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# RESOURCE [EN]

For everyone at Wageningen University & Research

October 2019 – 14th Volume



**Surf Your Stress** p.22

**INTERNATIONAL  
EDITION**

2019

21  
dag

NETFLIX

FINISH

THESIS  
???

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# Kimberley + Tecan Freedom EVO pipette robot

WUR staff work with all kinds of equipment. Meet Kimberley Laport, analyst in the Animal Sciences department in Radix.



## PRECISE WORK

Genetic analysis involves a lot of lab work and it is useful if you don't have to do it all yourself. The pipette robot in the photo takes a lot of work off Kimberley Laport's hands. The machine performs serial dilutions of bulk genetic samples. Precise work. It takes the machine a quarter of an hour to make 96 solutions. The samples then go into the PCR machine, which amplifies the required pieces of DNA — i.e. copies them numerous times — for further analysis. [@ RK](#), photo Sven Menschel

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## FAILING AGRICULTURAL POLICY

Dutch nitrogen emissions have got to be halved. To achieve that, the cabinet wants to buy out farmers near nature areas and subsidize the building of low-emission barns. This is a typical example of the kind of reactive policy – ‘quick fixes’ – with which the failing government has been covering up its lack of vision on agriculture for decades now, says governance expert Jeroen Candel. On page 12, he wonders where one can find an integral vision based on ‘a unifying discourse bringing agriculture and nature together’.

We ask ourselves the same thing in the *Resource* newsroom. And what role can (and should) WUR play in formulating a future vision based on a solid narrative? You can’t answer that question without dialogue. So we are holding our third *Resource* debate on Monday 21 October (see p.7). ‘Nitrogen professor’ Wim de Vries will outline the government’s options for cutting emissions. And researcher Gerard Migchels will explain how livestock farmers can tackle the nitrogen problem with simple methods. Want to join the conversation on this topical issue? Come to Impulse on Monday at 12:00. Welcome!

*Willem Andrée, editor-in-chief*



>> [Aurélie Féat got doctorate for bio-coatings that ants and termites slide off. That stops the insects damaging buildings. | p.8](#)



# NITROGEN PROBLEM DEMANDS MIX OF MEASURES

**Nitrogen levels in nature areas can only be reduced sufficiently by applying a combination of far-reaching measures, according to a Wageningen study.**

In a project for the nature organization WWF, scientists at Wageningen Environmental Research calculated the effect of various measures on nitrogen deposition in Natura-2000 areas. There is currently much too much deposition. Averaged over all nature areas, concentrations are one third too high, but there are nature areas where that figure is almost a half. Agriculture is responsible for 42 per cent of the nitrogen deposition in nature areas. The WWF therefore assumes the sector can make a similar contribution to the solution. If you just look at the figures, they could achieve this by modify-

ing barns so that less ammonia is emitted. But that is not realistic, says researcher Edo Gies (Regional Development and Spatial Use). 'That would mean three quarters of barns switching to air purifiers. The impact would be huge.' The same applies to a rigorous transition to circular agriculture. That too is theoretically a solution. 'But it would have to be a closed cycle for the Netherlands as a country,' explains Gies. 'And that means halving the livestock population.' Five-kilometre buffer zones around nature areas, where you purge intensive farming and only allow extensive agriculture, would work in principle as well. 'But that would take up one third of the total area of farmland.'

Gies says only a combination of these measures will achieve the required reduction in ni-

trogen deposition. And that is merely the contribution from agriculture. Gies emphasizes that the other sectors will also have to contribute their share of the solution. Traffic and industry are responsible for 20 per cent of the nitrogen deposition in nature areas. It is not yet known what major measures are required for those sectors.

The Wageningen researchers also stress the need for tailored solutions, looking at each nature area to see what the effects would be of both general measures and area-specific interventions. Furthermore, we must beware of focusing exclusively on the nitrogen problem, warns Gies. 'There are other challenges facing farming in terms of the environment, climate and public health that we also need to find solutions for.' **RK**

## BEETLE SURROUNDED BY 'CONFUSING LIGHT'



PHOTO: SVEN MENSCHTEL

**Anyone passing the pond between the Forum and Orion on Wednesday 9 October could see professor of Ecology and Water Quality Marten Scheffer in wading trousers, up to his midriff in the water. He was working on new lighting effects around the artwork *Must Leave*.**

Sound effects were already in place around the Danish artist Vagn Inversen's beetle. Speakers under the bridge spread 'a sound landscape which calms you down, which enchants you, and which is always changing,' says Scheffer. 'You hear a redbreast, for instance, a harp or frogs. The sound is driven by the wind speed, which we measure in real time. And you can see the beetle 24 hours a day via the camera suspended above the bridge. Ex-students in China or elsewhere can take a look in Wageningen whenever they like.'

So now there is light too. 'Night illusions,' is what Scheffer calls the effect. 'A bit like shooting stars. The idea is that you can't tell what is above and what is underwater. It's confusing and surprising.' **WA**

## SPINOZA PRIZE FOR TEAMS TOO NOW

**From now on, teams of two or three scientists will also be eligible for the Spinoza Prize awarded by the Dutch Research Council (NWO), in addition to outstanding individual scientists.**

Education minister Ingrid van Engelshoven made this announcement on 2 October when handing out this year's Spinoza awards. 'I am convinced that our research can benefit more from cooperation than from

competition,' she said in her speech. 'After all, two heads are better than one.' A precondition is that the team offers

**'Research benefits more from cooperation than from competition'**

something extra. That means the team must be demonstrably better than the individual members.

The Spinoza Prize is for world-

class scholars who are an inspiration to young researchers and actively propagate their insights by incorporating them in an application or by popularizing their knowledge.

There were no prizes for WUR scientists this year. Last year, microbiologist John van der Oost got a Spinoza Prize, and there have previously been Spinozas for entomologist Marcel Dicke (2007), microbiologist Willem de Vos (2008) and aquatic ecologist Marten Scheffer (2009). **HOP**

## IN BRIEF

### >> CITIZENS' INITIATIVE ON CRISPR-CAS

#### A million signatures wanted

European GM legislation is unnecessarily blocking progress on new plant-breeding techniques such as CRISPR-Cas, say 18 WUR students. They launched a European citizens' initiative called Grow Scientific Progress, aimed at getting the EU to adapt its regulations to the fast developments in this scientific field. To this end they aim to collect a million signatures, says Jibbe Keulen (27), a Master's student of Biotechnology and one of the initiators. 'We've collected 5320 signatures so far. We have until 25 July 2020 to reach a million. But we have realized it's a lot of work with just eight of us, especially since we are all fulltime students. So we want to expand our team, preferably with people with experience in communication and strategy. But anyone who can do their bit to help is welcome.' There is more information on the project on [growscientificprogress.org](http://growscientificprogress.org). **BvdB**

*Read the interview with the students behind the citizens' initiative on [resource-online.nl](http://resource-online.nl)*

### >> NEW RESEARCH

#### A lot of stress among students

New research at the University of Twente confirms that a lot of students suffer from stress and depression. As many as 80 per cent of the students at Twente have experienced minor and in some cases severe psychological problems, according to the study by psychologist Saskia Kelders. They report symptoms of anxiety and depression. The problems are worst among women, foreign students and non-heterosexual students. Kelders does qualify her findings by pointing out that the questionnaire was sent to all students and it is quite possible that it was mainly students with problems who responded. There is still a serious problem, though, says the psychologist. Teach students to deal with stress, is one of her recommendations, because prevention is better than a cure. WUR has just launched its Surf Your Stress campaign, with precisely that aim. **HOP, Bas Belleman**

*Read too the story Surf Your Stress on [pages 22-25](http://pages.22-25).*

## © COLUMN | GUIDO

### Van Rijn Committee

Our very own Board chair Louise Fresco let out a cry of empathy on Twitter recently: more money for science and technology universities is a good thing, but not at the expense of our colleagues in the social sciences. She was referring to the Van Rijn committee, which recommended diverting funding towards the sciences. Although Fresco's words come across as sympathetic, she must be secretly rubbing her hands as well. After all, Wageningen is one of the winners in this redistribution. Every chair group gets an extra fulltime staff member to relieve the burden on teachers and researchers: a massive investment, with over 200 chair groups.

### 'Lean years ahead for the arts and social sciences, I fear'

Two big names in the social sciences, the Leiden professor Ionica Smeets and the Groningen professor Casper Albers, have voiced protest in national papers and on Twitter. Unfortunately, I think they just reinforce the point the Van Rijn committee is making. They both work in and speak up for social science research, but their own backgrounds are in mathematics and econometrics, respectively, so they are hard scientists themselves. The thinking in The Hague is probably that investments in scientific research will keep the social sciences going too, in a roundabout way. And of course it is easier for a mathematician or an econometrist to transfer into the business world than for an art historian. I'm expecting The Hague to focus ever more strongly on tech, and less on the social sciences. As I was writing this column another press release came from The Hague: two billion euros are going to be invested in artificial intelligence in the next few years. There are lean years ahead for the arts and social sciences, I fear. **B**

**Guido Camps** (36) is a vet and a postdoc at the Human Nutrition department. He enjoys baking, beekeeping and unusual animals.





# UNICEF PRIZE FOR WAGENINGEN STUDY ON EMERGENCY AID

**Development economist Maarten Voors has won the UNICEF Research Award for his study of the effect of emergency aid in Congo.**

Voors and three international colleagues conducted experimental research in the Democratic Republic of the Congo on the effects of emergency aid given to families fleeing the violence in the country. Rather than giving them cash, the aid consisted of vouchers that they could spend on 'anything apart from food' at a market organized specifically for the purpose.

The announcement of this award coincided with that of the Nobel Prize for Economics.

That prize went to the founders of experimental development economics. 'Our research is very much along the same lines,' says Voors. 'Our group in Wageningen has been inspired by the kind of work they do.'

The situation in Congo has been unstable for decades. Of the country's 80 million inhabitants, five million are on the run and staying with host families. Disease and mortality among children is a major problem. UNICEF is trying to deal with the worst problems through its Rapid Response to Population Movements aid programme. Voors and his colleagues used that programme as an opportunity to conduct experiments.

