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RESOURCE ^[EN]

For everyone at Wageningen University & Research

no 6 – 8 November 2018 – 13th Volume



Saving the world one small step at a time

Professor Katrien Termeer deconstructs wicked problems | p.12

**INTERNATIONAL
EDITION**

Dennis + TriCaster

Dennis Anneveldt, multi media specialist in the IT department



WORK AS HOBBY

Where do all those short films come from that lecturers show during their classes, or that are shown in MOOCs? They come from here, Dennis Anneveldt's studio. In the basement at the Leeuwenborch, the self-made media specialist has turned his hobby into his job in a studio he built himself. And everything comes together on the TriCaster video mixer. The video team – Anneveldt and a colleague, students and a team of teaching material developers – produce about 800 clips a year here. **RK**, photo Sven Menschel

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TURN THE LIGHTS OUT

‘Turn the lights out, the party’s over,’ Willy Nelson once sang. ‘They say that all good things must end.’ WUR winds up its centenary celebrations this week. The grand finale is the unveiling of a carillon on the campus and a ball in the Junushoff theatre on Friday 9 November. To be perfectly honest, I won’t be too sorry. It’s been a lot. There was something for everyone, for sure, but then we reporters are expected to keep up with it all. And that can lead to a case of anniversary fatigue.

With a series of events great and small – and with greater and lesser success – the 100-year-old university has kept itself in the limelight for nine months. Unnecessarily of course – if you’re good, you don’t have to blow your own trumpet. And now it’s all over and the lights can be turned off.

So what has the centenary done for us? In tangible goods it has given us a book, a coin, a giant beetle and a royal tree. And a series of long stories in *Resource* about the university’s rich history. In this number there’s the last one, about the discovery that trans fats are bad for your ticker (see p. 18). And now: ‘Call it a night, the party’s over. And tomorrow starts the same old thing again.’

Roelof Kleis, editor

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NEW RESEARCH CENTRE TO BE GAME CHANGER

There are plans for a new research centre for digitization and nano-electronics applications in the agriculture, food and health sectors on the Wageningen campus from 2019. The initiators are WUR, Radboud University/ Radboud UMC and the Belgian research centre Imec.

The architects of the new innovation centre, called OnePlanet Gelderland have asked the province of Gelderland for 65 million euros for its fundamental research. The centre will also do applied research and commercial assignments for companies and knowledge institutions. The planned total budget is 160 million euros over a period of eight years.

A foundation will raise and manage the funding, distributing it over four research programmes: data-driven nutrition and health, health and behaviour, precision agriculture and food production, and customized supply chains.

The research centre's head-

quarters will be on the Wageningen campus, with a second small branch in Nijmegen. It will provide a total of about 160 jobs for researchers and PhD students.

The Louvain-based non-profit research centre Imec and the two Gelderland universities were brought together by Gelderland Provincial Council. With its staff of roughly 4000, Imec does fundamental research on topics including camera and sensor technology, and provides companies around the world with R&D services.

WUR rector Arthur Mol is 'most enthusiastic' about collaborating with Imec. 'Digitization is one of WUR's main themes for the next few years. This could be the biggest impulse for the campus since Unilever moved here. A game changer for the region.'

The Provincial Executive will assess the business plan and submit it to the Provincial Council early in November ahead of a decision in December. **AvE**



PHOTO: JONNE SEIDEL

▲ Rudi Caruyvels, executive vice president of Imec, at the WUR Company Day on 27 September. 'Breakthrough innovations are needed if 9.7 billion people are to live long and healthy lives.'

WHAT WILL COME OUT OF COLLABORATION BETWEEN IMEC AND WUR?

A sensor that analyses your saliva or sweat and can tell you exactly what you have eaten. That is just one of the applications expected to emerge from the planned collaboration between WUR, the Radboud University and the Belgian research institute Imec.

'The whole world is waiting for a sensor like this,' says Liesbeth Luijendijk, business development manager at Wageningen Food & Biobased Research. 'At the moment we still have to do various blood and urine tests to get that type of data.'

Other applications under consideration are sensors that detect specific molecules such as inflammation indicators in milk. Or optical sensors that can take precise measurements in the right wavelength range, thus helping give early warning of plant diseases. Or sensors that reliably measure moisture, nutrient levels, acidity and temperature in soil.

Luijendijk was appointed by the Executive Board to lead OnePlanet Gelderland. 'The world is digitizing,' she says, 'and it is important for the Gelderland Food

Valley to be part of that, to hold on to its place at the top. So we want to bring world leaders together in this centre.' According to Luijendijk, the Netherlands does not have an institute comparable with Imec. 'This kind of research will be done in Silicon Valley too. We can get a headstart.'

According to Frans Kampers, innovative technology coordinator at WUR, Imec has got open innovation down to a fine art. 'We can learn a lot from them,' says Kampers. 'Innovation can be roughly divided into fundamental research and product development. Open innovation means competitors collaborate in the fundamental research. After that, each company goes its own way and develops its own distinctive products. The advantage is that you share the costs of the initial research and can also develop faster.' Kampers says the Imec model can lead to the production of sensors with highly specific characteristics at low cost.

The agro, food and health sectors are interesting growth markets for Imec, and it is their knowledge in these domains that gives the Gelderland universities

their added value for the company. Kampers: 'Our research revolves around material of biological origin. No two bell peppers or patients are alike. So you have to learn to deal with that variation. That is quite different to something like the car industry.' **AvE**



▲ Liesbeth Luijendijk, who heads OnePlanet Gelderland at WUR



▲ Frans Kampers, who coordinates innovative technology at WUR

DINING FOR SCIENCE

An unusual pop-up restaurant will open its doors in Wageningen on 8 and 9 November. The diners will be observed by scientists who hope to find out how food design – the shape, colour and aromas of food – influence eating behaviour.

All You Can Eat Enough, as the pop-up restaurant is called, is Katja Gruijters' project. She is the founder of the Feed Your Mind Foundation and she is collaborating

on the project with WUR professor of Human Nutrition Kees de Graaf. 'Scientists know a lot about how particular characteristics of food and our surroundings influence eating behaviour,' says De Graaf. Gruijters has used that knowledge in planning a six-course dinner that will be served to 100 guests on 8 and 9 November in ProefLab Wageningen on the Diedenweg. In this small-scale study, the researchers will watch how

people react to things like the colour and shape of food, or the crockery it is served on, explains De Graaf. But he declines to give away details, as this could influence the results of the study. Gruijters thinks that if we have more idea about how we can steer eating behaviour, we might be able to prompt consumers to make healthier choices. Next year she wants to do follow-up research with 1000 people.

LT

COLUMN|VINCENT

Cleaning up

You know you're starting to lose your studenty casualness as soon as, to give just one example, you start making sure the lights on your bike are working. You know you've lost it for good when you find yourself, the morning after a fun night out with friends, fishing out of the canal the things you yourself threw in there a few hours earlier.

In this case the object in question, to avoid being too explicit, is best described as a 'functional fixture'. It must have been stolen in a moment of yobbish madness, although I've no recollection of the details. What I do know is that by the end of the evening it was lying in the middle of the canal. Or as it turned out the next morning, it was standing there.

Somehow the object had landed in an upright position, so that its shiny form was now protruding from the duckweed. As if a piece of space debris had crashed to earth. It couldn't stay there, that much was clear. The 'functional fixture' wasn't easy to recover, but a feeble story and the canoe owned by a helpful family ultimately proved the ingredients for success.

And it's only then, paddling across the wreckage of bicycles and bobbing between empty beer bottles, that it dawns on you: what a lot of rubbish lies hidden under that duckweed. What a lot of people there are who need to come and fish out their garbage. I wonder how many of them will actually do so.

Vincent Oostvogels (22) is exploring the delicate interface between nature management and food production through his two Master's programmes, Forest and Nature Conservation and Animal Sciences



in brief

>> WAGENINGEN COIN

First coin minted

Ex-minister of Finance and WUR alumnus Jeroen Dijsselbloem had the honour of minting the first Wageningen University five euro coin on Friday 2 November. An enormous levered coin press from the Royal Dutch Mint was transported to a tent on the campus for the occasion. Dijsselbloem set the huge lever in motion. The commemorative coin in honour of the WUR centenary can be purchased from the Royal Dutch Mint's website. WUR staff will soon be receiving one as a gift. RK



PHOTO: ROYAL DUTCH MINT

>> CHAIR OF WUR COUNCIL

PhD researcher Sabine Vreeburg

The WUR Council appointed Sabine Vreeburg as its new chair on 17 October. She will combine the task with her PhD research in the Laboratory of Genetics. 'I think this will be a great experience,' says Vreeburg. 'It will be nice to look at the university as an organization and to know how it works.' Vreeburg also wants to lobby for Wageningen PhD students and postdocs. She wants to draw attention to the fact that most PhD students

take longer than four years over their research. And she wants to give more voice to PhD students who don't have a WUR contract, such as sandwich PhD students. AS

>> MORE STUDENTS

Fear of new cuts

This year 290,000 students are attending Dutch universities: five per cent more than last year. The figures come from the university association VSNU. The ministry of Education had reckoned with a two per cent rise, so it underestimated the growth, says the VSNU. A similar underestimation last year created a budget shortfall and led to what were called 'efficiency cuts': economies to the tune of 183 million euros, to which higher education and research will have to contribute almost 50 million from 2021. The new incorrect estimate will cause an even bigger shortfall, fears the VSNU. HOP



PHOTO: ALBERT SIKKEMA



WUR best again, says National Student Survey

STUDENT EVALUATIONS SLIGHTLY LOWER

Wageningen students' opinion of their lecturers' English, the work stations available to them and the ICT facilities has gone down, shows the latest National Student Survey (NSE). The Executive Board is already working on solutions.

