





# **Foreword**

Dear Reader,

Our University has an enormous amount to offer: a considerable range of subjects to study, for example, excellently equipped laboratories, seminar rooms and lecture halls, numerous international cooperations, and a lively campus life. But these facts which shape our University only become really perceptible and tangible through all the people who literally give it a face: more than 44,000 students and around 8,000 staff. It is they who, through their work, their dedication and their personality, not only give the University its unmistakeable profile but also, each in his or her own individual way, contribute to the good reputation which Münster University enjoys.

In this new publication we wish to do justice to the diversity which exists at the University of Münster and present some of the outstanding personalities from the past year – in twelve portraits, one for each of the twelve months of 2022. With their expertise, their role at our University and their successes, the people depicted in these portraits represent the ideas of research, teaching and transfer which mark our University as a whole, and from which we all benefit: the historian, for example, who has in-depth knowledge relating to the war in Ukraine and whom the media frequently consult; the surgeon whose skill in operating makes the headlines worldwide; or the buildings technician who takes on the exceptional challenges posed by the energy crisis.

"It is the encounters with people which make life worth living," said the French writer and journalist Guy de Maupassant. As you look through our publication, I wish you much pleasure in reading interesting encounters with twelve personalities from our midst.

Sincerely,

Prof. Johannes Wessels

Rector of the University of Münster

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# ONE) on the front of the University Library; for him, the statement made by this work of art is relevant especially from a theological point of view

# BOTH NEW: A PROFESSOR AND AN INSTITUTE

**Dr. Wolfgang Grünstäudl** has been a professor at the newly established Institute of Biblical Exegesis and Theology (IBET) within the Faculty of Catholic Theology since January 2022. Talking to Brigitte Heeke, the theologian talks about his everyday work and his subject, as well as the importance of methodological expertise and international cooperation.

he way to Wolfgang Grünstäudl's office at the Faculty of Catholic Theology
leads through the building containing
the Dean's Office, which itself is situated
between the Cathedral and the University Library (ULB), thus revealing something about the
productive tension which permeates Catholic Theology as
an academic discipline. On the second floor, the visitor's
attention is caught by the number of offices occupied by
biblical scholars working at the Institute of Biblical Exegesis and Theology (IBET). These scholars interpret the
Old and the New Testaments and, in particular, reveal the
"literary and theological riches of the worlds contained in
the texts of the Bible" – which is how the Institute itself
describes its work.

In Wolfgang Grünstäudl's office, there are lots of packing boxes stacked against one wall. Has the professor, who is in his first year at IBET, not yet got around to unpacking his boxes after moving here? "That's all archive material belonging to one of my predecessors," he explains. "You can't carry out exegesis without knowing about its academic prehistory," he says. Grünstäudl is Professor of New Testament Theology and Biblical Didactics, and one of his predecessors at the Chair was Karl Löning, who bequeathed two of the watercolours which decorate the office walls. Grünstäudl recently received various books and files from the academic legacy of Löning, who died in 2022, and he will now soon be looking through them. "The legacies of exegetical work reveal not only insights into personal working methods and methodologies, they also tell us a lot about the development of exegesis and theology in a particular period in the past," explains

Grünstäudl, who has already worked frequently on the history of exegesis in the context of other research projects. Current theology, too, is influenced by historical debates, he says. For example: for previous generations it was a struggle to be able to use methods which are today a matter of course. There have also been exegetical discourses in the past which led to a dead end, he says, adding that much can nevertheless be learned from them.

It is not only the history of his discipline which influences Grünstäudl's work, but also the history of Münster. The University of Münster, he explains, is well-known to exegesis scholars worldwide, in particular as a result of the "Institute of New Testament Textual Research" (INTF), which is an institution within the University's Faculty of

"Whenever you take part in a conference anywhere in the world as a New Testament scholar, and you say that you're from Münster, that clicks with everyone straight away." Prof. Wolfgang Grünstäudl

Protestant Theology. "Whenever you take part in a conference anywhere in the world as a New Testament scholar, and you say that you're from Münster, that clicks with everyone straight away." The reason, he says, is that the concise scholarly editions of the New Testament – such as the "Nestle-Aland" reconstruction of the original Greek

text, produced at the INTF – are of crucial importance for New Testament research. The original text of the New Testament has not been preserved: instead, it has to be reconstructed by comparing thousands of manuscripts from different centuries. The INTF is making an enormous contribution to this, says Grünstäudl. At the Faculty of Protestant Theology, the Philosophical-Theological University of Münster and IBET, there are no fewer than ten professorships for biblical scholarship. "This multiplicity is most unusual, even by international standards," he explains, adding that a location such as Münster with such a broad base of Bible studies provides unique opportunities for professors, students and young researchers to discuss and exchange their views.

In the winter semester of 2021/22, the already diverse biblical studies landscape was extended to include IBET. For Wolfgang Grünstäudl, the advantages – both for teaching and for research - are self-evident: IBET offers students a broad range of teaching, as well as the opportunity to choose their own focuses. This applies to the whole field of biblical studies - from introductory seminars to language courses. "In addition to all this," he says, "agreements on organisational course structures and on the competences to be acquired present huge opportunities."

The importance of methodological expertise as opposed to the indispensable specialist expertise is often overlooked, says Grünstäudl. Promoting such methodological expertise is therefore all the more important, he says, as students doing different degrees - subject-based degrees or teaching degrees - come to lectures and seminars with different backgrounds and different levels of knowledge. The IBET makes it easier to deal with this challenge and to work on uniform standards. "That can be a major argument for choosing to study in Münster." Especially so as the Institute welcomes suggestions from students: last semester, for example, they asked to have a lecture on hermeneutics so that they could learn how to understand and explain as well as interpret biblical texts. In the summer semester of 2023, the Institute will be offering such a lecture.

It's now easy to guess why there are books on hermeneutics piled up on the desk. Hermeneutical questions, says Grünstäudl, are an important complement to exegetical work, which uses historical, philological and literary methodologies, among others. "Hermeneutics helps us to see which patterns of understanding we use to approach biblical texts, how differently these texts can be understood, and what relevance the Bible still has today." These aspects should not be underestimated and are the

reason why research on the New Testament still needs to be carried out today, Grünstäudl explains, even though it involves only a small volume of texts. Every generation throws up new questions, and as a result the Bible attracts attention again and again from new angles. "This also has a social dimension, as it provides a scientifically sound counterpoint to various other ways of using Bible texts which make you shudder, for example on the part of fundamentalists in the USA, or when Russian clerics quote the Bible to justify the war of aggression on Ukraine," he says.

However, Grünstäudl sees a need for research not only with regard to questions which are of relevance today, but also with a view to the context of ancient times. This applies, for example, to the history of the collection of texts which are today authoritative for various Christian denominations becoming a canon. This was discussed and agreed upon over many years and finally assumed a more stable form in the 4th century AD. How this came to pass is unknown in many respects, however. Today, the scope of the canon is no longer debated, but some of the content is considered to be difficult - for example, as regards gender roles or the definition of group identities.

After his studies in Vienna Grünstäudl worked at the Universities of Koblenz-Landau, Wuppertal and Regensburg. He is currently working on a comprehensive commentary on the Second Epistle of Peter and the Epistle of Jude two writings which are important in the emergence of the New Testament, and which deal with demarcation. "Both

"What's important to me is to bring together people with different viewpoints so that they can talk to one another." Prof. Wolfgang Grünstäudl

texts are very polemical and reject the claims of others to be Christians." When they were written, this may have been a normal reflex action aimed at strengthening the still young church through such demarcation. Later, however, such texts from the Bible were used to underline who had what was supposedly the true faith, and who was to be condemned as a heretic. "Today," Grünstäudl stresses, "we have a different view of these things." The question remains, though, of how to deal with such "difficult biblical texts", and how they are to be read today without either devaluing or fully embracing them. And what does Wolfgang Grünstäudl hope

for in the future? "What's important to me is to bring together people with different viewpoints so that they can talk to one another." The aim this year is to make that happen through a conference on innovations, which sociologists, amongst others, will also attend as well as through the visit by a guest academic from the USA. Collaboration on matters of exegesis must not be confined to German-speaking countries, says Grünstäudl. "And perhaps I shouldn't store the packing boxes right at the back of the cellar," he says. After all, the plan is for the IBET, together with all the other theological institutes and faculties, to move to the Hüffer Campus in a few years' time. Islamic, Protestant and Catholic theology all in one place - that will make productive, inter-faith dialogue possible at many levels, he says. Grünstäudl is optimistic: "I'm very much looking forward to helping to shape this new phase of theological research and teaching here at Münster, with its rich tradition in this field."