The researchers handed vouchers worth 55 to 90 dollars to families who didn't quite belong to the neediest category. A control group was not given vouchers. The families could buy clothes, mattresses, pots and pans and similar items at a special market. The effect of the aid was measured using questionnaires. 'The main thing we wanted to know was whether this worked — was it better than doing nothing?' The answer was a clear 'yes'. 'The people are better off in the



▲ Participants could spend their vouchers at the special market on 'anything apart from food'.

short term and in the long term,' says Voors. 'People who are on the run have nothing and that is an incredibly stressful situation. The voucher system reduces that stress because it lets them buy goods. Plus it didn't lead to conflicts with families who received nothing either. Social cohesion was not affected. This study

shows that giving aid immediately has a positive impact. We expect later aid programmes will have more effect as a result.'

The experiment by Voors and colleagues is one of 10 studies nominated for the competition by the UNICEF Office of Research-Innocenti. Three studies were selected as winners. **AS RK**

## EIGHT MILLION FOR EU INSECT PROJECT

**Demand for insects for animal feed and food currently exceeds supply in Europe. The new Susinchain (Sustainable Insect Chain) project, which WUR is coordinating, aims to change that. The EU will be investing eight million euros in the project over the next four years.**

Insects are a sustainable source of protein as they can live off waste products and they contain many healthy proteins. They are already being incorporated in dog food, cat food and fish feed. But demand outstrips supply, says Teun Veldkamp, animal feed researcher at Wageningen Livestock Research and the Susinchain coordinator.

Demand is also set to increase further if, as is expected, the EU adopts legislation allowing insects to be used in feed for chickens and pigs.

The idea is that Susinchain will generate knowledge and innovations that foster the competitive, safe production of insects in Europe. Veldkamp: 'For example, we need to develop safety and quality guidelines for the substrates the insects grow on. This will only become more important if we want to start using food waste from hotels and restaurants, consumers and supermarkets.'

The EU project is connecting 18 companies to 17 science institutions. Three WUR science groups are involved. Wageningen Livestock Research will test insect food on pigs and poultry, Wageningen Food Safety Research will examine the safety issues of insects as a source of food and the Business Economics group will be developing business models and production chains for growing insects.

**AS**



# LOST STATUE WASTING AWAY ON CAMPUS

The long-lost stone wall carving Agriculture and Horticulture by artist Cor Hund has been found. Exposed to wind and weather at a storage place on the edge of the campus.

The wall carving graced the front of the Laboratory for Crop Science on the Haarweg from 1953 until the building was demolished in 2010. The artwork was spared and temporarily stored on campus behind Zo-

diac. Then it disappeared, says Laurens van der Zee, self-appointed curator of the website Sculptures in Wageningen. Until a second appeal on the *Resource* website got a response from Rolf Marteijn (Nutrition and Health). 'I thought I had seen a statue that looked like that.' On checking, it proved that he had indeed spotted the lost artwork. Hubert Krekels, chair of the WUR Cultural Heritage Committee, was pleasantly surprised. 'We are very

pleased. Given the state the sculpture is in, we shall first see whether it needs restoration and whether there is funding for that.'

## HUND

How long the artwork has been lying behind Theia data centre on the Bornsesteeg is anyone's guess. It has weathered and is covered in moss. Krekels thinks it got lost during all the moves and construction projects of the past few years. Meanwhile an inventory has been made of all the art WUR owns. Krekels: 'We have made agreements on how to prevent this sort of situation arising in future.' Cor Hund (1915-2008) was a sculptor and advertising illustrator. He won the prestigious Prix de Rome in 1947. The work Agriculture and Horticulture



(1.5 by 1.5 metres) shows a woman carrying sheaves of wheat and a man beside her with some of the harvest on his knee. The question remains what the honest finder of the carving was doing in the remote corner of the campus behind Theia. 'You can ask me that, no problem,' says Marteijn. 'There are several containers there and their contents include event material for the AID. As an AID 'crew' member I sometimes have to go there.' **CRK**

## Who is Laya?

*Pide un deseo* (make a wish) says the Spanish text on the mural on the electricity building on the Nieuwe Kanaal in Wageningen. The artists signed it *I am Laya*. Laurens van der Zee, the initiator of the app Beelden van Wageningen, is keen to know who Laya is. His guess is that she's a foreign student or WUR employee. 'I would love it if the artist made herself know.' That's possible through [beeldenvanwageningen.nl](http://beeldenvanwageningen.nl).



Come to the Resource debate!

Monday 21 October

## What to do about nitrogen?

The Netherlands needs to drastically reduce nitrogen emissions from agriculture in order to protect nature. What are the implications for the short term, and especially for the long term? If you have ideas about this and want to discuss them with WUR experts, come to the Resource debate. Prof. **Wim de Vries** will outline the options the government has for cutting nitrogen emissions, and researcher **Gerard Migchels** will explain how livestock farmers can tackle the nitrogen problem using simple measures. Then there will be time for questions and dialogue. The debate will be in Dutch.

<b>Date</b>	Monday 21 October, 12.00 to 13.30
<b>Location</b>	Impulse, Wageningen Campus

**RESOURCE**  
For everyone at Wageningen University & Research



## ANT-PROOFING WITH SPECIAL PAINT

**Termites and ants can do a lot of damage to buildings, especially in the tropics. Aurélie Féat got her PhD for a study of bio-coatings that the little insects slide off.**

Insects damage buildings to the tune of between 2 and 40 billion dollars a year, estimates Féat. Termites are the worst, mainly in Africa and Asia. You can combat them with insecticides, but paint manufacturer AkzoNobel is looking for a less toxic alternative: a paint that the insects cannot get a grip on. This quest brought Féat to Jasper van der Gucht, professor of Physical Chemistry and Soft Matter.

'Biologists in Cambridge discovered how insects walk up walls,' says Van der Gucht. 'They excrete a fluid that works like glue so they can stick to surfaces, or they use their claws to cling on.' So Féat set about creating several

kinds of paint on which these tactics wouldn't work. The best option, which all ants slid off, turned out to be a badly mixed paint. 'Paint is a complex mixture of pigments, polymers and binders,' explains Van der Gucht. 'If you mix paint badly,

**Insects do between 2 and 40 billion dollars' worth of damage to buildings every year**

pigment particles stick out from the surface, and those particles get stuck on the ant's feet. After that, the gluey fluid stops working.' A nice cheap solution, concludes the professor: keep ants away with badly mixed paint.

Another successful paint was



PHOTO: SHUTTERSTOCK

one with large particles. 'Thanks to those large particles, the surface becomes raw and pores form. We think the ants' sticky fluid gets absorbed by these pores and that makes them fall off the wall.' A bit of chalk in the

paint will do the trick, discovered Féat. It will take a while before insect-resistant paint is for sale, thinks Van der Gucht, because the paint manufacturer still need to fine-tune some other paint characteristics. **AS**

## TWO BUILDING BLOCKS CAUSED PLANTS TO GROW UPWARDS

**Plants started to grow skywards 320 million years ago when they began to make vascular tissue cells. PhD student Nicole van 't Wout Hofland discovered two key building blocks that made that possible. She was awarded a PhD on 8 October for her research supervised by Dolf Weijers, professor of Biochemistry.**

The evolution of plants started with algae. Then came mosses and a bit later, plants with vascular tissue, which forms tiny ducts that transport water and nutrients and give the plant its firmness. So the development of vascular cells enabled plants to grow upwards.

Plant scientists want to know how vascular cells came about in the course of evolution.

They have already discovered the proteins TMO5 and LHW, which between them activate a gene that stimulates the manufacture of a growth hormone called cytokinin in the plant. This cytokinin sees to the division of the vascular cells.

The more TMO5 and LHW a plant has, the thicker its vascular bundles will grow.

Van 't Wout Hofland want-

ed to find out whether the two proteins were the decisive factor in the evolution of vascular plants. So she studied algae to see whether they also contain TMO5 and LHW. To her surprise, they do. In algae, however, the proteins cannot do their job because they are not linked. In mosses, the proteins were found to be linked, but not yet capable of activating the gene that regulates the production of the growth hormone.

When Van 't Wout Hofland replaced the protein LHW in the model plant *Arabidopsis* with LHW from moss, the plant stopped making the growth hormone and vascular cells. But when she transferred TMO5 from moss to *Arabidopsis*, the plant did make the growth hormone. So the first step towards the formation of vascular cells must have been taken in a precursor of moss that probably no longer exists, thinks Van 't Wout Hofland. 'I found one of the mechanisms which cause plants to grow upwards; but we don't yet know whether this is the decisive mechanism.' **AS**



# EXTRA PROTEIN CAN HELP ENDURANCE ATHLETES

**Endurance athletes who follow an intensive training programme while consuming extra protein make faster progress than their counterparts who don't eat extra protein, shows a PhD study by Pim Knuiman at Human Nutrition and Health.**

Knuiman's findings come from a study involving 44 healthy young men, all of whom exercise for fun. They trained three times a week for 10 weeks on a bicycle ergometer at an intensity just below the point where muscles start acidifying. Half the group were given extra protein in the test period: they had a drink with 28 grams of casein in it after each training session and before going to bed. The other half had a protein-free carbohydrate drink that looked and tasted the same. Neither the athletes nor the researchers knew who was in which group.

Training increases athletes' maximal oxygen absorption uptake – the  $VO_2$ max. 'But we saw a bigger increase in the protein group,' says Knuiman. 'And the extra protein consumption had an effect on their body composition as well: the amount of non-fat mass increased in the protein group, while their fat mass decreased.' This im-

proved body composition is good for health and sporting performance. His research does not give Knuiman a basis for concluding that performance capacity increased due to the protein drinks too. 'Our study took the  $VO_2$ max as the outcome measure.' Besides oxygen uptake, Knuiman studied changes in muscle. 'Training improves the oxidative capacity of muscle: its capacity to generate the molecule adenosine triphosphate using oxygen goes up. We measured that oxidative capacity using the maximum enzyme activity.' Knuiman found no significantly larger increase in enzyme activity in the men who had the protein drink. But he did see a trend towards higher activity levels. And that suggests that their muscles had adapted more in response to the training, and are thus better able to go through this kind of intensive training.