The annual student survey, in which students in the Netherlands evaluate the teaching and the educational facilities at their universities, contains a lot of high marks for Wageningen University yet again. Most of the degree programmes and facilities in Wageningen score above the national average and Wageningen is rated – for the umpteenth time – by far the best of all the universities.

But there are a couple of minus points. The students' rating of the work stations – both for quantity and quality – has gone down by 0.15 points in recent years, the survey revealed. Moreover, the students are a bit less impressed by their lecturers' English language

skills nowadays (0.07 points less), and by the ICT facilities and the digital learning environment (down by 0.11 and 0.07 respectively).

The Executive Board has taken steps to improve on minus points, writes the Board to the WUR Council. 'We are already working on improving the number of work stations for finalists, explains rector Arthur Mol. Mol also expects that the third education building on campus, which is at the planning stage, will provide more and better work stations.

As for the teachers' English, 'we are systematically working on testing all teachers and support staff on their English proficiency,' says the rector. Based on the test results, the university assesses whether the teacher needs a language course. All the teachers in the Environmental Sciences Group have already taken a test. Now it is the turn of the Animal Sciences group.



PHOTO: GUY ACKERMANS

▲ Wageningen students' rating of the number and quality of work stations available has dropped by 0.15 points.

The university is also working on a new digital learning environment (ELS) to replace the currently used Blackboard. Mol thinks the new system can be introduced next year. 'We are now doing the final assessment.'

These points for improvement notwithstanding, the university

can be proud of the high rating it got from students in the survey, says Mol. 'It even earned us a personal letter of congratulation from minister of Agriculture Carola Schouten to me. And of course I pass on those congratulations to all those involved at the university.' **BS**



PHOTO: GUY ACKERMANS

MUSIC & SCIENCE

The student orchestras WSKOV and De Ontzetting gave a concert entitled Music & Science in the Junushoff theatre in Wageningen on Saturday 3 November. They played modern and classical works such as Pallhuber's *Elements of Nature* and Schubert's *Hirtenchor*. In spoken intermezzos, Professor Marten Scheffer and WUR spokesman Simon Vink took the audience on a guided tour of the history and the future of Wageningen science. The concert was one of the last events of the WUR centenary. On Friday 9 November, the centenary will end with the unveiling of a carillon on the campus and a student ball in the Junushoff. **B**

DISTINCTION FOR EXCELLENT PROFESSORS

Professors who have been especially important to WUR and who tower head and shoulders above the rest can in future be appointed 'distinguished professor'.

The Executive Board has a handful of Wageningen professors – 'two of three' – in mind who merit the new title. They are big names in their field globally, they continuously get top marks from visitation committees, they have won prestigious prizes and attracted a lot of funding, programmes and prestige to WUR. And they only have between five and ten years to go until they retire.

'We want to hold on to our excellent scientists and make use of their qualities more widely across the organization,' says rector Arthur Mol. He wants to give the distinguished professors tasks 'at the



▲ The professorial procession at the opening of the academic year in 2017.

strategic level, in which they might for instance help us think through our scientific priorities, our positioning in the world, and our quality control.' But besides these broader tasks, they will still be

based in their chair groups and carry on teaching and doing research, Mol emphasises.

Professors who receive this distinction will step down from leading their chair groups, and will be

given a budget of 50,000 euros by the Executive Board. Their salaries will still be paid by the chair group, but the groups will always more than recoup that, argues the Executive Board.

Several Dutch universities already have the title of distinguished professor, says Hedwig Casteels of Corporate Human Resources, who prepared the decision-making about the new post. The title will replace two other honorary titles for professors that WUR no longer uses: those of university professor and honorary professor.

The Staff-Student Council voted in favour of the Executive Board's proposal on 18 October, on condition that WUR has no more than five distinguished professors at any one time, and that they are appointed for a maximum of 10 years.

AS

WUR TO COLLABORATE WITH WATER BOARDS

Researchers at Wageningen Environmental Research are going to work systematically with the Dutch water boards on water management in the Netherlands and elsewhere. The two parties signed an agreement on this collaboration on 18 October.

Through this collaboration, Wageningen researchers and students can participate in the 'Blue Deal' struck by the water boards and the ministries of Foreign Affairs and Infrastructure and Water Management. The Blue Deal covers long-term projects with partners around the globe to prevent flooding and supply people with sufficient safe drinking water. Efforts will be focused on 40 flood-prone regions around the world, with a total population of 20 million people.

'The water boards invited us to join in,' says Ivo Demmers, the Sustainable Water Management programme leader at WUR. He believes they did so because of WUR's broad perspective on water-related issues, looking not just at technological solutions but also at the social and ecological aspects. It cuts both ways, says Demmers. 'How can we pass on our knowledge about water effectively and thus be of help? And also: how can we learn from experience overseas so as to prepare ourselves for the future?'

According to Demmers, there is already regular collaboration with water boards. 'What is new is that the collaboration is now systematic and that we are setting up a joint programme.' For Wageningen researchers and students, this will mean new internship opportunities and PhD places. RK

Earth

9 Nov	Inauguration Carillon
9 Nov	Gala of the Century
22 Nov	Creative Innovation: Art meets Science: Presentation final work of Gionata Gatto

You'll find everything about 100 years of WUR on www.wur.eu/100years

WAGENINGEN UNIVERSITY & RESEARCH

100years 1918-2018



‘SHRINKING REGIONS DEVELOP THEIR OWN WELFARE STATE’

Increasingly, the Dutch population is moving to the cities, which leaves shrinking regions where public services are under pressure. Residents of these areas are forging new alliances in order to keep healthcare and education within reach, says personal professor Bettina Bock of the Rural Sociology chair group.

Bock gave her inaugural lecture on 25 October. She has studied differentiation in rural areas, meaning the urbanization of some parts of them and the marginalization of others.

What is the evidence for urbanization in the Netherlands?

‘Statistics Netherlands and the Netherlands Environmental Assessment Agency predict that the population of the Randstad conurbation will grow and that of the periphery will decline, relatively. There will be an urban area in the triangle between The Hague, Zwolle and Eindhoven. The north of the Netherlands, the Achterhoek to the east, and Limburg and Zeeland in the south, are peripheral shrinking regions.’

What processes reinforce that development?

‘More and more young people are going into higher education and leaving for the cities. And

then fewer and fewer of them come back to their villages, because they find jobs in the cities. Partners often want to find two good jobs, and for that you are better off in the city. And then there’s the cultural aspect of it: city life is seen as successful. There is also a tendency to insist on services such as hospitals and schools being as cost-efficient as possible. So they are centralized, making them less accessible from rural areas. Healthcare is then moved further away, while the aging rural population needs it more than ever.’

What can municipalities and provinces in the shrinking regions do about this?

‘At first, government wanted to fight depopulation. Now they opt to steer it. It is a fact: you’ve got to adapt. And now we’re seeing new initiatives in which volunteers work with health institutions to provide healthcare in the village. There are health cooperatives in which formal and informal, social and medical care are interwoven in order to guarantee home-based care. New relationships are being formed between schools, day care centres for children and for the elderly and sports associations in shared accommodation, where families can reach these services more easily. You also see links between GPs, pharmacies and men-



PHOTO: STIJN RADEMAKER

▲ Personal professor Bettina Bock: ‘At first, government wanted to fight depopulation. But it is a fact; you’ve got to adapt.’

tal health services. Or collaboration between vocational training schools and employers, with companies providing student with practical experience. There is a lot of innovation.’

AS

BREATH TEST SHOWS HOW GUT BACTERIA WORK

Researchers in the Animal and Human Physiology chair group have succeeded in identifying how intestinal bacteria process different kinds of food by analysing air. The analyses can provide information about intestinal health and be of help in dealing with overweight and bowel conditions.

The research team led by Evert van Schothorst demonstrated in tests on mice that intestinal bacteria react differently to different kinds of food. Indigestible food ferments faster than easily digested food, for instance. Researchers established this by putting the mice in a room



equipped with sensors that continuously measure the gases in their inhalations and exhalations.

The method could be suitable for use in research on people, says Van Schothorst. ‘There are already chambers in which peo-

ple’s breath is analysed. If they are equipped with the sensors we used in our study, they can analyse in real time how gut bacteria process food.’

These analyses can then provide important information about the health of the intestines, and perhaps in future also about conditions such as Crohn’s disease or irritable bowel syndrome. The composition of the gut bacteria and their reaction to food also affect the sense of satiety. ‘The more we find out about that, the better we can deal with overweight, obesity, and the diseases associated with them,’ says Van Schothorst. TL

TABLE SALT SOUNDS DIFFERENT TO SEA SALT

Professor Saskia van Ruth's new sound test can 'hear' the difference between mineral-rich sea salt and low-mineral table salt.

Salt has a sound. In fact, refined table salt has a different sound to sea salt or road-gritting salt, discovered Saskia van Ruth. Good to know if you want to be able to distinguish between the different kinds of salt that are for sale and thus to prevent fraud.

Just imagine yourself dissolving a spoonful of chocolate powder in a glass of hot milk. Once you've stirred the powder into the milk you tap the spoon against the edge of the glass at second intervals. What do you hear? A sound that slowly but surely goes up in tone. The 'hot chocolate effect', says Saskia van Ruth, professor of Food Authenticity at WUR. As you stir, air bubbles are released into the liquid, which disappear when you stop stirring. This reduces the compressibility of the liquid, causing the tone of the sound to go up.

Physicists have been familiar with this principle for about 60 years. But now Van Ruth can convert it into an accurate sound curve using a new piece of equipment. Developed at the University of Cork, the new apparatus makes use of Broadband Acoustic Resonance Dissolution Spectroscopy. Van Ruth and the Irish researchers have now discov-

ered that compounds dissolved in liquid have a unique sound curve of their own. In an article published in *Food Research International* she describes how this enables her to distinguish between various types of salt.

