

Coronavirus

What you need to know | p.7 |

World first

Biosensor never misses a tumour | p.8 |

myWURspace

Plan it properly | p.12 |

RESOURCE [EN]

For everyone at Wageningen University & Research

no 13 – 12 March 2020 – 14th Volume

Stepping up!

Meet the watchdogs for
WUR's students | p.24




**INTERNATIONAL
EDITION**

Barend + JPS-9200 x-ray photoelectron spectroscope

WUR researchers work with all kinds of equipment. Meet Organic Chemistry research and education assistant Barend van Lagen.

EXPLORING THE OUTER SURFACE

Chemists cover surfaces with the most amazing coatings. Adding a functional layer like that is termed 'modification'. But does it work as intended? The layers are invisible to the naked eye, but they *can* be explored using X-rays. The photons penetrate the material and electrons that are ejected from the outermost 5–10 nanometres into an ultra-high vacuum as a result can then reach the detector. That gives information about individual atoms and their chemical environments.  RK, photo Sven Menschel

>> CONTENTS

no 13 – 14th volume



>> **5**
STUDENT LITERARY COMPETITION
And the winner is...



>> **20**
ANALYSING CARNIVORES
We are would-be flexitarians



>> **22**
CULINARY CAMPUS WISHES
Time for more circularity?

AND MORE...

- 4 Letter to the editor about violence against women in Latin America**
- 6 'Best employer' not necessarily so**
- 9 Vision: coronavirus concerns**
- 11 Life beyond the tipping point**
- 16 Campus carillon plays again**
- 27 Teacher of the Year longlist**

CORONAVIRUS

Have you got that too — the first signs of coronavirus fatigue? You're sitting at your desk working and as soon as you cough, your co-workers suggest perhaps you should work from home. Or perhaps you should no longer be doing certain things because who knows, you might get COVID-19.

Whatever the case, the virus is causing a lot of unrest. Our WUR spokesman has spent the past week continuously dealing with the questions and concerns of staff and students (see page 7). And while the *Resource* debate next Monday on myWURspace, *The end of your own desk*, is still set to go ahead, you need to keep an eye on the news because it could easily be cancelled.

This coronavirus situation is taking up a lot of our attention and energy. Even if the virus is spreading fast, I do understand the people who make tasteless coronavirus jokes: you need some light relief as a kind of antivirus for your brain.

Albert Sikkema, science and organization editor



>> **Food components and breakdown products can activate the immune system in the large intestine. | p.10**

READERS' LETTERS

Do you have your own views on a topical issue at WUR? Send your contribution of 350 words max to resource@wur.nl, with 'Letter to the editor' in the subject line.

'I FEEL THE NEED TO SPEAK ON BEHALF OF ALL UNDERAGE GIRLS, RACIALIZED AND MARGINALIZED WOMEN'

In the previous number of *Resource*, the 'Meanwhile in...' column was dedicated to Mexico. The piece sparked outrage and criticism from members of the Latin American community in Wageningen, mostly women. In the aftermath, I would summarize the discussion in three words that we can all relate to and understand.

THE FACTS

Each day, 10 women are murdered in Mexico as a result of gender-based violence. In 2019, there were 10 per cent more femicides than the previous year. The national survey on sexual harassment showed that in the second half of 2019, 27 per cent of Mexican women were victims of sexual intimidation and 10 per cent were sexually abused. At some point in their lives, 66 per cent of women older than 15 have faced some form of violence. This is what is reported to the authorities; real figures are likely to be much higher. The flawed justice system systemati-

cally fails to build a proper prosecution, loses key pieces of evidence and ultimately releases the suspects. Our society, media and authorities do not condemn or punish the perpetrators of such heinous hate crimes.

Women have protested against gender-based violence for years, only to be met with oppression and indiffer-

ent elimination of violence against Women was observed around the world and demonstrations took place in Turkey, Spain, South Africa, Russia and France. In 2017, Romania, Northern Ireland and Hungary were the European countries with the highest rates of homicides by intimate partners, overwhelmingly committed by men against women.

THE PRIVILEGE

I acknowledge my privilege of being able to study in Wageningen, where nothing has happened to me. I have gone out on the streets, dressed however I want and I have not been harassed. I have gone out at night and returned home safely by myself. This is not something a woman living in Mexico today can say. It is not something all women can say. Is it something men can say?

THE EMPATHY

How do you feel when you read this? 'And it's not my fault, not where I was, not how I dressed.' This is a line from 'A Rapist in Your Path', a pow-

erful chant written by Las Tesis, a Chilean collective. Perhaps if you're a woman, you can relate to this on some level. But if something doesn't affect you personally, should you care?

I and all of the women close to me in Mexico have experienced some form of violence. I am lucky enough not to have been murdered. Therefore, I feel the need to speak on behalf of all of those whose lives were taken from them, on behalf of underage girls, racialized and marginalized women. I need to raise my voice respectfully and responsibly, with true facts and figures. I need to stand in solidarity with all the mothers, fathers, sisters, brothers and friends who have lost someone at the hands of the violent men who are still free, waiting for their next victim.

Do you think it is possible to empathize from your own position of privilege?

*Andrea Rivera del Rio, PhD Candidate
AFSG Food Process Engineering*

'I am lucky enough not to have been murdered'

ence. They protest in order to raise awareness of this reality, to demand justice and the end of the violence that women face in Mexico and Latin America. On 9 March, thousands of women participated in a nationwide Women's Strike, to draw attention to the consequences of the absence of women in everyday life. Gender-based violence knows no borders, race, religion, age or socio-economic status. Last November, the International Day for the

A COUNCIL: WHAT'S IN IT FOR ME?

In a series of four articles, *Resource* talks to members of WUR's various participatory bodies. People have until 22 April to put themselves forward as candidates. The elections will run from 2 to 6 June 2020.

Part 2: Julia Diederer, who teaches Food Chemistry. 'I was pleasantly surprised by the amount of time it took'



Like many Wageningen scientists, Julia Diederer does not want to run for the next WUR Council. 'I am already drowning in work. I'm on the Food Technology programme

committee, for example. I would have to give that up, and I'm not going to do that.' And yet this past year she has been an 'external member' of the WUR Council, on the committee tasked with evaluating the Extended Daytime Schedule.

'I'm on a committee of three teachers and three students that oversees the evaluation of the new timetable, conducted last year by Education & Student Affairs (ESA). I was pleasantly surprised by the amount of time it took. In total, I attended about eight meetings, and it cost me two hours a month at the most. I didn't have to organize anything, I could just pull up a chair and join in. We got data from the ESA, we asked critical questions and made suggestions.

SURVEY

I learned about how WUR is organized. And I could tell the committee what I've heard in discussions about the timetable among teachers. I also helped improve the ESA's survey for the teachers, because I create surveys for course evaluations and I know what questions to ask.

Would I do it again? Why not? I think the works councils could ask staff more often to join them for a while to help think something through. It's a way of getting more people involved in the councils.' **RS AS**



RESOURCE LITERARY COMPETITION WINNER

'HOW FAR CAN YOU GO BEFORE IT BECOMES UNBELIEVABLE?'

Mauk Westerman Holstijn (22) is a Marine Ecology student at Wageningen who writes short stories in his spare time. He won the Resource literature competition with *Droogte* ('drought') this week and will now go through to the nationwide final.

Westerman Holstijn is taking part in the literary competition organized by 16 academic and applied university magazines, including *Resource*. As *Resource's* winner, he will get professional support from a literary agency. The winner of the nationwide final will get their own literary agent. The competition is being held for the first time.

So you have a love for literature in addition to your degree subject?

'Yes, that started at secondary school in Amsterdam. I loved reading and I was always interested in stories such as the myths of Hercules and the Trojan War — I loved all that. I also liked reading fantasy, for example by Robin Hobb and George R.R. Martin. I enjoyed Eoin Colfer too. At primary school, I turned one of his books into a play. But I basically read anything I could get hold of.'

When did you start writing?

'I started writing short stories at secondary school. I often have several ideas I think would be interesting to turn into a story. In a novel you have to have interconnected circumstances but you have a little more freedom in a short story. So far, that's worked better for me.'

Or you can't choose...

'No, it's not that. It is easier to get started — you just begin. Also, writing a short story is an art in itself: literature down to the last inch, and each story has to have a beginning and an end. Where exactly does my inspiration come from? A lot of things can affect me. A little cottage surrounded by fields, for example. My imagination immediately runs riot and I start making notes. Then I get writing. Sometimes it goes quickly; sometimes it's a slow process.'

Studying in Wageningen and writing fiction: worlds apart, surely?

'Not really. I actually enjoy incorporating topics that I learn about or encounter here in my fiction. My story *Droogte*, for example, is about



nature and someone who has to adapt to extreme circumstances. The vagaries of nature and the weather are Wageningen themes. It is fun to stretch your scientific knowledge until you're almost in science fiction territory. How far can you go before it becomes unbelievable? Like the work of Daan Remmerts de Vries or Belcampo, two of my role models.'

ABOUT DROOGTE

The story is about a man living alone in the desert. He is used to surviving on minimal resources; with the help of some barrels of water, he is keeping himself alive until hopefully the rains return. His house is so remote that even the animals don't come near, but then another person turns up unexpectedly. The recluse is confronted all of a sudden with the difficulties inherent in a life that is not solitary. *Droogte* is an intriguing and original work that grips you from the start. Mauk Westerman Holstijn uses just the right words to create a subtle and at times disorienting atmosphere, according to the jury report. **WA**

The literary competition jury consisted of Louise O. Fresco (President of the Executive Board), marine biologist Lisa Becking, student and author Geert van Zandbrink and Willem Andrée (editor-in-chief of Resource and Wageningen World).

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#NietMijnSchuld

There is a campaign underway with the hashtag #NietMijnSchuld (NotMyDebt / NotMyFault – 'schuld' means both, ed.) The campaigners announced a while back that they would be 'making a noise' in March. I haven't noticed much yet. Drowned out by all the corona news, perhaps.

#NietMijnSchuld refers of course to the student debt built up by some Dutch students as a result of the loan system. That system was introduced in 2015, but no longer has the support of a parliamentary majority. For some time now, the campaigners have been pushing for the return of the basic grant that all students used to receive. They also demand compensation for the generation of 'unlucky' students who haven't had a basic grant.

I'm one of those unlucky students. Actually I should get down on my knees and thank those campaigners. If they manage to pressure the government into giving compensation, it would be a nice windfall. But the truth is, I'm not really very comfortable with the whole #NietMijnSchuld campaign.

'Actually I should get down on my knees and thank those campaigners'

The thing is, the loan system is pretty good. It includes free public transport, a supplementary grant for people whose parents are less well-off, and the option of borrowing money on very friendly terms. Of course, a basic grant on top of that would be great – so would free coffee – but that doesn't make it a human right.

I see it as a privilege to enjoy higher education in the Netherlands. We have good universities. The tuition fees are a fraction of the real costs of the education, and often much lower than the fees international students pay to study here. So is it really so strange that we are asked to invest in our education ourselves? **B**

Vincent Oostvogels (24) is exploring the delicate interface between nature management and food production through his two Master's programmes, Forest and Nature Conservation and Animal Sciences



JELKE FROS WINS BEIJERINCK PRIZE

Virologist Jelke Fros has won the 2020 Beijerinck Premium. The prize of 25,000 euros is awarded annually by the Royal Netherlands Academy of Arts and Sciences to talented young virologists. Postdoc Fros (34) has won the prize for his work on the similarities between the genetic material of viruses and that of their hosts. In the genetic code of mammalian viruses, the different possible combinations of two successive building blocks are not found in equal proportions. Of the four nucleotides, the pairs CG and UA occur 60 per cent less than you would expect. Fros discovered there was a reason for this. Viruses have developed in that way in order to resemble their host more.