So does Knuiman now advise all endurance athletes to consume more protein? 'Not at this point. In our training programme it looks like an effective strategy. But further research needs to determine whether it is also effective at a different training frequency or intensity, or with a different status of the individual in question.' **AS**



PHOTO: PIM KNUIMAN

▲ For the study, 44 healthy young men trained three times a week for 10 weeks on a bicycle ergometer.

## VISION

### 'Extra nitrogen measurements won't replace RIVM model'

**Agriculture minister Carola Schouten is providing cash for more nitrogen measurements in nature. That's good, says Karin Groenestein, livestock and environment researcher at Wageningen Livestock Research, but you still need RIVM's contentious nitrogen distribution model.**



*Are there not enough nitrogen measurements in the Netherlands?*

'RIVM has two measurement networks. One network measures the concentration of ammonia in the air at 280 sites in 84 nature areas. The other network has six stations that measure the ammonia pollution layer in the Netherlands. Those measurements do not give precise data on where the ammonia comes from or ends up. The minister wants to extend the measurements to get a better understanding of the spread of ammonia.'

*Should you measure ammonia emissions on farms as well?*

'Wageningen Livestock Research already measures methane and ammonia emissions in about 30 barns for dairy cows, pigs, goats and calves. We compare the emissions in different barn systems because we want to know which farms produce the least ammonia and methane.'

*Farmers are highly critical of the RIVM model. Could these measurements replace the model?*

'There has been a lot of fuss about RIVM's nitrogen distribution model but there is little basis for the criticism. The new measurements won't replace the model; they will make it more reliable. If you carry out measurements, you need to put them in perspective. Concentrations will be higher some days than others, depending on factors such as the weather and the wind direction. If you want to know how much ammonia ends up where, you need a model that takes account of those factors.'

*Will extra measurements help farmers?*

'We are now getting the opportunity to investigate how we can optimize a farm's nutrient cycle with minimal emissions of ammonia and methane. We can't measure all farms as that would be too expensive, but cheaper sensors are now being developed that can accurately record the emissions per farm. Then the government could introduce stipulated targets, and the sensors would show whether the farmer is keeping to the rules. Those sensors are nearly there.' **AS**

# HOOFED ANIMALS BAD FOR VELUWE FORESTS

Wild hoofed animals such as wild boar and deer are favourites with leisure-seekers but they modify the forests of the Dutch Veluwe plateau in undesirable ways, found doctoral researcher Juan Ramirez Chiriboga. He got his PhD on 10 October for research supervised by Lourens Poorter, professor of Forest Ecology and Forest Management.

'Wild ungulates modify their environment by trampling and rootling, grazing on leaves and bark and rubbing against tree trunks,' says Ramirez Chiriboga. In a lot of mixed forests, with deciduous and coniferous trees growing side by side, the populations of red deer, roe



▲ Red deer modify the forest by trampling the ground, eating leaves and rubbing trees.

## The preference for deciduous leaves leads to a shift towards coniferous forest

deer and wild boar are growing apace. Ramirez Chiriboga studied how these animals have changed the mixed forests of the Veluwe in the past 33 years. He studied woodland areas of different ages that were closed off or accessible to wild hoofed animals. He also made use of camera traps. What came out of his research was that hoofed animals have a minimal impact in the short term. The long term is another matter, though. The preference for juicy, easily digestible leaves from deciduous trees reduces under-

growth and causes a shift towards coniferous forest. In fenced areas that are inaccessible to hoofed animals, there is much greater diversity. The layer of leaf litter on the forest floor is also thinner where there are hoofed animals. Besides the immediate consequences, Ramirez Chiriboga found evidence for a domino effect. Reduced undergrowth provides less shelter for rodents, causing a drop in the population. A thin leaf litter layer provides less space and

food for invertebrate soil creatures such as worms, which are important in turn for releasing nutrients for plants. And the increase in coniferous forest leads to increased evaporation and thus to dehydration.

Ramirez Chiriboga recommends that park managers either protect parts of the forest against wild hoofed animals or release predators into the forest in order to restore it.

📍 NvtWH

## WUR EVALUATES FOOD SECURITY OF BIG CITIES

**Is food security in the world's major cities as it should be? Wageningen Economic Research is making a ranking of 850 big cities to get clarity on this. The main aim is to make a diagnosis, so cities can organize a better and healthier food supply.**

Researcher Peter Ravensbergen presented the ranking recently at a conference of the Milan Urban Food Policy Pact, a forum where 200 cities around the world put their heads together on the issue of a sustainable and healthy diet. The ranking uses five criteria, explains Ravensbergen. 'The first

one assesses food production in and around the city, in other words, the availability of food. The second one assesses the logistical situation: do the residents of the city have access to an adequate supply of healthy food? The third criterion measures purchasing power: can residents afford the food? The fourth issue is health: is the residents' diet adequate and healthy, and is the city a healthy living environment? And the last criterion measures risks to the food supply, including climate risks, risks of flooding, and the health risks of overweight and underweight.'

Cities can use the ranking if they want to gain insight into their food security status and to know where their weak points lie, says Ravensbergen. 'Most of the fast-

**'Fast-growing African cities score extremely low; there lies a major task'**

est-growing cities are in Africa. Places like Lagos, Nairobi, Ouagadougou and Yaoundé. These cities score extremely low on food secu-

city, so there lies a major task. In Asia, we note an interesting difference between Chinese and Indian cities. Chinese cities often score above average on logistics and on health, while the Indian cities score low on health and on purchasing power. In a country such as Brazil, there are big differences in food security between the cities.'

The ranking could prove useful for Dutch cities too, reckons Ravensbergen. 'Which neighbourhoods are doing poorly on health or logistics, for instance? And how can you improve the quality of life and the food supply?' 📍 AS



## PROPOSITION

# ‘The $p$ -value should not be all-important’



PhD candidates are required to submit a few propositions with their thesis. In this feature, they explain the thinking behind their most provocative proposition. This time it's the turn of Jeroen Berg, who was awarded his PhD on 11 October for his study on resistance to mildew in cucumbers.

**PhD student Jeroen Berg struck lucky. Or so he thought. Right at the start of his research he discovered a crucial gene in cucumbers. Sadly, replication showed the result was not significant. Which is why his proposition is: ‘The term statistical significance, which is based on an arbitrarily chosen  $p$ -value threshold, should be banned from science.’**

‘There is always a chance that you will discover something that is actually based on coincidence. The scientific community has agreed that the chance of this must not be more than five per cent, hence the  $p$ -value of

0.05. That means that one in 20 conclusions in a study are not actually true. That seems to me a rather random threshold. What is the

**‘It is more important to look at what your result could mean’**

difference between a  $p$ -value of 0.049 and one of 0.051? This is a bit hypocritical, of course, given that I've written about 20 times in every chapter of my thesis: “ $p$  is this big, so this is significant”. You can't leave it out either,

because then the reviewers come down on you like a ton of bricks. It's built in to the system. There is a journal, *Basic and applied social psychology*, which has completely abandoned  $p$ -values. I think it's fine to mention the  $p$ -value, but you shouldn't let so much depend on it. It is more important to look at what the effect you have measured could mean. The gene I was researching did turn out to be important, but not in the way I first thought it was.

Researchers should check their own data much more often, and try to replicate studies. But that takes a lot of time and money, two things that are in short supply, sadly.’ **© CJ**

## Do you dream about your first novel?

Are you a student with literary ambitions? *Resource* has linked up with a nationwide literary competition for students, and the prize is the chance to receive guidance from a literary agent to get your novel published.

### JOIN IN!

On [resource.wur.nl](http://resource.wur.nl) you can find detailed information about the competition and how to enter it.

**Please note: your entry must be in Dutch.**

**RESOURCE**  
For everyone at Wageningen University & Research

Public policy expert Candel: ‘Stop the quick fixes’

# Where is the vision for agriculture?



Farmers protesting in The Hague is a sign of the persistent failure of government policy. Market forces have become a goal in their own right and crises are resolved with ad hoc policies, concludes public policy expert Jeroen Candel. ‘There is no vision about where we should be heading.’

*text* Roelof Kleis *photo* Hollandse Hoogte/Robin Utrecht

**J**eroen Candel, assistant professor in the Public Administration and Policy group, regularly publishes critical opinions on food and agriculture policy. On 1 October, the day of the major protest by farmers in The Hague, an interview with him appeared on the online platform Foodlog in which he called the crisis in Dutch agriculture a ‘classic case of government failure’. He has not been short

of media attention since then. *Resource* spoke to him.

***What do you mean when you say the agriculture crisis is a classic example of government failure?***

‘For several decades now, the government’s actions have been typified by a lack of any vision about where agriculture should be heading. The current agricultural system in

the Netherlands clearly has problems in various areas. There are issues with nitrogen, the contribution to climate change, zoonoses, food safety and so on. We’ve known that for a long while. Yet there’s no answer to the question of what we should be doing next with agriculture and the food system in broad terms. The government is constantly reacting to incidents and crises. As a result, farmers continually have to deal with sudden, drastic



▼ Jeroen Candel says the farmers protesting in The Hague on 1 October have every reason to be angry.



## ‘At present, circular agriculture is no more than a buzzword’

Jeroen Candel, assistant professor of Public Administration and Policy

we’re aiming for? What kind of farm fits? How can you steer people towards that? How does it relate to European agricultural policy? We still need to fill in the details everywhere. Another problem is that there are no nuances in the current political debate. You’re either for farmers or against them. It is a case of nature versus the interests of farmers. Nature versus the economy. That’s very simplistic and polarizing, whereas a more unifying discourse is actually needed. A future vision is needed in which agriculture and nature go together.’

### *The cabinet wants to buy up farms near nature areas and subsidize the construction of low-emission barns.*

‘If that is all they do, that would be a typical example of reactive policy, of quick fixes. That isn’t the answer to the question of where agriculture should be headed. We need to see what else the cabinet does. The minister, Carola Schouten, told the farmers in The Hague that she didn’t want to halve the livestock population. So what *does* she want?’