HIMALAYAN SALT

There is common table salt, low-sodium salt, sea salt, Himalayan salt and Yuki Shio salt, as well as road salt, explains Van Ruth. Road salt costs 50 eurocents a kilo, while rare Yuki Shio salt is sold at 100 euros a kilo. You want to be able to tell the difference between these salts so as to combat food fraud. Van Ruth's research showed that you can do this using a sound test.

Table salt, which is approximately 95 per cent sodium chloride, has a different sound curve to that of low-sodium salt, which only has about 50 per cent sodium chloride and higher levels of potassium chloride or magnesium chloride. Sea salt and Himalayan salt contain more minerals, which affect the number of air bubbles that get into the solution, causing these salts to make different sounds from low-mineral salt.

Van Ruth tested various pure salts and combinations of salts with the new apparatus.

It enabled her to predict the composition of the salt quite accurately, but she does not yet have the full picture of the characteristics of the salt that give it its own sound curve. So a PhD candidate will now carry out a follow-up study at WUR. 'We need to know more about it before we can use sound in food inspections.'

THE SOUND OF SAND

It is not just salt that has a sound of its own. Sand does too, Van Ruth found out. She collected sand from nine different beaches along the North Sea coast and explored whether she could use the new spectrometer to trace the sand to the location it came from. It turned out she could. 'Sand does not dissolve in water, but it does contain particles such as shell fragments that do dissolve in acidic solutions. These fragments vary per location due to the flow of the water, so that each part of the beach has its own sound.'

Following the sand study, Van Ruth got in touch with photographer Bert Spiertz, who took photos along the North Sea shore. They are now working on an exhibition called *The Sight and Sound of Sand*, which will open on the Wageningen campus early next year. **AS**

FUNGUS CONVERTS STRAW INTO LIVESTOCK FEED

An abundance of straw from rice, wheat and sugar cane is available in the world and little or nothing is done with it. It is not easily digestible and this makes it unsuitable for use as livestock feed. Doctoral student Nazri Nayan has now found fungi that can remedy this shortcoming.

Plant cells consist of cellulose and hemicellulose, both sugar polymers that, in principle, ruminants can easily degrade. But plant cells also contain lignin, and this makes the cells hard to degrade for ruminants. Straw contains a relatively large amount of lignin. To increase its nutritional value, the lignin must be degraded. This can be done with chemicals, but also organically.

In nature, lignin can only be degraded by white-rot fungi, says John Cone, Nayan's co-supervisor at the Animal Nutrition Group. Well-known white-rot fungi are the oyster mushroom and the shiitake. Nayan tested various white-rot fungi from the fungus collection curated by co-supervisor Anton Sonnenberg of Wageningen Plant Breeding. He discovered that the degradation of lignin varies greatly depending on the fungi species and strain. This opens up possibilities for improving fungi for this purpose, says Cone. The mushroom group



PHOTO: ANTON SONNENBERG

▲ Goats eating straw treated with fungi.

at Plant Breeding is one of the few groups in the world with this capability.

During laboratory tests, the fungi degraded the lignin in a period of five to seven weeks. A second PhD candidate, Lei Mao, is studying the conservation of the straw after it has been

treated with the fungi. A third, Eli Ratni, is studying the straw's feed value for goats and cows. Plans are also in place to field-test the usability of the fungi-treated straw in several countries. 'We are working on projects in Vietnam, China and Brazil,' says Cone. **AS**

CONTRACTS WITH COMPANIES CAN HELP SMALL FARMERS

Small-scale farmers in developing countries who produce for the world market often live in poverty. But there are effective ways of making lasting improvements to their incomes. These include long-term relationships with food producers – contract farming – and savings groups.

Wageningen Centre for Development Innovation (CDI) conducted a review of the effects of various measures on the incomes of small farmers in developing countries. Demonstrably effective interventions include contract farming, climate-smart agriculture, savings groups, access to financing, producer cooperatives and intensive supervision of extremely poor farmers. In order to improve their incomes, farmers need to boost their production by a lot, says project leader Joost Guijt. But they can often only do that, he adds, if the international company that buys their products enters into a long-term relationship with the farmers. Contract farming

guarantees the farmer fixed sales for fixed prices, but also means the buyer can build a relationship with the producer in order to work together on improving the quality or dealing with plant diseases more effectively.

It is also important that small farmers link up with each other in suppliers' cooperatives and savings groups, notes Guijt. In a savings groups 12 farmers might pay in a monthly sum so that they can make a large-scale purchase now and then. This might be a piece of new technology or seeds. In cooperatives, farmers can pool equipment and knowledge. The heart of the matter, says Guijt, is that the relationship between food producers and the supply chain needs to change fundamentally. The companies must connect with the farmers. 'Long, anonymous supply chains have got to become a thing of the past.'

The CDI did the study for the Farmer Income Lab, a collaborative venture by Mars, development organization Oxfam, Dalberg Advisors and WUR. **AS**



PHOTO: ANDRE SILVA PINTO / SHUTTERSTOCK.COM

▲ Long, anonymous supply chains between farmers and food companies have got to become a thing of the past, says researcher Joost Guijt.

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RESOURCE
For everyone at Wageningen University & Research



PROPOSITION

Participation, but within limits

In the 'participation society' the Dutch government is aiming at, citizens have to contribute to achieving goals set from above, says nature researcher Thomas Mattijssen. Personally, he believes in a society that is based on what people do on their own initiative.

'It was in 2013, when I had just been working as a researcher for a year, that the term "participation society" was coined in the now infamous king's speech at the opening of parliament. In the same speech it was explained that there would have to be cuts in government spending. In plain language: the government can no longer pay for everything and is stepping down, so the general public will have to take over from it. This is very top-down thinking based on particular policy goals. So maybe the government thinks it's important for elderly people to have coffee mornings with a bit of socializing, but has no budget for this so wants local residents to organize it themselves from now on. I don't believe in that. I believe more in an energetic society in which

participation grows from the bottom up. Citizens already take a lot of initiatives themselves, not because the

government tells them to but because it matters to them. There is no guarantee that this will provide all elderly people with coffee mornings; if necessary the government should take responsibility for that.

And the main role for government can be to link up with existing citizen initiatives and see how you can help, instead of trying to get citizens to do your work for you. In that regard the government tends to be selective about the citizen participation they want and don't want. It was decided that citizens should be more involved in nature management, for instance. But if a group of citizens wants a different kind of natural environment, they may be accused of not knowing enough about it. It seems the government only wants citizen participation that fits with the policy. That means a participation society based on citizens collaborating with the government. Whereas an energetic society is based on citizens doing something because it's their own priority. The challenge is to make use of the energy that is generated so that you come together in shared involvement.' **TL**



Thomas Mattijssen graduates on 9 November with a PhD from Wageningen Economic Research on the role of active citizens in nature and landscape management.



**‘The world just
is complex.
Deal with it!’**

Professor Katrien Termeer believes
in incremental change

‘There are no simple solutions’

She has never studied public administration and has spent a large part of her career outside the academic world. Nonetheless, Katrien Termeer has managed to build from scratch a highly successful Public Administration and Policy chair group. Her crowning achievement is her theory of small wins, about effecting change in small, meaningful steps.

text and photos Tessa Louwerens

‘Under the current tenure track system I would never have been taken on as a professor,’ Katrien Termeer points out dryly. ‘I do have a doctorate but for the rest I had hardly any publications to my name and I’d never heard of an h-index.’ On the other hand, she had many years of experience in the field, including as a civil servant at the Ministry of Agriculture, Nature Management and Fisheries (LNV), as it then was. ‘That’s a huge help, because I know how the two worlds should connect.’

At the end of 2005 Termeer became chair of the brand-new Public Administration and Policy Group. She was given a small office in the Leeuwenborch building, equipped with only a desk and a telephone. ‘I literally had to build the group from the ground up. I was allowed to hire one trainee research assistant (AIO) and one assistant professor. After that it was mainly a question of acquiring teaching and

research work. Fortunately I already had a large network, so I reached for the telephone and got started.’

HIGHEST SCORES

Thirteen years later Termeer has more than 200 publications to her name, and it didn’t take her long to ratchet up that h-index from 1 to 30. She now sits in a large office in the Leeuwenborch building and during the last quality review her chair group achieved the highest possible score for all elements. A major achievement, especially when you consider that Termeer has never studied public administration.

‘As a girl I wanted to design gardens,’ says this daughter of a Brabant tanner. She decided to study landscape architecture in Wageningen, but soon came unstuck. ‘I found it very interesting on a small scale, but found it difficult to design entire landscapes and to translate my ideas into a design.’ She switched to soil and water engineering and after gra-

duating in 1987 went to work for the Directorate-General for Public Works and Water Management, where she calculated the impact of groundwater plans. ‘That was very technical work and I didn’t like it at all.’

Termeer shared her office with a colleague who was working on public administration and became interested in the field. When a vacancy arose for a doctoral position in public administration at Erasmus University Rotterdam, she summoned all her courage. ‘During the interview they asked which theories of public administration I wanted to apply. I answered honestly: No idea, I don’t know any.’ It proved not to be a problem; Termeer was given the doctoral position and her research on the Dutch manure policy won a prize for the best public administration thesis.

WICKED PROBLEMS

After gaining her doctorate, Termeer swapped academia for the Ministry of LNV and later for Sioo (see CV). But in 2005 she made another about-turn and took up the professorship in Wageningen. Together with her colleagues, she works on ‘wicked problems’ such as climate change, sustainable agriculture, food security and the circular economy. These share the inherent difficulty of involving many parties with differing interests, says Termeer. ‘Often they can’t even reach agreement about what exactly the problem is.’

‘Wicked problems are not something you can solve in one fell swoop and you’ll almost certainly never get to the bottom of them,’ Termeer continues. ‘Sometimes today’s solution leads to tomorrow’s problem. Just consider, for example, the decision to switch from battery chickens to free range, for animal welfare reasons. That led to the problem of particulate matter. Air washers were introduced in response, but they posed a fire safety hazard in hen houses. It is impossible to anticipate all this.’