That similarity works in their favour as it lets them avoid the host's immune system. Fros demonstrated in experiments that the more genetically similar viruses are to their host, the more successfully they can replicate in the host. That insight can be used to predict whether a virus will be successful in mammals and humans, and therefore a danger to them. The following step in his research is to exploit that similarity to develop safe and effective vaccines. Viruses can be weakened by adding GC and UA so that they resemble their host less, which makes them less successful. Fros is the second WUR scientist to receive the Beijerinck Premium. Stan Brouns won it in 2013. **✎ RK**

NEW VISION ON CAMPUS FOOD

Is the catering on campus still meeting requirements? WUR is developing a new vision on 'Food & Beverage' to set the course for the future. All the key contracts with campus caterers are due to end over the next two years. That includes not just the canteens but also the vending machines. Now WUR is developing a 'broadly supported vision' to make sure it is well prepared for the new round of tendering. Students and staff will have a real say in this vision, according to Ludy Zeeuwen of Facilities & Services, who is a member of the project group in charge of documenting the vision. The input for the new vision will include an analysis of the current caterers, a survey of

other universities and an assessment of what market players have to offer. The guiding principle is that the food and the business should be healthy and sustainable. Considerable weight is given to users' views. Polls and questionnaires will be used over the next while to assess people's preferences. A WUR group has been created on the intranet where staff can give their opinion. A draft version of the new vision should be ready by the autumn. **✎ RK**

See p. 22 for a taster of people's culinary campus wishes.



'BEST EMPLOYER' SAYS SOMETHING BUT NOT EVERYTHING

Last week it was announced that WUR had come out as the best employer in the education sector in a national survey of employers by Effactory. But what does that label actually say?

Quality labels and prizes are important in an increasingly tight labour market. It helps to have an official-sounding designation in the fight for talent, as that increases the number of job applications. No wonder that consultancy firms

'The criterion is the scores employers are given by their own employees. There is no objective assessment'

see this as a good business opportunity. Does an organization want to be able to call itself a Top Employer? That starts by loosening the purse strings: employers have to first carry out a 'certification programme' with 'interactive feedback sessions' and 'clear reports' before they are even allowed through to the next stage of benchmarking. While it may not be stated explicitly, these programmes are not free either

(unsurprisingly given the intensive assessments of their HR policy).

COMPETITION

This is one advantage of the Effactory prize compared with other awards and labels: employers do not have to pay in order to take part. Any organization with 100 employees or more can compare itself with others free of charge. Of course it helps if you know who those 'others' are. Are we talking virtually all academic and applied universities in the Netherlands, or just a handful? The Effactory website is rather vague on this matter, with no mention of the figure of 13 participants in the Education category cited in the WUR announcement. Recruitment-manager Johan Kanis does not have a clear view of the competition either. 'Effactory defined the categories. I understand it includes the Hanze University of Applied Sciences, the University of Groningen, the University of Humanistic Studies, IHE Delft Institute for Water Education and the Brabant secondary education association Ons Middelbaar Onderwijs. But we don't have a complete list.'

SUBJECTIVE CRITERION

Then there is the methodology. As in the designation of the best university in the Guide to



▲ At the start of March, Wageningen University & Research was labelled the best employer in education in a nationwide survey of employers by Effactory.

Higher Education, it is based on self-assessment. The criterion is the scores employers are given by their own employees. There is no objective assessment. The fact that WUR came out top in the Education category and Hanze University did not just means we are more positive about our employer than they are about theirs. Or to be more specific: we gave higher scores than they did. Perhaps the Hanze staff value their employer more but are simply not so generous in their scoring. **✎ ME**

MANY QUESTIONS ABOUT CORONAVIRUS AT WUR

Over the past week, WUR spokesman Simon Vink has been continuously fielding questions and dealing with concerns about the coronavirus.

Employees want permission not to come to work because they have asthma or their partner has COPD or a fever. And people want to know why the Radix building on campus is still open when a member of staff was diagnosed with COVID-19 a week ago. Why is WUR not following the example of Unilever and FrieslandCampina in forbidding staff from attending external gatherings or receiving guests? There are many questions and requests for clarity on how WUR is dealing with the coronavirus epidemic, especially from foreign staff

and students. Some Chinese students, for example, want to return to China because they feel the Chinese government is doing a better job of tackling the virus than the Dutch government. Other students are worried they will not be able to do their internship or take an exam because of the coronavirus, getting behind in their studies and incurring extra costs as a result. Vink repeats that WUR is keeping to the national guidelines set by the National Institute for Public Health and the Environment (RIVM). That means anyone who doesn't feel safe on campus can work at home. Staff and students who feel sick are urgently requested to stay home until they have fully recovered. Staff are also advised not to travel if that is not necessary

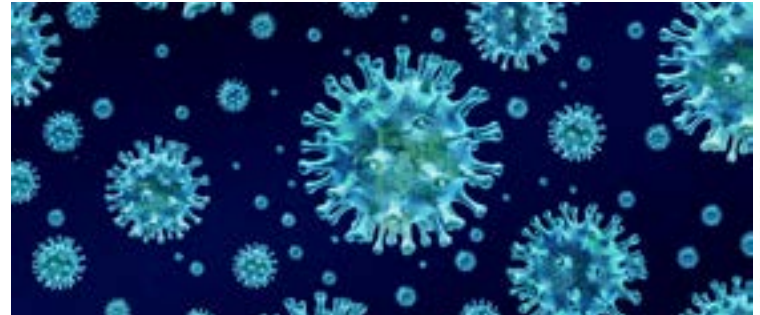


PHOTO: SHUTTERSTOCK.COM

and to have meetings via Skype where possible.

So far, most internal gatherings such as lectures have continued as normal. Vink says that the Executive Board is considering various scenarios if the virus continues to spread. In the worst case, possible scenarios are stopping all teaching in the large lecture halls on cam-

pus, or even closing the campus entirely. Some people are already calling for such drastic measures but the Executive Board — following the advice of RIVM — does not see the added value at present. Vink advises staff and students to check the guidelines on the WUR website (wur.nl) every day and to follow the advice of RIVM. **AS**

Come to the Resource debate!

Monday 16 March

The end of your own desk?

A new concept for the layout of our offices aims at solving the space shortage on campus and promoting cooperation. But myWURspace also spells the end of a desk of your own. Are staff keen on the idea? And does the open office really invite cooperation? Come to the Resource debate at which experts will air their views and there will be plenty of time for dialogue. The debate on Monday may not go ahead because of the coronavirus. Keep an eye on our website resource.wur.nl for the final go/no-go decision.

Date	Monday 16 March, 12:00-13:30
Location	Impulse, Wageningen Campus

Wageningen

Dialogue

RESOURCE

For everyone at Wageningen University & Research

BIOSENSOR NEVER MISSES A TUMOUR

A new nanosensor developed by Twente and Wageningen will never miss a single tumour. That is a world first according to WUR Organic Chemistry PhD candidate Pepijn Beekman.

Beekman carefully holds out a Petri dish. In it are two ultrathin chips barely two centimetres wide. No, a photo is out of the question; experts would be able to get information from it, which is not the intention. This chip, the latest product to emerge from Beekman's start-up ECsens, is still a secret. But the sensor is capable of unprecedented things, says Beekman. The chip, a nanosensor, can detect tumour vesicles in the bloodstream, in principle with 100 per cent accuracy. In other words, it never misses a thing. It is looking for what the medical literature calls tumour-derived extracellular vesicles (tdEVs). Body cells are constantly secreting tiny sacs containing nucleic acids, for example, or proteins. They are a bit like parcels that cells use to communicate with one another.

SENSITIVE

Beekman uses those vesicles to detect the presence of cancer cells. That is possible because the surfaces of tumour vesicles contain a protein (epCAM) that is specific for cells that are not normally found in the blood. That makes them good markers for cancer. The sensor uses that protein to differentiate between tumour vesicles and vesicles secreted by other cells. And it turns out to have unprecedented sensitivity.

'The question is whether we can improve the chemistry so that it also works in blood plasma'

'Single-vesicle detection is a world first,' Beekman concludes confidently. 'The data is less than a week old.' The chip that he shows is the follow-up to an earlier version that was announced last month by the University of Twente. Beekman works closely with his colleague at Twente and ECsens co-founder, Dilu Mathew. Twente is responsible for the sensor technology, Wageningen for the chemistry. That first nanosensor had a lower limit of de-

tection (LLD) of 10 tumour vesicles per micro-litre (millionth of a litre) of blood.

Beekman and Mathew's announcement of that biosensor made the cover of *Nano Letters*, a leading journal published by the American Chemical Society. 'We're very proud of that,' says the PhD candidate. 'But that sensitivity is not good enough for proper detection. The sensor needs to be at least 100 times more sensitive.' Which they have now managed. So fast? Beekman: 'The article in *Nano Letters* was based on data collected 18 months ago. We have been working further since then.'

NANOLAB ON A CHIP

First, a bit more on how the sensor works. It uses antibodies and electrochemistry. The antibodies make sure that tumour vesicles are selectively detected. An enzyme attached to the antibody then causes an electrical signal to be produced that can be measured. Beekman does not want to disclose much about the improvements they have made. 'We used electrochemistry to make sure the tumour particles gravi-

tate spontaneously towards the detector. That is why you don't miss them anymore.' The sensor is essentially a nanolab on a chip. The vesicles themselves are less than 100 nanometres across. The electrodes that detect the signal are spaced 120 nanometres apart. 'If you stare at your thumbnail for one minute, it will have grown 100 nanometres': this is Beekman's favourite comparison to show how high-tech the method is. A patent application has been submitted for the technique. Last autumn, Beekman and Mathew won the 4TU Impact Challenge. That award will take the researchers and their company to the World Expo in Dubai early next year. In the meantime, they already have a quarter of a million euros in grants to perfect the sensor. That means testing it with real blood rather than material from cultivated cell lines. 'The question is whether we can improve the chemistry so that it also works in blood plasma. Plasma contains a lot of biomaterials that could disturb the signal.' **© RK**

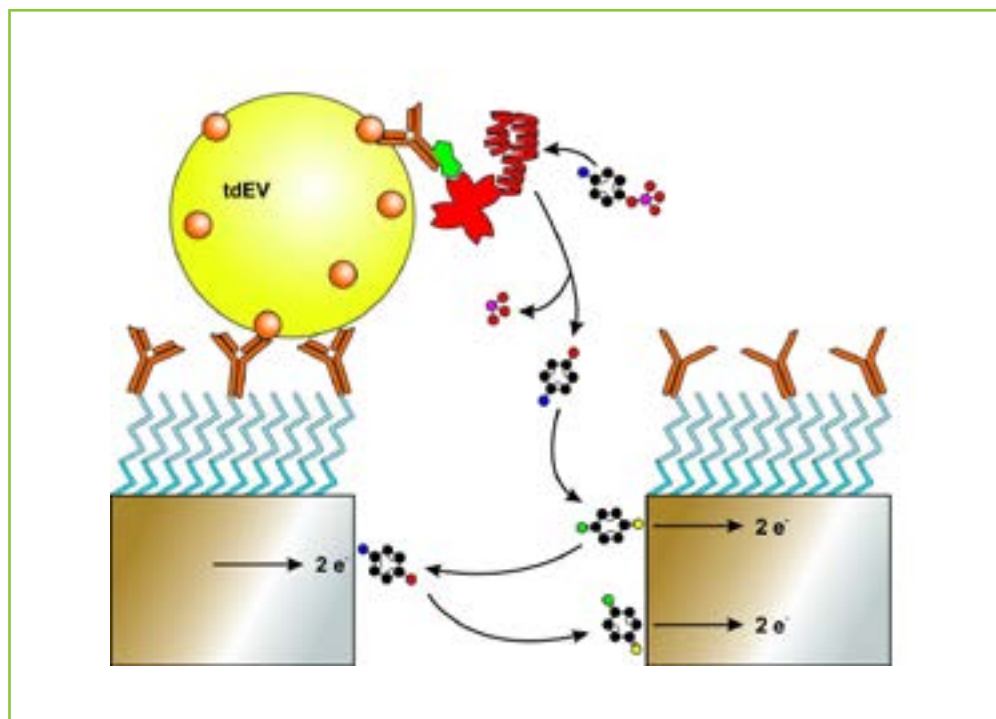


Diagram of the biosensor. Antibodies attached to the sensor (bottom) catch hold of the tumour vesicle (tdEV). Then an identical antibody with an enzyme on it also attaches itself to the vesicle. That enzyme activates a signal molecule (pAPP) by splitting off a phosphate group, causing an electrical signal to be produced between the sensor's electrodes. All the steps are shown here in a single drawing but take place sequentially.