### *What is WUR’s role in creating that new narrative?*

‘The formulation of policy is primarily a task for politicians. But we can help them as a university. Wageningen’s thinking on circular agriculture offers politicians ammunition for further developing their ideas. That is why it is so important that Wageningen nurtures and encourages this debate. What does circular agriculture actually mean? Is it feasible and what are the views of the various disciplines? We need to engage with one another on this topic. And there’s no harm in disagreement.’

### *So no One Wageningen vision on circular agriculture?*


‘Definitely not. Wageningen has a tendency to centralize the formulation of a vision, whereas you should actually delegate it to the scientists. Let them debate the issue. Management should facilitate and encourage this. We

should accept that this might produce conflicting advice and recommendations rather than a silver bullet solution. That is precisely the added value of scientific debate.’

### *What can your discipline — Public Administration and Policy — add?*

‘My discipline has a contribution to make in three areas. We can interpret political controversies and sensitivities. Why is something so sensitive? What is the reason for that polarization and what could you do to put an end to it? Secondly, we can offer policy options. What kinds of interventions could you implement and what would be the consequences? Finally, there is the governance issue. Who does what? What is the role of the government, the market and society at large?’

### *Are you optimistic that far-reaching choices will be made?*

‘I believe we are at a crossroads. To have agriculture so high up the political agenda is unique. The nitrogen crisis is what is known in policy theory as a “focusing event”, one in which an issue suddenly attracts an awful lot of attention. That is often the ideal moment to push through major changes. This is a very exciting time. There is a sense of crisis and the politicians will not be able to avoid making hard choices. But those choices are only possible if you develop a vision of what you want from agriculture. The nitrogen crisis is creating a policy window, momentum that makes this possible. At the same time, I’m afraid that a creative solution will be found to the nitrogen problem that amounts to yet another quick fix. And that is not enough. The challenges facing farming are too big for reactive policy.’ 

**Resource will be holding a debate on the nitrogen problem in Dutch agriculture on Monday 21 October. See p. 7.**

measures without any overarching narrative saying where they should be heading.’

### *Why is that?*

‘Since the 80s and 90s, the state has become much less interventionist and has let the market become the primary mechanism for steering things. In agriculture, market forces have become a goal in their own right. European agriculture has been deregulated. Farmers have to produce for the global market, which means that the cost price is all that matters. I call that out-of-control neoliberalism.’

### *You advocate a new narrative for agriculture. Isn’t that new narrative circular agriculture?*

‘At present, circular agriculture is no more than a buzzword. It has been in the coalition agreement for two years now, but what do politicians mean by it? What is the model that

Researcher looks for life using DNA from water samples

# CSI at sea

Give him a litre of water and about four hours, and Reindert Nijland will tell you exactly which fish have been swimming in the water. It's like CSI, but then for real. And he doesn't even need any big machinery to do it.

*text* Roelof Kleis *photo* Aldo Allesie



**M**olecular biologist Reindert Nijland of the Marine Animal Ecology chair group takes a camera bag out of the cupboard. It contains his mobile DNA lab with everything he needs to carry out genetic analyses using environmental DNA, or e-DNA. He can use e-DNA to identify all the genetic material organisms leave behind in their environment, such as scales, mucus and excreta, for instance. Organic waste that continuously leaves a kind of fingerprint in the water.

#### DNA FIELD GUIDE

With the right techniques you can pick up, amplify and sequence the genetic trail and trace it back to its original owner. Science is making extremely rapid progress in sequencing the letters of the genetic code. The most astonishing piece of high tech involved is the MinION nanopore sequencer that Nijland works with (see inset). No bigger than a stapler, this gadget can read DNA codes at lightning speed. At a rate of 200,000 letters (bases) per second, to be precise. The MinION can process about 80,000 fragments of DNA, each with 2000 base pairs, in one and a half hours.

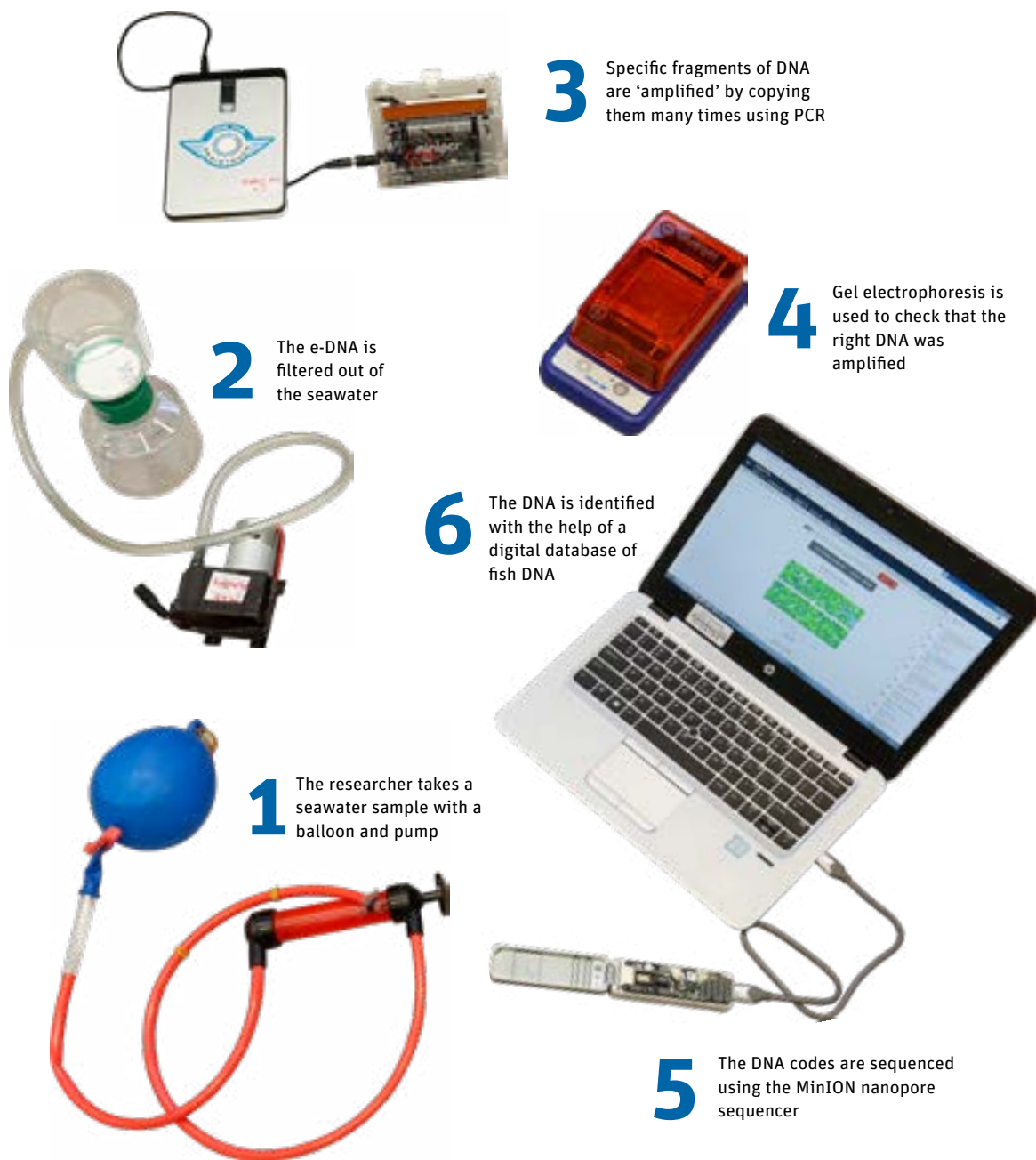
But that data is only of any use if you can identify those codes, adds Nijland. And that is where the bottleneck was for a long time. 'To identify species, you need a database with "barcodes": bits of genetic code that are unique to a species. You could compare it to a field guide. You can't do much without one.'

#### DETECTABLE TRAIL

There is now a database of this kind for the fish found in the North Sea, making it possible to use e-DNA to monitor where a particular fish has been. 'But it doesn't tell us much about the numbers of that species, and therefore about populations,' Nijland emphasizes. The method is still new and its potential and limitations are being studied.

How long does a fish's trail remain detectable, for example? 'For e-DNA in salt water, it is more a question of hours than of days,' says Nijland. 'The longer a fish stays the more material it





## IDENTIFYING FISH E-DNA WITH MINION

Researcher Reindert Nijland identifies the environmental DNA (e-DNA) of North Sea fish with a smart little gadget: the MinION nanopore sequencer. The process starts with taking a water sample. Being a diver, Nijland enjoys doing that himself, using bright blue balloons. 'From Action discount store, cheap and cheerful but strong enough.' Next, Nijland filters the DNA out of the water and isolates it. He then proceeds to amplify the DNA signal he is interested in, namely that of fish. He does that by copying a fragment of mitochondrial DNA specific to fish several billion times using polymerase chain reaction (PCR). The resulting fish DNA, with long barcodes of 2000 base pairs (letters), is then ready to be sequenced by the MinION. It is a crafty method. 'Single-strand DNA fragments pass across a plate in the gadget with little electrified channels – nanopores,' explains Nijland. 'The bases, the letters of the DNA code, create resistance in the channel, each letter in its own way. The difference in resistance turns into a changing electric signal, which is linked to the letters of the genetic code.' The gadget works at lightning speed, with each of the 500 pores reading 400 letters per second.

leaves behind, and the easier it is to demonstrate its presence. But you can even detect a fish that has just swum by. We are still working on the spatial factor. In fish hotels – concrete structures where fish can shelter – located in the Haringvliet estuary, we see that detection can be very local. For example, we can find no DNA of the round goby 50 metres from the hotel, whereas we know the fish are present in large numbers close to the hotel.'


### IMPACT OF FISHERIES

One of the applications of the MinION is the European GEANS project, which stands for Genetic tools for Ecosystem health Assessment

in the North Sea. The project is studying the possibility of replacing the current way of monitoring seabed fauna in the North Sea with e-DNA analysis of soil samples from which the DNA is isolated and sequenced. WUR is closely involved in this project. Nijland: 'The North Sea is being intensively monitored to reveal the impact of fisheries, wind turbines, sand extraction and the like. That is time-consuming and expensive. It might be possible to do it a lot faster and more cheaply with e-DNA analysis. Within this project we lead the work on harmonizing and standardizing the method.' Nijland has no doubts about the success of the method. 'The biggest challenge


is to convince our colleagues in Europe that nanopore sequencing should become the standard method.'

