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on education and research at Maastricht University

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Maastricht University

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Is the Einstein Telescope coming to the Euregion? As yet, nobody knows. But if the telescope is built here, it will offer many opportunities for valorisation, according to **Han Dols**. Dols is head of business development at CERN, the European laboratory for particle physics in Geneva. He delivered the keynote speech at the Opening of the Academic Year.

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For the cover image, photographer **Sem Shayne** was inspired by the interview with Pablo del Hierro. His book on transnational fascism in his native Madrid has led to a book, a documentary, the FASoS Valorisation Prize and a political campaign to remove a fascist monument.

semshayne.com

#### Foreword

Maastricht University Executive Board President Rianne Letschert Rector Magnificus Pamela Habibovic Vice-President Jan-Tjitte Meindersma

## A broad, global view

The coming year is set to be exciting in many ways. Russia's aggression towards Ukraine continues, and the US elections are just around the corner. The tension and suffering in the Middle East is great and shows no signs of abating at the time of writing. In Maastricht, our academic community comprises people from all over the world, with global concerns, thoughts and desires. This is just one of the reasons I love working for this university. It is not always possible to have a full view of everything that goes on between our walls, let alone to be fully informed on every subject down to the last detail—but Maastricht University really is a microcosm of the whole world.

This is reflected in the latest, wide-ranging edition of UMagazine, which takes us from non-stationary time series to a story on neofascism; from CERN and the Einstein Telescope to collection campaigns for used tins. We learn about a service robot for the University Library and about computer simulations for cooperation between neurons and cells in our brains. I don't know about you, but it always makes me happy to see colleagues talking about their fields of expertise. And it's always a pleasure to be reminded of all that I don't know and how much there is still to discover.

In a year in which higher education and research are under strain, and internationalisation is being squeezed by politicians in The Hague, I am proud that we here in the south continue to take such a broad view of the world. In these tense times, let us remind each other often of the importance of maintaining that broad orientation.

I wish everyone a good and collegial academic year. And for now, happy reading!

*Pamela Habibovic* on behalf of the Executive Board



Photography Arjen Schmitz

#### Education

Text **Jos Cortenraad** 

Illustrations Veronique de Jong

Brain Science—this is the name of the new bachelor's programme that kicked off in September at the Faculty of Psychology and Neuroscience. The programme was established in conjunction with two other faculties - Health, Medicine & Life Sciences and Science & Engineering - to

integrate psychology, biology and mathematics in the study of the brain. "We have to look beyond the boundaries of individual disciplines," says programme leader Peter De Weerd. "This is the only way to continue making progress in understanding our brains."

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One in four people will be confronted with a brain disease at some point in their lives. These include Parkinson's and Alzheimer's, but many problems with vision and hearing can also be traced back to the brain. To develop more effective treatments, scientists are trying to better understand how the brain works. In the new bachelor's programme, students gain a holistic perspective by combining different scientific disciplines. A game changer?

"Not overnight," Peter De Weerd says after a moment, "but we're convinced that transdisciplinarity-bringing together different disciplines - provides important new insights. Research on brain function falls into roughly three domains: various biological disciplines, psychology paired with cognitive neuroscience, and computational sciences. The Bachelor in Brain Science connects these domains. Our students will become the bridge builders between the specialists. Consider the design of an app for digital healthcare, the development of gene therapy or the application of brain stimulation. To gain genuine insight into the human brain, let alone to develop treatments, you need psychology, biology, mathematics, AI and technology. In other words, a holistic approach that also pays attention to ethics. That calls for a different approach to training. In Maastricht, we want to create a generation of scientists who take a broader view."

#### **Major challenges**

The idea for the bachelor's had been on hold at FPN for about 15 years, De Weerd says. "Our outgoing dean Harald Merckelbach asked me to work up a proposal in September 2020. The first proposal was rejected by the education ministry's review committee. The programme was considered socially and scientifically relevant, but there were doubts about the employment prospects. Later, a broad survey of institutions and companies showed a great need for both the hard and soft skills that we offer, and for people who look beyond boundaries and work in teams, as students learn in Problem-Based Learning at UM."

#### Perfect place

De Weerd trained as a clinical psychologist and obtained his PhD at KU Leuven in 1991. He then spent 12 years in the US, studying neural mechanisms of visual perception and attention alongside worldrenowned neuroscientists such as Leslie Ungerleider and Robert Desimone. This experience gave him plenty of options when he returned to Europe. He swiftly opted for FPN in Maastricht. >



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"This young faculty really appealed to me. I felt a cooperative spirit between people from different backgrounds and nationalities. It seemed like the perfect place to do research together with fun people. And it also turned out to be the perfect place to set up the new bachelor's programme in Brain Science, which is something I couldn't have foreseen. The opportunity to take things in a new direction, together with young people—how great is that? And to develop that new path with a superstar team of colleagues from three faculties ... It's been a great experience."

#### **Exceeding expectations**

In the end, both the review committee and the Accreditation Organisation of the Netherlands and Flanders gave the programme a green light. By late 2023, a draft curriculum was ready; De Weerd emphasises the essential role played by his fellow programme leaders, Gunter Kenis (FHML) and Nico Roos (FSE), and by Heidi Prevoo (senior policy adviser for education at FPN). They quickly received an unexpectedly high number of applicants. "We're only allowed to do minimal advertising, and only within the Benelux. We held a single open day, but were completely overwhelmed by the amount of interest. At the start of August we had 135 suitable candidates, over 60 of whom have definitively enrolled. More than half are from the Netherlands, along with a mix of foreign students. A large majority are women, too, which is interesting for a STEM programme."

#### $\downarrow$

Peter De Weerd obtained his PhD in clinical psychology at KU Leuven. He then worked at the National Institutes of Health and the University of Arizona in the US, where he set up laboratories to study perception and attention. He joined the UM Faculty of Psychology and Neuroscience in 2003.



Follow-up study and the labour market

De Weerd has no immediate explanation for this. "The fact that Brain Science touches on possible treatments in addition to fundamental science may particularly appeal to women. But most importantly, it's an excellent programme for everyone, with many opportunities for further study in various disciplines. Of course, we'd like to see some of our students stick around and join us in taking further steps in brain research. But above all, we hope our alumni will head out into the world to make a difference in many places and in many jobs. There are plenty of challenging positions for our graduates on the job market."

#### Brain Science

De Weerd is curious about the impact of 'his' bachelor's degree. "It's a great source of satisfaction, knowing that a new generation of young people, with a new perspective, will be helping to solve the social and scientific challenges of our time within just a few years. It's quite possible that I'll indirectly contribute more to brain science this way than through my own research." <



Science and society

Text **Florian Raith** 

Photography Sem Shayne

# (Neo)

Pablo del Hierro's work on transnational fascism in his native Madrid has led to a book, a documentary, the FASoS Valorisation Prize and a political campaign to remove a fascist monument.

PABLO DEL NIERRO

VIDAS SECRETAS, RUTAS DE ESCAPE, NE

VIOLENCIA POLÍTICA (1939-1982

Pablo del Hierro was 13 when he passed a statue of General Franco astride a horse in Madrid. His native city used to boast many fascist monuments, and he had never given it much thought. This time, however, a large neofascist rally had gathered by the statue. "My friend was wearing this red Che Guevara shirt. A group of skinheads saw us and chased us. We really had to run to get to safety," Del Hierro recalls. "That's when I was first confronted with how real and violent neofascism really is."

It wouldn't be the last time. A lifelong Atlético de Madrid supporter, Del Hierro was in the stadium when a far-right faction member killed a fan of Real Sociedad, a club based in the Basque region associated with fierce opposition to Franco. Indeed, much of Del Hierro's research into neofascism is linked to the Spanish Civil War and Franco's ascension to power in 1939.

"After 1945, Madrid was one of the few remaining refuges for fascists. The Franco regime provided safety. Intellectuals and political activists arrived from all over Europe to share ideas and best practices, which led to even more immigration." While the importance of cities like Lisbon and Buenos Aires waned due to cultural and political changes, Madrid remained a hub for fascism well into the 1980s.

#### **Transnational ultranationalists**

Ultranationalism would seem a strange bedfellow for transnational collaboration. "The remaining fascists had to make a virtue out of necessity. Even during the interregnum years, far-right groups across Europe tried to collaborate, but couldn't bridge their ideological differences. WWII left them decimated and scattered; they had to stick together regardless of their prior disagreements." Del Hierro traces how the Europeanist tendencies that developed in Madrid became mainstream among younger neofascists.

To Del Hierro, recent election results are best understood in a historical context. "Movements like Identity and Democracy [a far-right political group in the European Parliament] are nothing new. As early as 1979, far-right groups tried to forge an alliance for the first elections to the European Parliament. These initial projects failed for different reasons — but through repeated trial and error, they learned." The idea of leaving the EU had been gaining traction among such parties across Europe, but the consequences of Brexit exposed that policy as a pipedream. "They adapted. None of these parties suggest leaving the EU anymore. The rhetoric has shifted towards reforming in a similar vein to the 1950s slogan, 'Yes to Europe, not this Europe.""