Academic innovation in the face of tradition: from his desk in the Faculty of Catholic Theology on Johannisstraße, Wolfgang Grünstäudl has a good view of the Überwasserkirche.





# "I want to get the best out of everyone"

**Dr. Andrea Rentmeister** is Professor of Biological Chemistry and Biomolecular Label Chemistry. In February 2022 she receives a Proof of Concept Grant from the European Research Council (ERC) for a new method enabling the mRNA in living cells to be systematically activated. She speaks to Christina Hoppenbrock about her enthusiasm for chemistry, her responsibility for her team, and her experiences in competitive sport.

What motivated you to embark on it?

I've been fascinated by chemistry almost all of my life; even as a child I wanted to become a chemist. When I was still a child living at home in Graz, I bought some test tubes from a glassblower and set up a "laboratory" in my room. I've no idea where the interest came from. In my family, no one had the slightest interest in chemistry.

#### At any rate, your enthusiasm has not waned ...

In biochemistry you change biomolecules, and their properties, in order to achieve certain effects. For me, it's fascinating to understand molecules and change them. In my research I experience this triad of labelling, analysis and manipulation. We label large biomolecules, the mRNAs, to make them visible within the cell and accessible for investigation. In the end, we can systematically change their properties. In a living cell it is even more complex than in a test tube - the chemical reactions need to be highly selective. So-called click chemistry, for example – for which the Nobel Prize was awarded in 2022 - is suitable for use in living cells, and we also use this type of chemistry in our working group.

Then you were very successful very quickly. I read, for example, that in 2000 and 2007 you were the Austrian champion in épée fencing. And in 2000 you took part in the Olympic Games, representing your home country Austria in the épée fencing individual event ...

Yes, I did. Before I went up to university I took half a year off in order to prepare. At that time, I was number 15 in the world rankings and I first had to compete against the number 18. I knew it would be close, but I won the bout. It was only in the next round that I lost – to the former Olympic champion Laura Flessel-Colovic, the world

#### Did taking part in the Olympics influence your life?

No. At that time I was very focused on my role as a fencer and wasn't really very aware of the Olympic Games as a major event. But sport in itself influenced me – you learn a lot about yourself. In fencing you're on the piste alone with your opponent. I stood there, with my fears, and I had to deal with any situation in which my opponent acted in an unexpected way.

# Did your sporting career teach you anything for your academic career?

Certainly. At the time, I thought that in doing sport I would only be losing time I would otherwise need for my studies. But I see it differently today. I see that my team colleagues from that time have now got both feet firmly on the ground today. We all gained in self-confidence as a result of our fencing. My experience in sport helps me, for example, when I have to give an important presentation.

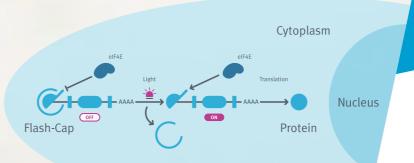
## As a university lecturer you also have a leadership role ...

Apart from learning how to cope with stress, fencing also taught me how to motivate team members. In the team competitions, in other words in the relay, every single hit counts and can, in the end, mean victory for the team. With my home team, for example, we won the Austrian championships twice in the relay event although we were the outsiders. And with the Austrian team we beat Germany in a European championship - which no one thought we could do. So it's always important to motivate everyone, even the weakest, regardless of how strong your opponent appears to be. This is extremely important to me in my working group - although research work isn't, of course, a fencing tournament ...

# What does it mean for your work with your team?

Everyone has their strengths and weaknesses. I want to get the best out of everyone. For everyone, the next experiment is the most important for them personally, and it's of secondary importance that not everyone manages to be published in "Nature". What's extremely important for me in my team, incidentally, is mutual trust. Ultimately, no matter how much stress we have, we have to remain on friendly terms with one another.





## You probably no longer do any fencing nowadays ...?

No. During my chemistry studies I moved from Graz to Bonn especially because I had better training conditions there for fencing and could combine studies and sport better. When I moved to the California Institute of Technology for my post-doctorate, joining Frances Arnold's working group, it was clear to me that I would have to give up competitive sport. I can't live without sport, though - I'm afraid I'd be unbearably grumpy otherwise. I do some endurance sport every day swimming, running or cycling. It does me good and helps me to switch off. The advantage is that these types of sport allow me to be flexible as regards the choice of time and place. In other words, I can balance training and work with no great difficulty.

# You were a successful competitive sportswoman and are an equally successful scientist and researcher. What are you proud of?

I work with some very talented young people, some of whom I supervise from bachelor to master to doctoral student – up to their becoming a "finished", critical researcher. I'm very proud of these young people. I once had a doctoral student, for example, who was very good at her subject, but at the time she was extremely shy.

Just recently she got a start-up going. Wow! It's just great to see such a development.

#### In 2018, your postdoc supervisor Frances Arnold from the California Institute of Technology received the Nobel Prize for Chemistry. What does that mean to you?

I remember very clearly the day it was announced. I was at home, mowing the lawn, when my husband came outside to tell me the news. I was absolutely delighted for her. Earlier, she encountered a lot of resistance as a woman at a technical university. She had to fight a lot for her rights, for example in getting a tenured position. Later she was awarded the Nobel Prize, and I guess everyone is now glad that she's there.

# We've spoken a lot so far about success and progress. But of course you also have to live with failure. How do you deal with that?

It's a question of how you define 'failure'. How many applications for grants do you think we researchers submit? And of course we're not always successful, far from it. I too have applied for jobs and not got them. The way I look at it is: you learn something every time. Chemists are traditionally assumed to have

a certain frustration tolerance. Many experiments don't immediately function anything like you expect them to. But here again: as long as you can learn something from an experiment, it's a good experiment. After a few decades working in research, my definition of failure is a bit different now from what it once was. You mustn't let things get you down. I like to be guided by the saying that you're allowed to make mistakes – but each mistake just once.

# But if you have only a limited amount of time for your doctoral dissertation, experiments which obstinately go wrong can be very stressful, or not?

Yes, they can – but one of my jobs is also to lead young people to success. If a topic leads down a blind alley, that might mean that I have to make sure that the student receives a different topic in good time.

# To finish with, let's take a look into the future: what would you still like to achieve in your career?

You can't plan everything. It's like in fencing: you can only give your best, and you don't know beforehand whether you're good enough to qualify for the Olympics. As a university teacher I want undergraduates to receive good training in biochemistry and I want doctoral students to get the best possible supervision. And, of course, in my academic field I would like to be successful and influential and be among the best in that field. It's important to me to undertake creative, innovative research. Perhaps I'll succeed in developing a product. I think it would be great to create something that can be used in research.

The Flash-Caps are integrated into the mRNA (graphic). In this way, Andrea Rentmeister succeeds in steering the production of proteins in living cells.

#### Flash-Caps and Co. – the project

Andrea Rentmeister's focus as a researcher is on a biomolecule without which no living thing could exist: mRNA. This 'messenger RNA' plays a central role in the production of proteins in cells. Rentmeister and her team have developed a new biochemical tool which enables them to control the translation of RNA into proteins inside cells. The heart of the process are so-called Flash-Caps. These tiny molecules produced by the Münster chemists are integrated into the mRNA and, as a result, the translation of long mRNA sequences is almost completely blocked. What is special about this is that, unlike in other processes, the mRNA sequence is not changed. Light also plays a key role: the Flash-Caps are removed through illumination, and the natural mRNA is then present unchanged. The process can be applied in standard laboratories worldwide - in molecular biology, RNA biochemistry, cell biology and the development of mRNA therapeutics. The team is also working on improvements, and there is now a further development of the Flash-Caps – the so-called Cou-Caps. Unlike Flash-Caps, these Cou-Caps are not separated off by means of ultra-violet light, but by using visible light, i.e. under milder conditions which do not impact the cells.