### PORPOISES

According to Niland, the new method opens up still more possibilities. Such as identifying an individual animal, he dreams out loud. 'That is impossible for fish. There are just too many of them. But the method we use to detect fish DNA can detect mammal DNA too. We are currently developing an individual identification system for porpoises. That can give you a fingerprint of an individual animal you have never seen.' 



## CLIMATE JUSTICE NOW!

'What do we want?' 'Climate justice!' 'When do we want it?' 'Now!' WUR student Malik Dasoo leads the protest chant during the occupation of the Amsterdam street Stadhouderskade on Monday 7 October. The co-founder of Extinction Rebellion Wageningen took part in the protest because he thinks the government is not doing enough to deal with the climate crisis. 'We've signed petitions, voted, organized climate marches and campaigned. Nothing works.' Time for the next step: civil disobedience. An estimated 50 or so people from Wageningen joined the protest, including lots of WUR students and at least one lecturer.  LZ, photo Bram Belloni







For more on this,  
watch the video report  
at [resource-online.nl](https://resource-online.nl)





# 50 years of nutrition research.

Nutrition research has been going on at Wageningen for 50 years. Professors Edith Feskens and Sander Kersten mark the occasion by looking ahead.

text Astrid Smit photos Bram Belloni

## Healthy diets worldwide

**Edith Feskens was appointed to the new chair in Global Nutrition at the beginning of this year. 'In large areas of the world there is not just undernutrition, but a lot of overweight as well. With all the diseases that go with it.'**

### **Where do you want to end up with the research?**

'How can we feed 10 billion people in 2050 with a healthy, sustainable diet? Which means no vitamin deficiencies, overweight or underweight. It is theoretically possible: worldwide there is enough food available to provide us all with sufficient calories, protein, vitamins and minerals. It is just the distribution that goes wrong. Our contribution is modest, but I am optimistic. Just look at the impact of the discussion about climate change. In the past five years, vegetarian food has become enormously popular in the West. We couldn't have dreamt of that 10 years ago. Big changes are possible. To achieve them we must change the food system radically. Less emphasis on increasing production, for instance, and more emphasis on sustainability and health. We want to support that line with our research. To start with, we are focusing on the continents of Asia and Africa. How can we ensure that the people living there get a healthy diet?'

### **How are you going to approach it?**

'A large international research programme on Food Systems for a

Sustainable Diet is already up and running, led by Inge Brouwer. And we are setting up new projects as well. Our focus: what is a healthy diet in these countries, how sustainable is it to produce, and how does it reach the consumer?'

### **What kinds of new projects do you have in mind?**

'In the Netherlands there is a project run by the Nutrition Centre called 'The Healthy School Canteen'. Other countries would like to implement something like this with our help. In Ethiopia we research what schoolchildren consider healthy and why. They don't buy fresh fruit on their way to school because they are afraid it has suffered from air pollution. They eat a packet of crisps instead. They think that is healthier, and it has higher status. That is an interesting finding, and one you can use.'

## 'We must radically change the food system'

### **Until recently, you held the chair in Nutrition and Health in the Life Cycle. How have you ended up at Global Nutrition?**

'For years I have been working on the prevention of diabetes and overweight. The research resulted in a successful method called SLIMMER, for preventing diabetes and overweight with an adapted diet and exercise. People who take this programme achieve permanent weight loss, as one of our PhD students proved. The method is even covered by the basic health insurance now, so what more could a scientist want? I began to think about the last 10 years of my academic career. Since 2005, I have also led quite a few projects on diabetes and overweight in developing countries. Now I am going to expand that research line, precisely because the problem of overnutrition is growing in those countries.'





# What next?

## HAPPY BIRTHDAY TO YOU...

The Human Nutrition and Health department at WUR is half a century old. Its establishment heralded the start of academic research on the link between nutrition and health in the Netherlands. The 50th anniversary will be celebrated with a scientific symposium with international speakers on Friday 18 October, and with an alumni day on the campus in Wageningen on Saturday 19 October. Also see [wur.nl/humannutrition50](http://wur.nl/humannutrition50).

## Rock-solid dietary knowledge

**Sander Kersten, professor of Nutrition, Metabolism and Genomics, is fascinated by the interaction between nutrients and genes. He wants to generate knowledge about it that ‘gets into the textbooks and is never dropped from them again.’**

### *How does nutrition activate our genes?*

‘Imagine you eat a meal that is rich in fatty acids. They get absorbed by cells in our bodies. The fatty acids serve as fuel, but they also bind to certain proteins in the cells, known as transcription factors. These ensure that parts of the DNA are transcribed, thus activating genes. We now know that there are transcription factors for fatty acids, glucose and amino acids. We wonder why it works like that. What is the underlying logic?’

### *What kinds of information has that delivered so far?*

‘We have mainly focused on the fatty acids. Using a new technique called RNA sequencing, we can see at a glance which of all the 25,000 genes a human being has are switched on in cells of a particular tissue type. We concentrate on two genes that are active in the digestion of fatty acids. One of them ensures that the cell absorbs less fat. The other regulates the storage of the fats as fat droplets. So switching on that gene is part of the feedback so that not too much fat gets into the cell, or that at least it is safely stored.’

## ‘The way the body works is so wildly complex’

### *Have you found a link between nutrients and diseases?*


‘I try to steer clear of that subject. I wonder whether we can ever demonstrate how any nutrient protects against diseases or causes

them. The way the body works is so wildly complex. I seek to understand how the body normally works, and we are making progress on that. A nice example is the work of my colleague Lydia Afman. She discovered that in people on a diet containing saturated fats, genes were switched on that are active in inflammation processes. This didn’t happen at all in people who ate equal amounts of unsaturated fats. A very significant result.’

### *What do you hope to achieve in the next few years?*

‘We hope to obtain some rock-solid scientific findings. Things that will get into the textbooks and never be dropped from them again. In this respect, I’m worried about developments in our field. A lot of research results that get published in leading journals like *Nature* and *Cell* turn out not to be replicable or even to be wrong. An article in *Nature* in 2006 claimed that glucose controlled cells through a particular receptor. Now everyone knows that is not how it works, but the paper has never been retracted. That undermines the authority of our discipline. There is too much pressure to publish in top journals.’

### *How can that development be stopped?*

‘By putting up resistance. That is relatively easy for me, I have a permanent post. Young people don’t always have any choice. We must protect them and allow them the time to do thorough research.’ 



# NO CHANGING THE CLOCKS?

The clocks will go back on the night of 26 to 27 October as we switch to winter time. But as far as the European Union is concerned, there will be no more changing the clocks as of April 2021. Each member state will then have to introduce permanent winter time or summer time. What problem is that actually solving? And which time should we choose?

text Coretta Jongeling illustration Henk van Ruitenbeek

**'It always takes me a week to adjust when the clocks change'**

## Vera Putker



**MSc student of Plant Sciences**

'I'm totally in favour of keeping the switch between summer time and winter time. That means it is still a bit light on winter mornings and we can enjoy really long evenings in the summer. I like going outdoors on walks or cycling, and I do that a lot less in the winter just because it gets dark early. That makes it so nice in the summer to be out at that time of day. **I don't understand the argument that changing the clocks is bad for our natural biorhythms.** Your natural biorhythm is to get up as soon as it's light and go to bed as soon as it's dark. Nobody lives according to that principle any more in modern society.'

## Robert Martinez Varderi



**MSc student of Urban Environmental Management**

'I always hate it when they put the clocks back in the autumn as that makes the days much shorter. I don't mind what time it gets light in the morning because I'm usually still sleeping then anyway. But I find it depressing if it's dark when I come home from lectures. So I would prefer to keep to summer time. In other respects I don't have much of a problem with it. My phone changes the time automatically so I don't get confused. And it always happens in the weekend. **Mostly I'm drinking beer then so I don't really notice the difference the next day.'**





## Joes ten Thij



**BSc student of Plant Sciences**

'I'm in favour of permanent winter time. That's the logical option if you want to take our neighbouring countries into consideration. Permanent summer time wouldn't be good for our biological clocks.

**I certainly find the changes a problem. I can tell my biological clock is confused after the clocks have changed.** It takes me a week to adjust. In particular for people who don't find it easy to "switch", it's important to choose one permanent time.'

## Francesco Secchi



**Postdoc in Development Economics**

'Sometimes, in June, I sit next to the Rhine feeling the last rays of sun on my face. It's already late and I often think what a wonderfully long and rich day it has been! The proposed ending of summer time will mean I won't experience that again, I guess. That would be a pity.

**I would prefer to keep summer time as our standard time, but it would be best to choose the same time for all of Europe.** If

the EU countries have different time zones, that would feel like a step back from an ever-closer union, something our European generation would never want.'

## Ruben Dümmer



**MSc student of Plant Sciences**

'As far as I'm concerned, it should stay as it is as opinions are very divided at present. **Of course it's great during summer time to be outside in the light until 11 in the evening and take one last dip in the Rhine.** In the autumn and spring you can go for a walk up to eight in the evening and

enjoy the light. I do find going to bed early more difficult in summer time as it's light until late and that doesn't feel natural. Research has shown that it is better for our biological clocks to have permanent winter time. It might be dark one hour earlier but of course you can get up one hour earlier and get just as much out of the day as you normally would.'

## Patrick Jansen



**Associate professor in the Resource Ecology group**

'Personally, I don't find the clocks changing a problem but it *is* a problem for my work. **I use camera traps to study the activity patterns of wild animals. The time changes are really annoying for this.** We have to put the cameras all on the same

time regime but mistakes are often made when setting the camera times. That reduces the data quality. I have heard that permanent winter time is slightly more in line with the human biorhythm than permanent summer time. For me, it would mean waking up extremely early in the summer as I tend to wake up when the sun rises. Fortunately I don't live in northern Sweden!'