#### Understand, not underestimate

If all this makes the far right look like formidable political operators, that is Del Hierro's intention. "If we want to fight fascism, we need to stop minimising it. We need to understand it better. We have to dispel the myth that extremists are inept, incompetent ignoramuses. They are truly dangerous, well-organised and well-resourced. They keep learning and seem to have found a formula for success."

To understand the evolution of the far right, he says, it is crucial to study the underlying network of intellectuals and think tanks across Europe, but also to dispel the myths surrounding their voter base. "They are products of their conditions. Secularism and globalisation are seen as having eroded people's sense of identity. At the same time, the 2008 economic crisis has left people feeling that living standards have declined and will continue to do so." The far right's success among younger voters can be attributed to its appeal to this pessimistic outlook, along with its social media savvy.

"They've found a way to address the zeitgeist in a way that traditional parties haven't", Del Hierro says. A vague sense of decline and decadence, a once-glorious Europe of nations betrayed by the global elite. "And then you offer easy solutions to address those problems. Get rid of foreigners, so it's easier to find jobs, housing and so on."

He stresses that simply dismissing people's concerns or indeed the shrewd political operators who exploit them—is counterproductive. "When I started this line of research around 12 years ago, my colleagues said it was just a fringe phenomenon and not worthy of attention. But I became convinced that this was a serious problem that would only get worse."

#### **Difficult societal conversations**

Del Hierro published his findings in an academic journal that attracted the attention of publishers. The subsequent book reached journalists, producers and political activists. "Much of it is about the urban geography of Madrid; it's very visual. So they decided to make a documentary, which will likely be broadcast next year for the 50th anniversary of the end of the Franco dictatorship. After that, we'll take a longer version to festivals to reach more people."

Del Hierro is also working with political activists. "The United Left movement has sent several petitions based on my research to remove a fascist monument in Majadahonda [a municipality near Madrid]. There are far-right gatherings there every year, but the right-leaning local government is still undecided." The controversial Historical Memory Law calls for the removal of all monuments that glorify Franco's reign, which lasted until 1975. "Rather than destroying monuments, I think we should contextualise them. It's very complicated, but it's good that this conversation is finally happening in Spain." Del Hierro's journey has led him back to the kind of monument where it all began — and there is still plenty of work to do. <

Pablo del Hierro is an

associate professor of History at Maastricht University's Faculty of Arts and Social Sciences. He holds a PhD from the European University Institute. His latest book is *Madrid*: (*Neo*)Fascist Metropolis.

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#### ICU patients **do not benefit** from a protein-rich diet

For many people, protein-rich food helps build muscle mass—but not for critically ill patients in intensive care. Instead, it leads to delayed discharge from hospital and lower quality of life after ICU admission. These are the conclusions of research conducted at Maastricht UMC+ and the Oost-Limburg hospital in Genk. The findings were published recently in The Lancet.

The finding of a lower quality of life six months after admission was notably stronger in women than in men. To date, no distinction has been made between male and female ICU patients in terms of dietary protein dosage. According to the researchers, this result may be explained by the fact that women have on average less muscle mass, meaning they are more likely than men to receive too much protein.

It remains unclear why too much protein is unfavourable for patients. The processing of Tech protein by the organs may divert energy that Gro the patients need for recovery, the researchers NL. suggest. "We continue to look for ways to help our patients recover as early as possible," The says intensivist Marcel van de Poll. "It is now plase clear that immediately starting protein-rich food is not a good investment. I expect these progresults will be used to tighten international It h. guidelines." obs

The findings also provide a good basis for follow-up research on suitable nutrition for ICU patients. "It's possible that protein-rich food may have a positive effect in a later phase of ICU admission, when patients start using their muscles again." <





#### <u>News</u>



### New research on circular plastics

How do we ensure that plastic packaging can be recycled? How can dyes in PET bottles be reused to help make plastics circular? These and more research proposals from Maastricht University received grants through the call 'Making plastics circular: Technical innovations,' part of the National Growth Fund Programme for Circular Plastics NI

The Netherlands is aiming for 50% of all plastics to be recycled by 2030 and for a fully circular plastics chain by 2050. The CPNL programme has been running for eight years. It has eight programme lines that focus on obstacles in the cycles for existing plastics, sustainable growth opportunities for the Dutch economy and grants to accelerate the transition.

The following projects have been awarded grants: 'Top-down covalent adaptable and circular epoxy networks' by Katrien Bernaerts, 'Sustainable and fire-safe plastics based on fully organic phosphorus-sulfur compounds (SuFiP-S)' by Ali Gooneie, and 'CLEANpack: Towards food safe Closed Loop rEcycling of pAckagiNg' by **Steven de Meester. <** 



#### First-generation non-Western immigrant women more competitive than Dutch women

Women from non-Western immigration backgrounds appear to be more competitive than their Dutch counterparts. This is particularly so among women from countries with greater gender inequality than the Netherlands. Second-generation immigrant women feel much less pressure to prove themselves. These are the conclusions of UM researchers Özge Gökdemir and Devrim Dumludağ, whose study was the first of its kind to examine ethnic differences in competition in the Netherlands. The study highlights significant differences between native Dutch women and non-Western immigrant women and offers policy recommendations for the labour market. <



#### **Opening** of the Academic Year 2024/25

The traditional festive launch of the new academic year 2024/25 was held in the Theater aan het Vrijthof on 2 September. The programme included an inspiring keynote speech by Han Dols from CERN and the presentation of the annual Student Award and the Edmond Hustinx Prize.

President **Rianne Letschert** officially opened the academic year, in which UM is set to face many challenges. In her opening speech she called for open-mindedness, tailored measures instead of The Hague's one-size-fits-all approach, and a long-term perspective—all of which have characterised UM since its founding in 1976.

This year's keynote speaker was **Han Dols**, head of Business Development and Entrepreneurship at CERN, the European organisation for nuclear research. In keeping with this year's theme, *Limburg's window on the universe: global innovation and regional regeneration*, he shared valuable insights about accelerating innovation and maximising the impact of technology. And about what mega projects like CERN in Geneva and, potentially, the Einstein Telescope in Maastricht can entail for a region. See also the interview with Dols on page 16.



Associate professor **Gideon Koekoek** gave a fascinating presentation on the Einstein Telescope and the ETpathfinder. Attendees were also treated to live music by Nakumba, a band with Latin and Brazilian influences led by Poliana Vieira.

#### **UM Student Award**

Every year, the UM Student Award is awarded to students who have made exceptional social or cultural contributions alongside their studies. This year, the prize went to the UnliMited-Students Network, led by Carolina Bäckström and Sophia Yazdani Biuki. They aim to create a more inclusive university by supporting students with disabilities, chronic illnesses or neurodivergence.

#### **Edmond Hustinx Prize**

This year, the Edmond Hustinx Prize went to **Elvira Loibl**, assistant professor of Criminal Law and Criminology. Her groundbreaking research on the illegal adoption trade has received national and international recognition. The prize is awarded annually by the Edmond Hustinx Foundation to highlight the impact of research in South Limburg. <









## I think in terms of solutions

That <u>Stephan Smeekes</u> became a professor of Econometrics at the age of 41 is not to say this path is open to anyone with a disability. "Everybody's different, and so is every disability," he says. He doesn't see himself as an ambassador for disabled academics. "But if my story inspires others, that's a good thing, for sure." A down-to-earth researcher and devoted teacher, Smeekes learnt from his parents never to give up and to think in terms of solutions.

Professor of Econometrics Stephan Smeekes

Portrait

Faced with a group of sleepy, poorly prepared students for an 8.30 tutorial, Stephan Smeekes sometimes wonders: is this what I got up at 5.30 for? "But I never say so, because it's not their fault I need three hours in the morning. And then if I do manage to wake them up and inspire them, it's all the more satisfying."

Smeekes lives independently in a flat in the Maastricht city centre, where he can call day and night for assistance from Fokus, a healthcare organisation. "It's nice to be able to be alone sometimes, and to have the freedom to decide for myself how to organise my day. When I travel in the Netherlands or go to conferences abroad, my parents always come with me. They've seen a lot of Europe that way. And at work, there are always colleagues who are willing and able to help me."

#### Mindset

Ouestions arose about Smeekes' health soon after his birth. It turned out to be a progressive muscle disease called SMA. "I was never able to walk, and went to primary school in an electric wheelchair. A normal primary school and then a normal secondary school; that was important to my parents. From the beginning, they tried to give me and my younger sister as normal a life as possible. They always thought pragmatically, in terms of solutions rather than problems." His father worked in logistics and IT, his mother quit her job to care for him. The mindset he inherited was at least as valuable as the physical support. He learnt to accept life as it is and not to dwell on the impossible, but to put his energy into things he could influence.