The Proof of Concept Grant, worth 150,000 euros, enables Andrea Rentmeister and her team to gauge whether any transfer to practical applications can succeed. In collaboration with business chemist Prof. Jens Leker, for example, she is investigating whether it might be possible to set up a company with her development, or whether an existing company could add the process to their portfolio. The team is offering researchers the use of the process in order to try it out and give feedback on it which can help to establish in which of its features there is room for improvement.



https://flash-caps.de



AFTER THE FALL OF THE BERLIN WALL, A PASSION FOR EASTERN EUROPE

In the spring of 2022, Russia invades Ukraine. After a Münster University podcast, Prof. Ricarda Vulpius from the Department of History, an expert on the two countries, becomes a national interview partner in great demand by the media and the public in March. She takes a walk with author Norbert Robers – seeking out the traces left by Russians in Münster.

lesson or two on Czar Peter the Great, Vladimir Lenin's role in the 1917 revolution and as the founder of the Soviet Union, the Cold War ... when Ricarda Vulpius gained her Abitur at a grammar school in Bonn in the spring of 1989, she had what was at that time the usual basic historical knowledge of eastern Europe. What to study? And what career afterwards? For Ricarda Vulpius, all this was in the (West German) stars when, after November 9, the Berlin Wall began to be torn down, and there was not only an important chapter in the history of the world suddenly being opened, but answers to her questions were appearing, too. "I knew straight away that my reaction to the Wall coming down was that I wanted to study Eastern European history," she says.

> From then on, the history of the Russian Empire - an empire that was run by a multiethnic elite which included ministers with a German-Baltic or Polish heritage – and of Czarist Russia and the Ukraine were the

> > in Münster-Nienberge

honouring the

The Haus Spital Cemetery

Münster – traces which the city's former senior librarian, Dr. Gottfried Kratz, has collected in an essay. Ricarda Vulpius walks slowly through the rows of the Haus Spital War Graves Cemetery in Münster's Nienberge district. Here lie buried around 800 war dead from the First and Second World Wars. Originally set out for the dead of all nations from what was, at that time, a neighbouring prisoner-of-war camp, Belgium, Italy, France and Britain each arranged for the remains of their nationals to be moved back to their home countries after 1945. The Soviet dead from the POW camp remained behind - and, since then,

Haus Spital has been known as the "Russian Cemetery".

focus of her interest, her academic career and her research.

It was precisely this combination which - within just a

few days in February 2022 and for clearly understand-

able reasons - led to her becoming a much sought-after

and highly regarded interview partner in the media. "The

podcast with the Münster University Press Office was to

blame," says Ricarda Vulpius, who was born in Bonn, with

a laugh. "After that, I was just inundated with requests,"

she says as we set off on our walk through Münster one

sunny afternoon. As a result, she says, lots of media asked

her for an assessment, for interviews, for commentaries

on the reasons and the background for Vladimir Putin's

invasion of Ukraine; and just as many clubs, educational

institutes and adult education centres invited her to come

and give talks. Ricarda Vulpius, who has held the Chair of

Eastern European and Eastern Central European History at Münster University since 2021, is acknowledged far

beyond Münster as an expert on Russia and the Ukraine.

On foot and by car, we follow the traces left by Russians in

a Greater Russian Empire. Three days before the invasion of Ukraine on February 24, he gave the masterly speech of a demagogue. On this day, at the latest, it was clear that he would soon strike."

Leaving Nienberge, we take the car to the Zwinger (part of the old city fortifications, situated by the Promenade), where the Nazis executed Soviet prisoners of war in World War Two. Ricarda Vulpius talks of how she visited Moscow on a study trip in 1989 and met her future German husband there; of her one year spent studying in Irkutsk, Siberia, from 1991; of how she thus experienced the disintegration of the Soviet Union at close quarters. Originally, she wanted to work as a journalist and wrote a few texts for the Reuters news agency. "But it was in Irkutsk in particular that I realised I was gradually losing the objectivity necessary for a journalist. I experienced such human dramas - for example, how a woman had an abortion out of sheer economic necessity and desperation. I thought this was so intolerable that I found it impossible to report on events in this country in an objective, level-headed way."

Coming from Kanalstraße, we walk up to the Zwinger - a monument in brick to inhumanity and brutality. "The war in Ukraine shocks me every day anew," says Ricarda Vulpius, who wrote her habilitation on "Russia as an Imperium in the 18th Century. Imperial and Colonial Concepts and Practices among the Russian Elite" at the University of Munich. The deep bond she feels with both countries means, she says, that she repeatedly has to be clear in her mind about her current role as someone who is "emotionally affected and, at the same time, an academic. Emotional responses are important to me," she says. "At the same time, my academic work helps me to disengage myself from this emotional aspect. It's a kind of refuge."



We sit down in a window recess of the Zwinger and watch the cyclists going past. "Here by the Promenade, I am struck yet again by how much quality of life Münster has to offer. I feel very much at home here," she says. She still commutes between Berlin and Münster, and one of her three children is studying at Münster University. "In the medium term we could build up a second centre of our lives here," she says. She likes literature and music and the best way for her to relax is by playing the piano.

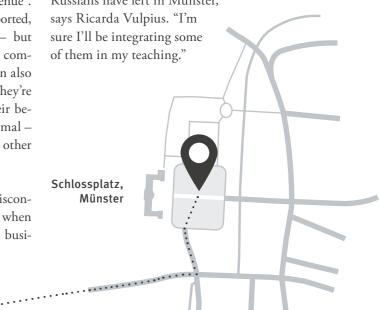
#### "There have been - and still are - too many people who say they understand Putin," \

In Gottfried Kratz we read that on 6 November 1813, after the Battle of the Nations at Leipzig, there were Russian troops on Münster's Neuplatz - in other words, in front of the Schloss, which was completed in 1787 - who "were camped with their horses and, in order to make a fire, used some of the trees from the nearby avenue". Everywhere, shopkeepers closed their shops, Kratz reported, "because the Cossacks certainly bought things - but seldom paid for them". Ricarda Vulpius, who has a command of Russian, English, French and Latin and can also read Ukrainian texts, has met many Russians. "They're very hospitable, but they can be a bit coarse in their behaviour. Also, many Russians tend to be more informal which on some occasions I find can be a relief, but at other times a bit disconcerting."

What Ricarda Vulpius found much more than disconcerting - disturbing, actually - was the time in 2014 when 60 German personalities from the fields of politics, busi-

ness, culture and the media warned Europeans against "warmongering" vis-à-vis Russia. Along with 119 other experts on Eastern Europe, she responded to this with the Appeal from the 120. In addition, in February 2015 seven experts each from Germany and the Ukraine took a stance by setting up the "German-Ukrainian Historians' Commission". They promote the mutual dissemination of knowledge about the history of both countries - primarily in order to avoid any possible falsifying of history. There have been – and still are – "too many people who say they understand Putin," is Ricarda Vulpius's criticism.

Our walk draws to an end, and we take another look at Gottfried Kratz's essay. "From the late 18th century onwards, Münster, too, is part of the eventful history of German-Russian relations," it says on page 3. "I'm impressed - and moved - by what fascinating traces Russians have left in Münster,"

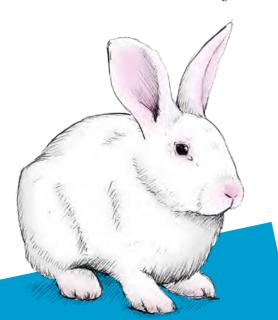


# Saying amen ... and sometimes no

24 April is international World Day for Laboratory Animals. Experiments on animals for research purposes are a controversial subject. Someone who has long advocated transparency in this field is **Prof. Stefan Schlatt.** As head of the Centre for Reproductive Medicine and Andrology (CeRA), he researches into how life is created, and he is also a deacon in the Catholic Church. Sophie Pieper accompanies him on visits to his lab and to Münster's St. Paul's Cathedral.

cience and faith: for many people, this may represent a contradiction – but not for Stefan Schlatt. He is interested in both, which is why, after passing his Abitur, he studies biology and catholic theology at the University of Münster. After passing his first state examination in theology, though, it is his interest in the natural sciences which predominates. He writes his degree thesis at the Institute of Reproductive Medicine, which is a coincidence – or, rather, an act of providence – which he owes to his theological studies: one of his professors, doing research into ethical questions relating to reproductive medicine, encourages him to address the biological side of the issue.