CHLAMYDIA BACTERIA LIVE A LONELY LIFE IN THE ARCTIC OCEAN

Relatives of the *Chlamydia trachomatis* bacterium, which causes the sexually transmitted disease chlamydia, live deep in the Arctic Ocean without a host. This was discovered by an international team of scientists from universities including Wageningen and Uppsala. They published their results on 5 March in *Current Biology*.

Chlamydia bacteria infect not only humans but also koalas and microscopic organisms such as algae and plankton. For a long time, scientists thought chlamydia bacteria could not survive without a host of some sort, but the findings of professor of Microbiology Thijs Ettema's team have changed that. They identified several species of chlamydia bacteria in the Arctic Ocean that seem to survive independently, without a host.


UNDERWATER CASTLE

The team of international scientists discovered the chlamydia bacteria by chance on an expedition to Loki's Castle, a field of active hydrothermal vents in the Arctic Ocean between Iceland, Norway and Spitsbergen. Conditions there, at a depth of three kilometres, are extreme and what with the high pressure and the lack of oxygen, there is hardly any life. 'Finding the chlamydia bacteria in this environment was completely unexpected and we wonder what on earth they are doing there,'

says Jennah Dharamshi, a researcher at Uppsala University. Given the large number of chlamydia bacteria in the area, the scientists think they have a big influence on the ecosystem.

EVOLUTION

The scientists took samples of sediments from the seabed in the area of Loki's Castle. Back in the lab, they studied the dna in those sediments, thus discovering the chlamydia bacterium's distant cousin. By comparing the genes of the newly discovered bacterial species with those of the one that causes chlamydia, the researchers gained new insights into how the chlamydia bacterium evolved into an invasive pathogen. Certain genes important for the host-dependent lifestyle turned out to be present in the distant cousin too, causing the researchers to suspect that the Arctic Ocean bacteria do not survive entirely independently. 'We think that they use nutrients from other micro-organisms in their habitat to survive and grow,' says Ettema.

The discovery of the chlamydia bacteria in a remote environment also suggests that they are probably found in other places around the world too, and have been overlooked by previous studies. 'Every time we explore a new environment, we discover micro-organisms that are new for science. That tells us how much there is still to be discovered,' says Ettema.  NvtWH

VISION

Concerns about coronavirus



On 9 March, Hans Verhoef, an epidemiologist in the Human Nutrition and Health group at Wageningen, organized a debate in Impulse about COVID-19. 'I am concerned about hospitals' capacity.'

'I don't have all the data on the coronavirus but I am worried. The COVID-19 virus is spreading fast and we don't know how many Dutch people are infected but are not being picked up by the health service. That group can infect other people undetected. Secondly, I am concerned about hospitals' capacity. Dutch hospitals have 2000 intensive care beds, but is that enough in the event of an epidemic? Even now, they barely have enough coronavirus test kits and medical staff.'


This isn't like the flu?

'We don't know yet what the probability is of being infected by the coronavirus nor what the probability is of dying from it but all the evidence points to a virus that is more deadly than the flu virus we are familiar with. The population is vulnerable because it hasn't built up any immunity to this new virus and there is no vaccine as yet. There are also no medicines. What is more, patients remain infectious throughout the period of illness of two to three weeks, which is longer than for the usual flu virus. That lengthy period means the virus is transmitted more often and therefore spreads faster.'

But isn't the virus on its way out in China?

'That's true but that is thanks to the very rapid and stringent measures taken by the Chinese government from the start of the outbreak in December. China's achievement is amazing.'

What can we do?

'We need to be alert and make sure we don't help spread the virus. I am concerned for example about nursing homes with vulnerable old people and about people with chronic diseases such as diabetes and high blood pressure. Are we doing enough to protect them? Above all, we need to wash our hands much more thoroughly and much more often than we do now.'  AS

If you have questions about the coronavirus and WUR, read the article on page 7 or check out the intranet.



FOOD FOR THE IMMUNE SYSTEM

Food components and their breakdown products can activate the immune system in the large intestine. PhD student Jonna Koper has unravelled the underlying mechanism, thereby bringing the development of immune-regulating food products a step closer.

PHOTO: SHUTTERSTOCK.COM



Koper researched the digestion and fermentation of a number of substances in the human digestive tract. These included the amino acid tryptophan and glucosinolates from broccoli. She put these into a model system that simulated the human stomach, small intestine and large intestine. This SHIME – Simulator of Human Intestinal Microbial Ecosystem – consists of a succession of five reactors, each simulating a different part of the gastro-intestinal system. Koper tested the breakdown products in the different compartments for their capacity to activate the immune system.

‘I looked particularly at a specific receptor of the immune system in the large intestine, the aryl hydrocarbon receptor,’ says Koper. ‘It plays a very important role in the balance in the large intestine, which is known as homeostasis. So we have selected a number of substances that could activate this

receptor.’ To switch on the receptor, a substance must have a particular chemical structure: it has to fit like a ‘key’ into the ‘lock’ of the receptor.

TOO MUCH

This applies, for example, to the breakdown products of tryptophan that are formed when gut bacteria convert this amino acid. To test this, Koper put the SHIME on a diet with lots of tryptophan. ‘However, we found a much lower level of activation of the receptor than we expected.’ Koper discovered that the amino acid can itself block the receptor, after which the breakdown products can no longer bind other substances. ‘We had probably added too much tryptophan and the bacteria couldn’t break everything down.’

RAW BROCCOLI

Breakdown products of glucosinolates in broccoli and other brassicas can bind to the aryl hydro-

carbon receptor, too. In tests, Koper found the highest activation levels during digestion when raw broccoli was being digested. She concluded that metabolites formed in the stomach by an enzyme in broccoli, myrosinase, are responsible for the activation. This enzyme is destroyed by cooking, and the conversion of the glucosinolates cannot then take place in the stomach. Koper sees a lot of potential for fine-tuning the immune system with food products, especially for people with inflammatory bowel disease (IBD). ‘But more studies are needed and we need to validate the effect in real people.’ **BJ**



BLOGGING ABOUT BROODING

The brooding season is around the corner, and that is a busy time for PhD student Bernice Sepers, who is doing research on great tits. But she makes a point of finding time to blog about the daily life of these little birds.

On the website Beleef de Lente (Experience Spring, ed.), you can look inside the nesting boxes of more than 10 different birds. About 900,000 people watch the process every year – from the building of the nest to the departure of the fledglings. Once a week, Sepers blogs about the events that can be seen on the great tit webcam.

‘There is no nest-building yet, but you sometimes already see males

fighting. Then we write about the competition for the nesting box,’ says Sepers. ‘But when sad things happen, like baby birds dying or no longer being fed, it’s important that we comment on them as well. I explain that it is all part of nature, and that we don’t intervene. It is an ideal form of science communication, because you reach so many people.’

EDUCATIONAL

‘For a lot of people, nature is not part of their day-to-day lives. Not many people realize what a bird’s life is like. If we see that great tits have difficulty feeding their young, I write about that in my blog. There are fewer insects; is that something to do with pesticides? I hope it will make people realize that they can have a posi-

tive effect on nature themselves, and that research on this is important.’

PERSONALITY

Sepers keeps an eye on 250 nesting boxes for her research. She hopes to find out which mechanisms play a role in great tits’ personalities. ‘We know that great tits have personalities and that individuals differ. If you put a bird in a new space, for instance, you can see whether it quickly starts exploring or just stays in one place. That behaviour is linked to

other traits such as aggression.’ Personality is partly a matter of genetics, but it is also influenced by the environment. And scientists and 900,000 other interested people will be looking at that environment in the coming months on Beleef de Lente. **CJ**



PHOTO: BERNICE SEPERS



LIFE BEYOND THE TIPPING POINT

When conditions change, ecosystems can tip into a new, completely different state. What lies beyond the horizon?

Complex systems are everywhere. Ecosystems are complex by definition, but so are financial markets, for instance. Everything is interconnected. In nature, some species reinforce one another while others interact in a negative way. The strength of those relationships also depends on the circumstances. A robust ecosystem can easily cope with disruptions. But what happens if it is no longer so robust and the limits of its resilience are exceeded? PhD candidate Jelle Lever investigated this future world beyond the tipping point. Well-known examples of tipping points are clear ponds that turn cloudy or landscapes that become degraded.

CRITICAL SLOWING DOWN

But not all ecosystems behave so predictably. When ecosystems with many species that have a relationship with one another pass a tipping point, the new state depends on how the changed circumstances affected the ecosystem. It is not clear beforehand whether the transition will have minor or major effects, nor whether those effects will be positive or negative.

'Complex systems consist of many, many components,' says Lever. 'They all interact with one another positively or negatively.' If that is so, can you ever say anything meaningful about the future? He believes you can. For some complex systems, you can deduce what the future will look like after the transition from the participants' behaviour before the tipping point. That phase is when you see the phenomenon known as 'critical slowing down', when a system takes longer and longer to recover from shocks that disturb the equilibrium.

'My theory shows which species do well beyond the tipping point and which do badly'

That means its resilience is declining. Lever studied models of ecosystems with positive feedbacks that destabilize the system, for example plants and their pollinators. An increase in the number of pollinators causes the number of plants to increase, which in turn has a positive effect on the number of pollinators. The effect reinforces the cause. The reverse is also possible: a decrease in the one leads to a de-

crease in the other and eventually to the collapse of the system.

PREDICTING THE FUTURE

But not every species reacts to a disturbance with the same lag. Lever showed that differences in behaviour point to what things would look like beyond the tipping point. 'My theory shows what direction the ecosystem will take, and which species do well beyond the tipping point and which do badly, not in absolute numbers but in proportion to one another.' In principle, this gives him an indicator for predicting the future. 'In principle' because so far the proof is purely theoretical. The next step is to test the theory using real data. **RK**



PHOTO: SHUTTERSTOCK.COM

THE PROPOSITION

'Grants for women reinforce sexism'

Special grants for women scientists do exist. But PhD student Jessica de Bruijn is against them because, she claims: Science grants for which only women are eligible reinforce sexism.

'Working in the sciences is highly competitive and there is a lot of pressure to obtain grants. A grant is intended for the best proposal and the best person to do the research. If you ask me, that has nothing to do with your sex. There are two aspects of this that bother me. Firstly, it is discrimination if you exclude men. And secondly, it has potentially negative consequences for the researcher and her

group. I've heard stories about women who get told: you only got that funding because you are a woman. If men had been allowed to compete, you wouldn't have got a grant. Like that you start off on the wrong foot, as a woman. The risk is that your scheme aimed at creating equality unintentionally stimulates discrimination against women.

We should also think about why we think we need to attract more women into the sciences – for the sake of balanced teams, for instance – and why those women are not there now. It could be partly because of discrimination, whether deliberate or unconscious. But it might also be a conscious

choice by women. Women are no longer expected to stay at home and look after the children, but maybe women see other pros and cons when they consider the option of a job in the sciences.