CYNICISM

According to Termeer, people often deal with wicked problems in one of two ways. The first is to simplify the matter. ‘Then you get, say, politicians who promise their voters the world and can’t deliver.’ The second is cynicism: nothing helps, so I can’t do anything to change things. ‘To which my reply is: the world just *is* complex. Deal with it! If we really want to make things more sustainable, more radical changes are needed. More of the same doesn’t work.’

How people change is what really fascinates Termeer. She uses theories to research this and aims to translate them into ‘perspectives for action’ in the day-to-day work of public administration. ‘There are no simple solutions, and every step towards sustainability requires cooperation between diverse parties. You can’t simply put everyone in a room together, close the door and say: good luck!’

As a civil servant she has personally experienced this during public discussions about nature development on farmland. ‘That ended in chaos and a politician being escorted off the scene by police. Maps had been leaked and farmers had seen that their land was involved.’ For Termeer it was an eye-opener. ‘You should always think carefully how you are going to set up something like this, because often significant interests are at stake, as was the case here with family-owned farms passed down through the generations.’

SMALL WINS

One of Termeer’s greatest successes is her theory of small wins. The idea is that small, meaningful steps are ultimately the key to change. Everyone – citizens, civil servants, politicians, companies – can take these steps. By way of illustration, Termeer cites the example of a farmer in Brabant who is keeping his pigs in

‘Sometimes today’s solution leads to tomorrow’s problem’

pasture day and night. ‘This is a small, local change, but it has knock-on effects. Because it contravenes the rules; pigs aren’t allowed to just roam freely outdoors, due to the risk of disease.’ To overcome this legal barrier, the farmer has concluded a Green Deal with the government. And the province is providing grant money for research into whether this form of pig farming has a future.

The small wins theory sometimes draws a sceptical response, says Termeer. ‘You aren’t going to save the world with something small like this, they say. To which I reply: ultimately we are. Provided the steps are meaningful. After all, these steps aren’t easy, they require another way

of thinking and often clash with existing rules and business models.’

For the rest, it is important that more than one step is taken, that a change takes hold and spreads, says Termeer. A nice example of this is provided, she believes, by Wasted, a citizens’ initiative in Amsterdam. Participants collect plastic in their neighbourhood and for every bag they receive a digital coin they can spend at shops involved in the scheme. This encourages recycling in neighbourhoods where it is neglected. Gradually a project like this spreads to several neighbourhoods and in its wake new projects emerge, Termeer explains. The founders of Wasted have since been invited to the World Economic Forum.

Such dissemination and elaboration is vital, Termeer believes. ‘The idea of small steps can often be misused as an excuse for picking low-hanging fruit. But there’s no point in opting for simplistic short-term gain.’

CHANGING THE WORLD

Termeer also does a lot of research beyond Europe’s borders, for example in the field of sustainable, integrated food policy, taking into account health, food security, poverty, biodiversity, climate and animal welfare. ‘For this kind of integrated policy, people from health ministries need to cooperate with people from agricultural ministries and environmental ministries. This requires change not only in the structure, but also in the culture.’ Termeer researches how that comes about and what is needed to make it possible. ‘So we are looking at how this is being done in South Africa and Uganda, whether something is genuinely happening and not just on paper, what the influencing factors are and which conditions ensure that it works.’

This system approach is what drew Termeer to Wageningen. ‘Whether it’s about food, climate or agriculture, these are all complex societal issues for which WUR is trying to find solutions. And to arrive at these solutions, you always need knowledge of public administration.’ This is why it is important, to her mind, to involve public administrators in the research at an early stage. ‘If we wait until a technical solution has been developed and only then start thinking about the governance side, it is often too late. Then it turns out, for example, that the solution conflicts with long-standing policy.’ She aims to convey this to her students. ‘The lecture theatres are full of students who want to

change the world for the better. That's really good, but make sure you go about it in a smart way. If you understand how the power relations work, you can play the game and have a lot more impact.'

SEEKING CONSENSUS

This is a lesson Termeer herself also applies. She spends roughly one day a week on ancillary positions. For example, she is a supervisory board member of development organization Solidaridad and a member of the Council for Public Administration (ROB), which advises on the structure and functioning of the government. This past September she was also appointed to the Social and Economic Council of the Netherlands (SER) as one of the 22 Crown-appointed members, a position formerly held by Louise Fresco, among others.

The SER is a consultative body comprising employers, employees and independent Crown-appointed members that advises the government and parliament on social and economic policy. Termeer will focus mainly on international corporate responsibility, for example in the gold and textile industries. 'For me, SER represents the polder model, not in terms of maintaining the status quo in the face of urgent need for radical change, but in terms of making progress by means of small steps and consultation with all the parties involved.'

This is particularly relevant right now, believes Termeer, because we live in an era of polarization and fragmentation. 'The complex issues that SER addresses require cooperation between government agencies, industry, employers and NGOs. As a Crown-appointed member, I share my expertise and I mediate between the various parties. At present I am still reading up, so as yet I have no definite vision, but I hope that through my advice I can contribute to meeting the UN's Sustainable Development Goals.'

LEFTOVERS

In her daily life too, Termeer does her bit towards creating a more sustainable world. She travels from Utrecht to Wageningen every day by public transport and bike, she eats almost no meat, travels by plane as little as possible and has covered the roof of her home with solar panels. 'I don't think any of that is particularly unusual and I'm certainly not a sustainability nut. Perhaps it's because I studied in Wageningen at a time when everyone here was a vegetarian. And



KATRIEN TERMEER


1987	Master's in Soil and Water Engineering in Wageningen
1993 – 1996	Doctorate at Erasmus University Rotterdam and assistant professor of policy at TU Delft
1996 – 2000	Policy advisor at the Ministry of LNV
2000 – 2005	Advisor at Sioo (centre for innovation and change management)
2005 – present	Professor of Public Administration and Policy at WUR

This September Katrien Termeer was appointed to the Social and Economic Council of the Netherlands (SER) as a Crown-appointed member. She is also a member of the Council for Public Administration and a supervisory board member of development organization Solidaridad. Termeer is married and has two sons.

I think my research on the circular economy has raised my awareness.'


Every year at Christmas the whole chair group is invited to dinner at the professor's home on the Oudegracht in Utrecht. 'It is a very multicultural group and everyone cooks something,' tells Termeer. Because it is customary in many cultures to show hospitality by making too much food, there are lots of leftovers. 'So everyone goes home at the end of the evening with a Tupperware box.' She points to a clean container on her desk. 'Over the course of the year they trickle back to my office.'

TAI CHI

Termeer believes that dining together like this at Christmas is important for creating a good working atmosphere. 'The work pressure is high and it is important that we relax now and again and simply have a good time together.' Personally she finds relaxation in martial arts. 'I used to do karate and these days I do tai chi. The nice thing about martial arts, I find, is that they demand complete focus. If your thoughts stray for just a second, you'll get hit. I find this has a very meditative effect, because I really have to clear my mind entirely.' 



LIVING ROOM LECTURE

If you live in Wageningen, your neighbour could be a plasterer or an infant school teacher. Or an obesity expert, or someone who knows all about pastoralists in tropical regions. During an event called 'Get to know the neighbours', Wageningen folk hear the stories of fellow residents who work for WUR. In a living room on the Veluviaweg, Gemma van der Haars (left) talked about her research in Nepal and the eastern Congo, on opportunities for women in wartime. Notice the books underneath the little yellow table. God willing, the beamer didn't topple over.  LdK, photo Sven Menschel



Wageningen discovery prevented many heart attacks

How trans fat became bad fat



100years
1918 — 2018

Trans fats are bad for your cardiovascular system. We all know that by now. But 30 years ago our food was full of them. And heart attacks were the number one cause of death. That changed after a Wageningen study was published. In this last instalment of the series 100 years of WUR, the key players look back on their life-saving discovery.

text Roelof Kleis illustrations Geert-Jan Bruins

'Next year we'll be celebrating 50 years of nutrition research in Wageningen,' says professor of Nutrition, Metabolism and Genomics Sander Kersten. 'If you review the high points, this study by Katan stands out, for both scientific and societal reasons.' Fat expert Kersten is in his office. There is a still life hanging on the wall featuring a garden table loaded with fatty foods: bottles of vegetable oil, nuts, avocados, coconuts and so on. 'Made for a TV programme about fats that I worked on.' There are no products with industrial trans fats in the picture. In the Netherlands, trans fat was removed from all foods long ago. 'That social problem is a thing of the past. Which is what makes this a suc-

cess story.' To see where the story starts we have to go back to the 1980s, when the Wageningen researcher – and later professor – Martijn Katan was asked by the Dutch Heart Foundation exactly what kinds of fatty acids margarines contained. 'The reason was an article in the *British*

Medical Journal, which said that margarine can contain fats with trans-fatty acids which are bad for the heart. The director of the Heart Foundation, Bart Dekker, especially wanted to know what was in diet margarines, because the foundation recommended them.'



'I had checked 10 times to see whether I had filled in the figures correctly'

Ronald Mensink
discoverer of the harmfulness of trans fat



▲ Martijn Katan (left) and Ronald Mensink at the time of the trans fat experiment at the end of the 1980s. Behind them is the apparatus with which cholesterol levels in test subjects' blood were measured.

The now emeritus professor Katan speaks animatedly from his home in Amsterdam about the study that followed. It went on for three years. Katan scrutinized not just the diet margarines but 'the whole fat shelf' in the supermarket. It turned out there were no trans fats at all in the diet margarines. 'But the cheap, hard margarines, deep-frying fat and baking fats contained vast amounts of that trans fat. And there were some very weird compounds in them too. I'm a chemist by training and I was fascinating by all the strangely altered fatty acids you consume with your food.' A second conclusion was that no one really knew how these fatty acids worked. It was generally assumed that they could not do any harm, says Katan. But was that true?