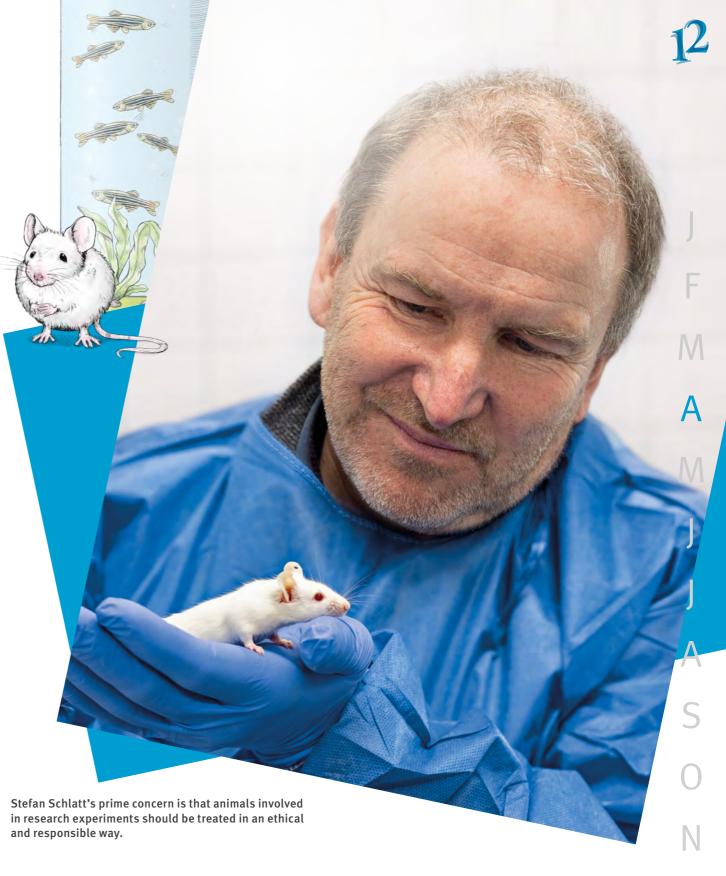
For his diplom thesis, Schlatt carries out research on laboratory animals for the first time. He studies the cycles of female hamsters with the aim of drawing conclusions on



their fertility. For his doctoral dissertation, it is primates which constitute part of his research – likewise for the first time. He does not, however, work directly with the animals, but studies rather the concentration of hormones in tissue samples. The Institute subsequently offers him a position as a postdoc.

The project involves a contraceptive pill for men. "A fascinating topic," as Schlatt recalls, "but I had considerable misgivings because this time I was supposed to work on the monkeys not indirectly but invasively. This was 30 years ago, and the conditions in which animals were kept were different from what they are today. I took a very critical view of this – and said so quite openly." This is the first time in his career that he expresses dissent - and it is not the last time. His criticism is not without consequences. Just the opposite: the Institute releases him from his work. The dismissal does not, however, last long. A few days later, he is asked to come for a meeting. Schlatt doggedly presents his arguments again - and achieves a success: the parameters are changed in the experimental set-ups, and the conditions in which animals are kept are improved. In the summer of 1992 he begins his postdoc work.

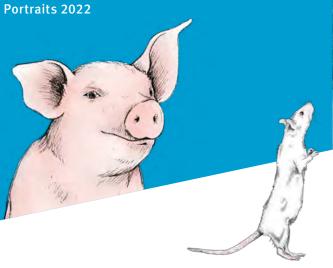
What follows are research stays in Melbourne and Pennsylvania, and a professorship in Pittsburgh, before he returns to Münster in 2008 to take up the position of Director of CeRA. Here, he works primarily on male infertility. "I investigate ways of producing sperm from stem cells," he explains. "If we can manage to do this, then in the case of boys who have cancer and are undergoing chemotherapy, we can first take stem cells from their testicles and in this way give them the opportunity later, as adults, to father children."



Stem cell research, as well as reproductive medicine, are highly sensitive fields of research in Germany and are subject to many restrictions – for example, through the Embryo Protection Act. If a couple undergo assisted fertilisation, there are often more embryos produced than can be used. These excess embryos can be frozen or donated to other involuntarily childless couples. But freezing embryos is a costly business for couples and donating them is complicated in Germany – which means that many embryos have to be disposed of. The alternative – donating

them for scientific purposes – is prohibited by the Embryo Protection Act. "The Act is outdated and hasn't been reformed in 30 years," is Stefan Schlatt's criticism. "In other countries, research on surplus embryos is allowed for up to 14 days after fertilisation, which means that research is much further advanced there."

Researchers and organisations such as the Leopoldina (the German National Academy of Sciences) have long been advocating for the law to be revised – so far unsuccessfully.



"There is a lot of prejudice and ignorance surrounding this topic," says Schlatt. "Discussions quickly turn to 'designer babies', although this has nothing to do with our research. We want to know how egg cells or sperm function — and thus help couples to actually have a child. It's all about life and the question of how it is created."

It is not only the question of how life is created that drives Stefan Schlatt. It is also the issue of treating life – or, to put it another way, living things – in an ethical manner. This is because experiments on animals are indispensable for his research. At CeRA, the researchers work with

#### "We want to know how egg cells or sperm function – and thus help couples to have a child ..."

Prof. Stefan Schlatt

mice, rats or monkeys. "We examine mechanisms which we want to develop and adapt for treating people," says Schlatt. "For this purpose, we need the most relevant animal model. If we use animals for the purposes of pre-clinical research, we have to use those that provide us with the most meaningful results as regards any transfer to humans. This is why we have to work with monkeys for some of the questions we're working on." For Schlatt, it means weighing up benefits. If the scientific benefit is essential, the use of lab animals can be justified. Nevertheless, he often struggles with the issue. "It's never an easy decision," he says.

From the very beginning of his academic career, Stefan Schlatt has been going against the conventional practice of communicating as little as possible about research involving experiments on animals. Instead, he displays transparency and openness when talking about using laboratory animals. With such openness he often rubs people up the wrong way. "I'm very much at loggerheads with colleagues in research because I speak openly about the

use of animals in research experiments. I also have a dispute with animal welfare activists who condemn me for using animals in the lab. Between these two camps, I'm pretty much on my own. But I act from principle."

This is what characterises Stefan Schlatt: a thick skin and a clear stance – two qualities which stand him in good stead in his capacity as chair of the Coordinating Commission for Research Involving Animal Experimentation at the University of Münster which the Rectorate set up in 2013. The committee's tasks include taking a close look at all the processes involved in handling lab animals, developing a culture of transparent information, and advising various bodies at the University of Münster on issues relating to animal welfare. The committee's members include natural scientists, physicians, ethicists, animal welfare officers and students.

In 2017 the University of Münster approved the "Guidelines for the Ethical Treatment of Animals in Research and Teaching" which had been drawn up by the Coordinating Commission for Research Involving Animal Experimentation at Münster University. "That led to heated discussions amongst committee members," Schlatt recalls. The sticking point was the proposal to include in the Guidelines the aim of no longer having any animal experiments at the University at some point in the future. Schlatt voiced his objections – yet again. "From my point of view, it was wrong - and that's what I said in our meetings. There came a point when the debate was so highly charged that we agreed that each person could make just one more contribution to the discussion. It was a tough struggle," he relates in retrospect. "What we agreed on was the wording that all efforts would tie in with the vision of no longer needing animal experiments in research at some point in the future."

With its Guidelines and its initiative on transparency, Münster University has assumed a pioneering role in Germany. There is no other university in Germany, says Schlatt, which deals so openly with the issue. A part of this transparency initiative was the Animal Welfare Day which took place at Münster in October 2022 and which was organised jointly with the German Research Foundation (DFG). The programme included panel discussions, talks

and a science slam on the issue of animal welfare and animal experiments. "With this Animal Welfare Day we succeeded in getting a discussion going between different disciplines and members of the public on the issue of how to treat animals."

Talking about tackling difficult issues, this is a key role which Stefan Schlatt has in his capacity as a deacon in the Catholic Church. His faith has been a part of his life for as long as he can remember. His ties to the Church still remained close after the theological studies he began, and he was engaged in

voluntary work in his parish in Altenberge, just north-west of Münster. He wanted to do more at some point and became interested in the office of a deacon. At the same time, the Catholic Church has a clearly stated position as regards what his research involves: it has an extremely critical view of reproductive medicine. This frequently stated view is that a child should result from the love between a man and a woman and not from any medical intervention. How could this be compatible with Schlatt's work? This was a question which Münster's bishop, Felix Genn, no doubt asked himself when, in 2014, Schlatt expressed to the diocese his interest in becoming a deacon. "Genn called Schlatt, "and asked me why I, as a scientist working in reproductive medicine, was applying to become a deacon." But for Schlatt there is no conflict between his faith and his work. "I have my faith, and I stand up for the values of the Church. I just find its laws difficult."