'It is discrimination if you exclude men'

Men and women scientists are equally qualified. It is good to have more women in the sciences, but I don't think you should force it in this way.' **TL**



PhD candidates are expected to submit a handful of propositions with their thesis. In this feature, they explain their most provocative proposition. This time, it's Jessica de Bruijn, who got her PhD on 4 February for her study on the influence of learning on the foraging behaviour of parasitoid wasps.

myWURspace: 'plan it properly'

It's not easy to let go of having a desk of your own, as research has shown. The need for privacy and social bonding is often underestimated. So the message is: make sure you plan it properly.

text Roelof Kleis en Albert Sikkema photos Guy Ackermans

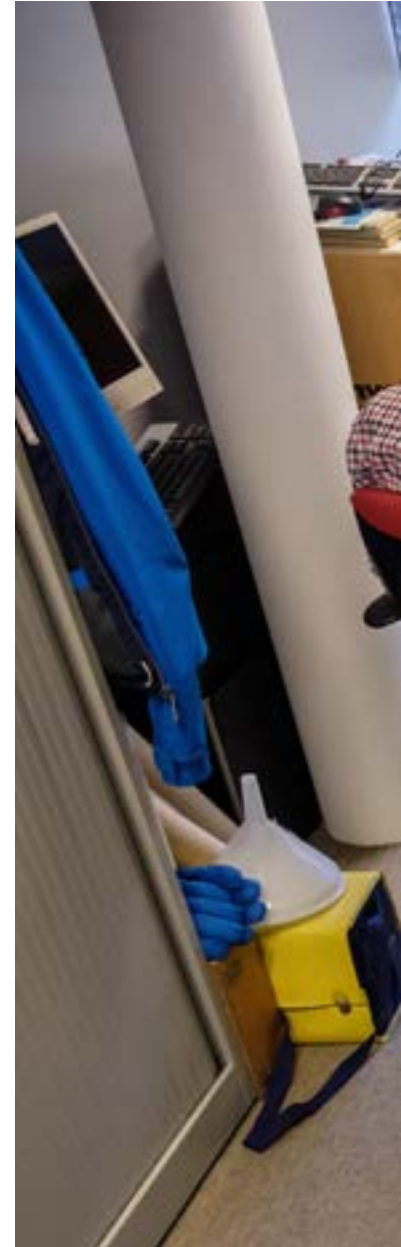
'Goodbye personal desk' read the *Resource* headline above a story last month about the planned introduction of myWURspace. It was met with a flurry of indignant reactions on the website and the intranet. Threaten someone's work space and there's always trouble. Opinions abound, some of them based on experience elsewhere. But what can science tell us about myWURspace?

Nothing, of course: myWURspace is a made-up term. But a lot has been written about activity-based working (ABW for short). One of the experts in the Netherlands is Jan Gerard Hoendervanger of Hanze University of Applied

Sciences in Groningen, who will graduate with a PhD this year for his study on this topic, *The Psychology of the Hot Desk*. He puts his finger on a couple of sore points regarding myWURspace.

IMPRACTICAL

Concepts such as myWURspace are intended to facilitate people's work better by offering employees the right kind of workspace for each activity. That means moving around according to the kind of work you need to do – within the building or maybe even between buildings. But do employees actually do that? Not according to a large-scale study conducted by Hoendervanger in 2016. He asked more than 3000 employees at research institutes and companies about their experience. A telling detail: although the responses were anonymized, you can tell that Facilities & Ser-



COME TO THE RESOURCE DEBATE!

Monday 16 March, 12:00-13:30
Venue: Impulse, Wageningen campus

Goodbye personal desk?

A new concept for the layout of our offices aims at solving the space shortage on campus and promoting cooperation. But myWURspace also spells the end of a desk of your own. Are staff keen on the idea? And does the open office really invite cooperation? Come to the *Resource* debate at which experts will air their views and there will be plenty of time for dialogue.

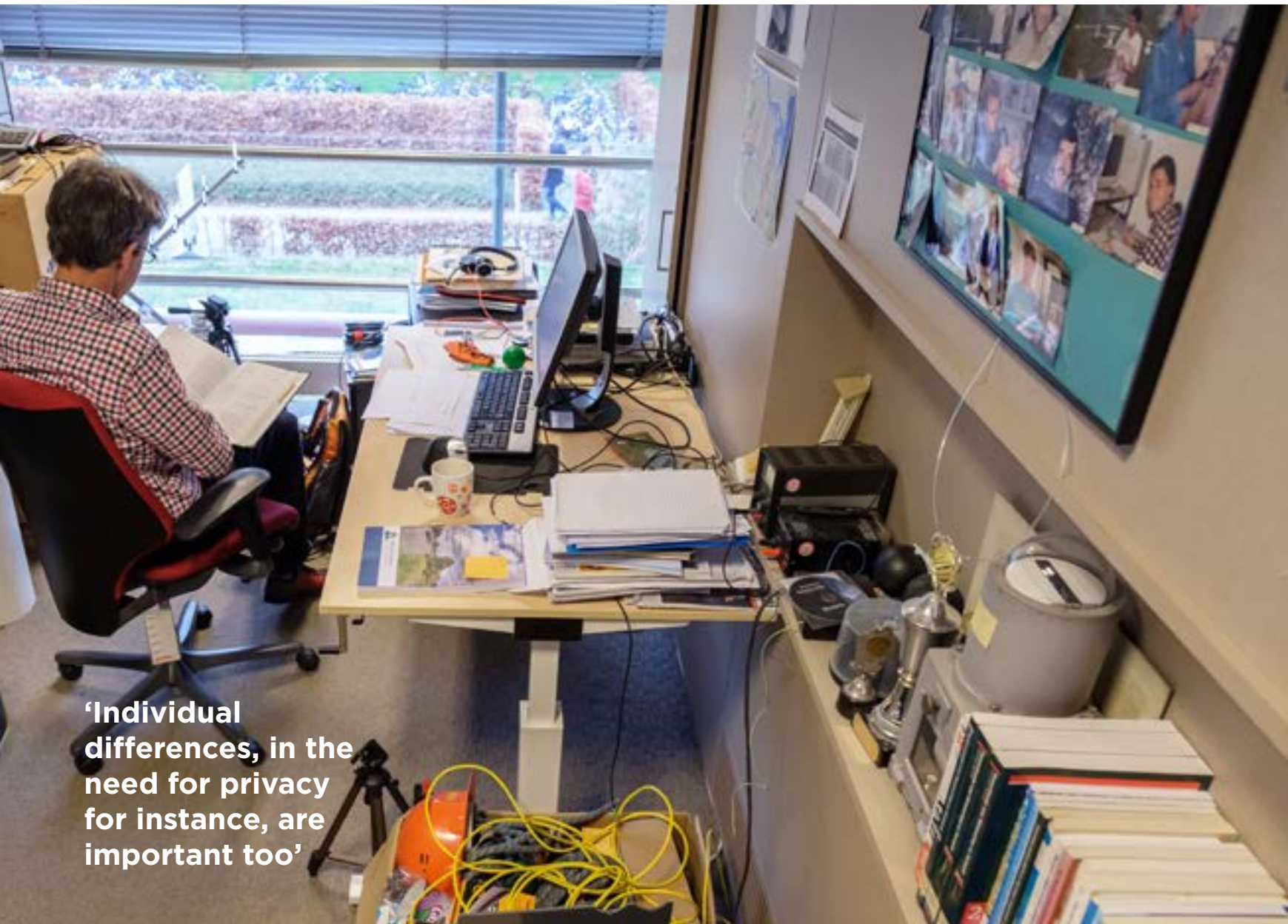
The debate on Monday may not go ahead because of the coronavirus. Keep an eye on our website resource.wur.nl for the final go/no-go decision.

'People develop habits that are hard to break'

vices at WUR (in the building Actio) took part. The results spoke volumes. Most of the respondents rarely move around. Half of them never do so, or at most once a week just because someone else is sitting in 'their place'. Only four per cent moved around several times a day. The main reasons given for not moving

were: 'then I have to move all my stuff', 'then I'm too far away from my unit', and 'then I have to adjust the furniture all over again.'

So the impracticality of it and their sense of belong to a group stop people changing places. Nor was the level of satisfaction with the concept anything to write home about. Forty per cent of the respondents gave the system five points or less on a scale of 10. At school, that's a fail, concludes Hoendervanger. 'In practice it seems that people switch locations for different kinds of work far less than was assumed by the designers of the concept. As an example, people do concentrated work in the open areas



‘Individual differences, in the need for privacy for instance, are important too’

▲ An office in Lumen. Individual differences, such as in the need for privacy, should play more of a role in the design of the activity-based workplace, says researcher Jan Gerard Hoendervanger.

which are not meant for that.’ This came out of a study in a large research organization last year. Almost all the work requiring great concentration was done in open areas instead of designated concentration spaces.

PATTERNS

According to Hoendervanger, there are several reasons why employees don’t adapt to the concept as intended. ‘It probably has a lot to do with the number of available concentration spots. Studies show that employees generally spend half their time doing concentrated work. But I don’t know any workplaces where half of

the work stations are suitable for that. In the institution this study is about, only 12 per cent of the work stations are behind closed doors and private. And when there are such spaces, they do not automatically get used for concentrated work. Apparently, people don’t easily switch work locations. Why not? People don’t often stop to think about what they are doing and the best place to do it. People develop habits and patterns that are hard to break.’ And then there are also social and cultural barriers that make it difficult to switch places, as Hoendervanger’s studies show. ‘Contact with colleagues can be a reason not to switch places.

The fun people have together and the sense of belonging. Or indeed, the fear of being left out. The thought: what will the others think if I cut myself off?’

Herman Kok, who teaches Facility Management at WUR, recognizes what Hoendervanger comes across in his research. Besides his teaching, he is director of Shign, a company that works on healthy and productive workplaces. ‘Bringing diversity into work environments is a good idea in itself,’ he thinks, ‘but you do have to guide people. Just dropping in a concept leads to frustration. When you introduce the activity-based workplace, behavioural



▲ Office space at Wageningen Economic Research in Atlas. A permanent base does fit into an activity-based workplace, but then in an open space, says WUR lecturer Herman Kok.

change is important too. You must get people on board. Otherwise you'll find they don't move around, and everyone just stays where they are.'

PRIVACY

But Hoendervanger thinks the most important factor in the successful implementation of concepts such as myWURspace may be catering for people's need for privacy. Whether the workplace suits their work depends a lot on individual needs for privacy. And that 'fit' determines levels of work satisfaction and performance, showed a doctoral study published

last year. People are more satisfied and perform better when they can do difficult work in concentration spaces in private rooms. And that applies especially to people to whom privacy is very important. Hoendervanger: 'In this context, privacy means the need to be able to withdraw, not to be visible and not to be exposed to other people's noise. That need varies a lot from person to person.'

Closed concentration spaces can be part of ABW concepts like myWURspace, says Hoendervanger. 'People too often assume that this kind of work environment has to be completely open, but concentrated work requires a

'An attractive design can have a positive effect on enjoyment of work'

closed space. If you know your staff need a lot of privacy, you shouldn't make those workspaces open. There is nothing against working from a kind of "home base", which you do share with colleagues – areas that you assign to



‘Open areas are fine as long as everyone keeps their mouth shut’

teams. And for some activities you then use other workspaces. My experience is that there is not so much resistance to this kind of sharing. The focus in activity-based workplaces often lies mainly on the various activities that people do in the course of a day. But that is too narrow a field of vision. Individual differences, in the need for privacy and social bonding for instance, are important too. “Activity-based” should actually be “needs-based”: personal needs are decisive.’

ATTRACTIVE

‘The big disadvantage of open spaces is noise,’

WECR TIPS FOR ACTIVITY-BASED WORKING

Staff at Wageningen Economic Research (WEcR) in The Hague and Wageningen no longer have their own desks. Business Unit Manager and project leader Olaf Hietbrink explains how he went about operation ‘myWURspace’.

‘The concept was thought up in The Hague,’ says Hietbrink. ‘We had to leave the building on the Alexanderveld, where everyone was in offices and the design of the building meant we hardly saw each other. We wanted a workplace in which it was easier to cooperate and share knowledge – a requirement for research these days. The directors tasked a project group of staff with finding the best way of doing that.’

HOW DID YOU GO ABOUT IT?

‘We first decided on the goals which the office space had to help us achieve, partly based on an assessment of the satisfaction and wishes regarding the old setup. Then we visited a couple of organizations with innovative flexible workplaces, and we listed basic principles. Firstly, you need to divide the workplace into zones. You need spaces for meetings and consultations, spaces where talking is allowed, and silent areas. Based on the work that needs to be done, you look for a balance between those three types of workspace. So it is tailor-made. Secondly, management joins in too. Everyone, including the managers, has to look for a place to work in the morning. Thirdly, you need to draw up some rules. People are not allowed to claim a silent room for themselves all day every

day. In silent zones you are expected to be quiet, just like in the library. And if you are going to be away from your desk for longer than two hours, you should leave it empty.’