CHOLESTEROL

Five years later, in 1987, Katan had enough funding to answer that question. The Heart Foundation allocated one of its grants to a PhD study and Ronald Mensink, a Wageningen graduate in Nutrition Science, was taken on to do it. 'I had actually wanted to do medicine but I lost the lottery for places twice,' says Mensink in his soberly furnished professor's office in Maastricht. So he went to Wageningen, where his interest in medicine was reflected in the emphasis on nutrition, physiology and metabolism in his studies. Mensink had already worked for Katan for a while and Katan wanted him and no one else for this project.

'The main theme of the study was the effect of monounsaturated fatty acids on blood cholesterol levels,' says Mensink. It was known that polyunsaturated fatty acids, such as the linoleic acid in sunflower oil, had a beneficial effect on cholesterol levels and thus on cardiovascular diseases (see inset). But little was known about

monounsaturated fatty acids such as the oleic acid in olive oil, for example.

SENSATIONAL

Mensink conducted three intervention studies. Fifty to sixty test subjects followed specific diets for several weeks and their cholesterol levels were carefully monitored using blood tests. The first two experiments generated articles in *The Lancet* and *The New England Journal of Medicine*. But the sensational finding came from the last experiment, which focused on the composition of the monounsaturated fatty acid. And this is where trans fat comes into the picture. Unsaturated fatty acids come in two forms, cis and trans. In lay terms, the fat molecules are bent and straight respectively. To make it easier to process liquid fat (oil) in foods, it is partially hardened, and this changes the shape of part of the unsaturated fat – cis fatty acids turn into trans fatty acids. Mensink's research revealed that this change of shape has a big impact on the way the fatty acid functions biologically. Trans fatty acid greatly increases the amount of bad LDL cholesterol in the blood, while lowering the amount of good HDL cholesterol (see inset).

FAT, CHOLESTEROL AND HEALTH

The kinds of fatty acids we eat influence the levels of 'good' and 'bad' cholesterol in our blood, and thus our health. Cholesterol is a fatty substance that the body needs as a building block. Transport in the blood vessel is provided by special proteins in what are called lipoprotein particles. Those particles are mainly found in two forms: LDL and HDL, standing for low-density lipoprotein and high-density lipoprotein. The 'bad' LDL raises the risk of cardiovascular disease because it causes arteries to get clogged up. A protective effect, by contrast, is attributed to HDL. Fatty acids influence the distribution of cholesterol between LDL and HDL. Polyunsaturated fatty acids and the cis type of monounsaturated fatty acids lower the bad LDL and are therefore good for the heart. Saturated fatty acids and the trans type of monounsaturated fatty acids do the opposite and are therefore harmful. Trans fatty acids are formed in the food industry when vegetable oils are hardened. They also occur naturally (in small quantities) in animal fats such as fatty meat and butter.

March
1990

Ronald Mensink defends his thesis on fatty acids

Aug
1990

Publication of Mensink's study on the harmfulness of trans fat in *The New England Journal of Medicine*

PHD WITHOUT A THESIS

Ronald Mensink was the subject of controversy even before his revolutionary article about the harmfulness of trans fat came out in *The New England Journal of Medicine*. The top journal claimed exclusive rights and demanded that Mensink's already printed thesis, which included the article, be withheld until after publication in the journal. As supervisor, Martijn Katan did not want to deny the top journal its scoop, but postponing Mensink's PhD graduation was not an option either. So the then rector Van der Plas made an exception to the rule and allowed Mensink to graduate without making his thesis available to the public. Only the examining committee got to read it. The *WUB*, forerunner to *Resource*, gave this extensive coverage, drawing the attention of the press. 'Thesis remains closed book', ran the front-page headline in the national newspaper *NRC*. 'The room was full of journalists who hoped to pick up a snippet from that magic chapter,' recalls Mensink. In vain: the most sensational bit of the thesis wasn't mentioned during the defence. 'That had not been agreed, but everyone could sense that it was a delicate issue.' The article came out in *The New England* five months later, but by then nobody was interested in Mensink's thesis. He was left with 200 copies on his hands. 'I just threw them in the waste paper container.'

'Heart failure is now mainly only the cause of death among the very elderly.'

Martijn Katan
Emeritus professor and Ronald Mensink's PhD supervisor

SCOOP

Katan could hardly believe his eyes when he saw the first results. 'I said: Ronald, are you sure you haven't switched anything around?' But Mensink was sure about that. 'I had checked 10 times to see whether I had filled in the figures correctly on the computer or whether there wasn't a mistake somewhere. Could those trans fats have come from anywhere else? But that was impossible: the body doesn't manufacture trans fats.' Katan: 'It was completely watertight. We had a result that nobody had expected.' *The New England Journal of Medicine* smelled a scoop when the article was submitted at the end of 1989. Under pressure from the editor-in-chief, the study's conclusion was even beefed up a bit: the effect of unsaturated trans fatty acids on health is at least as harmful as that of saturated fat. Katan: 'I can still remember that I was about to go on holiday when the lady from the *New England* called. The editor-in-chief himself thought it was better to express it that way. And he was pretty much a god! So I thought: okay then. It was not unreasonable; it was more that I was too cautious. They even added an editorial asserting that there was a lot wrong with those trans fats.'

WORSE THAN BUTTER

The editors of the *New England* were right to follow their hunch. The article took the world by storm. 'We had half the world at our door,' recalls Katan. 'The American media zoomed in on the margarines. Margarine had been promoted as good for your heart for years in the US, and yet they were full of trans fat. And now that trans fat turned out to be worse for you than butter, with its saturated fats. The food industry, which used a lot of hardened soya oil that was rich in trans fat, dug its heels in. "This can't be true. Those guys on the other side of the Atlantic

don't know how to do research." American researchers wrote sceptical articles about our study.' But it *was* true, as repeat studies in Wageningen and elsewhere showed. The renowned Harvard professor Walter Willett presented the 'smoking gun' in 1993: an epidemiological study which revealed that nurses who consume a lot of trans fats have more heart attacks. Katan: 'Then the shit really hit the fan in America.' He remains modest about the lifesaving effect of the trans fat study. 'It is just one of the contributions made by science to cutting the number of heart attacks. Heart failure is now mainly only the cause of death among the very elderly.'

A QUIET REVOLUTION

All the negative publications about trans fat led to Unilever in the Netherlands – rather quietly – removing all the trans fat from its products. Genuine science for impact. 'What is particularly satisfying about it for me,' says Katan, 'is that the risk of a heart attack has gone down without people having to do anything themselves. All too often, St Matthew's law applies in nutrition and health: to those who have shall more be given. In other words: already healthy people adopt even healthier habits. It was differ-

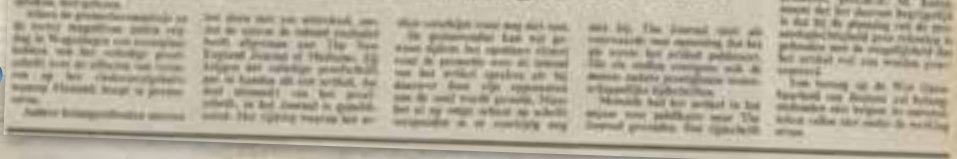


PHOTO: CARLA VAN THIN

Proefschrift blijft geheim tot publikatie in vakblad



Proefschrift blijft gesloten boek



American epidemiological study links trans fat with heart failure



'The Dutch food industry removed trans fat from its products of its own accord'

Sander Kersten
professor of Nutrition, Metabolism and Genomics

ent this time. It wasn't just the graduates with good jobs who bring their kids to school by bike that benefitted, but the less highly educated too. Because no behaviour change was called for: the food itself was changed.'

Food was changed in the Netherlands, at least. In other countries it took quite a lot longer before the new insights found their way into legislation, says Kersten. In the US, the Food and Drug Association (FDA) only decided in June this year that no trans fat should be used in food. 'Internationally, there has been massive opposition. The EU only passed a resolution on trans fats at the beginning of this month. The maximum level of industrially produced trans fatty acids in food products is to be set at 2 percent. All products must conform to this by 1 April 2021. So that is how long this kind of process takes. The legisla-

tion doesn't have many implications for the Netherlands, since the industry has removed trans fat from its products of its own accord. But in other places, in eastern Europe for instance, some food products are still full of trans fat.' The trans fat study had some undesirable consequences too. Yes, the study has saved lives, says Katan. 'But the use of palm oil has been greatly stimulated as a result. And a lot of rainforest has been felled for that. Another consequence is the drop in margarine consumption. Margarine became suspect, especially in the US. Globally, people are eating less and less margarine. And that is a pity, because soft, trans fat-free margarine is very healthy.'

FOLLOW-UP RESEARCH

Ronald Mensink left after his controversial PhD graduation ceremony (see inset) to take up a postdoc position at Maastricht University. Since 1999 he has been personal professor of Molecular Nutrition there, focussing on fat metabolism. Cholesterol is still central to his work. 'But here we look more at the effects of vascular function. Does the condition of the blood vessels improve or worsen, and does that have an impact on cognition, in the brain for instance?'

Meanwhile, in Wageningen, the trans fat story has a sequel. Because although it has been irrefutably established that trans fat is harmful, we still don't know why that is. This question has always interested Kersten, even now the dietary problem has largely been solved. 'The purpose of science is not just to solve problems, but also to understand how things work.' So four years ago he appointed a PhD candidate to try to find out what trans fat does inside cells. The first scientific article on this has been published. **R**

NEW SERIES: WAGENINGEN DISCOVERIES

What especially significant results have come out of a century of Wageningen research? *Resource* is going to explore this scientific legacy in a series of stories. New instalments will appear online at irregular intervals, and will be announced in the magazine. Kicking off with this story about trans fats.