After a work-intensive and time-consuming period of training lasting four years, Stefan Schlatt was ordained as a deacon in Münster's St. Paul's Cathedral in 2018. Since then, he has been active in his parish in Altenberge. He holds church services, officiates at funerals or provides support for families after a bereavement. "It is often very emotional and demanding work, but at the same time it is very rewarding," he says,

adding that he gets a lot back in return.

Nevertheless, he often struggles with the Church, with its cases of child abuse, with the way it treats women – but in particular with its views on how life is created, or rather: how it should be created.

His unshakeable will to change things does not stop at the Catholic Church. "It is precisely with my scientific background that I can stimulate a change in thinking and enter into a dialogue with people higher up in the Church. Many of them take the easy option on the question of how life is created. And in the final analysis, it really is the case that I can only change something if I'm inside the lion's den. If I'm just looking in from the outside, I won't change anything."



Stefan Schlatt was ordained as a deacon in St. Paul's Cathedral in Münster in 2018.



There is always a lot going on in the Botanical Garden behind the patch with the tea plants and the medicinal plants. Quite a number of birds seek out their food here in a small birdhouse in the tree. In this interview with Brigitte Heeke, **Tom Niers** explains how, at the same time, he uses it to feed a database. This project, which is being carried out by the Institute of Geoinformatics, received the University of Münster's Citizen Science Award. Since May 2022, the smart birdhouses have also found a home in private gardens.

iodiversity is declining dramatically world-wide. Can public and private gardens help to preserve this biodiversity? Together with his fellow students Jan Stenkamp and Nick Jakuschona, geoinformatics undergraduate Tom Niers thought up a citizen science project which looks into the question. The team and its cooperation partner, NABU Münsterland (Nature and Biodiversity

Conservation Union), received the Münster University Foundation's Citizen Science Award for their project entitled "How diverse is my garden?" Since then, the three inventors have been deluged with enquiries and have been explaining their concept in well-attended workshops. The new feeding boxes are popular with people and animals alike, and families and school classes in particular enjoy assembling the boxes themselves.

Every week, Tom Niers (24) tops up the boxes with sunflower seeds from a 10 kilogram bag. As if arriving at an agreed time, visitors – some tits, come to nibble at the seeds promptly turn up in the Botanical Garden to our interview with Niers. Some passers-by stroll along the paths, the wind gently moves the branches back and forth, there are still a few leaves on the ground. Everything seems to be nor-

... Wait a minute! Why is there a cable leading out of the feeding box to a nearby socket?

mal. Except ...

Because we haven't yet installed the solar module.

## Since when do feeding boxes need electricity? For a camera?

Exactly, but it's much more than that: power is needed not only to top up the boxes with more food, and for the camera, but also for a microcomputer, some scales, a sensor for air humidity and temperature, and a microphone, which are all in the box. The feeding box counts the birds, makes videos, measures their weight and determines what species they are. The data are collated on a server and

are publicly displayed on a website for all to see – and it's all live, too.

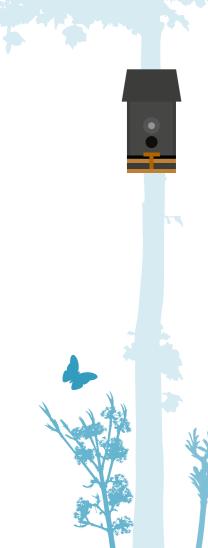
Together with fellow students, geoinformatics student Tom Niers develops a smart feeding box which counts birds, measures their weight and determines their species.

#### What do you do with the data?

Everyone can have access to the data in each of the boxes – which we call "birdiaries" – and use these data for scientific work, for example for research purposes or for workshops with members of the public. The idea is to produce concepts to protect the diversity of species. After all, the Red List of endangered bird species in Germany is getting longer and longer. The last survey, carried out in 2021, showed that almost every second species of breeding bird was endangered.

# Is it primarily the technology that fascinates you, or is nature at the forefront of your project?

We all had a basic interest in nature before we began. Today I'm also interested of course in seeing which species of bird visit the various gardens. Before our project, though, I had more to do with technology. I'm studying geoinformatics and we can undertake two or three study projects for which we select a topic. In our first master's semester it should be something from the fields of image recognition, citizen science or artificial intelligence. At the moment, everything has to be "smart" in some way. Together with our in-



structor, Dr. Thomas Bartoschek, we thought about what the use of smart technology is. To that extent, we could just as well have opted to count people entering shops.

# Instead of which, the three of you thought up the idea of smart feeding boxes for birds. How did that come about?

Quite by chance, we came up with the idea of constructing a prototype for a fellow student's garden. There is already a smart environmental measuring station in existence, the senseBox. But our aim was primarily to observe the occurrence of garden birds – and to understand the factors on which this occurrence is dependent. The total area covered by gardens in Germany is not insignificant - it corresponds roughly to the total area of all German nature reserves. So then we thought that it might make a difference if private gardens help more to protect the diversity of bird species in future.

# Can such a smart feeding box be set up in every garden?

Yes, some of our feeding boxes can be found on balconies. The only requirement at the moment is a functioning power supply and a WiFi connection. The camera and the microphone are of course set in such a way that only a bird can be seen or heard on the

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video and nothing else. The audio and video recording begins as soon as a bird alights on the perch at the front of the box, and it runs for as long as the bird is sitting there. The background is blurred, just as in online video conferences. The videos are only saved and sent out as long as a bird is sitting on the perch.

The data are cached and transmitted

#### What happens after that?

to our own server, where they are reconciled with the database there by means of artificial intelligence. At the moment we are using a trained Google model, but later on we'll also be using our own data as a basis. This is typical of such open access projects. For years now, a lot of researchers and amateur ornithologists have been helping to compile inventories, for instance in the Garden Birdwatch or Winter Birdwatch campaigns which NABU launches twice a year. The plan is for this to continue. One of the advantages which our method has - which complements this work on inventories - is that perhaps one day data can be recorded to a greater extent, time-wise and location-wise, than they are today. Our feeding boxes, namely, analyse the birds' visits round the clock, seven days a week.

#### Why is that so important?

Many questions that researchers have can only be answered as a result of this, and those involved can have access to a much larger database – for example, when comparing differences between the diversity of species in urban and rural areas, or when looking at the consequences of climate change. Rock gardens are of no help to plants

and animals. Our data show how a garden's properties contribute to diversity.

## Should we actually feed birds all year round?

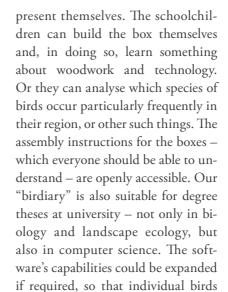
Yes – they also search for food in the summer. Out in the wilds they now find less food than in earlier times, especially in towns and cities. We discussed this with NABU. But the winters are naturally the main season for birds at the feeding boxes.

# What does the Citizen Science Award mean for your project?

Naturally, we were delighted at the recognition for our work. The award helped to make the project so popular. Since then, a lot of people have taken part in our online survey and expressed an interest or built their own box, either by themselves or with us in a workshop. Of the 50 or so people who were interested, around 20 were offered a place in the first workshop. The criteria, for example, were the conditions prevalent in each garden - in other words, the question again of WiFi or power supply. In the long term, we'll certainly be switching over to power banks or solar modules or enabling data to be passed on via mobile communications. Also, it's important to us to have a broad range of people involved from very different households: families, the elderly, school classes.

#### So a feeding box in a school playground would be conceivable?

Sure – or in a school's garden! For school classes especially, a lot of opportunities for research activities would



to record the different species of birds.

Once a week, Tom Niers tops up the sunflower seeds in

the feeding box in the Botanical Garden. The box is there

#### Do you know whether other students are continuing to work on your smart feeding boxes?

could be recognised.

As far as we're concerned, we have come full circle because we have now been offering a study project for bachelor students. In particular, the students have helped to improve the software. For example, they have expanded the statistics tool and programmed a preview of the video on the map for the internet. We are

indebted to a citizen scientist from Bonn that the videos can now be cached before they proceed to the server. Some study projects are interesting, but are over and done with after one semester. We received follow-up questions — e.g. "Where are the boxes available?" — which motivated us to carry on.