He had a scare two years ago, when his right arm suddenly stopped working in just a few days. "It's hard because you don't know where it will stop. Since then, I haven't been able to pick up a cup to drink from, so I had to find a solution. Now I have a robotic arm attached to my wheelchair. There's no point in moping." He loves watching sports on TV, so this Olympic summer he was all set. He has never grieved over not being able to play sports himself. "That might actually make it easier to accept. I can just enjoy it. Like the Maastricht football club MVV; I've been a season ticket holder my whole life. I go to practically every home game with my dad and friends."



I've never wanted to profile myself through my disability.

#### ←

Professor Stephan Smeekes studied econometrics at Maastricht University, where he obtained his PhD in 2009 with a thesis entitled Bootstrappina nonstationary time series. He received a Veni and a Vidi grant for his research and was a member of the Young Academy. This year, he was appointed professor of econometrics at the UM School of Business and Economics.

#### Referee

At school, not being able to take part in gym was no problem. "I usually just went along; often I'd be the referee. I was never bullied. There were always children who were happy to help me put my coat on and things like that." It soon became clear that he was a quick learner, and during high school his affinity for maths and economics came to the fore. Econometrics seemed generations." a logical choice of study programme. As did UM, conveniently located in his hometown. His parents didn't go to university themselves, so an academic career wasn't self-evident. "But it became clear to me that the more abstract and theoretical the issues were, the more interesting I found them." He graduated cum laude, which paved the way to a PhD position.

#### **Royal lunch**

He describes his field of expertise as 'just a complicated type of puzzle'. "Solving problems by understanding complex theories, or mathematically proving why certain statistical properties are the way they are — that's what gives me the most satisfaction." His PhD project went smoothly, for the most part. "It was a really good experience. Which is not to say it's always easy; there are periods where you make barely any progress, but I just accepted that as something that's part and parcel of it. It never bothered me."

His dissertation was awarded the Christiaan Huygens Prize, a KNAW prize awarded to young researchers who make an innovative contribution to science. "And that earnt me an invitation to lunch with the king. Well, he was crowned a few weeks later. There were about 25 other prize winners there, and he had to admit that he struggled to understand what my research was about. Actually, that's a pretty standard reaction; you get used to it. This kind of research is too abstract for the general public to understand, which makes it less broadly appealing. But that's fine with me."

#### Making an impact

At its core, his research revolves around uncovering connections in large amounts of data collected over time. Smeekes develops mathematically underpinned algorithms that can be applied to economic principles such as inflation and -- most interestingly to the researcher—topics like climate change. "With colleagues from other disciplines, I'll analyse data from a weather station in the Alps, for example, that measures greenhouse gases in the atmosphere. There seems to be a link between shale-gas drilling in the US and the amount of certain greenhouse gases in the atmosphere. We try to demonstrate this using innovative statistical methods. I enjoy working together in a multidisciplinary way."

As much as Smeekes wants his research to be socially applicable and thus generate 'impact', he sees teaching as equally important. "I think that's the most impactful thing by far. The people I help to train are the future: I put a lot of energy into that and it gives me a great deal of satisfaction." He hopes to spark the enthusiasm of his students and PhD candidates and help them to persevere. Two supervisors serve as sources of inspiration. "For me, Franz Palm and Jean-Pierre Urbain set an example of how to create a pleasant, relaxed working atmosphere, where people are allowed to learn and make mistakes. Their passion for this field and willingness to talk about any topic—that's what I hope to pass on to future

#### Red gown

Naturally, he hopes to land more major grants and high-profile publications. He has already been awarded a Veni and a Vidi grant, closely followed by the professorship. "Lots of academics aspire to be a professor, but it wasn't a must for me. Being recognised for your achievements is valuable, but there are plenty of good academics who are not professors." The red gown has yet to be fitted, and he doubts how often he is likely to appear in it. "I'm not sure joining the cortège on academic occasions is really my thing. I don't find it hugely important." Certainly, he says, it would contribute to the university's diverse image. "But I've never wanted to profile myself through my disability." At the same time, he realises it could be inspiring for other people with disabilities. "At the university, very few students and staff have visible disabilities, whereas in society at large there are many more. That shows that there are still obstacles. If I can set an example for others, I'd be really pleased. On the other hand, every disability is unique and I wouldn't want to appear to be saying, hey, if I can do it, so can you. I've also been very lucky in my career so far." <

Head of business development at CERN Han Dols

## science drives innovation

Is the Einstein Telescope coming to the Euregion? As yet, nobody knows. But if the telescope is built here, it will offer many opportunities for valorisation, according to <u>Han Dols</u>. Dols is head of business development at CERN, the European laboratory for particle physics in Geneva. He delivered the keynote speech at the Opening of the Academic Year. "Big science—like CERN and, soon, the Einstein Telescope—can contribute to open and inclusive scientific collaboration."

Han Dols is Head of **Business Development** and Entrepreneurship at CERN. Born in Sittard. he studied Applied Physics in Delft and spent 20 years working in innovation, business development and marketing strategy at companies such as Medtronic. CMG and DSM. In 2017, he relocated to Geneva. where he develops innovation alliances with industry and for the venture programme focused on deep-tech startups in the 23 CERN member states.



#### **Sciences**

CERN

Text Hans van Vinkeveen Photography

At first glance, the parallels between CERN and the Einstein Telescope (ET) might seem to be minimal. After all, they operate at opposite ends of the spectrum. CERN is a microscope, focused on the smallest of the small: the interaction between elementary particles. ET is a telescope that focuses on the largest of the large: the interaction of black holes in the universe. Moreover, CERN— established in 1954—is a mature organisation with a long track record of research and collaboration, whereas ET is yet to be born.

In fact, there are many similarities, Dols explains. Both CERN and ET involve big science: a large-scale experiment bringing together numerous countries, universities and companies. Both involve fundamental science, operating at the limits of human knowledge. Both involve the search for minuscule signals in mountains of data using highly sensitive equipment. And in both, all this happens below ground level, under cryogenic and extreme vacuum conditions.

#### Curiosity

Dols is responsible for innovative applications of the technology at external companies. He trained as a physicist and has a long history of working at the intersection of science, business and management. He joined CERN seven years ago, moving to Geneva with his family, including pets. "It was curiosity that drew me in. As a child, I was always curious about things. Why does a magnet attract a toy car made of metal? I used to experiment with things like that. And it's this curiosity that brings people together at CERN to work on fundamental questions about matter and its origins."

#### Returns

When it comes to harnessing knowledge and technology for society, Dols sees a great deal of overlap between CERN and ET. One obvious return is the purchase of materials and services from companies. At CERN, half of the annual €1.2 billion budget goes to industry. "These are often complex technological components, and our specifications are demanding. That's why we partner with companies that are keen to learn and innovate with us. They challenge for them is to create materials that are suitable for extreme applications, which often result in new products." > Other returns relate to talent development and education. "At CERN, 3000 PhD candidates complete their research every year; knowledge that flows back into society and companies. Since 1998, roughly 15,000 teachers have been trained at our training institute. And many people make the switch to a technology company in the region or launch a startup. My team and I promote entrepreneurship and support these startups. I can envisage these kinds of opportunities for ET as well."

#### Accelerating innovation

Valorisation opportunities can also emerge from fundamental research, although for ET it is too early to predict what these might look like. Such opportunities stem from the technological and occasionally even revolutionary applications that arise more or less by chance from the experiment. CERN, for example, laid the groundwork for the world wide web, the touchscreen and colour X-rays. CERN scientists are working on proton therapy and quantum mechanics. They are contributing to the self-driving car through machine learning and to plastic detection in oceans through machine learning in satellites. "CERN not only accelerates particles, but also accelerates innovation," Dols says. In the future, ET could be a similar driver of innovation.





#### Cooperation

Discoveries like these cannot be planned in advance, but you can organise for them, Dols says. "You try to give serendipity a helping hand. You look at major societal problems—sustainability, healthcare, artificial intelligence—and ask yourself how the knowledge we have at CERN can help to solve them. And you invite companies, show them around the labs, give them challenges. Proactively organise collaborative projects in research and development or innovation of products, production processes and services. We started doing this 20 years ago at CERN. It would be great if ET included this in their vision from the start."

#### **Educational attraction**

Ultimately, ET, like CERN, could become a major attraction for the general public. CERN welcomes 150,000 visitors annually. "Since it opened in October last year, the CERN Science Gateway [the new visitor centre] has had 300,000 visitors — a record number," Dols says. "They come from all over the world, often with their children, and also visit Geneva and the surrounding area, which has a huge positive impact on the region. It turns out that many people share our scientific curiosity, regardless of age, education or background."

Dols cannot emphasise enough the collaborative value of big science. "To overcome enormous technical challenges, you have to work together. That's the best part of my experience at CERN: people with different languages, cultures and backgrounds all successfully coming together to build these very complex machines. The experiment not only helps to answer fundamental scientific questions, but also fosters collaboration across the borders of countries, disciplines and cultures. This way, CERN—and perhaps soon ET, too—contribute to open and inclusive scientific collaboration." The decision on where the telescope will be placed will be made next year. <



You try

to give

serendipity

a helping

hand.