**'It would probably be nicer for cows to have permanent summer time'**

## Martin de Bree



**Manager at Dairy Campus**

'I think a lot of people have more difficulty switching between summer time and winter time than animals do. I work with cows that have to be milked every 12 hours. When the clocks change, we adjust the milking time gradually. **If you suddenly turn up for milking one**

**hour later, the cows will be fit to burst and you can't do that to them.** So we compensate by starting earlier on the first day of winter time. It would probably be nicer for the cows to permanently have summer time as they would spend longer in the field and be able to graze more.' 🐄







# Surfing your stress

In recent years, doing a degree seems to have become a guarantee of stress. More and more students are displaying symptoms of burnout, in Wageningen as elsewhere. With its new Surf Your Stress campaign, the university wants to turn the tide.

text Luuk Zegers illustration Yvonne Kroese

**H**undreds of Wageningen students turned up on Tuesday 8 October to see *Time Out*, an interactive play with which WUR kicked off Surf Your Stress. Student psychotherapist Esther Ruijters is the project leader of this large anti-stress campaign. *Resource* had a chat with her.

***Have WUR students started suffering more from stress in recent years?***

'I can't give you exact figures on how much stress has increased. The general literature shows that one in four students suffers burn-

out symptoms such as emotional exhaustion. We are also hearing signals from our colleagues. And there are more and more factors that can cause stress in students (see inset, ed.). What we do know is that there has been a big increase in recent years in the number of students making appointments to see the students' psychologist. Where study-related problems are concerned, they mainly talk about study stress, fear of failure, discipline issues and graduation issues. In the personal problems category, depression is by far the biggest issue. The parents of the current generation of students often say your university years are the

Find out on p.25 how Joris survived a burnout



## ‘Stress is still something people find hard to talk about. We want to get that discussion started’

best days of your life. But things were different then, because you got a grant and could take 10 years to complete your degree. Perhaps it was easier then to have a good time than it is now. Especially if you do want your student days to be “the best days of your life”, if you go for broad development with a year on a committee for example and still want to graduate in the set number of years because you’re afraid of a large student debt.’

### *Now there is the new Surf Your Stress campaign. How did that start?*

‘Last year, the Student Council drew attention to complaints of stress among students and suggested organizing a thematic week on stress. It soon became clear that one week wouldn’t be enough, and this has evolved into a much bigger project.’

### *A project that will relieve students of all stress?*

‘No. You can’t remove stress in its entirety. Anyway, stress is good for people – within reason. It helps you perform during a match or an exam. Stress comes in waves. You have to learn how to deal with those waves, how to surf them. Hence the name. Perhaps you’ll fall off the surfboard and go under occasionally. That’s fine. It can happen to anyone and you can learn from that. The trick is to climb back onto your surfboard and start surfing again.’

### *So what will Surf Your Stress do?*

‘Break the taboo on stress by putting it in the spotlight. Stress is still something people find hard to talk about. We want to use the Surf Your Stress week from 11 to 15 November to start off a discussion. We also want to give students pointers that will help them deal with stress better. An example is the Life without Mobile Devices workshop. It will be given by a man who spent a year without a phone. He will talk about what he learned from that and how you can reduce your digital dependence. Or The Art Of Failure, a kind of masterclass on how to fail in which you learn to make mistakes and find out why that is important for learning and growing.’

### *How can you tell if you’re too stressed?*

‘It often has an effect on both your body and your mind. You’re tired mentally and you’re less interested in doing things, for example studying, playing sport or meeting up with friends. You may burst into tears for no reason. Or have physical symptoms such as pain in your neck, shoulders or back. If your stress persists, your body reacts with physical complaints that are essentially telling you to take things easy. But the tricky thing is that stress also makes your body produce adrenaline. That makes it more difficult for you to notice your body is exhausted.’

### *So when does that qualify as a burnout?*

‘There is a lot of debate among psychologists about what a burnout is exactly. I think you can compare it with overcropping. Farmers need to let their fields lie fallow occasionally for a couple of months to let the soil get new nutrients. If you don’t and you keep growing new crops, that might be effective in the short term but in the long term you leach all the nutrients out of the soil and you get soil exhaustion. Then nothing grows any more and you end up much further from your goal.’

*If you suffer from stress or burnout symptoms, or have questions about stress, check out [wur.eu/surfyourstress](http://wur.eu/surfyourstress). You will also find the programme there for the Surf Your Stress week (11-15 November).*

## WHAT CAUSES STRESS?

The Surf Your Stress project team asked Wageningen students what makes them stressed. The result is a list of 11 causes.

- 1 **Pressure to perform:** Students put a lot of pressure on themselves, both in their studies and beyond. They want to have a social life, do a year on a committee, have a job, go on an exchange, travel, etc.
- 2 **Social media:** Students compare themselves against other people on platforms such as Instagram. Because many people only share the positive things, it often

makes them seem more successful or interesting. That increases the pressure to perform. Excessive screen time can also lead to attention and concentration problems.

- 3 **Taboo on stress:** Lots of other people might be stressed, but *I’m* not. Students sometimes admit they used to suffer from stress but they quickly add that they are better now.
- 4 **Pressure from parents:** Many students feel pressurized to graduate quickly so they don’t burden their parents with

additional costs. So-called ‘curling parents’ who sweep away any obstacles in their offspring’s path don’t give their children much room to fail.

- 5 **Loan system/financial worries:** The longer you study, the bigger your student debt. That makes students worry about failing a module, choosing the wrong subject or getting ill. That anxiety can cause stress.
- 6 **Stress among staff:** Students get the impression that many lecturers and study advisers are stressed themselves. That



STUDENT JORIS PIEREY SURVIVED A BURNOUT

## ‘Always do that little bit less’



‘I dived into student life in my first year at Wageningen,’ says Joris Pierrey (21), Bachelor’s student of Health and Society. ‘I became a very active member of KSV. After a couple of months, I started to have difficulty

concentrating. At one point, I was sitting in a lecture room and I thought: I’ll see how long I can focus. After only two seconds, I could no longer follow what the lecturer was saying. There was a lot going on in my head and I was having trouble sleeping. But I thought: everyone does this, no one has problems, so I can manage too.’ Pierrey scraped through to the second year with difficulty and a lot of resits. ‘I didn’t feel comfortable but I went full steam ahead again. I studied, joined AIESEC and became lead singer in a jazz band.’ He gradually realized that he couldn’t carry on like this. ‘When I was back home for the Saint Nicholas celebrations, I wanted to calmly tell my parents and brother that I was struggling a bit. But I suddenly burst into tears. Then I knew I really was stressed out and needed help.’ On the advice of his GP, Pierrey cut back on various activities. ‘If everything is going full blast, you are

bound to get burnt somewhere.’ He shared his story with family and friends and even wrote his thesis on stress among WUR students. ‘If you are in big problems, you think: everyone is doing this and I don’t see them crying — why can’t I cope? But as soon as I shared my story, I discovered I wasn’t the only one.’

## ‘If you are in big problems, you think: everyone is doing this — why can’t I cope?’

It took a while before Pierrey was back on track. ‘I had to reorganize my life and that takes time. But my symptoms were improving after six months.’ He advises stressed students to see how they can make life less busy for themselves. ‘As an expert based on my experience, I would say: always do that little bit less, and be bored occasionally. That lets you process the turmoil of your life and it

means the things that are supposed to be fun really are fun.’ He also encourages students to discuss their problems. ‘That’s what helped me recover eventually.’

Pierrey has some tips for the university. ‘Students have a lot of choice here but they often feel only one option is the right one. So the assistance they get in making the right choice could be improved.’ Pierrey also thinks there is too much emphasis on high grades. ‘Are you a poor student if you only scrape through but develop in other ways? I don’t think so.’ **R**

makes them reluctant to ask for help for their own problems.

- 7 ‘There’s no help’:** Students don’t always know who to approach if they are suffering from stress. Some students don’t realize there are also student counsellors and psychologists in addition to the study advisers and that workshops and courses are organized on how to deal with stress.
- 8 Binding study advice (BSA):** The BSA at WUR is not that tough (you need to get 36 of the 60 credits to progress to the second

year) but it still causes stress among first-year students.

- 9 How the teaching is organized:** Students say they often have several difficult subjects in the same period, the short periods 3 and 4 are very intensive, group work is stressful and it is difficult to work on a thesis independently after having done a lot of group work. They also find the teaching buildings crowded.
- 10 Grants/financial support:** Some international students *have* to graduate within the set number of years because the grant

provider won’t pay for any extensions. Pressure from parents, relatives and neighbours can also play a role, especially if they are contributing financially.

- 11 Cultural differences:** International students have to get used to a different culture and educational system and at the same time build a new social life. In some cases there is more shame surrounding mental problems in their culture, which makes it even more difficult to talk about symptoms.

## IN OTHER NEWS

### BREASTSTROKE

The mosasaur, a gigantic prehistoric marine creature, could swim using its legs, concluded Californian researchers from the animal's bone structure. Most large animals use their tails to propel themselves forward. The mosasaur did that too, but could also do the breaststroke.

### DEATH AND DESTRUCTION

American data scientists have developed a model that predicts the activities of terrorist groups on the basis of previous attacks. Key to the model is that terrorist groups are viewed as companies that deal in death and destruction. An attack is the launch of a new product. And such launches are predictable.

### GOOD NIGHT (1)

Good sleep pays off in better grades, shows research by the Massachusetts Institute of Technology for which 100 students walked around with an activity tracker for a semester. Of the students who slept an average of 6.5 hours, half performed worse than their peers who stayed an hour longer in bed. Variable daily amounts of sleep proved to be disastrous too.

### GOOD NIGHT (2)

Also good to know: getting a good sleep the night before an exam doesn't help. A good night's sleep really helps on the nights after you've been revising, not the night before the big day. And it's not just the amount of sleep that counts, but your bedtime too. Getting to bed way past midnight, says around 2 am, is a bad idea. But the critical point is different for everyone.



No more smoking areas in student societies

# Where are smokers to go?

**All smoking areas in Dutch catering outlets must close at once, decided the Supreme Council on 27 September. A thorny problem for student societies, because smoking out of doors can be a nuisance for the neighbourhood.**

The ban on smoking areas applies with immediate effect, but is not being enforced yet, explains Iris van Noort of the National Chamber of Associations (LKV). 'Now it is up to the NVWA (the Netherlands Food and Consumer Product Safety Authority) and the ministry of Health to make a plan for enforcing it. Until then, no fines will be imposed.' But that doesn't take away the need for societies to find a solution, says Van Noort, and that is not easy. 'If people are not allowed to smoke indoors, they will do so

out of doors, and that can be a nuisance.'