#### It sounds like a lot of work, though. Do you have any hobbies to balance it?

I play tennis and floorball at University Sports. Floorball is a kind of hockey, and we also took part in the annual sports tournaments in early December. Otherwise, the "Birdiary" currently fills our free time - in addition to studies and working as student assistants in other scientific projects. Although the project is time-consuming, it does mean that we get to know a lot of fields of work: office work, writing applications, maintaining our Instagram account, presenting the project at scientific conferences. It really is a lot of fun! We're delighted at the interest shown by the citizen scientists and at the

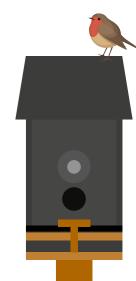
support provided by the University of Münster – for example, by the land-scape ecologists' workshop, by SA-FIR's research funding support, by the AFO Innovation Office, but also by the Rectorate, which recognised us as a student research project at a very early stage.

# Do you too have a feeding box on your balcony?

Not yet, but we look after a range of different stations nearby – including this one here in the Botanical Garden.

#### wiediversistmeingarten.org







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# LISTENING -AND BELIEVING

People are an important object of study and point of reference for many academic disciplines. Some of these disciplines get closer to people than others do. Just how close this can get is something that ethnographer and sociologist Dr. Natalie Powroznik experienced when, together with four colleagues, she investigated sexual abuse in the Diocese of Münster and spoke with victims. It is an issue which remains abstract for many people, but Natalie Powroznik experienced it at first hand when the victims spoke to her about their ordeals. On 13 June 2022, after two and a half years of work, the team of researchers present their concluding report to the public. Now, one November afternoon, Powroznik changes roles – from that of an interviewer to that of an interviewee in conversation with André Bednarz.

hat is necessary for a good interview in her discipline? "For me as an ethnologist," says Natalie Powroznik, "active listening, emotional intelligence and intuition are especially important." What she means by intuition is a feeling for when silence "can lead to something more being" are." This means that what counts is the individual person revealed," she explains. It's important, she adds, not to offer possible interpretations but to give as much space as possible to interviewees for their answers. Just how good an interview partner Powroznik is, is shown in the eye contact she builds up - displaying interest and attentiveness – as well as in the precise explanations she gives. Not that she is free from any nervousness. "It's unusual to be the one answering the questions," she says. The interview with the religious scholar and ethnographer Powroznik takes place in the auditorium in the Schloss. Here, the first photos are taken for this portrait as it was here that in June 2022, sitting on the small podium, she presented her results - not only to representatives from the media but also to many of the victims to whom such harm had been done by priests in the Diocese of Münster.

"Before the presentation I was very tensed up, because I wanted to fulfil the expectations which the victims had," says Powroznik. "At the same time, it was good to see

many of those victims again." She first met them in 2020, to hear their stories. The reason she was a member of the project team lay in her working methods and her experience. Unusually for a sociologist, her research is primarily of a qualitative and not a quantitative nature. "It's all about the representation of people, not how representative they and not only their role in the larger picture. Just how open she is to anyone who has a story to tell, and sometimes one marked by suffering and misery, can be seen in her academic career so far. This has included a research stay in India, where she provided support for women with mental health issues, as well as her work in refugee accommodation centres, where she helped families to manage their everyday lives. "In work like this," she explains, "a certain asymmetry can quickly arise between the researchers and those involved in the research, i.e. the interviewees. For this reason, it's important to me that I should be approachable and accessible and that I should reveal things about myself: Who am I? What is my social status? What experience do I have?" It's about respect for the other person, and about working with other people and not on them – seeing them not just as passive creatures but also as people who can act for themselves. All this requires a critical view of one's own role, she adds, as well as constantly adjusting how close or how distant the relationship with interviewees should be.



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But when Natalie Powroznik listens, in particular to people who have experienced injuries and traumas, she does not remain unaffected. Some of the interviews with the victims of abuse in the diocese lasted three and a half hours. "After such conversations I went home exhausted and needed to be alone," she says. Based on her previous experiences, however, she had already suggested to the team a possibility of helping them to cope with what they heard, namely supervision by a psychologist. This was then established as part of their work. While speaking about this exhausting work, however, she doesn't forget those on whom the interviews made very great demands – in a different and much more immediate way: "I'm very grateful to the victims that they managed to go through with these interviews," she declares.

#### Study on sexual abuse

Between October 2019 and May 2022, five academics investigated cases of sexual abuse and the structures facilitating it in the Diocese of Münster in the years from 1945 to 2020. The work on the study was undertaken on the initiative of the diocese, which made 1.3 million euros available for it. The authors were historians Prof. Thomas Großbölting and Prof. Klaus Große Kracht, who led the study, Dr. David Rüschenschmidt and Dr. Bernhard Frings, and Dr. Natalie Powroznik. Their findings showed that between 1945 and 2020 at least 196 clergymen in the Diocese of Münster committed acts of sexual abuse on minors. According to the researchers, the number of victims was reckoned to be at least 610 – although the real figure may well be eight to ten times higher. The authors of the study attested to failures of duty and cover-ups on the part of the bishops and other church officials active from 1947 onwards. The Central Committee of German Catholics (ZdK) said the report was a "milestone in the process of reappraisal" – a process which was supported by an eight-strong advisory body which gave advice to the researchers on compliance with academic and legal standards. Three victims, including the initiator of the self-help group, were also represented.



http://go.wwu.de/missbrauchsstudie



She was the only researcher in the team who was not a historian. "This constellation enabled us to combine the best of two worlds - history and social sciences - with each of us remaining an expert in their own field," Powroznik explains. She is a good example of how interdisciplinary working and the expert's approach can run together. Born in Leipzig in 1987, her interest in Hindu culture led her to embark on a bachelor's programme in Münster in religious studies - without having been religiously socialised herself - and philosophy. For her master's degree she specialised in social anthropology - a subject in which she subsequently wrote her doctoral dissertation, though she defended her thesis in sociology. Powroznik is a scholar who crosses the borders between disciplines and, as a result, constantly changes perspective. "This changing of perspectives is especially important for my work with people," she says, "because I want to understand what certain experiences do to people." As far as the study on sexual abuse and similar complexes is concerned, what is particularly important, she says, is to maintain an attitude towards the phenomenon of 'this might well be true', so that victims can actually open up. "Too often, people are not listened to because what they describe is dismissed as being untrue." Ultimately, she adds, taking an attitude of 'this might well be true' also helps those who do not wish to, or cannot, talk about their experiences.

Natalie Powroznik likes people. One feels it constantly. For her, people do not cease to exist when their stories have been written down in the form of studies. Her happiest moments include seeing what happens after the intensive work she has been carried out. "It was impressive to see what became of the young people I worked with in a refugee accommodation centre. Or of the women in India who left psychiatric hospitals and built new, independent

lives for themselves." It was a similar experience for her with the investigations into sexual abuse. "It was an important moment for me when I shook hands with the victims' representatives at the presentation." Powroznik also shows her appreciation of and gratitude for the excellent collaboration with the colleagues with whom she worked on the study for two years — not only the four other authors, but also the student assistants and research assistants.

has been a dedicated user of the city library for years, borrowing films, games and books.

In June – standing on the podium, facing representatives of the German and foreign media, feeling the eyes of numerous victims and of the bishop on her – Natalie Powroznik radiates an aura of seriousness. It is a seriousness which seems appropriate and, at the same time, weighs heavily on this otherwise so friendly and outgoing woman. On the mother of two children with whom she likes most of all to go to the city library to borrow books, films and games. On the woman who has a soft spot for anime, console games and cinema and for biographies of great people such as Henry Kissinger. On the woman who enjoys tea and early morning sport, and on the time manager who has successfully juggled studies, PhD and work at the Institute with bringing up two children. In the numerous projects she has undertaken, she says, she has always drawn on all these facets, which she calls "social roles" - facets which cannot be guessed at, however, on that 13 June. After all, even though she and her colleagues are photographed and interviewed countless times on this day and can be seen everywhere from local TV to the national news programmes, it's all not so much about them as about decades of sexual abuse, about the perpetrators and, above all, about the victims to whom the researchers have given a voice with their 600-page publication.

The importance which the study would attain quickly became clear to her. "Victims that we knew, and others that we didn't, expressed their appreciation, and media coverage was extensive," she remembers. "I realised that our work was not only being noted by the academic community, but that it was also attracting far more widespread attention." Hundreds of times the team's achievements were reported on over the following weeks and months. Understandable, then, that when she is asked what remains of the study, Natalie Powroznik replies, "We brought light into a dark place." A dark place which will probably never quite lose that darkness.