Anyone who thinks all students do is study and party hasn't met Emma Daalmans and Cristian Rusu. The former and current presidents of study association JFV Ouranos are currently raising money for charity. Why do they place so much value on societal engagement? And what have they learnt during their presidency?



For weeks, students lugging large bags of used cans has been a common sight at the Faculty of Law. Third-year student Emma Daalmans gets involved as often as she can. "In September, we started a campaign to collect empty cans and bottles and donate the deposit to Pink Ribbon, an organisation that supports breast-cancer research," she explains. "We deliver them to Randwyck, on the other side of the Maas; for us as students, that sometimes poses logistical challenges. But we figure it out together."

#### Charity committee

The campaign was initiated by Ouranos, a study association that organises social and academic activities for law students. Daalmans has been a member since the start of her studies and sits on various committees. Last academic year, in which Ouranos celebrated its 40th anniversary, she served as its president. The deposit campaign is the brainchild of the Ouranos board. "As a study association, it feels good to contribute to the world outside the university walls. That's why we set up a committee to raise funds for charities."

#### **Breast-cancer diagnosis**

The first charity the students chose, Pink Ribbon, was, as it were, chosen for them. It came as a great shock when a fellow Ouranos board member was diagnosed with breast cancer. "From that moment on, we did everything we could to raise money for breast-cancer research. We organised a bingo night, an Easter brunch, a bake sale, whatever we could. We managed to raise €671," Daalmans says. "Then we came up with the idea of the deposit containers, which you can apply for through Statiegeld Nederland. In the coming months, three containers will be installed in the Faculty of Law: at the LAW Café, in the Lenculenhal and in the hall on the Kapoenstraat. With all the activities, we're hoping to raise at least €1000 in total."

#### Wake-up call

This academic year, Daalmans was succeeded as Ouranos president by Cristian Rusu. Originally from Romania, Rusu has been living in Maastricht since 2022. Given the strong reputation of Dutch education, he is glad to be able to study here, though he initially struggled to find his feet. Until he joined Ouranos, that

#### Emma Daalmans is a bachelor's student in

bachelor's student in law at Maastricht University.
Alongside her studies, she is an active member of study association JFV
Ouranos and served as its president in the academic year 2023/24.
Rusu, a bachelor's student in European Law School and law at Maastricht University.

is. "It's my light in the dark," he says. "It helps me make friends, gain knowledge, learn Dutch. And I learn about society, too."

Her successor is Cristian

#### First step

Rusu is determined to make a success of the campaign for breast-cancer research. It's important to look out for one another, he says. "In Romania, people are mainly focused on themselves. Society is very closed, in part because of all the political problems in the country. That's a shame, because if we want to ensure a bright future for ourselves and future generations, we have to take steps in the right direction together."

#### It's important that we students do our bit, even if it's small.

Daalmans couldn't agree more. Her wake-up call came during her studies. "As a law student, you study a lot of real-life cases; from disputes between neighbours to climate lawsuits such as Urgenda. They opened my eyes to what's really going on in society, and the fact that our society can use all the support it can get. That's why it's important that we students do our bit, even if it's small." Her advice for fellow students who don't know where to start: "Just do it! The first step is often the hardest. If you have an idea, sketch it out and get to work. And seek out like-minded people, because you don't always have to reinvent the wheel alone."

#### Purple heart

She looks back on a fantastic board year. "Of course, there were ups and downs. But I made friends for life and learnt a lot, including about myself. I now try to go into discussions more calmly and constructively." Letting go of the presidency was difficult, but she appreciates having more time this year for her studies and hobbies, such as designing clothes and painting. Which is not to say she's letting go completely: she remains active in various Ouranos projects and committees. "I have a purple heart," she says, referring to the association's house-style colour.

Rusu sees it as a privilege to follow in Daalmans' footsteps. He hopes to give new members—including foreign students—as warm a welcome as he enjoyed. "Currently I'm the only non-Dutch board member. I'd like to make the association more international." At the same time, he is working on his Dutch: he wants to stay in the Netherlands and dreams of becoming a public prosecutor here.

Daalmans is less sure of what she wants to do after her studies. In any case, the future is wide open for both of them. Just as it is, fortunately, for the former board member whose diagnosis sparked the initiative to begin with. <



2.2.4 UMagazing

#### INKOM 2024

INKOM, the annual introduction week for new students of Maastricht University, Zuyd University of Applied Sciences and VISTA College, was held this year from 19 to 22 August. New students took part in a range of activities, from cultural workshops and workouts at UM SPORT to a scavenger hunt through

Statement 2

The Maastricht region is attractive to live and work after my studies.

the city. A new part of the programme was Build your Future, which introduces students at the very start of their studies to companies and organisations-potential future employers—in the region.

#### Spread

Photography Paul van der Veer

We bring progress to life by combining the essential, the desirable & the sustainable

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## The

Robots are on an unstoppable march in healthcare, restaurants, airports and shops. The various research projects at the Maastricht Center for Robots at the School of Business and Economics focus on the interaction between service robots and humans. One of these projects was conducted by <u>Chelsea Phillips</u>, a PhD candidate from Australia. Supervised by <u>Gaby Odekerken-Schröder</u> and <u>Dominik Mahr</u>, she studied the use of service robots, which are designed to assist people.

Our findings also suggest that robots could be used more widely in healthcare. Whether we like it or not, robots will be a fixture of everyday life in the future. "No doubt about it," says Gaby Odekerken-Schröder, professor of Customer-Centric Service Science at the Department of Marketing and Supply Chain Management. "In industry, technical robots are proving their worth on a daily basis. They're essential for automation and take over a lot of heavy and dirty work from humans. Service robots will do the same. There are staff shortages everywhere, especially in hospitality, retail and healthcare. Robots can easily take over simple tasks, and are getting better and better at what they do.

"And yes, this is a form of disruption, which can give rise to fear and uncertainty. Will a robot soon pop up at my bedside? Will I no longer be able to ask a real person in the supermarket where the butter is? At the Maastricht Center for Robots, we focus more on human behaviour than the technology itself. How do people deal with these innovations? What are the advantages and disadvantages?"

#### Joint degree

The professor and her colleagues conduct research in practical settings—beyond the university bubble together with talented young researchers like Chelsea Phillips. Born and raised in Brisbane, Australia, Phillips recently completed a joint-degree programme in Brisbane and Maastricht. "It's a PhD project conducted



in two places," she explains, "made possible by the collaboration between UM and the Queensland University of Technology. A fantastic opportunity. In Australia, I spent 18 months working on the theoretical side of service robots, and here in Maastricht I was able to see the robots at work in real life."

#### Severe dementia

rise

Phillips came to the Netherlands in autumn 2022 to conduct her empirical research. Her first 'living lab' was a healthcare institution in Maastricht. "A progressive healthcare organisation," says Odekerken-Schröder, Phillips' main supervisor. "They agreed to use a robot for people with severe dementia. It had become difficult to connect with these people, both for their families and for healthcare workers. The idea was that a service robot might be able to bring them out of their isolation."

#### Stunning effect

In consultation with the Maastricht Center for Robots, the choice fell on Hiro-Chan, a robot developed in Japan. Hiro-Chan is in the shape of a baby; it has no face, but makes sounds in response to touch. Patient Miep was the first to embrace Hiro-Chan. "The effect was stunning," Phillips says. "Miep reacted almost immediately to the noises and soon started caressing and cuddling the baby. The staff and family also reconnected with her through her 'baby'. She was more active, started eating better. We saw more social interaction."

Odekerken-Schröder nods. "We wanted to find out whether the robot plays a role in communication between people, in this case between the patient and the nursing staff or family. It's up to healthcare professionals to build on that knowledge. Our findings also suggest that robots could be used more widely in healthcare. Of course, robotisation has its supporters and opponents. We're interested in what actually happens in practice. Something I found really touching: one health worker was adamantly against it at first, but had to wipe away a tear when she saw Miep with the baby. She was able to reconnect with her." >

robots





#### Waitstaff

In another study, Phillips reported to Dadawan, a Maastricht restaurant popular with students. Here, a service robot has been a permanent member of the waitstaff since 2020. "The employees and most of the customers have no problem with their robot colleague. He, she, it, solves part of the staff shortage by seating diners and waiting tables. It works fairly autonomously, but the flesh-and-blood employees decide what it does. If they see that older visitors don't know how to deal with the robot, they serve them personally, whereas parents with small children love it. And the robot is ideal for dealing with difficult customers: it's obedient, doesn't get angry and never tires."

#### **Ask Pepper**

For Phillips' final case study, the UM library received a new colleague in the form of robot Pepper. "Students can approach Pepper with simple questions," Phillips explains. "Where the toilets are, what the Wi-Fi code is, how to reserve a study place. These are questions that new students ask all the time and the library staff spend a lot of time on." Odekerken-Schröder adds, "Of course, Pepper can do much more. The specialists at the Maastricht Center for Robots can train it using Chat GPT and other forms of artificial intelligence. The same holds for all service robots."