AND ALL HELL BROKE LOOSE?

‘The staff were involved in the process all along. We discussed the goals and principles with the staff and then we hired designers. Staff got plenty of opportunity to study the initial designs and propose adjustments. That involvement is crucial, because they’ve got to work there! Then various adjustments were made, such as the location of different rooms, the positioning of sound insulation and coffee machines, colours and style.’

HOW IS IT WORKING OUT?

‘You notice that a lot of people soon have a favourite place. That’s not a problem. But you don’t have the right to a place of your own. Some people don’t like that. And sometimes it turns out there is a problem with the planning. In The Hague there was a meeting room next to a silent area, for example. That disturbed people and so it was changed. Beforehand, people dreaded the clean desk policy, but I don’t hear any complaints about it now. We did make sure that digitalization meant everyone had a laptop, a mobile phone, and facilities for meetings, archives, and so on. In The Hague, we have held a new survey. Staff think that the new setup has made it easier to collaborate and to share knowledge.’


confirms Kok. ‘Open spaces are fine as long as everyone keeps their mouth shut. Otherwise it doesn’t work. Disturbances, acoustic discomfort and lack of privacy are the big downsides of open spaces. You can do something about that with a good design, though. We see in our study that a tasteful and attractive interior design has a positive effect on productivity and people’s enjoyment of their work.’

He also emphasizes that activity-based working must be functional above all. ‘Openness is important but not all-important,’ thinks Kok. ‘Collaboration is linked to degrees of distance and separation. If you see each other, collaboration is easier. Colleagues who are less than 20 metres away from each other talk to each other the most. In four out of five cases, daily face-to-face contact is restricted to colleagues on the same floor and in the same area. That has serious consequences for collaboration and knowledge exchange. And individual pro-

ductivity is purely a matter of privacy, of being able to concentrate. So look especially at what fits the work and the person. Why shouldn’t someone who is in the office every day, doing the same work, have their own permanent place? There is nothing wrong with that. A permanent base fits in the ABW concept too. But then in an open environment, with options for withdrawing around it.’

‘Concepts such as myWURspace are based on the assumption that you do different things in one day,’ adds Hoendervanger. ‘If that is the case, those different workspaces have added value. But if it’s not the case, give an employee their own place that is appropriate for that one kind of work they do. The concept is good, but it needs to fit the work, the people and the organization. It’s essential to analyse that thoroughly before you start. And above all, make sure you have enough concentration spots. Scarcity only creates dissatisfaction.’ **1**

BIRTHDAY TUNE

While Wageningen's professors walked in procession to Orion on 9 March to celebrate the university's 102nd anniversary, the campus carillon played a tune. Beethoven's *Ode to Joy* still sounds a little odd coming from the carillon. It has rarely been heard since it was installed on campus 18 months ago to mark the conclusion of the centennial celebrations. The piece by Beethoven is one of the few tunes the carillon is able to play.  AS, photo Guy Ackermans





Organic will be mainstream (one day)

Organic farming is growing in the Netherlands, but still represents less than five per cent of our food production. Why is that? High land prices and the Dutch culture of cheap food stand in the way of growth, say Wageningen researchers.

text Albert Sikkema photo Shutterstock.com

‘Organic will become mainstream,’ announced the Rabobank in a market survey at the beginning of this year. ‘The organic sector has grown in recent years from a niche to a mature market in which the big food companies operate too. The discount supermarket Lidl, for example, has doubled the number of organic products on its shelves in two years, and Albert Heijn now offers more than 1000 organic options.’ The turnover in organic food products is growing by 10 per cent per year, as opposed to one per cent for the rest of the food market, claimed the Rabobank. Last year, there were 1952 organic farms, which

between them supplied less than five per cent of the food consumed in the Netherlands. They farmed only 70,000 hectares (about four per cent of the country’s farmland), showed figures from the branch organization Bionext. By way of comparison: Spanish organic farmers manage 2.2 million hectares of land.

In terms of market share, the Netherlands is below the European average. Neighbouring countries such as Germany (6.8 per cent), France (6 per cent) and Belgium (6.2 per cent) have proportionally more organic farmers, and countries such as Austria and Sweden far more (23.4 and 19.2 per cent respectively). So why is organic agriculture stagnating in the Netherlands?

says Sukkel. Twenty years ago, the Dutch government still provided transition subsidies for regular farmers who wanted to switch to organic farming. The effect of that incentive policy was that the supply of organic products increased faster than the demand. As a result, prices fell so much that the organic farmers got into trouble and some of them switched back to regular production methods.’ For that reason, the Dutch government decided in 2004 to stop subsidizing the sector and instead to stimulate the purchasing of organic products through information and publicity campaigns. ‘So gradual growth is better for the farmers’ incomes.’

‘Gradual growth is better for farmers’ incomes’

A third reason for the slow growth has to do with Dutch consumers. ‘The Netherlands has a culture of cheap food,’ says Sukkel. ‘We spend only 11 per cent of our income on food, whereas in other European countries people can spend twice that. And on top of that: in spite of all the food scandals, the Dutch consumer has a lot of faith in the health and safety of conventionally farmed food.’ As a result, switching to organic food, which is often twice the price, is a big step. ‘Compare the Dutch situation with that in the south and east of France,’ says Katja Logatcheva, a market researcher at Wageningen Economic



Organically farmed agricultural land 2017 SOURCE: CBS

0 to 5 per cent 5 to 10 per cent
10 to 15 per cent 15 per cent or more

SUBSIDIES

‘Firstly, these figures distort the situation,’ says Wijnand Sukkel, an Agro-ecology researcher at Wageningen Plant Research. ‘In Southern European countries and mountainous areas, a lot of marginal and extensively farmed land has been turned over to organic farming with the help of subsidies.’ In countries such as Italy and France, where land prices are low, that kind of subsidy is of interest. ‘In the Netherlands, on the other hand, there are no subsidies for organic production and land prices are high. So Dutch organic farmers have to farm relatively intensively and preferably produce goods with a big profit margin,’ says Sukkel. Which is why Dutch organic farmers mainly produce (and export) dairy produce and vegetables such as onions and carrots. In short, high land prices in the Netherlands stand in the way of extensive organic farming. ‘A second reason for the slow growth is that the organic sector doesn’t want to grow quickly,’



‘The incentive policy caused the supply of organic products to outstrip demand’

Research. ‘In those regions, small-scale farmers produce food for regional labels. This creates more product differentiation and the consumers are more used to pricier regional food. In that kind of food culture, the step from conventional to organic food is not as big.’

Logatcheva sees two further reasons why the market share of organic food is low in the Netherlands. ‘Dutch consumers are fond of convenience foods such as prepared products and ready meals. It is difficult to make these products with purely organic ingredients, and that would also push the price a lot higher than that of conventional convenience foods. We also eat a lot of greenhouse vegetables. Even though greenhouse vegetables are not grown using pesticides, they do not count as organic because they are grown on rockwool and not in natural soil – which is a requirement in the organic sector.’

BETTER LIFE

Lastly, there are also market developments that hold back the growth of production of organic meat and other products. For about 10 years, the Better Life label launched by the Dutch Society for the Protection of Animals has dominated the market. The better the animal welfare

is on a farm, the more stars its meat gets. Meat from this ‘in-between segment’, bridging conventional and organic production, is cheaper than organic meat. The sustainability labels ‘are putting pressure on the price of organic food,’ writes the Rabobank.

Another development is that the growth of

‘We are fond of ready meals and they are hard to make with purely organic products’

organic farming is not exclusively through sales in specialist health food stores such as Ekoplaza and Odin, as sales through ‘ordinary’ supermarkets are gaining traction. Most of the supermarkets have gone for a wide range of organic products and have their own brands alongside named brands. So the supermarkets are pushing down the prices of organic products. The consequences of this are already visible.

The price difference between organic and conventional products is going down, concluded the Consumer Association last year. Five years ago you paid twice as much, on average, for an organic product than for the regular equivalent: now the difference is 1.75 times as much. Price variation has increased too, the Consumer Association notes. Supermarkets such as Dirk and Vomar offer the cheapest organic food, while the health food stores are by far the most expensive.

The falling prices of organic food are good news for consumers, and could lead to organic farming growing to about 10 per cent of the market. The more demand for organic products grows in the supermarkets, the more the market will rule. Significantly, the growth in organic farm production last year came largely from upscaling of existing organic farms. Organic farmers will have to produce more efficiently or be satisfied with smaller margins. In that sense, too, organic is set to become mainstream. **R**

The good intentions of the meat-eaters

It is national 'No Meat Week' in the Netherlands this week. The Dutch are full of good intentions to eat less meat, and a lot more people are calling themselves flexitarians these days. And yet we are actually eating meat just as often as we did 10 years ago, as researcher Hans Dagevos and his colleagues discovered. There seem to be a lot of would-be flexitarians.

text Tessa Louwerens *photo* Harmen de Jong

Hans Dagevos, a sociologist of consumption at Wageningen Economic Research, has studied the consumption patterns of Dutch people who love meat, who are cutting down on meat, and who are avoiding it altogether. What is the role of meat in current Dutch eating habits? And how attached are people to meat?

The researchers conducted an extensive survey among 2117 respondents, 1979 of them meat-eaters and 198 vegetarians and vegans. They compared the results with those of a study done 10 years ago. It turns out that the frequency with which we eat meat has not gone down in those 10 years (see figure).

'Maybe eating meat seven days a week was more the exception than the rule in 2019, but it seems many Dutch people still like to have a piece of meat on their plates,' says Dagevos. The researchers did not look at how much meat people ate, only at how often they ate it.

WILLINGNESS TO CUT DOWN

Although the Dutch have not really cut down on meat, more of them express the intention to do so: in 2011, 58 per cent of respondents had no intention of eating less meat, whereas in 2019 that percentage had dropped to 44 per cent. And more than a third said they wanted to cut down. A small minority of four per cent say they will eat more meat in the coming year – twice the number who said that in 2011. Dagevos: 'This might be a small group of people who are fed up with all the "fuss about meat" and are digging their heels in. On the whole, that debate is not particularly heated at the moment, but we should be aware that this group does exist.'

The researchers also asked the respondents whether they would describe themselves as meat-eaters or as flexitarians. While only 14 per cent described themselves as flexitarians in 2011, 43 per cent did so in 2019. Dagevos: 'It is striking that more people are describing

'Many Dutch people still like to have a piece of meat on their plates'

themselves as flexitarians, and yet that is not reflected in our consumption data.' One in five self-proclaimed flexitarians said they ate meat five or more times a week, which is as much and sometimes more than people who called themselves meat-eaters. Dagevos: 'It looks as though the definition of a flexitarian was broader by 2019.'


GRADUATE AND FEMALE

Dagevos and his colleagues also looked at the distribution of flexitarians in the country, based on how many times a week people ate meat. 'The cliché idea that flexitarians are mainly women graduates living with their young families in the big cities in the west of the country is too simplistic,' says Dagevos. 'Today's flexitarians are a very diverse group and we didn't see much difference between the regions.'

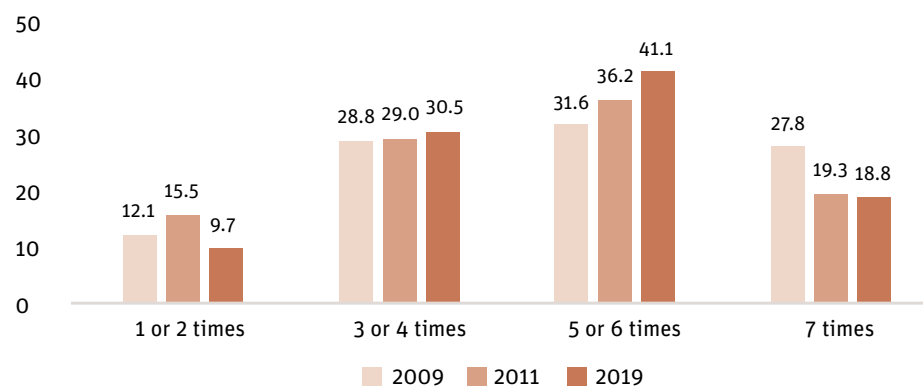
What did come out of the research was that more respondents from the west of the Netherlands, especially big cities such as Amsterdam, Rotterdam and The Hague, call themselves flexitarians, and that there are indeed many women among them. The diehard carnivores are more often men. And that confirms the cliché. According to Dagevos, it may have to do with social norms. 'We haven't done any further research on that at present. But all in all, the fact that flexitarians are spread across the country suggests that flexitarianism is fairly well-established.'