A steady hand

A fast-track career, scientific innovations and medical successes: for senior lecturer **Dr. Maximilian Kückelhaus**, 2022 is quite a special year. In July he is the first surgeon worldwide to perform microsurgery on a living person which is completely robot-assisted. Kathrin Kottke speaks with him about his work as a physician and about the role that research plays for him – and this much can already be said: it is a decisive one.

ake a look inside Maximilian Kückelhaus's operating theatre and you think you're in another world: the surgeon, wearing a 3D headset, is sitting on a chair about a metre away from the anaesthetised patient and moving his hands in the air - much like the conductor of an orchestra. Kückelhaus moves slowly and carefully because the impulses he gives out are transferred to tiny instruments which are located inside the patient's body and which do precisely what the surgeon tells them to. What can be seen here is among the most innovative surgical techniques to be found in microsurgery. It is a success which is the result of years of preparation, teamwork and specialist knowledge.

While he was still at school, Kückelhaus would never have thought that today he would be in the operating theatre on almost a daily basis – although he did have contact with the world of medicine at an early stage: his father was a physician and his

mother worked as a nurse. "After passing my Abitur, I wanted to study economics," he says, "but following an internship in a hospital I decided to study medicine instead." Today Kückelhaus, who was born in Wuppertal, is not only a specialist for plastic and aesthetic surgery and managing senior physician, but also

When he wrote his doctoral thesis in Bochum, he met his supervisor, Prof. Tobias Hirsch, and was fascinated by Hirsch's work in the field of plastic surgery. After successfully completing his thesis, Kückelhaus was appointed to a postdoc position at Harvard Medical School in Boston. "The time I spent in the United States was

"Striving for perfection, and creativity, should definitely be two qualities that a plastic surgeon and a researcher has. If you don't have the creativity to come up with new trains of thought, you'll find it difficult to achieve anything innovative."

Dr. Maximilian Kückelhaus

a researcher and lecturer at the Institute of Musculoskeletal Medicine at the University of Münster. "Although I was certainly interested in medicine as an undergraduate, it was only later – when I came into contact with research – that I developed a passion and a fascination for it," he says.

hugely important to me in two respects," he explains. "In the field of medical research I got to know a new academic system which still influences me today – in particular the open, positive and cooperative approach shown by the Americans motivates both me and my research. Also – no less importantly – I met my wife."

He participated in what was probably one of his greatest successes in his still young career while he was working as an assistant physician at the Bergmannsheil University Hospital in Bochum – a position for which he had returned from the United States in 2015. "Together with colleagues from Italy and Germany, we successfully treated a seriously ill boy who was suffering from the so-called butterfly disease," he says. This skin disease is based on genetic defects and, because there are no known cures, it is often fatal. Thanks to a very complex genetic and stem-cell therapy, the boy survived and is now leading a normal life.

# Innovative research in microsurgery

A team led by Maximilian Kückelhaus has developed an innovative method of performing operations whereby a new type of operation robot designed especially for microsurgery is linked up to a robotic microscope. This method allows the surgeon to be completely "decoupled" from the operating area – which amounts to a revolution in the field of microsurgery.

During the operation the robot – the so-called Symani Surgical System – picks up the movements of human hands via an electromagnetic field and joysticks. Using tiny instruments, the robot replicates the surgeon's movements on a scale up to 20 times smaller. Connected to the operation robot is a robotic microscope made by the BHS Technologies company. This microscope displays the operating area via a "3D Augmented Reality Headset" with two high-resolution monitors. The headset in question is a so-called binocular one, which is able to combine the real world with virtual information. The surgeon's head movements, for example, are picked up and transferred to the robot, making possible even complicated views of the area being operated on. In addition, the surgeon can select various menus by movements of the head and carry out the robot's functions without the use of hands.

The method can be used by microsurgeons to connect extremely fine anatomical structures with one another – for example, in breast reconstruction or after accidents in which patients need tissue transplants. This operating technique also protects the surgeon from fatigue or back issues.

Years of research and several operations were necessary to reconstruct the boy's epidermis, the top layer of skin. "It was a very risky procedure," Kückelhaus relates, "and one which had not previously been carried out on this scale." The boy, who is now 14 years old, is the only person worldwide living with an organ replaced almost entirely by genetically modified cells. The reaction in the media was enormous. "At that time, I travelled around the world and was able to report on the case at specialist congresses and in interviews on TV and radio and I was still an assistant physician," he reports. "On the one hand, it was crazy - but on the other hand it showed me how successful things can turn out when research and hospital both work in tandem."

In early 2018, he and Tobias Hirsch both moved from Bochum to Münster, and since then he has been working in a complex trio of roles: as a physician at the Hornheide Specialist Clinic in Handorf and at Münster University Hospital, and as a researcher and lecturer at the University. "I've been interested in innovative methods of transplantation in plastic surgery for some time now," says Kückelhaus, "and at Münster I have a lot of freedom to push on with my research." In 2020, he completed not only his training as a specialist physician for plastic and aesthetic surgery, but also his habilitation and a master's degree in medical management.

For Kückelhaus, 37, an important role is played by the transfer of his research findings to knowledge that can be applied in hospitals. His focus is on the reconstruction, regeneration and transplantation of complex tissues. It is the smallest structures and minute branches in human tissue that he works on, and which constantly push him to optimise processes and methods. It was therefore very important for his research work that in 2022 the EU funded an operation robot and a robotic microscope. hrough the combination of both instruments we were able to cross the borders of what had been possible up to then," he says. "For example, we can connect blood vessels, nerves or lymph channels with a diameter of only 0.3 millimetres – which would not be possible just using our hands." Also, looking into the future, this technology could be used to perform digitally controlled operations across national borders, specifically involving relevant experts from all over the world in so-called remote operations."

Even though this is not yet possible, the initial results are

impressive. For a conventional breast reconstruction using a patient's own tissue from the abdomen, the surgeon first has to cut through several layers of skin, bone and muscle to get at the vessels to which he joins the tissue. "For the patients, these are massive medical interventions," Kückelhaus explains. "If I use a robot I cause much less damage and, for example, I can join the abdominal tissue to a tiny vessel just under the skin." The pioneering work which Kückelhaus is engaged on attracts a great deal of attention both in Germany and abroad and is described as a quantum leap for microsurgery.

By way of contrast to the "microcosm" within which he moves every day as a surgeon and researcher, it is the "macrocosm" which fascinates him at night. As an amateur astro-photographer, he is out to get images of stars, planets, nebulae and other celestial bodies – regardless of whether it is from his roof terrace in

Münster's Kreuz quarter, or in the Californian desert, which he travelled through with his wife in 2022. "Depending on how far I photograph

into the past," he says, "I have to set exposure times of up to a week." The basic requirement for this is a fascination with intricate technology — whether it's in the operating theatre or in photography. "The lengthy preparation and the correct setting of the telescope and the camera are a kind of meditative counterbalance to the stress of daily work."

It is a passion that requires patience, precision and creativity – just like in his work. "Striving for perfection, and creativity, should definitely be two qualities that a plastic surgeon and a researcher has," he declares. "If you don't have the creativity to come up with new trains of thought, you'll find it difficult to achieve anything innovative." They are two character traits which Maximilian Kückelhaus demonstrates by day, in his work as a physician and researcher, and by night as an astro-photographer.







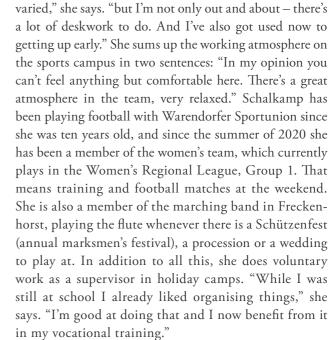
he treadmill emits its monotous whirring sound. With every foot strike, the number of metres run increases on the display. Franziska Schalkamp's arms swing smoothly back and forth. She looks straight ahead out of the large windows in front of her, with a friendly expression on her face and displaying not a trace of exertion. All around her there are students training on the equipment in the campus gym on Horstmarer Landweg. Although Schalkamp doesn't go jogging on a normal working day, sport is still a constant companion. "I love doing sport – I play football and go skiing every winter," says the young woman training to be an events manager at HSP. "That's one aspect, certainly, that influenced my choice of HSP for my vocational training."