Phillips obtained her PhD in September and has since returned to Australia. Odekerken-Schröder would be happy to see her back here. "It's wonderful to work with such talented and driven PhD candidates. And were going to see more and more service robots, that's for sure."<

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Chelsea Phillips holds bachelor's and honours degrees in Business (Marketing) and in Fine Arts (Interactive and Visual Design). In her joint PhD, she investigated the impact of service robots on employee wellbeing.

is professor of Customer-Centric Service Science and vice dean of Internationalisation and Impact at UM's School of Business and Economics. To bridge the gap between theory and practice, she also chairs the Supervisory Board of Meander-Groep Zuid-Limburg and is a member of the Supervisory Board of

CenterData.

Gaby Odekerken-Schröder



A change of course is needed if we are to keep healthcare in the Netherlands accessible. The South Limburg Regional Plan, presented in late 2023, focuses on cooperation between dozens of parties and organisations. Researchers <u>Daan Westra</u> and <u>Svenja Cremer</u> explain the contribution that Maastricht University is making through its Academic Collaborative Centres.

The demand for healthcare is increasing, costs are spiralling and staff shortages are acute. With time running out, strategic memos and ambitious plans abound to turn the cumbersome tanker that is the healthcare system around.

"We need to organise healthcare completely differently," says Daan Westra, assistant professor at the Department of Health Services Research and an affiliate of the Academic Collaborative Centre for Sustainable Care. "We have to transition from medicalisation to prevention, focusing on wellbeing, vitality, positivity and living a good life. This requires us to look at a person's needs holistically and emphasise self-reliance and staying healthy, rather than treating them from a single perspective. It calls for care providers and care recipients to change the way they think and act. It means making space for social and technological innovations, daring to let go of bureaucracy. And above all, working together."

#### **Change mission**

At the national level, the Integral Care Agreement (IZA) and the Healthy and Active Living Agreement (GALA) offer a range of possible solutions. In line with these guidelines, South Limburg is coming up with its own plan. "There are more people with chronic diseases here, life expectancy is shorter and the demand for care is greater. This has to do with physical and social factors," Westra explains. "We want to know exactly what's going on. Why are people here, on average, unhealthier? How can we motivate them to do more prevention themselves? And how can the healthcare system contribute to the required changes? Our plan will fit in within the national frameworks of IZA and GALA, but with tailored solutions for this region."

#### Living labs

Insurers, hospitals, healthcare institutions, municipalities, doctors and interest groups are all working together on the South Limburg Regional Plan. The plan dovetails with the Knowledge and Innovation Agenda for the Southeast Netherlands, in which UM's Academic Collaborative Centres play an important role. "They have a long tradition in the region as living labs," says Svenja Cremer in a recently opened wing of a residential care centre of Envida in the Amby district. Cremer is a postdoctoral researcher in the same department as Westra and an affiliate of the Academic Collaborative Centre on Care for Older People in Limburg.

"You can sit at your computer or the drawing board and come up with wonderful plans," she says, "but it's about how those plans translate into practice. How does healthcare actually function, what do the caregivers and care recipients think of it, do they want things to change or not? The collaborative centres bring together doctors, nurses, caregivers, therapists, designers, organisational experts, finance people and, of course, the users themselves in an integrated way to try to figure out the best forms of housing and care."

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Daan Westra is assistant

professor of Healthcare

Management at the

Department of Health

leader of the Academic

Collaborative Centre for

Sustainable Care. He is

initiatives to transform

healthcare in Limburg

improving cooperation

through measures such as

between different parties.

involved in regional

Services Research and unit

#### Key

Everyday practice, Cremer says, is the key to the much-needed transition. "We develop and test joint innovations in the living labs. Professionals discuss treatments and options with patients. In nursing homes, we learn how to make people's last years of life meaningful and happy—which is not the same as always doling out medication and treatment, medicalising everything."

The Regional Plan depends on cooperation and participation, says Westra, who received a Veni grant in 2022 to map the formation of networks in healthcare.



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Svenja Cremer is a postdoctoral researcher at the Department of Health Services Research and an affiliate of the Academic Collaborative Centre on Care for Older People. In her PhD research, she was commissioned by the professional association V&VN to develop guidelines focused on care in Activities of Daily Living (ADL). Cremer teaches on the Bachelor of Health Sciences and coaches students in the Master of Health Policy Innovation and Management.



"Collaboration always sounds great, but every organisation has its own goals and ambitions, its own background and culture. They need to look beyond walls and across borders. There's bureaucracy, there's money involved, there are monitoring bodies. Healthcare is so broad. You can only arrange it properly and keep it affordable and accessible if parties work together. In the coming years, the Regional Plan will have to put this approach into practice and prove that it can work."

#### **Rethinking and adapting**

The collaborative centres on Sustainable Care and Care for Older People work closely with each other and with other centres at the Faculty of Health, Medicine and Life Sciences. "We conduct research in professional practice," Cremer says. "My PhD focused on everyday activities in nursing homes. The guiding principle was what people can and want to do themselves. Getting dressed, choosing their own clothes, making their own sandwiches, making their own way to the dining table instead of being pushed in a wheelchair. Things that seem small, but which are very real and different from the usual protocols. Visiting the zoo, taking a walk, doing activities, having social contact, listening—all these things contribute to a healthier life.

"The next step is to translate our findings to employees, team leaders and management. That way, we can begin transitioning to a new form of healthcare. It requires rethinking things, adapting. But it also makes healthcare more appealing to work in, because there's more room for personal input and creativity. This is just one step in a very broad package of measures to make healthcare healthy." <



Even more than his undisputed ingenuity and technical savvy, it is his imagination that has lifted **Rainer Goebel to the highest** echelons of cognitive neuroscience. In no less than a world-class achievement, he recently landed his second ERC grant worth €2.5 million, this time for his research project Reading the mind's eye: Alinspired personalised brain models of mental imagery. "Finding the best people for the project is currently the biggest challenge. I'm looking for suitable candidates from the Netherlands and abroad," he says. "In five years' time we will, I hope, know how thoughts become images. We're working hard on that. I'm optimistic."

#### **International**

Text Ludo Diels

Photography Paul van der Veer is also in thrall to the romantic notion of science as an endeavour 'to boldly go where no man has gone before,' as his beloved series Star Trek put it. "Our project is a small moonshot," he says, laughing. "Brain research can be compared to space travel in many ways. Visionary science definitely appeals to my imagination; that's probably why I have such a soft spot for science fiction and technical gadgets. Science is also emotion."

Rainer Goebel is not only a scientist to the core. He

#### **MRT** scanner

Goebel was appointed professor of neurocognition at UM in 2000, and director of the Brain Imaging Centre five years later. As a rising scientific star, it was expected that he would trade Maastricht for a renowned international institute—MIT, Stanford, Amsterdam—with an attractive new MRT scanner.

#### How

do you turn thoughts into images?

After all, earlier attempts had been made to poach him from the Max Planck Institute, where he worked after his PhD. But Jo Ritzen, then university president, persuaded him to stay.

Professor of Cognitive

Neuroscience

**Rainer Goebel** 

"He promised that we'd get a state-of-the-art MRT scanner, which I could use to study areas of the brain that had previously been invisible. I was given the opportunity to go deeper still, to be a pioneer. That was one of the deciding factors. It was also important to me that I could more or less build something from scratch with a team. And the surrounding environment of Maastricht, close to Germany and Belgium, is very beautiful and inspiring. That's important for a pleasure-seeker like me."

As we chat over coffee at Bandito Espresso, he picks up on a melody in the background. "I remember this song from high school," he says, smiling broadly. "This is 'Stumblin' In,' from the late seventies. All of a sudden it's got a beat. Personally, I prefer rock music, though I once played trumpet in the village I grew up in." Isn't merely adapting music to modern tastes a sign of a lack of imagination? He laughs. "That touches on an essential part of my research. Imagination, or being able to form a mental image, is crucial. I want to find out how that process works in the brain. As far as originality is concerned, I think that as a scientist you have to be creative. I never do the same thing over and over again. Science also means taking risks; you have to get out of your comfort zone. Nobody's going to quote you if all you do is what others have done before. It's about passion. I want to be a pioneer." >



Rainer Goebel studied

psychology and computer science in Marburg (1983–88) and completed his PhD in 1994 at TU Braunschweig, Germany. He received the Heinz Maier Leibnitz Advancement Award in Cognitive Science in 1993 and the Heinz Billing Award for Scientific Computing from the Max Planck Society in 1994. He worked as a postdoc at the Max Planck Institute for Brain Research in Frankfurt from 1994 to 2000, when he was appointed professor of Cognitive Neuroscience at UM. He has been awarded numerous grants, including two ERC Advanced Grants and 10-year funding for his significant role in the European Human Brain Project. Goebel is a member of the Royal Netherlands Academy of Arts and Sciences (KNAW) and the German National Academy of Sciences (Leopoldina).



