products become more important in getting those nutrients.'

#### Sinking calcium

Cow's milk is also a source of calcium, which is needed for your bones, teeth and muscles. Bragt: 'In the Netherlands, about 60 per cent of the daily calcium intake comes from dairy products. Our bodies are easily able to absorb the calcium in dairy foods. About half of the oat drinks sold in the Netherlands are enriched with easily absorbable calcium. But you must shake the oat drink pack thoroughly before use as the calcium sinks to the bottom.' That could be an issue for the Wageningen coffee vending machines. Bragt: 'You can also get the calcium you need from cereal products and some green vegetables. Although that calcium is less easily absorbed so you need to eat more.'

Bragt also points to research that shows that eating dairy products is associated with a lower risk of bowel cancer while yoghurt is associated with a lower risk of type 2 diabetes. Such health benefits are also known for vegetables and wholemeal products, as well as being associated with cutting meat consumption, she says. 'I think everyone realizes our diets need to change. The question is only whether we should completely rule out certain food groups. Sometimes it seems as if you have

to choose whether you are for or against plant-based products. But you can vary what you eat; it's mainly about a shift in the balance.'

Just when I am close to finishing this article, I catch an episode of a consumer affairs programme on TV. It is about the 1.5 million calves born each year in the Netherlands, merely because their mothers would otherwise stop producing milk. They are sent to large calf crèches where they are unable to play outdoors and where some 10 per cent die of pneumonia or other infections, in part due to the anaemia that makes their meat paler and therefore more appealing to consumers. After eight months they are turned into veal to be sold abroad.

#### Vegan dilemma: oat drink leads to animal feed

The production of oat drinks results in a residual product. René Smulders, Plant Breeding business unit manager and an oats researcher: 'That product contains insoluble fibres from cell walls, protein, starch and some fat.' Which makes for nourishing animal feed. Smulders: 'Last year, that caused a stir among some vegans. But it's more sustainable than burning the residue.' According to Bragt, vegans still need nutritional supplements in addition to extra pulses, nuts and enriched products. Many scientists believe the ideal diet from the perspective of both health and sustainability is a mix. In 2016, Hannah van Zanten of the Farming Systems Ecology gained a PhD with distinction for her calculation that the world population can eat 21 grams of animal protein a day if the livestock exclusively eat grass and feed from waste streams. The latest calculations on a circular European food system, with large savings in land use and CO2 emissions, will appear in April in Nature Foods. On 12 June, Van Zanten will present the findings at the free symposium the Environmental Impact of Food Systems.



#### Taxed as soft drinks from 2024

The Dutch cabinet will make oat milk much more expensive from 2024, adding 17 euro cents per litre. At the end of March, the government announced it would be increasing the consumption tax on alcohol-free drinks to 26 cents a litre. It applies to plant-based milk products except for soya drinks with added vitamin B12 and calcium. It doesn't matter whether sugar was added. An exception has been made for animal-based milk products, including chocolate milk with added sugar. The government website says: 'The increase will generate 300 million euros a year. The cabinet also wants people to lead healthier lives, for example by opting for water instead of soft drinks. That is why the cabinet is abolishing the consumption tax on mineral water.' Nutritional scientists decry the tax rise on plantbased milk, which also goes against WHO advice on how governments can improve public health through pricing policies.

You encounter all the flavours of the world in our WUR community. MSc student of Plant Biotechnology Jinyu Luo (22) from China, shares a recipe for Sichuan beef.



Flavours of WUR

#### Sichuan beef

'This recipe comes from my hometown Chongqing. This dish originated from people called 'burlaks', who hauled boats up the rivers in China. In the old days, the burlaks didn't have much to eat so they added any vegetables they had to this dish. And they also added a lot of spicy ingredients such as chilli peppers, to cover up the smell of the unrefrigerated dish. The burlaks are a thing of the past now, but this recipe is still part of our culture. I learned how to cook it from my father.'

- 1 Peel the onion and potatoes. Then wash and cut the cabbage and fennel.
- 2 Cut the ham sausage.
- 3 Soak the noodles and jelly ear mushrooms in warm water for half an
- 4 Marinate the beef slices with the soya sauce, oyster sauce, salt, egg and cornflour. And then stir with a fork

- until all the liquid is absorbed by the beef slices.
- **5** Fry the garlic granules with the hotpot seasoning, chilli bean paste, chilli pepper, Sichuan pepper, and star anise.
- **6** Add water and boil for a few minutes. Then add the beef and cook it for one minute, then put it aside in a bowl.
- **7** Boil the rest of the ingredients (onion, fennel, cabbage, ham sausage, jelly ear mushrooms, noodles) for 20 minutes.
- 8 Optionally, add more salt, pepper, soya sauce, and oyster sauce, depending how spicy you want your dish to be.
- **9** Return the beef to the pot and mix it in.
- 10 Sichuan beef is best served with rice.