But flexitarianism does not currently go much beyond good intentions. Dagevos: 'Flexitarianism has been mentioned in numerous studies in recent years as an essential route to change in the protein transition. It offers a route that is acceptable and feasible for a lot of people, without banning meat altogether. It also contributes to a diet with more respect for ecological limits, human health and animal welfare.'

FLEXITARIAN AT HEART

The way the Dutch are currently interpreting flexitarianism has very little impact, says Dagevos. 'What we have learned from our research is that the switch to a diet with less meat is going terribly slowly. It is too little too late. Especially in the light of the ambitions of the Council for the Environment and Infrastructure (RLI), which aims at a diet in which only 40 per cent of protein comes from animals, as opposed to 60 per cent now.' Nevertheless, Dagevos does see a basis for change. 'Something is brewing below the surface. People indicate that they think it is important to eat less meat, and more of them identify as flexitarian than 10 years ago. The idea has at least been planted in Dutch heads and hearts. The question is how long it will take before their choices are in line with that. It should be clear that the message, "Just eat a bit less meat and all will be well" is not enough. And it doesn't make it any easier for consumers to eat less meat when there is meat being sold and promoted all around them. The dominant eating culture is still carnivorous too. That won't change overnight.' Dagevos is going to analyse the data further in the coming months. 'One of the things we want to look at is the differences among flexitarians, and between them and vegetarians and vegans. Not just in age and income, but also in their motives for eating less meat or no meat at all. The preliminary results show, for instance, that health is an important motive to eat less meat.' 

Frequency of weekly meat consumption at main meals (%)



What are your

CULINARY CAMPUS WISHES?

Does the campus need a sober bar or a starred restaurant? Is it high time we put more circularity, celery juice or 'seacuterie' on the menu? *Resource* asked around, in anticipation of the project 'The Future of Food & Beverage @WUR' (see page 6), which is going to review the catering options on campus.

text Marieke Enter illustration Henk van Ruitenbeek

Mao Xiong



PhD student at the Laboratory for Plant Breeding

'I think Unilever's company restaurant is by far the best place for lunch on campus: the other eateries could follow their example. To me, the menus in the restaurants in Orion and Impulse are boring. Always the same old filled rolls. The hot meals are not very interesting either, especially the vegetarian ones. **At Unilever, the food is very varied, tasty – and cheaper**

than other places on campus. The dishes are also presented very attractively – nearly every plate is Instagrammable. The Unilever cooks really do a good job of it. I'm crazy about yoghurt, for instance. Instead of a blob of yoghurt in a bowl, like you get in Orion, at Unilever you get a lovely dessert with fresh fruit and jam. If you ask me, Unilever can do all the catering on campus.'

Vera van den Noort



'Lunch counter lady' in Atlas

'About 70 to 100 people get their lunch here every day. Many of them are "regular customers" who I see nearly every day at my counter. I have fixed menus on fixed days, but I try to provide a varied range of options. At least, within the limits of this location. Atlas only has a small kitchen and I'm the only person working here, so serving a full main meal is not an option. We used to have salads as well, but we've stopped that as there wasn't enough demand for them. **The bread rolls and soups go down well, and the mustard and curry soups are the clear favourites with Atlas lunchers.** I love good food myself. My favourite dish? I don't really have one – I like everything.'



Leo van der Heijden



Senior Purchaser at Facilities and Services

'I notice that more and more colleagues are going for a little walk in the lunch hour, and have their lunch at the same time. Quite logical, really, as we sit all day and obviously don't get enough exercise – a major health risk. A lunchtime walk is an important "exercise moment" for office workers. **So**

isn't it a nice challenge for the future caterers on campus to cater better for "walking lunches"? Lunch on the Go? More street food?'

Evelien Castrop



MSc student of Earth & Environment

'I usually bring my own packed lunch. Here in Gaia there is only a little sandwich bar and a bread roll is not filling enough to last me till around five pm. Very occasionally we get Chinese at Campus Plaza. Anyway, I think there's quite a good choice of cuisines at Campus Plaza. Bring-

ing a packed lunch with me is partly a question of habit. And it prevents food waste. If I've got some leftover salad and vegetables, I would rather make a nice lunch salad than throw it out. **If WUR asked me about the menus in the various catering outlets, my main advice would be to cut down on the number of bread rolls.** I've got nothing against bread in itself, but then go for bread that is filling, like wholemeal. Otherwise I feel empty again two hours later. I do think the free fruit is a great initiative, though. At first I was sometimes too late because the bowls were already empty but now I manage to time my fruit snack better.'

Marte Stoorvogel



Education assistant at Soil Geography & Landscape

'I like to go for a short walk in the lunch hour so I feel it's a bit of a waste of time to sit down for an extensive lunch. I might do that with a group of colleagues if I knew there was something very delicious on the menu somewhere. But as far as I know, there is nowhere where you can find an

overview of what is being served where on campus this week. **If WUR is reviewing the catering facilities, it might be a good moment to give some thought to running even more lunch activities.** I often really enjoy the lunchtime lectures in Impulse, for instance. Personally I don't really feel the need for a catering outlet where you can easily socialize with people you don't know, by all sitting together at long tables, for instance. I prefer to make lunch appointments with people I know, so as to relax a bit as a break from my work. And as a place to meet new people we already have The Spot, of course. On a Friday afternoon it is certainly easy to meet people you don't know there. In that sense, The Spot does the job: I don't think we need another "campus pub" or anything like that.' 🍷

FOOD FOR THOUGHT

Food trend-watchers tell us that the future is all about sober bars (which serve only alcohol-free drinks), starters made of fish and seafood ('seacuterie') and the celery juice espoused by celebrities. Culinary circularity is going to be hot too, they tell us. But the project 'The Future of Food & Beverage @WUR' is about *your* opinions, not theirs. The project group has announced that it will be garnering your wishes and ideas through escalator surveys and polls on Facebook and the intranet. A nice subject to start chewing on!



Watchdog for WUR students



The Student Council represents all Wageningen students. So who is on the Council and what do they do there? *Resource* invited a member of each party to get on their soapboxes.

text Luuk Zegers

photo Guy Ackermans

STUDENT COUNCIL

The Student Council (SC) is a central participatory body of Wageningen University. It consists of 12 students, who are elected every year. The SC meets regularly with students, study associations and student societies to collect input. Six times a year, the SC meets with the Executive Board to discuss topics such as mental health, student rights, career preparation and waste reduction on campus.

Currently, there are three parties in the Student Council: Sustainability & Internationalization (S&I), United Students (VeSte) and the Christian Student Party (CSF).

The next Student Council election will be held from 25 May up to and including 28 May. Every student who is entitled to vote will receive an email with a link to their electronic ballot.

www.facebook.com/wageningenstudentcouncil



‘RSI lessons for students’

Camille de Regt-Harvey (21), United Students (VeSte)

‘I believe that students don’t just learn a lot from their studies, but also definitely from the things you do on the side. Things I’ve done have included an exchange to Iceland, being actively involved in KSV Franciscus, and organizing a pilgrimage to Spain. All nice things that are educational at the same time. That’s how I’ve ended up on the Student Council.’

‘My focus is on student welfare. We had the “Surf your Stress” week in November, and we are evaluating that now so that we can make it even better next year. We’ve also arranged that students will soon be able to borrow an RSI set in the library. Increasingly, students work on their own laptops, which is not good for

their posture. The university sells RSI sets cheaply, but not everyone buys one. It makes quite a difference if you can borrow one free from the library. The Bongerd Sports Centre offers its staff RSI lessons. Why don’t they do that for students? I’m going to look into that.’

FOOD

‘We are also looking at the food and drink available on the campus, from the catering outlets to the coffee machines. Since September, we have been documenting what is on sale now and what the wishes and needs of staff and students are. Ultimately we want a healthier and more sustainable food supply in the restaurants, kiosks and dispensing

machines. All the contracts will be ending within the next two years, so this is the right time to consider which direction we want to go in. There will be a “Future of Food and Beverage@WUR” event on 5 July to hear the ideas and wishes of students and staff.’ (See pages 6 and 22).

‘In the end, the Student Council is there to represent students. From making sure computer rooms stay open in exam weeks because the library is too full, to hoisting the rainbow flag, to starting a sustainability fund, and a whole lot more. When I first started on the Student Council, I didn’t have much idea how to get such things off the ground. I have learned that step by step.’

‘Student Council instead of Russian adventure’

Harm Ligtenberg (22), Christian Student Party (CSF)

‘After my Bachelor’s in Soil, Water and Atmosphere, I didn’t want to go on to a Master’s straightaway. I considered going to live with a host family in Russia to learn the language. I find Russian culture very interesting, with writers such as Dostoyevsky and Tolstoy, and composers such as Tchaikovsky and Rachmaninov. I think we are given a very one-sided picture of Russia in the Netherlands. I thought it would be nice to go there myself and really immerse myself in the culture.’

‘But when I saw that CSF was looking for new candidates, I decided to postpone my Russian adventure and apply for this. I think it’s impor-

tant for Christian students to have a voice. I like to be a contact person for Christian students with questions. I also do little things like making sure the overview of churches in Wageningen on the WUR site is up-to-date, and organizing a Christmas dinner for international students who stay in Wageningen over Christmas. That doesn’t mean my Christian background is always very obvious: it doesn’t really come into it when we are discussing the issue of the level of English.’

WATCHDOG

‘The differences between the parties are not

that big at a day-to-day level – in the end we are one Student Council. And as such, we have advisory rights on certain matters. We give our opinion, which represents the opinion of the student population as a whole. We also have the right of approval on a lot of dossiers, which means we have to give the green light for the Executive Board’s plans on those topics. That means we can genuinely do something for students by saying: we don’t agree, unless points A, B and C are included in the plan. That’s how the Student Council works as a kind of watchdog defending the interests of students by asking the policymakers critical questions.’

‘Sustainable ideas into practice’


Xiaoxiao Peng (24), Sustainability & Internationalization (S&I)

‘I have a strong passion for sustainability and I wanted to put sustainable ideas into practice. That is why I joined the Student Council. Within the council, I look at how we can make operations in this university more sustainable. A couple of years ago, the SC initiated the Keep Cup campaign. Thanks to this initiative, people get a discount on coffee if they bring their own cup. By doing this, we saved on 30,355 disposable cups in 2019 – a real success. So now I am working on a Bring Your Own Lunchbox campaign to decrease the

amount of disposable plastic used in some restaurants and salad bars.’

SUSTAINABLE EDUCATION

‘When it comes to sustainability, you have the three p’s: people, planet, profit. In this society, I think there is too much focus on profit and not enough on planet and people. To make WUR’s education more sustainable, there should be more attention for people and planet. To do this, I initiated a sustainable education project, with the goal of creating a

long-term vision on sustainable education at WUR. This must be the vision of students and the teaching staff, so we will start by facilitating meetings between students and teachers to reflect on our current education system and figure out if more sustainable education is necessary, and if so, how to achieve this. Of course, sustainable education is a complex topic, so this project is now only starting. And it will continue after my Student Council year is done.’ 