2018

The US and the EU
legislate against the use of
industrial trans fats in food

ANTI-CORRUPTION CODE DID WE NEED IT?

Wageningen researchers must not accept bribes or expensive gifts, says the new WUR anti-corruption code. And they should be wary of countries that are on international blacklists because of cybercrime or the funding of terrorism. Is the code a blessing or a millstone around our necks?

text Albert Sikkema *illustration* Henk van Ruitenbeek



Roel Bosma



**Project manager at
Aquaculture and Fisheries**

‘The code is a check to ensure that before you start a project you assess whether you should enter into a collaboration with that party

in that country. **A lot of donors require this, so the WUR institutes that work internationally do need some kind of code.** Moreover, there are potential partners in our field that are corrupt. Rumour has it that there is corruption in many an FAO office in Africa. They say you don’t get a contract there without paying somebody, but it is difficult to prove it. So you have to weigh things up: am I going to do business with them or shall I look for other partners? I have never encountered bribery myself. But there were times in the period when I worked as a consultant that I didn’t apply for assignments because I knew I would only get them if I offer a backhand. So this kind of code helps you be selective and that is very good.’

Irene Koomen



**Project leader at
Wageningen Centre for
Development Innovation
(CDI)**

‘I lead long-term projects in developing countries and I can’t guarantee that

our local project staff don’t take bribes. We have all kinds of checks and balances within WUR, with which we try to exclude corruption. For the larger projects we first make a risk analysis and draw up clear guidelines and agreements. But you do hear things sometimes. Apparently in Ethiopia there is a 10 per cent arrangement: if you get someone work that earns them 1000 euros, you get 100 euros in return. I can’t prove it – you know but you don’t know. What I can do is check project spending and have it monitored. **I have never come across fraud in our projects. But cars intended for the project team were nabbed by managers for their own private use.** That is called misuse of resources. Our project partner intervened in that case and cleaned up their act. I don’t know whether a course for WUR staff on dealing with fraud would help. In my opinion it

is much more important to work closely with the Dutch embassy. They can make a good risk analysis because their staff get everywhere and know the country inside-out, and they can advise you on what action to take. You should use this knowledge when assessing your partners.’

Nico Heerink



**Associate professor of
Development Economics**

‘I’ve been working on research projects in China for a long time. The rule in the code that you are not allowed to accept gifts worth more than 50 euros is tricky in the Chinese context. My research partners regularly give me good wine, special teas and handwritten calligraphy. How much are they worth? I know for sure that if I turned them down, the giver would be sorely offended. **I accept the gifts because they are not meant as bribes but as tokens of appreciation for the ongoing collaboration.** I did once have the experience of being bought off when I was working in Beijing for the IFPRI research institute. The World Bank had financed an extremely over-ambitious project at a Chinese research institute and I had to evaluate whether the project should be extended after three years. I was invited on an outing. My boss tried to ring me to tell me not to go, but it was too late. They made a big fuss of me all weekend and in the end I couldn’t say no. That should no longer be possible because China now has a strict anti-corruption policy. Offering trips is not allowed anymore and there are strict limits on spending on meals. I approve of the passage in the code about international sanctions, but it is open to different interpretations. China has been on the EU sanctions list since 1989. Point three of the EU sanction says: suspension of high-level contacts. How does that tally with all the Dutch trade missions to China since 1989?’

‘It is not always a bad thing to work in a dictatorship’

Jouke Campen



**Project manager at
Wageningen Plant Research**

‘It’s fine by me that we’ve got an anti-corruption code. I work a lot in the Middle East, where we sell expertise about horti-

cultural systems. I have never come across bribery; there is no corruption among my clients. But I do hear stories about corruption related to the building of airports, where there is more competition. Our clients want Wageningen expertise and we don’t have much competition so there is not much temptation to bribe. And besides, **we are not selling weapons in the Middle East, we are improving food production.** I don’t think there can ever be any harm in that, even in countries that do not comply with UN resolutions. Precisely by being in those countries and talking about tricky subjects, you can open up a discussion about their perspective, which is often formed by local media. So it’s not always a bad thing to work in a dictatorship.’

Frans Pinggen



WUR legal expert

‘The anti-corruption code does not lay down the law in the sense of forbidding us to do business in certain countries. The code indicates: if you

do research in that country, this is what you should bear in mind. If staff go to a country that is high on the corruption index, they are expected to take a course so they can handle it. We provide staff with support and information. The same goes for the funding of research. If the US blacklists Iran, Dutch banks have to abide by US regulations because otherwise their branches in the US will be penalized. That complicates the financing of projects in certain countries. Then we have to find out whether we can still do business with the partners we would like to work with in those countries. **The code is intended to ensure that we constantly ask ourselves in which countries we can carry on working, either without risk or with precautions in place.**’

Student society gets serious about sustainability

The bar gets greener

'De-greening' first-years through initiation rituals is going out of style. But going green is in. More and more student societies are forming sustainability committees (*DuurCos*) to help them get serious about the environment. Ceres is one of them. The society has started producing solar energy and wants to heat its building with the heat generated by the beer refrigeration.

text Luuk Zegers

PHOTOS: SVEN MENSCHEL



‘One of our objectives last year when we set up the sustainability committee was to have solar panels on the roof within five years, says Lennart Alderlieste, project officer on the *DuurCo*.

That target has already been met: last week 104 brand-new solar panels were placed on the society’s roof. ‘It is a good investment. We use quite a lot of electricity, but with this many panels we have overcapacity at certain times. By supplying that to the net we shall recoup the investment in a couple of years.’

THOUSANDS OF LITRES OF BEER

And the solar panels are just the beginning. The Ceres kitchen is switching from gas to induction during this academic year and the old ventilation system will be replaced by a more economical one. In February the beer refrigeration – not unimportant at a social club – will undergo an ambitious makeover ‘The present refrigerator is outdated so a new one will save energy anyway,’ says Alderlieste. But Ceres wants to go a step further than that. ‘During the cooling process you extract heat from thousands of litres of beer, and currently that gets pumped out of the building. With heat exchangers we can use some of that residual heat to heat the building.’

LANX in Amsterdam, which calls itself the largest student society in the Netherlands, is already using this method. Last year the society hosted a Sustainability Day for societies from all over the country. Ceres was there, and took a good look at the new beer refrigeration system. ‘It is a challenge but technically it is possible,’ says Alderlieste. ‘We are now looking into the possibilities and the costs. If the investment is too big for now, then we shall at least

install our new refrigerator in a way that makes it possible to take that step in five years. Future-proof.’

JOINING FORCES

In contract to ‘de-greening’ hazing rituals, greening initiatives are clearly trendy among student societies. And they are learning from each other. The national Sustainability Day at LANX in Amsterdam will be followed up this year in Wageningen: Ceres will run the second one. And KSV Franciscus, which has started a *DuurCO* too, recently organized a sustainability consultation with the other Wageningen societies. Besides KSV and Ceres, Nji-Sri and SSR-W attended the meeting, and Argo and Unitas will join next time. Alderlieste: ‘Yes, there is rivalry between the societies sometimes. But if we want to become more sustainable, it is better to join forces.’

HARD OR SOFT PLASTIC

One of the topics at the Wageningen sustainability consultation was cups. On quiet evenings, beer is served in glasses but when it is very busy that is risky, says Alderlieste. ‘On Thursday evenings and at open parties we use plastic disposable cups at Ceres. Hard plastic cups may be more sustainable but switching all at once is difficult. You have to wash them, which creates is more work behind the bar. It can be dangerous to stand on them, and you can’t just endlessly hand out plastic cups at parties, because people take them home with them.’ Cost is a factor too: Ceres gets the disposable cups free from the brewery, but not hard plastic cups. SSR-W and Nji-Sri do use hard plastic, says Alderlieste. ‘So at the consultation we asked them about their experience and how they go about it.’

Ceres is currently working on a life cycle analysis of the different kinds of cups. ‘We are comparing how long the cups lasts, their environmental impact and their CO₂ emissions etc.’ That doesn’t automatically mean the end of disposable cup, says Ceres president Coen Hubers. Creating a ‘mono-flow’ with just one type of disposable plastic can be effective. ‘With the university, we are looking into the best way to recycle that kind of mono-flow,’ he says. During the Ceres anniversary festivities, hundreds of thousands of cups were recycled and turned into PP granules to be used for new plastic objects.’

◀ Solar panels on the roof of Ceres student society.



PHOTO: GUY ACKERMANS

▲ The Ceres sustainability committee, with Lennart Alderlieste on the left.

GAS-FREE

With the solar panels and the planned in the kitchen and refrigeration, Ceres is taking stride towards a greener future. What are the long-term ambitions? Alderlieste: ‘We want the whole building to be gas-free. Geothermal energy is a very interesting option. The technique is still too high-risk to use here and the investment is huge. But in the long term it really is our dream.’

WHAT ARE THE OTHER SOCIETIES DOING?

Student rowing society Argo has generated much of its own electricity since 2015, thanks to 150 solar panels on the roof of the boat-house. The new training space in the boat-house is well-insulated. Last year, Argo started a *DuurCo*, tasked with looking at waste-sorting among other things. The club has to find a way of doing this itself as the council does not collect waste separately at its location.

KSV Franciscus installed smarter, more sustainable central heating boilers at the end of 2017, reducing gas consumption by 70 percent. The society sorts ‘PMD’ waste (plastic, metal and drink cartons) separately and the *DuurCo* is now writing a sustainability plan for the whole society. KSV initiated the sustainability consultation among Wageningen societies.

SSR-W is consulting with ex-members from the sustainability branch as to how to upgrade its premises’ energy label. Beer is served in reusable plastic cups, all the light bulbs are LED, and the kitchen is due for greening soon. SSR-W plans to start its own *DuurCo* this year.

Nji-Sri serves beer in reusable plastic glasses and disposes of paper and plastic separately.



LOOK!