#### 10-euro lunch voucher

Share your recipe with Resource and get an Aurora voucher worth 10 euros. resource@wur.nl



Jinyu Luo, an MSc student of Plant Biotechnology from China. Photo Sarah

#### Ingredients (for 4 people):

- · 350g potatoes
- · one onion
- · one head of fennel
- one cabbage
- · one chilli pepper
- 1/2 Chinese ham sausage
- · 200g sliced beef
- one egg
- · 50g dried jelly ear mushrooms
- 40g glass noodles
- · Packet of hotpot seasoning
- 50g Sichuan chilli bean paste
- 20 ml soya sauce
- 20 ml oyster sauce
- Salt to taste
- · Sichuan pepper
- · One star anise
- 10g garlic granules
- 5g cornflour
- · Rice for 4 people



## DAILY UPDATES ON STUDENT LIFE AND **WORKING AT WUR?**

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### 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 from unusual side jobs, like Sanne de Bruin (26), a Master's student of Health and Society. Sanne works for T-zorg as a home help.

Text Steven Snijders

'I go to people's homes to help with the housework. We look at what people are able to do themselves, and how I can fill the gaps. Sometimes we do the cleaning together, which is sociable. The client might dust the easily accessible surfaces, which they don't have to bend

'Doing my side job, I encounter important themes from my studies, such as ageing and loneliness'

down for. Meanwhile, I clean the hardto-reach areas. If clients are completely immobile, I tackle the most important things for keeping the house pleasant to live in. In this side job, I encounter important themes from my Health and Society studies, such as ageing and loneliness. And how market forces affect healthcare. For instance, I am not allowed to give clients their drugs - someone else does that. The care that people receive at home is fragmented: sometimes up to five care providers visit on a single day. One comes to help them shower and put on support stockings, another comes to set up a drip. I question whether market forces are really more effective. And there's no

one who has a helicopter view, an over-

view of the whole picture.

Fortunately, I do have time to talk to clients and make real contact with them. I pay attention to the people I work for, I see them and ask how they are doing. I can really make their day, and they so enjoy my visits! Sometimes they even put something tasty in my apron to take home. It's a bit like visiting your grandmother. You really do this job with your head, heart and hands. The change from studying has helped me tremendously with finishing my internship reports: it's nice and active, and really meaningful for others. I'm also learning something about how I would want to age: it's extremely important to stay open to things, stay positive and to have a strong social network. And to have a sense of humour and be able to laugh at yourself.'

Sanne helps
with the
cleaning

Who: Sanne de Bruin
What: Home help for people

Why: It's a workout that is satisfying as well Hourly wage: €12.50

who need it



Photo Guy Ackermans

Do you have an unusual side job or know someone else who does? Send an email to steven.snijders@wur.nl

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## Resource

WUR from within: straight sharp transparent





#### Colophon

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### [SERIOUSLY?]

Kooky news





## WUR PULLS OUT OF BEST UNIVERSITY

The guide to Dutch universities *De Keuzegids* must look for another Best University in the Netherlands

t has become a fixture: every year like clockwork, the *Keuzegids* announces that WUR is the Best. It has been now for 18 years in a row. How boring is that? WUR itself is getting bored of it, so the Executive Board has decided to skip a year. The board is following the advice of the Not Again workgroup.

WUR's gesture is not just an expression of magnanimity, however. It's a question of self-interest too, as chair Alfons Spegt readily admits. 'After 18 years, the novelty has worn off a bit. Even among the intranet editors, I detect a certain reluctance to report on it. A year out of the limelight will work wonders. Besides, everyone knows we're the best anyway.'

The idea of withdrawing was inspired by the way things work in the annual election of the Teacher of The Year. The winner of that award cannot be nominated again the following year. 'That creates space for others to shine,' says Spegt. 'And what are you supposed to do with two or more of those statuettes. They'll just end up on eBay or the like anyway.'

De Keuzegids reacted with surprise but relief to the

news from Wageningen. 'We have also played with this idea internally. But it's a bit like Formula 1 without Max Verstappen, the World Chess Championship without Magnus Carlsen or King Willem-Alexander without Máxima. What does it amount to then? Anyway, we will have to write a different press release this year.'

### 'Everyone knows we're the best anyway'

The Not Again workgroup has extended its (unsolicited) advice to cover several other areas.

For instance, the group suggests that WUR skips *Dies Natalis* next year, that the VVD party should not take part in the elections once the cabinet falls, that the Netherlands should not enter the Eurovision Song Contest and that Ajax football club should pass up the champions' trophy this year.