IN OTHER NEWS

LOUTISH

Does alcohol turn you into a lout or a bundle of empathy? The Groningen researcher Marije aan het Rot has won a research grant from the Beer Knowledge Institute, with this question as the basis of her research proposal. The 500 euros in prize money is just enough to run a test among 100 men and women. **First question: is that representative? Second question: is this important? Third question: what do you think?**

STRANGE LODGER

Israeli scientists have discovered a parasite in the muscles of salmon that survives without oxygen. The strange lodger only has 10 cells. Apart from single-cell organisms, no anaerobic animals have previously been discovered. In fact, the use of oxygen is a defining characteristic of animal life. But this little creature has no mitochondria, the energy-generating engines that run on oxygen. **How it gets its energy is anyone's guess.**

JERKS (1)

The more expensive the car, the less chance the driver will stop for a zebra crossing without a traffic light, shows a study by the University of Nevada. In a quiet neighbourhood of Las Vegas, an average of 28 per cent of drivers stopped. The percentage dropped drastically as the price tag on the cars went up: 3 per cent for every 1000 dollars above the average price of the cars in the study.

JERKS (2)

The sex and skin colour of the pedestrian made quite a difference too. On average, drivers stopped more often for women than for men (31 versus 24 per cent), and more often for white people than for people of colour (31 versus 25 per cent). **So any man of colour who sees a big fat pimpmobile coming had better not count on right of way. But then it is America.**

FOTO: BOYKOV / SHUTTERSTOCK.COM



OtherWise celebrates 20th anniversary with 'Imagine Otherwise' week

OtherWise came into being 20 years ago when three student organizations joined forces. The anniversary is being celebrated with a week of art, workshops, lectures and a party.

Each day of the anniversary week (Sunday 15 to Friday 20 March) will focus on a different OtherWise theme. Monday, for instance, will be about diversity and inclusiveness while Tuesday will be about indigenous know-how. OtherWise chair Inez Dekker (24): 'On Tuesday we will be joining representatives of indigenous groups from Suriname and the Moluccas to explore indigenous peoples' knowledge about the world, nature and climate change.' Wednesday will focus on inner sustainability. 'It won't be about using your bike rather than the car, but more about connecting with yourself and with nature. We will be screening a film about

inner sustainability and holding a workshop on nature awareness.' Thursday's theme is the alternative economy and Friday will be about activism and rebellion. 'We will conclude with a party in the evening on the theme of music and resistance.'

ALTERNATIVE PATHS TO A SUSTAINABLE FUTURE

Dekker has been actively involved in OtherWise for three years now. She has just completed her Master's in International Development Studies at WUR. 'At the end of my Bachelor's, I did a minor in Gender and Sexuality Studies in Amsterdam. I learned about subjects there that Wageningen doesn't touch on, such as intersectionality and postcolonialism. I wanted to explore those new paths further during my Master's. A friend introduced me to OtherWise and that was just what I was looking for,' says Dekker. 'People at Wageningen University mainly look at the world from a technological perspective. OtherWise is a space for students who want to take a broader, holistic view of things. What else plays a role in addition to technological



'What else plays a role in addition to technological facts?'

facts? That could be about agriculture, diversity, social justice or many other issues. OtherWise is all about investigating those other kinds of knowledge. Our logo is a question mark formed by two hands. That is our task: to examine the world we live in and explore alternative paths to a sustainable future.' **LZ**

www.facebook.com/otherwise.wageningen

Wageningen student wins Law thesis prize

If you want a personalized diet, for example because you have diabetes, you can give your DNA to a company that then compiles personal nutritional advice. But how safe is it to hand over that DNA data? WUR student Tessa Canoy (23) wrote her Master's thesis on the topic and won the Jan Brouwer thesis award. That is a first for a student not studying law. 'I looked at personalized nutri-

tion advice based on biological information. There are companies that offer to analyse the relationship between your health and your diet. To do this, they take DNA and blood samples, for example,' explains Tessa. 'But what will they do with that information?' Tessa, who studies Food Technology & Food Safety and Food Biotechnology, looked at the application of the General

Data Protection Regulation in this area from a legal perspective. Unusually, she also considered the ethical aspects. **WA**

Read the full story on resource.wur.nl

Teacher of the Year longlist

The longlist for the election of the Teacher of the Year (with 15 WUR teachers) includes two newcomers: Arnold van Vliet and Bastiaan Engel. A total of 17.5 per cent of the eligible students cast a vote for their favourite teacher.

Some former winners are also in with a chance, including Henry van den Brand (2018), Roel Dijkstra (2016) and Jessica Duncan (2017). It is biologist Arnold van Vliet's first time on the longlist. 'In the "Principles of Environmental Sciences" course, I always ask students why they are here. It turns out every time that they want to tackle the problems our society is facing. We share that passion.

That is why I view students as my future colleagues.'

SWIMMING POOL

'I also show students that they can genuinely make a difference as an individual,' continues Van Vliet. 'I personally am in the media a lot, for example. You can use that visibility to change things.' Fred de Boer won the award last year. 'It was a total surprise and a real honour. Colleagues congratulated me, but so did total strangers in the supermarket and swimming pool. I was actually overwhelmed by it all.' But there are also downsides to winning, says De Boer. 'Some students have very high expectations of me all of a sudden. I find that a problem as I never asked



PHOTO: UNIVERSITY FUND WAGENINGEN

for that prize and I just want to give enjoyable lessons. But all in all, I am pleased with the prize.' The teachers on the longlist will be interviewed by a student jury made up of eight students. This

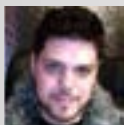
jury will select the top five for the shortlist. Finally, the jury members will decide jointly who should be Teacher of the Year 2020. The winner will be announced on 9 June. **LZ**

MEANWHILE IN... GREECE

Hopefully a humane solution will be found soon

Turkey is letting asylum seekers cross its borders into the EU. As a result, a stream of refugees is building up in Greece, where tensions are growing.

'I have a friend back in Greece who is a soldier on the north-eastern Greek border in Evros. They have orders to shout to the refugees to go back to Turkey and to say that the borders are closed. Sometimes if the situation is out of control, they shoot in the air as a warning and use water machines in order to make the refugees afraid and leave the borders. Also, on some of the islands like Lesbos that are close to the Greek-Turkish borders, local people are complaining that they can't support all these people, and they feel that the incoming people are outnumbering the local population. I think Turkey is misleading people that the European/Greek borders are open.'



Petros, second-year Master's student in Geo-information Science, reflects on the refugee crisis in Greece.

'It is a European issue and not only a Greek one. Europe must be united in facing this challenge, without ex-



PHOTO: ANSWERS / SHUTTERSTOCK.COM

treme views and with respect for human rights and problems. People who are coming from countries that are not affected by war should be double-checked and have all the legal documents to enter Europe. For the people who are suffering from the war, I think that Europe should be more open compared to others, or at least try to contribute to the solution of the problem (if not yet).'

'I have seen actions by the European Union in order to support Greece, so I hope for a better future and better information. Greece respects human rights and does not use refugees in order to have economic benefits, in contrast to its neighbour's policy. Hopefully a humane solution will be found soon, and all the people will be safe.' **AdH**

YOU ON CAMPUS

Filippo Case (24) is a second-year Master's student of Food Quality Management. He came to Wageningen with a dream of opening his own restaurant. 'But I had the urge to study and gain more academic knowledge about food science.'

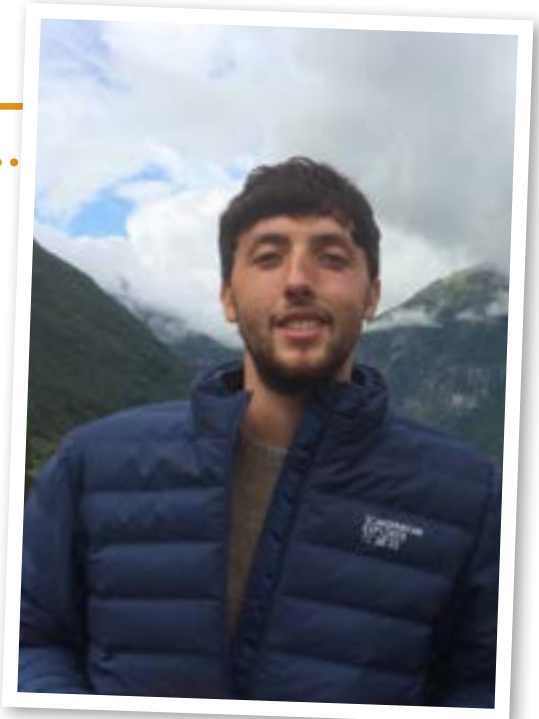
Before Filippo came to Wageningen, he was working at the Bulgari Hotel in Italy, one of the world's top hotels. 'I was doing my job well and the manager offered me a permanent contract shortly after I started working there. This job could've brought me a decent income that assured me of a nice living and a nice future career,' says Filippo proudly. However, he still quit this job and decided to pursue further education in food science. 'I had the urge to study and gain more academic knowledge about food science and management. So I made the decision to come to

study at Wageningen University. I resigned from my job without hesitation after I got accepted at the university. Now that I have almost finished my degree, I can see that my decision was absolutely right. After completing my Master's in the field of food science, I feel I will do much better than before.'

'I want to open my own restaurant soon'

Filippo's goal now is to open his own restaurant soon after graduation. 'I chose the entrepreneurship track especially to learn more about the mindset of an entrepreneur. I want to open my own restaurant one day. This has been my dream since I was 16 years old. My sister was really ill then and she was psycho-

logically unstable. I wanted to make her feel better by making her nice food. I wanted to learn to treat illness with food, and I felt the "inner me" encouraging me to study the mystery of food that can make people feel better. Food is so important and so closely related to human life. And if possible, I want to merge this idea into my future restaurant business. So soon after my internship, I will look closely at the market trends and take a chance on opening my own restaurants soon.' **© CC**



'Sobbing, she said sorry at least 10 times'

DIARY OF A CARETAKER

Eugene van Meteren works for Idealis as a caretaker. He writes about his experiences for *Resource*. You can read all his columns on resource-online.nl.

Idealis caretaker Eugene van Meteren comes across all kinds of things on his inspection rounds. And not always in the right place.

I go round the student flats at least once a year on a planned tour of inspection. What I'm interested in is security and hygiene. And this time, as usual, I'm in a flat walking through the common area when I see a bedroom door open. Out of habit, I glance in from the corridor. And I see a painted butterfly cut out of wood hanging prominently on the wall and bearing the name *Sanne*. 'What a colourful and original work of art,' I think to myself, 'and so creative.'

When I get outside I suddenly get a funny feeling. Something is not right: I've seen that butterfly somewhere before. I walk on, casting my mind around, and suddenly I remember. This butterfly is normally by a tree on the Nijenoord Allee in Wageningen. It is a memorial for a girl who died in an accident on that spot long ago. And here it is now on the wall of one of our residents' rooms.

I decide to go back, and I knock on the

door. A young lady opens the door with a friendly smile. 'Good morning, Eugene. What can I do for you?' she asks. I look a bit concerned, point at the butterfly and ask how she came by it. 'I found it on the side of the road recently, and I thought it would look nice in my room,' she said. 'I understand that it goes well with your decor, but do you know what it is?' I ask. She

'Something is not right. I've seen this butterfly before'

shakes her head. 'This beautiful butterfly is a memorial for a girl who died in an accident.' Her face crumples and she bursts into tears. Sobbing, she tells me she had no idea and she says sorry at least 10 times. She promises me that she will put the butterfly back by the right tree that evening. 'And I'll light a candle for her,' she sobs. It's not the sort of thing I usually come across on my inspection rounds, but I am glad I did spot the butterfly and that it is back by the tree. Back where it belongs. Back where it will stay. **©**



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.

'My internship made me question everything'

'Being at the European Council of Young Farmers (CEJA) was really far outside of my comfort zone. I'm an environmentalist by training, and I lived most of my life in the United States, so before my internship, I didn't know anything about European agricultural policy.

TESTING THEORIES

One of my core activities was organizing and attending working groups and seminars. Once a month, the national young farmers' associations come together to discuss and debate specific topics. That was my favourite part of my internship because I was able to hear first hand how young farmers feel about a range of European policies. I spent a year learning about sustainable food systems and agroecology during my MSc, and now I could test those theories. A combination of the structured conversations that we had, and the informal ones after working groups, made me realize that adopting sustainable agricultural systems is not as straightforward or simple as academia makes it seem. My internship experience made me question everything I had learned.