Fruit flies might have much better vision than we realize. Canadian researchers recreated the neural network of the fly's 'vision system' on a computer. This self-learning computer network recognized individual fruit flies within two days. What we don't know, of course, is whether the fruit fly can do the same as the computer.

GONE!

Only 23 per cent of the land surface of the Earth (not including Antarctica) is still wilderness, shows the first wilderness map of the Wildlife Conservation Society. Of that wilderness, 70 per cent lies in five big countries: Russia, Canada, Australia, the US and Brazil. An area of wilderness larger than India was lost between 1993 and 2009. Hope we haven't ruined your day.

HELP

It's better not to offer your colleagues unsolicited help, suggests a study at Michigan State University. Unsolicited help can make colleagues feel insecure and they are not as grateful for it as they are if they asked for help. So mind your own business. Or, as a researcher might say: swim in your own lane.

CAMOUFLAGE

The colour of birds' eggs goes back to the time of the dinosaurs, a German-American study has shown. Birds only use two pigments, red and blue, to make all the shades in their eggshells. Researchers found the same pigments in fragments of shell from the eggs of flightless dinosaurs. The dinosaurs developed these colours to camouflage the eggs.



Student panel: keeping lines short between students and uni

How does a university find out what students want? And how do students with ideas get hold of the right person in the university? The answer you'll get from WUR's Student Service Centre and its Marketing and Digital department is: through the new student panel.

There wasn't really a good, low-threshold way of sounding out students about ideas, say communication advisors Nadieh Tubben and Hannelies Bögemann. 'That's why we established the student panel, to see whether what we offer students meets their expectations,' says Tubben.

In fact, three student panels were established: one for Dutch students, one for international Bachelor's students, and one for international Master's students. The panels will meet four or five times a year. Tubben: 'Students will then have a chance to get their message across, and we will have a chance to ask questions, 'We will also make sure the students' messages reach the right person.' Students' ideas can go beyond comments on the timetable or questions about the growth of the university. Someone proposed, for example, that online room reservation should be open to students as well as staff. The person

who had booked a room would then check in using a QR code system. If they didn't do so within 15 minutes, the room would become available again. This idea has been passed on to the schedulers, who are considering it. According to Bögemann, this is a good example of how the student panel can be used: as a way of keeping lines of communication short. **📍 LZ**

Want to be on a student panel, or get a topic onto the agenda? International students, email students@wur.nl (for Dutch students: studentenpanel@wur.nl)



▲ Idealis director Sylvie Deenen and a few residents at the Moutery.

PHOTO: IDEALIS

First residents of Moutery get the key

The first residents of the Moutery on the Churchillweg got the keys to their rooms last week.

A total of 176 students are going to live in the new student residence. There are 10 units with 10 rooms apiece, 2 units with 12 fur-

nished rooms, 28 single studios with their own kitchen and bathroom, and two 'combi rooms'. The accommodation is low-energy and there are solar panels on the roof. The 10-room units were extremely popular, says Sylvie Deenen, director of student housing provider Idealis. 'These rooms are spacious

and affordable, with rents of between 300 and 350 euros. Students were allowed to apply for these units as a group, and they did so in large numbers.' The second part of the student residence will be ready on 1 December. The official opening will take place in the spring. **📍 LZ**

Extras wanted for movie

A touch of Hollywood on campus

Always fancied being in a film? Here's your chance. Filming will take place on campus on Saturday 24 November for a Dutch black comedy called *Boy Meets Gun*. Suraya Maenhout, production coordinator of this film in the *Telefilm* series, is looking for extras.

Boy Meets Gun tells the story of Maarten, a boy who happens upon a pistol. He decides to keep it, and it starts to have an impact on his life. Maenhout: Beyond this teaser I can't tell you much more about the plot. We are not allowed to give anything away at this stage. But we still need some extras on the campus, especially students and teachers.' You don't need any film experience

or particular skills to take part. 'As an extra all you have to do is walk, sit or cycle in the background.'

The television film is a collaboration between production company Pupkin and the VPRO broadcasting company. 'We start shooting next week and the film is supposed to be finished some time towards the end of December.' Extras are asked to clear their diaries for the whole of the filming day. 'We've planned filming from eight o'clock in the morning to seven in the evening. That's a long day but we've given ourselves some extra time to be on the safe side.'

Hollywood comes to campus? 'Well,' says Maenhout, 'it is a professional set, with our own cater-



PHOTO: SVEN MENGHELI/SCHUTTERSTOCK

ing and everything else that goes with it. But to call it Hollywood is a bit over the top.' **OLZ** *Would you like to be an extra in *Boy Meets Gun*? Send your name, age and a recent photo to productie@pupkin.com*

MEANWHILE IN... IRELAND

'The catholic laws are outdated'

A large majority of the Irish (65 per cent) voted to remove blasphemy from their constitution in a national referendum on 26 October. Especially young people supported the change: 80 per cent of all Irish under 35 voted 'yes'. With this decision, the inhabitants of Ireland distance themselves further from their strong catholic heritage. Earlier this year abortion was legalised and since 2015 homosexuals can marry.

'This referendum and the previous referenda on abortion and gay marriage dominated talk in Ireland quite a lot, because they had a high direct impact on the country. I talk about these issues a lot with my friends. We still have a lot of catholic-influenced laws in our country which are outdated and I'm glad they are changing. In some cases we're not even aware we have them.

I found it surprising that there was a higher yes vote now compared to the gay marriage referendum. Both were accepted though.

The abortion referendum of last May is a really good example

of why these laws should be revisited. The catholic church considers abortion a sin and believes the foetus has as many rights as the woman. Because of the law against



PHOTO: THE OLD MAJOR/SCHUTTERSTOCK.COM

▲ Referenda have been held in Ireland recently on gay marriage, blasphemy and abortion (photo).

abortion it was impossible to have a legal, safe abortion in Ireland. So women who needed an abortion had to travel to England or to mainland Europe.

Since I don't live in Ireland now, I read the news to keep up with everything. I want to know what's happening back home; that's important I think. In the Netherlands, the Irish news doesn't automatically crop up in your everyday life and it is easy to lose sight of it.' **REC**



Siún Collins, an MSc student of Earth and Environment from Ireland, reflects on recent event in her country.

YOU ON CAMPUS

Exam week finds Nienke Luchtmeijer (23) sitting at a table in the deserted Forum. Croissants on the table, water bottle in one hand, telephone in the other.

The Bachelor's student of Food Technology is completely settled in Wageningen. When she came here a few years ago she joined not one but two student associations. 'During my AID I checked out Unitas and SSR-W. Because they both seemed friendly and fun, I became a member of both of them.'

When asked if all that doesn't keep her very busy, Nienke responds, 'I am cutting down. And there aren't a lot of commitments. It's more a question of things you can choose to do, options. Only the operations committee at Unitas takes up quite a lot of my time. We make sure that the policy and rules are in order, so it mainly involves combing through a lot of documents. But that's not all we do; we

also support other committees, where necessary. Fortunately there are quite a few committee members.'

Nienke is also a big fan of board games. She is a member of the Facebook group Wageningen Board Gamers, a forum on which fellow board game fanatics regularly announce board game evenings. 'It's not just Monopoly

'It's not just Monopoly and Settlers of Catan. There are so many board games'

and Settlers of Catan. There are so many different games. And it's really sociable and fun. Games are always played on the fourth Thursday of the month at Thuis in Stationsstraat in Wageningen. While there's a regular core of people, some come only occasionally.'

For the time being Nienke won't have to give



PHOTO: EVA VAN DER GRAAF

up her associations and board games evenings, because she plans to stay on in Wageningen after completing her Bachelor's. 'I want to move on to the Master's of Food Technology and then specialize in Gastronomy. I love cooking so it's no coincidence that I often cook at my associations. I also cook a lot in my leisure time. In terms of main courses, I don't really have a signature dish. Quite the opposite in fact, what I like doing is trying out different things. But I do have a signature dessert: tiramisu. I got the recipe from a friend of my mother's. She is Italian. I usually make it when my friends come round for a meal.' **EVdG**

'Hopefully the hitch-hiker won't be extinct by the time I have a car'

For students it is free and it gets you where you need to go. Blogger Angelo Braam is a fan of the Dutch train network. But what he likes even more is to stick out his thumb along the side of the road. 'Hitch-hiking is great.'

'It is Monday morning. I'm sitting in the train from Emmen, my home town, to Wageningen. It is truly a privilege: to be able to reach every station in the Netherlands with a train network in good working order, without – as a student – having to pay a penny for it. Yes, our train network works well, so you can all stop moaning. What is less enjoyable about the train is the fact that a journey can be pretty boring. Eye contact meets with a discouraging

frown and people are happier conversing over their phones than with those sitting next to them.

EXTINCT

The mode of transport I find much more fun is my thumb. Many people would claim that the hitch-hiker is extinct or that hitching in the Netherlands can't be done any more. But hitch-hiking in the Netherlands still works just fine and it's great.

I started hitch-hiking while travelling in very communal and hospitable countries, and it always led to wonderful encounters with nutters and enjoyable experiences. I had expected it to be no longer possible in the more individualistic Netherlands, but happily this proved not to be the case. In fact, the average

Dutch person proved less individualistic than I had thought. I'd even go so far as to say I'm finding the Netherlands to be one of the better places to hitch-hike in Europe. Over the past three years I have sat next to hundreds of people in their cars, and all kinds of people pick me up. Families, single women, farmers and business people with expensive cars, every type of person imaginable.

FREELoader?

A handful of awkward chats aside, every trip produces good conversations and great stories. But what I really love is that little bit of tension and uncertainty, that you have no idea who you are going to meet, how long you'll be travelling and the route you'll take. That gigantic

BLOG



Angelo Braam is a second-year Bachelor's student of International Development Studies. Read all his blogs at resource-online.nl.

hit of adrenaline when finally, after you've been waiting a half hour, a car stops. So it has only benefits, and travelling together also saves exhaust fumes and traffic jams. Don't I feel like a freeloader, people sometimes ask me. Well, yes a little. No one is worse off for giving a lift, but I do feel it's about time I did something in return. Hopefully the hitch-hiker won't be extinct by the time I have a car, and then I can finally welcome other people aboard.' **EVdG**

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.