#### **Understanding mental imagery**

of stories and memories. "We want to be able to draw out these mental images; that's why we talk about 'reading the mind's eye.' We're trying to understand how mental images arise. Some people are better at creating mental images than others, some can't do it at all. Our research has an impact on relevant topics in society, such as the treatment and prevention of psychological disorders like depression and posttraumatic stress. But we study happiness, too. It's important to cover the entire spectrum of mental imaging. We do this with all the techniques at our disposal and, often, with software developed in-house."

As a pupil at Hüneld high school in Germany, Goebel and his Commodore 64 computer were inseparable. He family, I was fascinated by computers and new

technologies. I still am." He was the first person to Goebel is interested in how the brain creates images hack the very first iPhone, and the first Tesla driver in the Netherlands. "I love new technologies. Growing up, I was captivated by children's science programmes on German TV. The book *Denken*, *Lernen*, *Vergessen* by Frederic Vester made a deep impression on me and steered me in the direction of brain research. My current research brings everything together: my passion for computers and programming and my interest in studying the brain."

#### The sky is the limit

Goebel is due to join yet another Teams meeting with colleagues from all over the world. Before he goes, he adds that if he is modest as a human being, as a scientist he has towering ambitions. Major scientific breakthroughs are on the horizon, and Goebel is determined, in the words of the Starship Enterprise, 'to was a real-life Gyro Gearloose. "As the son of a farming boldly go where no man has gone before.' The sky is the limit. <

A peek inside the kitchen of UM employees

Soul kitchen

Text Annelotte H

PhD o

Harry Heuts

## Food brings the family closer

andidate Sharon Anyango





<u>Sharon Anyango</u> moved from Kenya to Maastricht six years ago for the Master in Globalisation and Development. At first, things were tough: the education was completely different from what she was used to. So, too, was the food culture—especially lunch. "I still can't get used to the sandwiches."

The division of labour would be unthinkable in Kenya. Sharon Anyango grew up in Kisumu, in western Kenya. "Fishing and farming are the main sources of livelihood there. I lived with my mother, two sisters and two brothers in a homestead in a village just outside the city. My father has two wives; my mother is the second wife. We lived next door to each other, but the households are separated. Only at Christmas do we eat and cook together. Kenya has 43 tribes; I come from the Luo tribe. In many tribes, polygamy is common and legal."

Her mother, with a government job and her own catering company, was the breadwinner. Both Anyango's parents are now retired, but her mother still regularly cooks at parties and celebrations. "Among the Luo, many traditions are linked to food. Weddings and funerals can last up to two weeks, with huge amounts of cooking and eating every day. We eat a lot of ugali [a kind of thick cornmeal porridge] with vegetables and meat. In our village, family members are buried in the homestead garden; in the big cities you have cemeteries."

#### Discipline

Like most children in Kenya, Anyango went to boarding school. Typically, the aim is to teach discipline, because fathers often live and work elsewhere. Working mothers have little time left over for the children. "I had to go to boarding school from the age of 9. Luckily, my sister was there to help me. You were expected to do everything yourself, including your own laundry. If you didn't do it right, you were caned. I hated it. I went to primary and secondary school there. We were fortunate enough to go to university, which was a struggle for my parents, but we managed. Partly because my eldest sister helped pay for our education, and I helped pay for my younger brother's education-that's normal in my culture. My classmates' education usually stopped after high school."

She learnt to cook from her mother. "As a daughter, you were expected to help your mother around the house, including cooking. I've never seen my father cook."

#### The smell of home

In the Netherlands, Anyango cooks almost exclusively Kenyan food. "We have so many delicious dishes. Everything is eaten with ugali or chapati [unleavened flatbread] or rice. Then you add fried vegetables such as spinach or sukuma [a type of kale]. I fry them with tomatoes and onion and season them with Royco, a spice mix I can only get in Kenya. To me, that's the smell of home. When I miss my family, I look at what I can cook. Tonight we're eating chapati with beans. Chapati is also often eaten with lentils, or dengu in Swahili, the official language of Kenva, Rice is less common; most Kenyans think it's too light. But pilau is definitely one of my favorite dishes. I use a mixture of cinnamon, pepper and nutmeg and some spices I don't know the names of in English. You fry the beef, add the spices, rice and tomato paste and let it simmer. Then you eat it with avocado and kachumbari [a salsa made of tomatoes, onion and coriander]. My mouth is already watering," she says with a laugh.

What does she think of Dutch cuisine? "My sister-inlaw makes a great stamppot with sausage and gravy—delicious. And I love oliebollen because they remind me of mandazi, a popular snack back home. But other than that …" Silence. She bursts out laughing.

#### Fair division of labour

After her bachelor's degree in Ecotourism, Anyango moved to Nakuru to pursue a master's in Business Administration. She worked in a restaurant on the side, which is how she met her husband. "He'd been sent to Kenya for his work at a Dutch water company. He showed up every day; we got to talking and the rest



is history." They had a daughter together and, after seven years, decided to move to the Netherlands. "My husband is from Den Bosch, which is how I ended up here. He loves Kenya: the country as well as the food. We eat more Kenyan than Dutch."

Laughing, she adds: "He's the health freak—he makes lots of salads and things like that. Kenya's high-carb cuisine isn't always that healthy. During the week, he cooks. That's also something I like: the division of labour here. That would be unthinkable in Kenya. As a woman, I'd have to do all the housework myself, including cooking, after work."

#### The fate of women

Anyango is concerned about the fate of women in her home country. She spent four years working for an NGO that advocated for young girls in Nakuru. "Many girls were circumcised and married off young. We tried to bring about change from within the community. It was hard work, but we were able to save girls from female genital mutilation and child marriage." In September, she will start her PhD on evolving gender expectations of refugees from Somalia and Eritrea in the Netherlands. "The research is based on my own experience. When I came to the Netherlands, it changed—fortunately—my perspective on the roles of men and women. The refugees in my research also come from East Africa, and arrive with their own cultural upbringing of what is expected of a man or woman. Does that change when they relocate, and if

so, how?" In her research, food will also play a role, she

thinks. "We come from varying cultural and religious

backgrounds, but food can bring us together." <

bachelor's degree in Ecotourism from Maseno University in Kisumu and a master's in Business Administration from Kenyatta University in Nakuru, Kenya. She completed the master's in Globalisation and Development at UM and is conducting a PhD research on gender expectations of refugees from Somalia and Eritrea in the Netherlands.

Sharon Anyango holds a

<u>Manon Weusten</u> is Maastricht University's 100,000th alum. The South Limburg native with an international outlook, a love of her region and a passion for lifelong learning talks about UM's contribution to her career path—and her aversion to attention.

## The 100K alum

Somebody was bound to be the magic number. How did Manon Weusten feel about being the 100,000th UM graduate? "I had no idea until the Alumni Office contacted me. It's a great honour, of course. But I'm not that fond of all the attention," she laughs.

Weusten, who will attend her official graduation ceremony in November, may not be the most typical UM student. She is, however, a great advertisement for the South Limburg higher education system and the opportunities it offers for those with talent and dedication. Born in Heerlen, she went to high school in Meerssen, a village near Maastricht. She then moved to Kenya to pursue her interest in tropical medicine, studying Pharmacy and Medicine at Kenyatta University in Nairobi.



*Text* Florian Raith

Photography Harry Heuts

#### The long road

After two years, she realised medicine was not her lifelong calling. She returned home and enrolled in Business Economics at the Sittard campus of Zuyd University of Applied Sciences. A student job opened her eyes to her true passion: accounting. "I know it's not the sexiest of subjects," she laughs.

lensenmassa

senmassa

Alongside her undergraduate studies, Weusten followed a pre-master's at UM, which would enable her to further her education later on. "I went to Maastricht every week. It was all much more condensed and academic, and everything was taught in English." She was keen to learn more. "But I was afraid of accumulating too much study debt, so I decided to start working instead."

#### Work and study

She found a job in Heerlen: financial reporting for AZL, a financial institution that works for pension funds. "I learnt a lot and it was a good experience, but after a couple of years, I wanted to grow professionally." She joined Statistics Netherlands (CBS), also in Heerlen, as a statistical analyst for large enterprises. "From the start, I told them that at some point I'd want to continue my studies and get more academic qualifications." A few years later, on the cusp of receiving her first promotion, the time had come.



#### $\uparrow$

Manon Weusten is an economic researcher on globalisation at Statistics Netherlands. She studied Business Economics at Zuyd University of Applied Sciences and a pre-master's in International Business at Maastricht University. In November 2024, after two years of studying part time, she will receive her cum laude MSc in International Business specialising in Accounting and Control. "I already knew Maastricht was a beautiful city and the education at UM was really good." The deciding factor? UM's two-year, part-time master's programme in Accounting and Control, which allowed her to continue working and study in the evenings and weekends. "On Fridays, I'd spend the day in Maastricht and feel like a student again. Sometimes I'd go for a drink after a day of classes or go to the hairdresser little things like that." Of course, the programme was also challenging. "Working in teams and always depending on others was tough in the beginning. I also remember feeling overwhelmed the first time I had an exam in the MECC [Maastricht's conference centre] with hundreds of people."