FARMERS' PROTEST

During my internship, I spoke to frustrated farmers, so I wasn't surprised when the protests began. I took the synergies between agriculture and environmentalism for granted. It wasn't until my internship that I fully understood the tensions between the agricultural and environmental movements.

I know that we need to protect the environment, but I also recognize that farmers already feel the financial and social burden from environmental legislation and that it will only worsen. I see the validity in the arguments from both sides. We have to be aware of what the consequences are if we pass stricter environmental protection laws because there are always trade-offs. Is everybody clear on how many farmers will file for bankruptcy, for example? Does that outweigh the environmental benefits? Sometimes it does, and sometimes it doesn't, which is why I am interested in policy and linking research with it. It can help us to make better decisions about what policies to support.

BEIJING

CEJA is also very involved in various European projects. For example, I got to go to Poland as a part of a European project about creating entrepreneurs in food. But I also went to Luxembourg, the Netherlands, Serbia and the Czech Republic for various projects, forums and seminars. I signed up for this internship without knowing about the travel opportunities, so that was an unexpected perk. The icing on the cake of my internship was when I had the opportunity to go to Beijing and visit farms in China with Chinese and European young farmers. It was a phenomenal experience to see the reality of young farmers there and compare it to young farmers in Europe.' 

THE WORKS

Who? Mariana Debernardini (25), MSc Organic Agriculture
What? Internship at the European Council of Young Farmers (CEJA)
Where? Brussels, Belgium. But also China, Serbia, Poland, the Netherlands and the Czech Republic

Do you too have a nice story about your internship or thesis research abroad?
 Email resource@wur.nl



Announcements

Toastmasters Wageningen

Do you want to improve your public speaking skills in an engaging and supportive environment? Then try Toastmasters Wageningen. Toastmasters is an organization with clubs all over the world. Our club is for students and non-students alike. With our practical approach you can get rid of your fear of public speaking and improve your improvisation skills. We meet every second and fourth Monday of the month at StartHub. Feel free to give it a try and bring a friend along! Find out more at toastmasters.nl/en/tm-clubs/wageningen.

Join the Biobased Innovation Student Challenge Europe

Do you want to design a creative biobased solution in a multidisciplinary student team? Student teams design a biobased innovation that meets sustainability, economic viability and technical feasibility criteria.

The Challenge starts as a Dutch competition and the winning Dutch team will compete at the European level with other national winners. Last year the Dutch team Biosilence was one of the winning teams. The team devised a procedure which converted manure into soundproofing panels, with the bonus of reducing the need for mineral wool and replacing it using a major agricultural waste flow. Are you up for this year's challenge? Register now. Deadline: 28 March. www.bisc-e.eu.

Agenda

Thursday 12 to 26 March SHOWING AT MOVIE W

Little Joe: British horror film about new flower. *Sibel*: Strong feminist film from Turkey about a young woman's struggle in a traditional, patriarchal society. *Beanpole*: Russian drama about two women trying to survive in post-World War II

Leningrad. *Atlantique*: Senegalese drama about growing up, impossible love, first love and letting go. *The Kingmaker*: documentary about Imelda Marcos. Thursday 19 March: *The Commons*: a special screening by OtherWise introduced by Gerrit Stegehuis of the De-growth Movement. Venue: Wilhelmijnaweg 3A, Wageningen. €6.50/€8.50. moviev.nl
MOVIEV.NL

Sunday 15 March – Friday 20 March OTHERWISE LUSTRUM: 'IMAGINE OTHERWISE'

Over the past 20 years, OtherWise has given a stage to grassroots organizations, movements and other changemakers to showcase alternatives to dominant ways of thinking, doing and being in this world. When we think about moving towards an inclusive, sustainable world, the first step in realizing this is to imagine that world. OtherWise has been providing exactly this: a space in which we can reimagine our society, the way we do and think about science and ourselves as human beings. The lustrum celebrations start off with a reunion and actively remembering the roots and history of OtherWise. Every day we organize activities in the context of a special OtherWise topic: diversity & gender, indigenous knowledge, inner sustainability, alternative economics and de-growth, resistance and movements. On Friday, we will close the lustrum week with a party. Stay in touch with our Facebook page!

Tuesday, 17 March, 16:00-17:30 WAGENINGEN GEOGRAPHY LECTURE SERIES: GRINGOLANDIA: NORTH-SOUTH MIGRATION AND GLOBAL INEQUALITY WITH DR MATTHEW HAYES

The lecture explores the migration of older Americans and Canadians, whose ideals about ageing have taken them to destinations in Latin America and lower-income countries elsewhere in the world. While it may be easy to identify with their desires for travel and adventure, Hayes situates those narratives within global power relations and observes their impact on lower-in-

come, informal workers in one destination city: Cuenca, Ecuador. Matthew Hayes is Associate Professor at St Thomas University in Canada. His work on lifestyle migration of North Americans to Ecuador has been published in several journals. Venue: Orion Building, Room C4042

Tuesday 17 March & 24 March, 20:00 STUDIUM GENERALE SERIES: ECONOMIC PERSPECTIVES FOR A CIRCULAR FOOD SYSTEM

Can farmers make a living from circular production? Are consumers and retailers willing to reward circularity? In this series, we discuss these questions and explore the role of the economy in the transformation towards a circular food system. On Tuesday 17 March we will discuss about dilemmas and opportunities at farm level. What does a transition towards a circular food system mean for farmers? And what opportunities and challenges are they facing in this transition? On Tuesday 24 March: Rethinking Economy for Circularity. Can circularity and economic growth go hand-in-hand? Do we need to rethink our economy to make it happen? Venue: Impulse. www.wur.nl/studiumgenerale

Thursday 26 March, 12:30-17:30 POSTDOC EVENT AT KEYGENE, WAGENINGEN

Doing a postdoc in industry? That is certainly not common, but it is exciting. Doing research and working on your career within an innovation-oriented company may well open your eyes to working in industry. And innovation-driven scientists, like the ones at research company KeyGene, often enthusiastically welcome postdocs to the team. Wageningen-based KeyGene is organizing an on-site and online postdoc event on 26 March. The invited speaker is Anna Goedhart, National Marie Curie Contact Point for industry in the Netherlands. KeyGene's CEO Arjen van Tunen will talk about the postdoc programme at KeyGene, which currently has six postdocs. Full programme and (free) registration: www.keygene.com/postdocevent2020.

Science Cafe Wageningen
www.sciencecafe.wageningen.nl

Music by: Bird of a Feather

Prof. Menno Prins (TUE)
De Aart van Amerongen (WUR)

Biosensors

Thursday, 19th March
Cafe Loburg
19:05: Live music
20:15: Science
FREE ENTRANCE

Partners:
KLV
WAGENINGEN UNIVERSITY & RESEARCH
RESOURCE

Colophon

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In memoriam

Anton Dommerholt

On 18 February, the former head of the university's Hydraulics Laboratory Anton Dommerholt passed away unexpectedly at the age of 73. Anton started work at the Laboratory for Hydraulics and Drainage Hydrology at Duivendaal in 1969, when it was headed by Prof. Kraijenhoff van de Leur. His job involved research on hydraulic scale models, calculations to process observations and the production of instruction videos and television recordings for lectures.

For Anton, his work was his hobby. He was good with his hands and used to put together demonstration drains for teaching. He developed into a proactive and creative employee, for example in the research on rainwater drainage. Furthermore, for decades Anton was responsible for the annual hydraulics practical for Bachelor's students doing the International Water and Soil course. In 1983, Anton became the laboratory's manager. In the 1990s he developed joint problems, which meant he had to reduce his working hours. Despite this, he put considerable effort into setting up his third laboratory on the (present-day) campus. After

working for 40 years, he retired in 2009 but remained involved with the laboratory until 2011. On his initiative, the lab was given the name of its founding father: the Kraijenhoff van de Leur Laboratory for Water and Sediment Dynamics. Afterwards, he wrote a record of the laboratory's 60 years' history. Anton was a helpful and pleasant colleague and the driving force behind this laboratory.

Piet Warmerdam, Ton Hoitink and Remko Uijlenhoet, on behalf of all current and former employees of the Hydrology and Quantitative Water Management chair group

In memoriam

Maurice Elzas

Emeritus professor Maurice Elzas (1934) passed away on 12 February from a fateful fall. In the years since he retired he had given his services to the Jewish community and had chaired various societies. He recently received the Wageningen Honorary Silver Medal for this work. Previously, he had pioneered the study of computer science. He designed and built early analogue computers and in 1981 he founded the Computer Science chair group at what was then still the Agricultural University, becoming the group's first professor. His colleagues in what is now the Information Technology group remember him as an erudite and inventive man. He was ahead of his time and was always full of plans and initiatives. He had an excellent feel for the importance of new developments. Our chair group looks back in gratitude at our founding father.

Information Technology Group

In memoriam

Gerrit Meester

On 27 February 2020, Prof. Gerrit Meester passed away suddenly. For decades he has been an influence in the 'Wageningen community', as a student, researcher, lecturer, course instructor and policy research client. Gerrit studied agricultural economics in Wageningen in the 1960s, combining his studies with an active student life. He was heavily involved in Argo as a rower and in 1976 he was in charge of the Dutch rowing team at the Olympic Games in Montreal.

In 1970, Gerrit was appointed a lecturer in Economics at Erasmus University. Five years later, he switched to LEI, the Agricultural Economics Institute. By this point, Gerrit was also head of Intermodel, which helped LEI with its policy research.

In 1985 Gerrit obtained a PhD for his thesis 'The green concerns of Europe'; his supervisor was Prof. Jerrie de Hoogh. Then

Gerrit moved to the ministry of Agriculture as the deputy director for International Economic Affairs and Market Organization. From 1994 Gerrit headed the Strategic Policymaking Office at the ministry, until he was appointed General Administrative Official for the ministry of Agriculture in 2000.

He was also a welcome guest in Wageningen during this period, taking part in PhD committees, strategic debates and discussions of educational reforms. In 2009, Gerrit left his job at the ministry and his position as professor by special appointment in European Economic Integration at the University of Amsterdam. He received a medal for his services and a Festschrift.

As a thinker, Gerrit Meester was good at synthesizing knowledge and he was able to make connections of lasting value. For us, Gerrit was not just a fine colleague but also a good friend with whom you could 'read and write'.

Arie Oskam, Krijn Poppe, Huib Silvis

>>TYPICAL DUTCH



ILLUSTRATION: HENK VAN RUITENBEEK


Bricks but no mortar

Every old house and many footpaths in the Netherlands are made of grey-brown bricks. Why are bricks so commonly used in the Netherlands, I wonder?

Cycling around Wageningen, you often see workers repaving roads or pavements, brick by brick, with the same ease as if they were making puzzles or playing with Lego. They turn them upside down with a shovel, since underneath the bricks there is only sandy soil. Then the bricks are piled up and reused, as they are not spoiled.

It is amazing to see the speed at which these tasks are done. It is hard work which requires discipline and teamwork. Usually, starting in the early morning, with the help of a few tools, workers can take apart and repave a road just by recycling the older bricks.

This would not be possible in the streets in Italy since, in most cases, in between and beneath the paving stones there is cement which can only be removed with a pneumatic hammer. So most of those materials are wasted and it takes more time to rebuild the road after repairing a broken pipe or installing a new underground cable. Moreover, when using the jackhammer, a lot of noise is produced, whereas in the Netherlands, workers can remove bricks listening to the music on their big portable stereo.

Once, it happened that those workers noticed me looking at them with admiration, and they said hello, smiling with Dutch pride. Paving gives them a lot of satisfaction. Bricks are handy, they can be locally produced, and they are strong and reusable. That is why bricks are everywhere in the Netherlands.  Elisa Bongiolatti, a double degree student of Agriculture and Food Economics, from Italy.

‘Dutch workers repave brick roads with the same ease as if they were playing with Lego’

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 and earn 25 euros and Dutch candy.