The LKV advises societies to talk to municipalities and find the best way of implementing the ban. 'Ultimately, it is up to the municipalities to enforce it. So good contact is important so as to make the best of it.' Wageningen societies have already established that contact, says vice chair of KSV Franciscus Noëlle Dielissen. 'At the moment the municipality is waiting for more detailed information from The Hague. Things should become clearer in the course of this month'. **© LZ**

**'If people can't smoke indoors, they do so out of doors and cause a nuisance'**



## Phantom students cost the municipality money

**Wageningen municipality probably misses out on thousands of euros because of phantom students: students who are living here but have not registered with the municipality.**

The town gets a contribution from central government for every student who registers as a resident. According to Wageningen spokesperson Tjitske Zwerter, this is about 2500 euros per student per year. However, many students do

not take the trouble to register because since the basic grant was scrapped, doing so no longer brings them any extra money. What is more, some students prefer to stay under the radar – those who are living together or sub-renting illegally, for example. The municipality doesn't know exactly

**Not registered at the municipality? A 325-euro fine!**

how many phantom students there are in Wageningen. 'About 730 houses are empty on paper, including a lot of addresses on the Haarweg and the Bornsesteeg,' says Zwerter. Those addresses are now going to be monitored regularly. Students who are not registered will be fined up to 325 euros. Connect proposed earlier that students should be rewarded for registering. But the municipality first wants to see if the registration level can be raised through a campaign on social media. **© CJ**



# Duivendaal residents still waiting for cash

**Almost 100 current and former residents of student complex Duivendaal have been waiting nearly a year for a refund of their deposit and service charges and their rent discount from the former landlord, Duivendaal Beheer BV. The amounts range from 500 to 1200 euros – about 50,000 euros in total.**

Duivendaal, which used to be WUR's headquarters, was bought by student accommodation provider Xior last year. Before that, WUR rented the premises for a number of years to Duivendaal Beheer BV, a collaborative venture between Socius Wonen, which provides housing for young people, and Van der Leij real estate. A dispute about the division of responsibilities between the two parties is behind the delay to the refunds for current and former residents. The residents have complained and a start was

made on 8 October with repaying the deposits. But resident Max Achterweust says the battle is far from won. 'They haven't paid everything. Each party is pointing to the other, and we lose out as a result.'

Socius's lawyer Jan Cees Noordijk says that a list of names, deposit sums and account numbers was sent to Van der Leij's lawyer in mid-July and that means Socius has fulfilled its obligations. Van der Leij, however, says the list was incomplete. Noordijk: 'That would be a pity. But so far we have heard nothing from them saying this.' There is also disagreement about the size of the refunds. Most of the students affected just want their deposit and excess service charges refunded but some people qualify for a rent

discount too. Because of exceptional circumstances, they were given a 'temporary loan' contract that stated they only had to pay service charges. Despite this, the full rent was deducted from their account. Van der Leij says there is a difference of opinion between the real estate company and Socius about who is responsible for repaying the promised rent discount. 'We need to settle this matter. Those people are indeed entitled to that money.' **LZ**



PHOTO: SVEN MENSCHER

▲ Duivendaal's indoor courtyard.

## MEANWHILE IN... GREECE

### 'Many Greeks are not so sympathetic towards the refugees'

**A fire broke out in the Moria migrant camp in Lesbos on 29 September, killing at least one person. Protests ensued and the police fired tear gas at migrants. Many refugees are staying on Lesbos due to an EU-Turkey deal. The camp has capacity for 3000 but it now houses around 12,000 people.**

'When the first refugees started arriving in Greece, they were mainly from Syria and numbers were smaller. Then, refugees from other countries such as Pakistan and Afghanistan also started arriving and the migrant problem grew to what it is today. In response, refugee camps, or "hotspots", have been set up in different parts of Greece. There is a hotspot near my family home – I remember going to the port of Piraeus to watch the first ships arriving. There were hundreds of people and there were rows and rows of big buses waiting to take them further into Greece.



Fotis Tyrogalas, an MSc student of Environmental Science from Greece, reflects on the current situation in his home country.

The majority of hotspots are on army land, and the government used money from the EU to bring in tents and containers to set up migrant camps. Some



PHOTO: SHUTTERSTOCK

children go to Greek schools and in some hotspots there are football pitches etc. But of course these don't solve their many problems. Although there are NGOs working with migrants in Greece, the majority of Greeks are less sympathetic. The new government is more right-wing and they brought the department of immigration under the police department, as if immigrants were people who need to be policed.

My sister has a company in Greece and she hires lots of Pakistani workers. They were willing to work for less than the going hourly rate and it makes sense for the majority of companies in Greece, but this also creates discontent amongst Greek workers, as unemployment is already high. With the migrant crisis, we Greeks are pushed even harder to face our problems, especially the economic ones.' **GH**

# YOU ON CAMPUS

**The Student Council office is located on the ground floor of the Forum. One of the student parties on the Council is S&I (Sustainability and Internationalization), and this is where Zheng (Jane) Wu (25) is working. She took a break from her second Master's, in Plant Biotechnology, to serve on a board for a year. Her aim is to help international students adjust to university life and encourage them to develop an assertive, problem-solving attitude.**

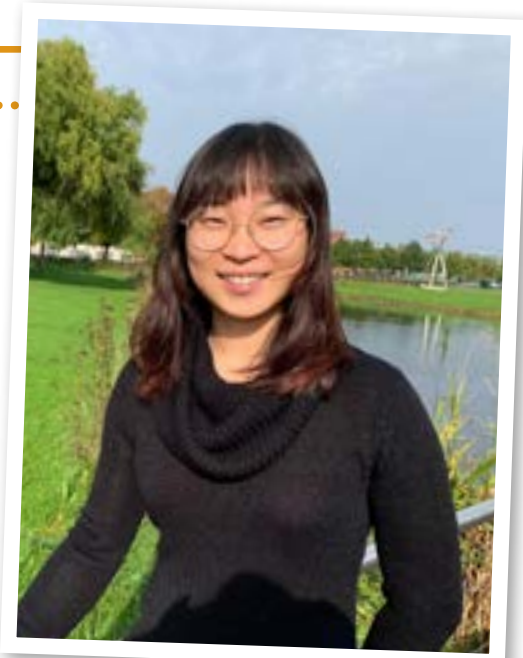
'The Student Council is really unique to the Netherlands,' Zheng says. 'We do have something similar in China but the students don't have as much say. Here, our ideas for improving the university can actually influence future policymaking. So I think this is really important and I appreciate the chance we get as students to do something like this.'

An important subject on the agenda of S&I and

the green organizations right now is the catering on campus. They are looking into how to reduce plastic waste. The 'Bring your own cup' campaign is a successful example and now you can also bring your own lunchbox to the Chinese caterer, for instance. These are the

**'Here in Wageningen student's ideas for improving the university can actually influence the policymaking'**

little things you can do yourself, Zheng says. 'If you just blame the university for not doing anything about sustainability, it doesn't work. So if you have really good ideas, try to find the



right person to talk to. For instance, Student Council members can help you to implement an idea. But if students realize they have some influence, that is a good thing in itself.'

For Zheng, one of the most positive things about her time at WUR is the sharing of ideas and the interaction between students from all over the world. If you are a student who would like to get involved in greening the university and to share your ideas, you are welcome at the open meeting of S&I, which takes place every Monday. AdH

## The perfect way to get through the Dutch autumn

**As a third-year Bachelor's student, blogger Geert van Zandbrink could have opted for an exchange visit to a hot country. But he is staying put: the Dutch autumn suits him down to the ground.**

'The rain spatters from an overfull gutter down my window and onto the pavement below. Everything that was once green has turned brown, red, yellow and orange in no time. Wageningen is not so green after all, it seems; no city can stop the arrival of the Dutch autumn. You have to accept and move on.

### TANNED FACE

Wouldn't it be great to escape the autumn and winter and spend

some time in a sunny southern European city? Barcelona, Bologna, Valencia... As a brand-new third-year, I have now entered the BSc zone where people go on exchanges. Six months abroad, before returning with an out-of-this-world experience, a tanned face plus some exceptionally high grades.

**'I wrap myself in a fleece blanket and curl up on the sofa with a mug of tea'**

Some of my fellow students and friends are indeed enjoying an

"Indian summer" on the Mediterranean. Personally, I've arranged to do my Bachelor's degree in four years to allow time for two minors, among other things. I plan to do one of them abroad next academic year. Perhaps that is something to look forward to already, but I'm not thinking about it yet. I'm staying put because the Dutch autumn suits me down to the ground.

### MUG OF TEA

I prefer to get my warmth in the shower, where I gradually turn up the temperature of the water until I end up a tiny bit burnt. Then I wrap myself in a fleece blanket and curl up on the sofa with a mug of tea

## BLOG



Geert van Zandbrink studies Economics and Policy. Read all his blogs at [resource-online.nl](http://resource-online.nl).

and a good book. And above all, I get down to work. Being productive again gives me the boost I need after a holiday where, as someone who is always on the go, I felt at a loose end. The perfect way to get through the Dutch autumn; Wageningen suits me fine for now. I can worry about those sunny months studying and partying with cool new friends from all over the world later. Time to brew another mug of tea.'



**Wageningen Master's students do internships and thesis research all around the world, getting to know their field and other cultures. Here they talk about their adventures.**

# Hard work in a gorgeous setting

'The experience of working and living at Oxford University is quite surreal. It felt like I was working at Hogwarts for six months. In fact, several scenes of the Harry Potter movies were actually shot in the library where I went to study. Every day I would walk amongst grand buildings, of which some are almost 1000 years old, while students strolled around in gowns.

## BOW TIES AND BUTLERS

Oxford is famed for its outlandish traditions and massive wealth, which often translates into over-the-top formality and expenses made for expenses sake. Full-time students are divided into social units called colleges. I attended several college dinners. You can only go there if you are invited by a member. Your name has to be on a list. And turning up in jeans and a hoodie is not an option. Without a full-on tuxedo plus bow tie, you're not allowed in. All this, just to have dinner with friends. Another time, my lab threw an informal Christmas party. Butlers served us wine the whole night and there was a first edition Jane Austen novel standing casually on one of the bookshelves in the rented common room.