Scanning soils in Kenya

I've been in Nairobi for nearly five weeks now for my internship at SoilCares. Sometimes so many new things happen in a week that it's almost impossible to keep up. My internship is with a young and growing Wageningen company that works on soil analysis using sensor technology and spectroscopy. I am taking two Master's programmes, combining elements of the natural sciences and the social sciences. Both come into the work here.

GOOD ENGLISH

One of the things the company does is to analyse soils with a portable soil scanner. We have an app which is synchronized with the soil scanner and tells you what the status of your soil is, and what you should do to improve it. The social science side of my internship is about the way people deal with the technology, the dissemination of knowledge, the influence of the government and the role of SoilCares itself. The technical questions about how the soil scanner works are highly relevant to my other Master's.

I share accommodation with two colleagues in Kikuyu, a kind of suburb of Nairobi. It looks quite rural with its dirt roads and donkey carts everywhere. To us that is strange in an urban area, but it is just the way

things are still done here. Everyone speaks pretty good English, or at least good enough that I can get by everywhere. A friend of mine is doing an internship on the other side of Nairobi. It is nice to talk Dutch with each other now and then.

HALF MARATHON

I recently went to a Bible study group in a local community centre, as a way of meeting people. The centre is a kind of meeting place and it's a nice way of getting to know some people. And I also ran a half marathon, and went on safari with African colleagues. Fun- nily enough, it was their first time to go to the national park that is right next-door to Nairobi. That's a bit like the Dutch people who never go to the Kinderdijk or the Keukenhof until they get a visitor from abroad. I go nearly everywhere by public transport here. It's very hectic and chaotic compared with the Netherlands, but it is also efficient. If you miss the bus here, or can't squeeze onto it, you just take the next one in five minutes. In the Netherlands you might well have to wait half an hour.' 

THE WORKS

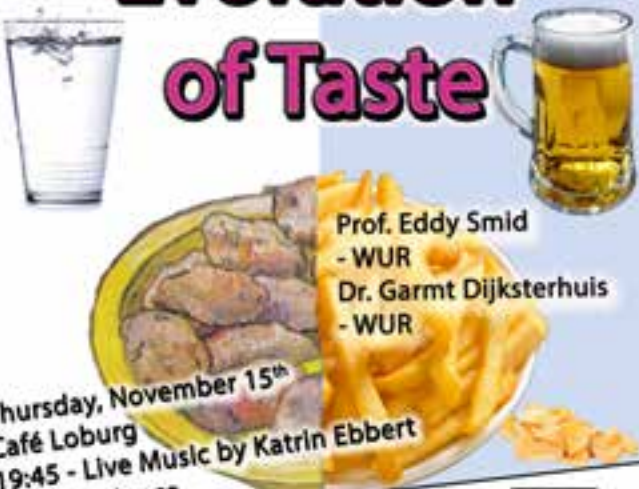
Who? Teun Fiers, MSc student of Earth and Environment and Climate Studies
What? Internship at SoilCares
Where? Nairobi, Kenya

More interviews on resource-online.nl



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Evolution of Taste



Prof. Eddy Smid
- WUR
Dr. Garnt Dijksterhuis
- WUR

Thursday, November 15th
Café Loburg
19:45 - Live Music by Katrin Ebbert
20:15 - Science

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MCB-51403: Capita Selecta Commodity Futures & Options

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Announcements

VACANCY: JURY MEMBERS TEACHER OF THE YEAR AWARD

Every year, elections are held for the Teacher of the Year award to acknowledge the outstanding teachers at WUR. Students vote for their favourite teacher, after which a student jury decides on the nominees and the ultimate winner of the award. If you're passionate about stimulating good education and you'd like to help select this year's most excellent teachers, join the student jury. Sign up now by sending a short letter of motivation and CV to ufw@wur.nl.

WUR.EU/TOTY

PARTICIPANTS NEEDED

We invite Dutch men and women in good general health and with an adequate understanding of the English language to participate in two studies about eating-related sensations. Participants receive a €5 gift card plus a bag with an assortment of snacks or a

free lunch. For more information contact aikaterini.palasma@wur.nl.

IMPROVE PHYSIOTHERAPY OPENS ITS DOORS IN SPORTS CENTRE DE BONGERD

Your body has to put up with quite a lot. Poor posture during work or study may cause physical complaints. Sports training may cause an injury. Your job on the side may severely strain your back or knees. Stop fretting, start moving, and address these issues! For physiotherapy can effectively deal with problems like these.

MPROVEPHYSIO.COM

WOMAN STUDENT TO SUPPORT LEARNING READING AND WRITING SKILLS IN ARABIC

A retired lady is looking for a woman student to help her learn to read and write in Arabic. No problem if the student speaks English. Fee to be discussed. Contact: 0317-416517 or email a.m.kuennen@zonnet.nl.

Agenda

Thursday 8-22 November FILM HOUSE MOVIE W

Dogman: an Italian biographical crime story about revenge. *I Am Not a Witch*: a magical-realist, satirical fairy tale about witchcraft in Africa. *3 Faces*: an Iranian drama about the position of women and artists. *Leaning into the Wind*: a Scottish artist gives you an inspiring experience of being part of nature. *Bellingcat - Truth in a Post Truth World*: a documentary about the people behind the internet research group. *The King*: an infectious musical road movie about the state America is in. Location: Wilhelminalweg 3A, Wageningen. €6,50/€5.

MOVIE-W.NL

Thursday, 15 November, 12.30-13.20 LUNCH WORKSHOP WAGENINGEN WRITING LAB/WUR LIBRARY: SEARCH EFFICIENTLY IN THE RIGHT DATABASE

There are many places and ways to look up information. Knowledge of databases and search strategies will help you to find scientific publications on your topic in an efficient and systematic way. Learn about tips and tricks. You can bring your own research question to get advice. Free admission. Be on time, as participant numbers are limited to 20. Venue: Forum PC0725. Info: info.wageningen-writingLab@wur.nl.

Thursday 22 November, 12.30-13.20 LUNCH WORKSHOP WAGENINGEN WRITING LAB: OPTIMIZE YOUR PERSONAL WRITING STYLE

In this workshop, you'll discover your personal writing style and how to approach the writing process. You will learn about typical pitfalls and how to avoid them. We will set to work practising some techniques that will help you to make your writing style a strength in current and future writing assignments. Be on time, as participant numbers are limited to 20. Free admission. Venue: CO104 Forum. Info: info.wageningenwritingLab@wur.nl.

Colophon

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Marc Lamers, Corporate Communications & Marketing Wageningen University & Research



In memoriam

Professor Ton Visser



Sadly, emeritus professor A.J.W.G. (Ton) Visser passed away on Sunday 28 October at the age of 75, after a short period of illness.

Ton Visser studied Chemistry at the University of Amsterdam and received his MSc degree in 1969. In that same year, he joined the Laboratory of Biochemistry at Wageningen Agricultural College. In 1975, Ton received his PhD degree under the supervision of Professors F. Müller, J.D.W. van Voorst and C. Veeger. Ton was a true fluorescence spectroscopist and biochemist. He used time-resolved fluorescence spectroscopy to study the dynamic behavior of enzymes and biomacromolecules. Throughout his career, Ton was a source of inspiration for numerous undergraduate students, PhD students and post-docs, and was involved in more than 250 peer-reviewed scientific publications. Ton was a visionary and pioneering

scientist, looked beyond boundaries, and beyond applied fluorescence microspectroscopy to cell biology. He approached biochemical problems with a physicist's toolbox. Ton was the founding father of the Micro-Spectroscopy Centre Wageningen (MSC) in the mid-1990s. In this centre, nowadays called the Microspectroscopy Research Facility, optical setups are developed and made available to scientists both within and outside Wageningen University. Ton's contributions to the field of fluorescence microspectroscopy led to professorships in both Amsterdam and Wageningen. Ton was a generous, humble and gentle person. After he retired from Wageningen University in 2008, Ton did not stop doing science. He kept publishing at least one paper per year, which illustrates his remarkable passion for science.

Our thoughts and condolences go out to Nina and Ton's family.

On behalf of the Laboratory of Biochemistry and the Microspectroscopy Research Facility, Jan Willem Borst and Dolf Weijers

>>TYPICAL DUTCH



ILLUSTRATION: HENK VAN RUITENBEEK

Who's afraid of the rain?

If there was no super-urgent need to do so, I never used to go outside when it was raining, not even to go somewhere by car. But my behaviour has changed since I came to the Netherlands two years ago.

Once, when I was still new here, I was really in a hurry to get to class. I had not paid much attention to the weather forecast, not being in the habit of doing so back home. Outside, I found it had just started raining so I went back for my umbrella. I wasn't happy as I hate the long wait for the elevator to reach the 19th floor. Once I had my umbrella I grabbed my bike, but I soon discovered it is hard to ride a bike and hold an umbrella at the same time. To make it more dangerous, there was a strong wind which almost blew me off my bike.

Learning from this experience, I decided to wear my raincoat next time. I felt a bit silly in it because it is a colourful poncho with polka dots. It is also hard to take off and when I got to the university I felt embarrassed being watched as I struggled.

At the same time I noticed that many Dutch people were simply ignoring the rain, casually cycling through it. Compared to my complicated way of dealing with rain, this looked really easy. And I even live close to campus. It made me wonder: why am I so afraid to get wet?

📍 Fitria Rizkyka, an MSc student of Food Technology, from Indonesia

'I noticed that many Dutch people were simply ignoring the rain'

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 twenty-five euros and Dutch candy.