#### Ambition and flexibility

Along with the flexibility of the programme and the design of the curriculum, Weusten appreciated her cohort. "There were many people from the region already working in accounting, but in different contexts, from family businesses and corporations to the public sector. Having all these different experiences in the group was fascinating."

She is grateful for CBS's flexibility in enabling her to pursue her further education. "They're a great employer — very flexible, and they've always encouraged my development. And obviously it helps to know that what I'm doing has a positive societal impact." She wants to stay at CBS, where she is now a researcher in the globalisation unit. "Maybe one day I'd like to do a PhD, but again combined with work. I'd like to research what I'm doing for my work in greater depth."

#### Lifelong learning in Limburg

Weusten has become a proponent of lifelong learning. "After a couple of years working, I had my doubts about whether I'd still be able to study, but the work experience and level of maturity actually really helps." As she discovered, the combination of studying and work, though challenging, also has its upsides.

"Study and work mutually reinforced each other. I learnt things about academic research that I could apply immediately at work. And at work I had learnt many things, like programming, that came in handy with some of the assignments." She strongly recommends having a student job, which can help to integrate acquired knowledge.

Besides some nerves about the publicity, the magic number is not exactly at the forefront of Weusten's mind. "I'm really looking forward to celebrating my graduation with my family, but the ceremony is also the day before my wedding, and we're expecting a child in January." The ceremony, then, will be a milestone for both Weusten and UM—and both are already looking to the future with optimism and ambition. <

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Text Jolien Linssen

Photography Susanne Schnabel Her primary school teacher was convinced she would end up saving the whales with Greenpeace. Even as a child, Maastricht University alum Susanne Schnabel couldn't stand injustice. If a classmate was bullied, she had to intervene. It was this trait, combined with her "big mouth," that led her to the legal profession. For the last 12 years, Schnabel has worked at Tripels Advocaten in Maastricht. "I don't go around bragging that I'm a lawyer. This is just my job."

## **Baptism** by fire

Her father might well have given her the final push towards law. "I was quite a handful as a teenager, and I remember my dad saying, 'Maybe you should do something with that big mouth of yours," she says with a laugh.

Schnabel considered studying in Amsterdam, but chose her hometown of Maastricht for its Problem-Based Learning. She thoroughly enjoyed her student days. "What helped was that I found it relatively easy. I skipped plenty of lectures, but the weeks before the exams I was able to shut myself off and knuckle down. That's still how I work today. I need pressure."

#### Hospitality industry

An added bonus of studying in Maastricht was that she was able to keep her part-time job, behind the bar at In den Ouden Vogelstruys. Later, this gave her an advantage at Tripels, which represents many hospitality entrepreneurs. "That whole world appeals to me. It's nice that I can still be involved as a lawyer."

The hospitality industry also prepared her for a legal career by introducing her to people from all walks of life. "You have to be able to deal with different kinds of people, talk to them and put your finger on the problem. That empathy has to come naturally, but a part-time job in hospitality definitely helps."





#### Fight

Susanne Schnabel obtained a bachelor's in Dutch Law and a master's in Private Law at Maastricht University. In 2012 she joined Tripels Advocaten in Maastricht, where she has a

private-law practice specialising in commercial and residential tenancy

law

During an internship at Tripels, Schnabel made such a good impression that she was offered a job before completing her master's degree. She locked herself in her parents' attic and wrote her final thesis in three weeks. Not long after, she entered the stately office building on the Brusselsestraat as a 23-year-old trainee lawyer.

"As a rookie, you have to fight to be taken seriously. There were times when I was just dying inside. I did my first hearing after only a week. It was a visitation arrangement with a child who had been placed under supervision; I was assisting the mother. I had no idea what it was going to be like. I had to show right off the bat that I wasn't afraid to speak up. It was a baptism by fire. That's what I've learnt over the years: that I develop and grow mainly when I'm super uncomfortable."

#### Introvert

This doesn't change the fact that a large part of her work consists of ploughing through documents in her office. Schnabel runs a civil practice specialising in tenancy law. "You have to be able to handle the fact that it's a lot of research. I typically spend whole days reading, analysing and applying case law, writing letters and dictating."

Her experience with interns shows that not everyone is cut out for this. "Some are wildly enthusiastic, whereas others prefer to be more active; they want to get out and about. That's why internships are so important, because it's the only way to find out what suits you. Deep down, it's a good thing I'm actually quite introverted, otherwise I'd be very unhappy in this profession."

#### **Rental issues**

Schnabel assists various types of landlords as well as tenants. For example, she collaborates with the Huurteam Zuid-Limburg to help students who have a dispute with their landlord. "There are lots of landlords in Maastricht who act like the rules don't apply to them and have made a business model out of refusing to return deposits," she explains. "They just assume foreign students won't come back for their money."

Yet, more and more students are finding their way to her. They receive subsidised legal aid, which means Schnabel is paid by the government. "Not necessarily interesting from a commercial point of view, but these are things I get a kick out of. A landlord who ignores the rules and treats people badly is likely to receive a strongly worded letter from me: pay up or I'll sue. Sometimes it only takes one or two letters on my office letterhead to settle the matter."

#### Future

On LinkedIn, she gives personal insights into her life as a lawyer. "For many people, the threshold to pick up the phone is very high. They're afraid it'll be super expensive right away, or that you only turn to a lawyer when you're on the cusp of suing." She wants to make legal assistance more accessible in the hope that people will approach her before matters get out of hand. "I'm not an old-school lawyer. I don't see this work as giving me some kind of special status; it's just my job."

A job she undeniably enjoys, as is clear from her many plans for the future. Schnabel would like to specialise further in tenancy law and is keen to train law interns. "I also want to write a column; drafting legal documents is not much of an outlet for my creativity. Who knows, maybe one day—I've said it out loud now!"



This summer, the HeArt Ma'at racing crew ran Maastrichts Mooiste, the city's largest annual running event. Their goal was to raise money for research into an art therapy for heart patients. Dozens of crowdfunding initiatives and hundreds of donations later, they managed to raise more than €55,000 for this special project at the intersection of art and science.

## Innovative research at the intersection of **art** and **science**

#### University Fund Limburg

Text Anouk van den Brink

Photography Emmy Mevissen lands suffer a sudden cardiac arrest. Some will have an ICD (implantable cardioverter defibrillator) inserted. This can prevent sudden cardiac death by administrating a shock, but may also cause psychological distress. "Imagine waking up in the hospital and being told not only that you had to be resuscitated and will receive all sorts of medications, but also that you need an operation to receive an ICD. It's a drastic change; 33% of patients experience psychological symptoms such as anxiety and stress afterwards, which can in turn increase the risk of new cardiac arrhythmias. It's important that they receive the appropriate aftercare," says Yesim Kaya, a physician-researcher at CARIM, UM's cardiovascular research institute. Last year, Kaya

Every year, roughly 15,000 people in the Nether-

was awarded an HS-BAFTA grant to study integrated cardiac imaging in the treatment of patients with ventricular tachycardia: life-threatening arrhythmias of the heart.

Kaya's fascination with the heart is not limited to her work within the hospital walls; she has devoted her life to it. She is an instructor at the Red Cross and the Dutch Resuscitation Council. Additionally, she gives free CPR lessons, and will soon also offer cardiovascular risk prevention classes through the charity Hart voor een Ander. "I've always been intrigued by the prevention and treatment of ventricular tachycardia, but patient aftercare is also very important to me. That's why I decided to get involved with HeArt Ma'at."

#### Art for the heart

Kaya joined the multifaceted project, initiated by cardiologist Rachel ter Bekke and artist Claudia Volders, a few years ago. Dozens of patients have already been introduced to HeArt Ma'at, mainly by getting creative in pop-up studios. "We're currently working on a large canvas and leaflets for the waiting room of the cardiology department. The canvas is covered in drawings that portray the emotional experience of wearing an ICD, while the leaflet tells the personal stories of patients ['Humans of HeArt']."

In Egyptian mythology, ma'at refers to balance and stability. In the HeArt Ma'at project, it symbolises finding an equilibrium in life. "After an ICD is placed, which is quite a drastic intervention, patients often experience strong emotions. They need tools and techniques to process what is happening and to pick up the thread of their lives again. But expressing your feelings in words isn't always easy; that's where art comes in. We want to study how we can guide patients in their coping process through personalised art therapy. The next step is to build a strong scientific basis on which to develop therapies and a care pathway."

#### Hard work makes dreams come true

To support the study, a crowdfunding campaign was launched under the auspices of the annual fund campaign of the University Fund Limburg. Through the UM Crowd platform, the 'dream team,'\* as Kaya puts it, raised more than €30,000. CARIM doubled the target amount of €25,000, bringing the total to an impressive €55,000. "We put a lot of time and effort into the crowdfunding; it's not like the money just flows in. But you also get a lot in return: not only in terms of donations but also valuable contacts, unique opportunities and visibility." The project dovetailed seamlessly with UM Crowd's goal of bringing people together around an important societal theme, with the ultimate aim of advancing science. "My aim was €30,000; the fact that we raised the money through crowdfunding makes it extra special. Colleagues, family, friends, patients and local businesses all supported us by making a donation or participating in one of the initiatives. Like us, they really believe in what we do, which is a very special feeling."