## HOMELESS PEOPLE

The university seems to own the city, as everywhere you go you'll find some reminder of the institution. There is however a major clash of wealth in the city. Oxford has a big homeless problem. At the same time, Oxford University is one of the richest universities in the world. It's painful to walk home past the many homeless people, all dressed up after a fancy dinner paid for out of university funds.

For my internship, I worked in a Plant Science laboratory. Getting to work alongside academic elites was inspiring, but it was a tough environment. The place was open 24 hours a day, seven

days a week, and I was given lots of independence to work on my project. In the end, I spent most of my days in the lab, sometimes working up to 20 hours per day. No one forced me to do that, the pressure in the lab was just so intense. Everyone else did the same. There also wasn't really anyone who checked if I was doing okay. Ultimately, the schedule wasn't great for my

## 'I was too much drawn in by the prestige of Oxford'

health, physically and mentally.

I'm lucky that I got the chance to study in a place of tremendous history and to tread in the footsteps of famous British people. However, looking back, I think I was too much drawn in by the prestige of the place. I was experiencing so many people's dreams, but it became quite ordinary for me in the end.' **IC**



## THE WORKS

**Who** Ben Excell (25), MSc student of Biotechnology  
**What?** Research internship at Plant Sciences, Oxford University  
**Where?** Oxford, United Kingdom

**Do you too have a nice story about your internship or thesis research abroad?**  
 Email [lieke.dekwant@wur.nl](mailto:lieke.dekwant@wur.nl).



## In memoriam

## Niki Dijkstra



It is our very sad duty to announce that our Master's student Niki Dijkstra has passed away. Niki started

her Bachelor's degree in Nutrition and Health in Wageningen in September 2012. She already knew Wageningen well, as she grew up here. Alongside the regular courses within our BSc programme, she took the minor in Sport, Movement and Health at VU University in Amsterdam. After obtaining her Bachelor's degree, with a focus on Nutrition & Disease, Niki went to Peru in March 2017 to work as a volunteer and learn Spanish at the same time. At the end of 2017, she started on the MSc in Nutrition and Health, specializing in Nutritional Physiology and Health Status. This summer she would have been finishing her thesis done in collabo-

ration with the RIVM (National Institute for Public Health and the Environment) and the Erasmus Medical Centre in Rotterdam. After graduation she hoped to work in a team doing physiology research and to help society with the knowledge generated. This fitted well with her personal drivers, which included giving meaning and collaborating. On 29 June, Niki suffered a severe cardiac arrest while running just outside Wageningen. After a three-month struggle to regain consciousness, Niki passed away from a congenital heart defect in the night of 2 October. In Niki we lose a kind, humble and tenacious student. All the programme team wish to extend our sincerest condolences to her parents, family and friends at this sad and difficult time.

*On behalf of the programme team,  
Rolf Marteijs, Programme Director,  
Nutrition and Health*

## Announcements

## Grip on your dip

Are you between 16 and 25 years old, and have you not been feeling too good for a while? Maybe you've had a bit too much on your plate? Take heart: you are not the only one! It might be making you prone to gloomy feelings, or perhaps you find yourself entertaining negative thoughts about yourself or the world around you. In short: you feel like you've lost your grip on yourself and what's going on around you. Do you want to do something about it yourself? Do you want to feel better, more enthusiastic, and be able cope with life a bit more easily? Here's what Grip on your Dip has to offer: various tips and information on dips and depressions, and the chance to email a dip expert who can help you cope with your dip. You can also exchange tips and make anonymous contact with young people going through a dip. Or you could take our course. We are here for young

people who feel down, and also for their nearest and dearest. All the information on Grip on your Dip is based on scientific findings.

[GRIPOPJEDIP.NL](http://GRIPOPJEDIP.NL) AND [KOPSTORING.NL](http://KOPSTORING.NL)

## Meditation course: From 'must' to 'yes!'

In this course we use a method to get from 'must' to 'yes!' in seven simple steps: grounding, clearing, relaxing, breathing, liberating, connecting and meaningful togetherness. The course boosts positive thinking and feelings, because science has shown that optimism helps us achieve goals and be resilient. Finding space for what you want brings relaxation and gives life meaning. It is easy to practise at home using the guided meditation on your phone, and there is a syllabus with extra exercises. There's a free trial class at 20:15 on Wednesday 30 October in ZINTRE, Gen. Foulkesweg 37, room 1029. The seven-week course starts on Wednesday 6 November. Laura Jonker: 06-45229355 [ZIJNVOLZIN.NL](http://ZIJNVOLZIN.NL)

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## Agenda

### Thursday 17 October to 7 November FILMHUIS MOVIE W

*Rojo*: An Argentinian thriller about public indifference and a military dictatorship. *Dolor Y Gloria*: A Spanish drama about a tormented filmmaker looking back on his impoverished youth and his glorious career. *Only You*: A raw Scottish relationship drama about fairy-tale love affairs that come to an end. *De Patrick*: A Belgian tragicomedy about human eccentricities, about letting go, and about being happy the way you are. Location: Wilhelminaweg 3A, Wageningen. €6.50/€5.

MOVIE-W.NL

### Saturday 19 to 26 October DUTCH DESIGN WEEK 2019 - EINDHOVEN

From miscanthus to paper, from bioplastic to bio textiles: the possibilities for developing plant-

based products are endless. WUR is a partner of the Embassy of Sustainable Design, one of six participating embassies. WUR is also a partner in the 4TU Federation along with other science universities, Delft, Twente and Eindhoven. This collaborative venture aims at bridging the divide between design and research. Besides the research centre, this is the first year that Wageningen is participating in the 'Design United' exhibition in the Building with the Clock. This is an exhibition of new and innovative methods of textile production. Flower waste is used as the basis for renewable textiles, and the sea provides the basis for a new take on using threads.

WORLDDESIGNEMBASSIES.COM

### Tuesday 29 October, 20:00 STUDIUM GENERALE LECTURE SERIES ON FEMINISM: 'ONE FEMINISM?'

Initiatives like Me Too, Hollaback

and many others suggest a contemporary feminist revival. However, to what extent can we speak about a single movement? Could we ever? Dr Katrine Smiet shows that feminism does not represent one harmonious phenomenon, but is characterized by intense debates, frictions and contradictions. How can we understand the different manifestations of feminism in the past and today? Location: Impulse (Stippeneng 2, WUR building 115)

WUR.EU/STUDIUM-GENERALE-CALENDAR

### Wednesday 30 October, 19:30-21:15 GUEST LECTURE BY DR CHARUDUTT MISHRA, OUTSTANDING ALUMNUS AWARD WINNER FOR 2019

During the Opening of the Academic Year on 2 September, Dr Charudutt Mishra received the Outstanding Alumnus Award for his remarkable contribution in the field of transdisciplinary research on community-based conservation, with special attention to the snow leopard in Asia. On 30 October, he will give a guest lecture entitled 'Snow leopards of High Asia: my journeys in science and conservation'. Venue: Atlas building, Room Atlas 1 & 2.

### Thursday 31 October, 20:00 STUDIUM GENERALE LECTURE SERIES ON FEMINISM: 'THE RISE OF ANTI-FEMINISM'

Notwithstanding the achievements of the past decades in terms of women's rights, progress towards gender equality is not a given. As a matter of fact, we are currently observing an erosion and revocation of previously acquired rights in several different areas around the world. How can we, in 2019, understand the emergence of anti-feminist movements, and how do they operate to put women's rights under pressure? A lecture by Professor Conny Roggeband. Location: Impulse (Stippeneng 2, WUR building 115).

WUR.EU/STUDIUM-GENERALE-CALENDAR

**Science Cafe Wageningen**  
www.sciencecafe.wageningen.nl  
Music by: Troubagroove

# Artificial womb

Thursday, Oct. 17th  
Café Loburg  
19:45 Live music  
20:15 Science  
FREE ENTRANCE

Speakers:  
Prof. Guid Oei (TUE/MMG)  
Drs. Marcel Zijderland (VU)

Partners:  
KLV  
WAGENINGEN UNIVERSITY & RESEARCH  
RESOURCE  
LC 3U 3G

## Colophon

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# >>TYPICAL DUTCH




ILLUSTRATION: HENK VAN RUITENBEEK

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## Fresh air is the Dutch medicine

**Last year, my family and I arrived in Wageningen with terrible flu and a cough. It was the fifth time that year and we were scared of going outside and getting worse. To our great surprise, the doctor we visited told us we were okay. There was no need for a drug prescription, we simply had to rest. We couldn't believe our ears because we felt very sick. Fortunately, we had brought a big bag of medicines from our country.**

A few days later, we were invited to dinner by a nice Dutch family. As soon as they heard about the bag of medicines, they advised us to leave it alone and go for a walk and breathe in the Dutch air instead. While they were astonished by our bag, we were alarmed by their suggestion: neither family could imagine the other's point of view. That evening we learned that the Dutch rarely go to the doctor and that they are prescribed very few medicines. When they are sick, they just rest at home but also go out to get some fresh air. In Mexico we tend to go to the doctor for anything strange that happens to us, a lot of medicine is prescribed, and staying at home is compulsory. Despite our hesitation, we heeded the suggestion and after a while, we started feeling much better. Now we are more familiar with this typical Dutch behaviour; we are much healthier and haven't fallen ill even once. We walk more, breathe in the fresh air and enjoy the beautiful Dutch landscapes. However, we must confess that we are still afraid of being infected by people who are recovering outdoors...  **Leticia Elizabeth Romero García, wife of a postdoc researcher at the Knowledge, Technology and Innovation group, from Mexico**

**'The Dutch family advised us to leave our bag of medicines alone and go for a walk'**

*Do you have a nice anecdote about your experience of going Dutch? Send it in! Describe an encounter with Dutch culture in detail and comment on it briefly. 300 words max. Send it to [resource@wur.nl](mailto:resource@wur.nl) and earn 25 euros and Dutch candy.*

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