#### Unique combination of art and science

"For me, what makes HeArt Ma'at unique is its combination of art and science. It does patients good to be creative—but for doctors and researchers, too, it's important to tune in to our creativity. If you look at the most brilliant scientists in history, they were usually highly artistic people. Of course, in the medical world we have to follow protocols and guidelines, but it's also important to tap into our artistic side, think outside the box and occasionally take a completely different approach. Wonderful things can happen at the intersection of art and science."

\*Besides Kaya, the team includes cardiologist-electrophysiologist Rachel ter Bekke, professor of Clinical Psychology Susan van Hooren, hospital psychiatrist Carsten Leue, illustrator Emmy Mevissen, professor of Mathematics of Knowledge Engineering Ralf Peeters, artist Claudia Volders and professor of Genetic Cardiology Paul Volders. <

Are you a UM student or staff member with a good idea for a socially relevant project? Through UM Crowd, you can raise funds to bring your project to fruition. You can also donate to an existing campaign or support it by taking part in a sports event or other activity. For more information, visit *umcrowd.nl* or email us at *info@ufl-swol.nl*.

From the left to the right: Rachel ter Bekke, Claudia Volders and Yesim Kaya.



#### NWO awards four Veni grants to promising UM researchers

Four young UM researchers have been awarded Veni grants worth up to €320,000 from the Dutch Research Council (NWO). The grants will allow Aleksandra Komornicka (FASoS), Natasha Mason (FPN), Glenn Franken (FHML) and Job Verdonschot (FHML) to further develop their own research ideas over the next three years.

Aleksandra Komornicka – European history Russia's invasion of Ukraine reopened debates on the end of the Cold War. the 1989 transformations of socialist regimes and the eastern enlargement of the European Union. 'The market next door' revisits these debates by investigating the involvement of Western European multinational corporations in Central Europe between 1969 and 1993.

Natasha Mason – Psychopharmacology Psychedelics have the unique ability to make the brain more open to change. This project explores whether psychedelics such as psilocybin help people with anxiety shift their focus away from negative thoughts. It also considers whether combining psilocybin with ABMT makes this retraining more effective and lasting.

#### **Glenn Franken – Neurology**

Chronic nerve pain is often caused by a disturbed firing pattern of nerve cells in the dorsal root ganglion and the spinal cord, which send constant pain signals to the brain. This research will investigate whether and how electrical stimulation of the dorsal root ganglion can decrease this disturbed firing pattern and thus reduce chronic nerve pain.

#### Job Verdonschot – Heart failure

A dilated heart is a severe cardiac muscle disease, often caused by a genetic mutation, and can lead to heart failure and death. Patients' relatives are also at increased risk and are therefore screened annually using ultrasound. This study will investigate a cheaper and more accessible imaging method to detect stiffening of the heart at an early stage. <



News

#### **New obesity** framework: beyond **BMI**

Obesity experts are introducing a new framework for the diagnosis, staging and management of obesity in adults. In the new framework, diagnosis is based on abdominal fat accumulation and an evaluation of physical and psychological issues, rather than solely on body mass index (BMI). This is the result of an international consensus survey among obesity experts conducted by the European Association for the Study of Obesity led by Gijs Goossens (Maastricht UMC+) and Luca Busetto (EASO). The study was published in Nature Medicine. <





#### **Foreign students** in 'shortage sectors' have relatively high stay rates

The number of international students in higher education has increased significantly in recent years. Their subsequent contribution to the Dutch labour market varies across fields, with high inflows for engineering and ICT. In fields such as economics, social sciences, agriculture and natural sciences, international students are less likely to stay in the Netherlands after graduation. These are the findings of the report 'Stay rates of international students graduating from Dutch higher education and their impact on labor market estimates' by the Research Centre for Education and the Labour Market (ROA) at Maastricht University.

Stay rates in education and healthcare are also high, but the number of international students is low. Because these programmes are largely taught in Dutch, they are less accessible to foreign students. Those graduates with a sufficient command of Dutch have a high probability of joining the Dutch workforce.

The research shows that a majority of students leave the Netherlands immediately after graduation. Bottlenecks in the labour market could be reduced if more international graduates stayed in the Netherlands than is currently the case. <

#### Profile

(MUSTS)

(SHCL)

Life Sciences

(CARIM)

(GROW)

(SHE)

(BISS)

(BFFI)

Care (CAPHRI)

Education and research at Maastricht

University is organised primarily on the

basis of faculties, schools and institutes.

**Faculty of Arts and Social Sciences** 

Globalisation, Transnationalism and

• Politics and Culture in Europe (PCE)

Faculty of Arts and Social Sciences

Centre for Gender and Diversity (CGD)

Centre for the Innovation of Classical

Faculty of Health, Medicine and

School of Nutrition and Translational

Research in Metabolism (NUTRIM)

School for Cardiovascular Diseases

School for Public Health and Primary

School for Oncology & Reproduction

School of Health Professions Education

Faculty of Science and Engineering

University College Maastricht (UCM)

Maastricht Science Programme (MSP)

Department of Advanced Computing

Brightlands Institute for Smart Society

• Brightlands Future of Farming Institute

• Department of Molecular Genetics (DMG)

• Department of Sensor Engineering (SE)

Gravitational Waves and Fundamental

• Institute for Corporate Law, Governance

· Institute for Globalisation and Interna-

**Cross Border Cooperation and Mobility** 

Maastricht Centre for European Law

Maastricht Centre for Human Rights

• University College Venlo (UCV)

• Aachen-Maastricht Institute for

**Biobased Materials (AMIBM)** 

Department of Circular Chemical

Globalization and Law Network

and Innovation Policies (ICGI)

Institute for Transnational Legal

tional Regulation (IGIR)

Research (METRO)

(ITEM)

(MCEL)

(MCfHR)

Sciences (DACS)

Engineering (CCE)

Physics (GWFP)

Faculty of Law

• School for Mental Health and

Neuroscience (MHeNS)

Centre for the Social History of Limburg

Science, Technology and Society Studies

• Arts, Media and Culture (AMC)

**Development (GTD)** 

Graduate School

Music (MCICM)

- Maastricht Centre for Taxation (MCT)
  - Institute (M-EPLI)
- Maastricht Institute for Criminal Studies (MICS)
- Montesquieu Institute Maastricht

- Graduate School of Psychology and
- Cognitive Neuroscience (CN)
- Experimental Psychopathology (EPP) Neuropsychology & Psychopharma-
- cology (NP&PP)
- Section Teaching and Innovation of
- Learning (STILL)

- Graduate School of Business and Economics (GSBE)
- Research Centre for Education and the Labour Market (ROA)
- Network Social Innovation (NSI) Limburg Institute of Financial Economics
- The Maastricht Academic Centre for Research in Services (MAXX)
- Accounting, Auditing & Information Management Research Centre (MARC)
- Engagement (ECCE)
- Economic Research Institute on Innovation and Technology (UNU-MERIT)
- Social Innovation for Competitiveness, **Organisational Performance and human** Excellence (NSCOPE)
- Marketing-Finance Research Lab
- Service Science Factory (SSF)
- Maastricht Sustainability Institute (MSI)

- MERLN Institute for Technology-Inspired **Regenerative Medicine**
- Migration and Development (MACIMIDE)
- Maastricht MultiModal Molecular Imaging Institute (M4I)
- Maastricht Centre for Systems Biology (MaCSBio)
- Conservation and Heritage (MACCH)
- Centre for European Research in • Institute for Transnational and Euregional Maastricht (CERIM) Institute for Transnational and Euregional
  - cross border cooperation and Mobility (ITEM)
  - Institute of Data Science (IDS)
  - Centre for Integrative Neuroscience (CIN)
  - Maastricht Science in Court (MSiC)

- Maastricht Centre for Law & Jurisprudence (MCLJ)
- Maastricht European Private Law

Colophon

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#### **Faculty of Psychology and** Neuroscience

- Neuroscience (GSPN)
- Clinical Psychological Science (CPS)

- Work & Social Psychology (WSP)
- Maastricht Brain Imaging Centre (M-BIC)

#### **School of Business and Economics**

- (LIFE)

- European Centre for Corporate
- United Nations University Maastricht

- UMIO executive branch of SBE
- Education Institute
- Maastricht School of Management (MSM)

#### Interfaculty institutes

- The Maastricht Forensic Institute (tMFI)
- The Maastricht Centre for Citizenship,

- Maastricht Centre for Arts and Culture.

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## Blow up

Want to know which part of Maastricht is zoomed in on? Visit the Facebook page of the UMagazine.

facebook.com/maastricht.university

lech loer nao de lui op straot, huur wied eweg veugel roond park en Maos. Wie gruuts alles zingk vendaog.



Frans Budé