As a member of HSP, Schalkamp not only learns about planning, organising and staging sporting events. Her three years of training also include topics such as marketing, costing and sourcing processes, and legal regulations. There is a very wide range of events held at HSP – from the University Sports Show and the Zumba party to the Leonardo Campus run, with thousands of participants, and the December Sports-For-All tournament (Nikolausturnier). In addition to all this, around 25,000 students and staff from the University take part every week in the courses offered in over 150 types of sport. "I like the concept that HSP has," says Schalkamp. "Doing my training here was my first choice, and I was delighted to get the phone call offering me a place."

As the distance Franziska Schalkamp has covered on the treadmill in the campus gym steadily increases, the

"Can't feel anything but comfortable here. There's a great atmosphere in the team, very relaxed." Franziska Schalkamp

more strenuous the exercise becomes – and her cheeks are now turning red from the exertion. But she remains unflustered. Since 1 August 2022, her alarm clock has been waking her up at six o'clock in the morning. That took some getting used to, she says, because previously her school had only been a five-minute walk from home. She now travels to the office by train and bicycle from her home in Warendorf. "The work I have to do is very



After she had passed her Abitur at the Laurentianum Gymnasium in Warendorf, Schalkamp knew that she didn't want to go to university. "Among my close friends, I'm the only one who embarked on vocational training," she says and adds, with a measure of self-confidence, "but that doesn't matter to me. I wanted to have a qualification under my belt – and I can always study at university later." For the path she has chosen

in life there is a good example in her own family: her brother Tobias is training to be an industrial clerk. "I've seen from him that it's cool to work and earn money," she says. If her performance and school grades are good enough, she can reduce her three years of training at Münster

University by six months. And what's in store after that? "Maybe I'll study event management or tourism. But who knows what can happen between now and then? That's why I'm not yet making any definite plans ..."

Franziska Schalkamp coolly steps off the treadmill after her extra session of sport in the campus gym – and returns to her actual job on this, a normal working day.

With around 45,000 students and 8,000 staff, the University of Münster is one of the largest universities in Germany. It offers more than 280 degree programmes in 120 subjects. Providing a wide

range of vocational training – in fields ranging from IT and commerce to trades and laboratory work – the University has around 150 trainees/apprentices in 20 different occupations, making it one of the largest providers of such training in the Münsterland.

**Vocational training at Münster University** 



Further information on vocational training at Münster University can be found at: www.uni-muenster.de/ausbildung

# Using the potential of sports for education

The link between sport and education is the central interest of sports educationalist **Prof. Nils Neuber.** In September, the state of North Rhine-Westphalia (NRW) awards him the NRW State Prize for Sports Science 2022 in recognition of his many initiatives in research and teaching and for the commitment and dedication he has shown. Norbert Robers accompanies Neuber to a school and describes his career and his convictions.

here is a photo showing Nils Neuber – dressed in a beige polo shirt, cargo trousers and sandals - sitting on a bench among the greenery and flanked by five men and a woman. Leisure time, holidays, a group enjoying a relaxed atmosphere - these are the thoughts which occur when looking at the photo, dated 1 September 2006. Deceptive, though - because it was actually Nils Neuber's first day at work as Professor of Sport Didactics, beginning for him with a conference on the island of Baltrum, off the north German coast. Today he looks back fondly at what he calls the "impressive debates" at that time among the sand dunes, above all taking a critical look at "the usual standards and patterns" existing in his subject and developing ideas for "meaningful learning" - in other words, for learning which "grabs people".

Education and sport: these are the two elements which, since then, have been at the centre of sports educationalist Nils Neuber's professional career of research and teaching. Today, you would need about two sheets of A4 paper to list up all the memberships, committee activities and prizes he has had in these fields. To name just a few: he was the spokesman for the Research Association for German Youth Sport, as well as for the "Sports Science Faculties Association of North Rhine-Westphalia"; he

set up the Centre for Educational Research for Sport in Münster and launched the Research Association for Children's and Young People's Sport in North Rhine-Westphalia, of which he is today still the spokesman. "Sport is not a perfect world" – of that Neuber is convinced – "but as the favourite school subject for many girls and boys, it has a great potential for their development. This is what is fascinating and what I've always been dedicated to."

One sunny morning we set out for the Grundschule am Kinderbach – a primary school in Münster which is a partner school of the University's Institute of Sport and Exercise Sciences – and in practically every sentence, every memory and every anecdote you can feel how passionate Nils Neuber feels about his role. And, of course, as you would expect, his enthusiasm and his dedication have long been well-known far beyond Münster.

In September last year, the state of North Rhine-Westphalia awarded him the State Prize for Sports

Science 2022 in recognition of his "outstanding achievements".

However, Neuber had initially resolved to try for a career as a journalist. His aspirations were certainly justified: the Oldenburger Nordwest-Zeitung newspaper and Radio Bremen were happy to accept from him an occasional article or feature. In 1985 he enrolled at Göttingen University to study history and politics, as well as business and social psychology.

Portraits 2022

Nils Neuber has been engaged for many years

in teaching and research on the educational

potential of sport and movement.

"However, a year later," he recalls, "when I embarked on my civilian service at a special school for children with learning difficulties - where there was a lot of sport on the curriculum - I asked myself, 'Why not go for sport?" No sooner said than done: after completing his civilian service he studied sport science, history and pedagogics at Cologne's German Sport University and at the University of Cologne. A broad range of subjects, and today Neuber still profits from the diversity of insights and competences they gave him - for example, the ability to read sources critically, which he gained through studying history.

And talking of a broad range: in younger years - Neuber was born in Karlsruhe and grew up in Klattenhof, 20 kilometres west of Bremen he impressed others with the range of sports he went in for, already then showing his sporting ambitions and talents. Whether in canoeing, playing underwater rugby or doing karate, Neuber felt at home in a large number of disciplines. These were later extended to include numerous artistic forms of sport involving play, music, dance and movement theatre. He combined all of these in his dissertation entitled "Teaching Movement Creatively at Primary School Level". He gained his habilitation at the University of Bochum on the subject of promoting young people's development through sport.

His true sporting home, however, has always been a water container 50 metres in length, two metres deep, and generally fitted out with white tiles – the swimming pool. Neuber comes from a family of swimmers. His mother was three times a competitor in the Olympics, and his father was a trainer and a judge at swimming events. Son Nils's greatest success was achieving 9<sup>th</sup> place in the Lower Saxony

State Swimming Championships. He was also a swimming trainer at TuS Wesseling sports club, just south of Cologne. Even today, 56-year-old Neuber – who is married, has three children and lives in Havixbeck – tries to get out three times a week in the summer and "count the tiles" (as swimmers like to put it) over

Standing next to Neuber and watching children in the playground as they run, climb and chase after balls, talk quickly turns to the focus of his

1,500 metres. "I grew up in the

swimming pool," he says, "and that

still influences me today."

done is for the right tasks to be given to them. Now there's no stopping Neuber as his thoughts pour forth: "It's not wizardry. You have to encourage pupils to contribute their own ideas when doing an exercise, get them to recognise the range of possible solutions. Each child has his or her own individual motor skills and imagination. The tasks shouldn't be too closed - but neither should they be arbitrary. Then any creativity applied will work fine." As an example: in freestyle swimming lessons, Neuber let children vary the angle at which their hands entered the water until the optimum was found and

"This is why the first thing I would call for is for more men to become primary school teachers. Also, the work done by primary school teachers should at long last be recognised, and the importance of movement, play and sport for children's development should be taken seriously. Sport must not be treated as a superfluous subject at school."

Prof Nils Nauhar

academic work. How can children and adolescents be helped in their development by means of sport? It sounds simple but, if taken seriously, it is probably much more difficult. The "only" thing that needs to be

each child discovered for him- or herself the practical benefit and the effect.

This "tactic" is something that Neuber and his colleagues at the Institute still apply today. Many students, he



says, spent years in a sports club and were used to doing sport that was "heavily standardised". "It's extremely difficult to remove all the mechanisms that were drummed into their heads in younger years," he says. The aim is not to indoctrinate students, he says, but rather to animate them to question things. For example, not every relay race on the beach has to produce a winner, not every sport must be measurable. "Experience-oriented learning" is the formula used at the Institute, on Horstmarer Landweg, of which Neuber was Director from 2016 to 2022.

Which is not to say that he understands this as a "call to anarchy". Learning patterns and standards is both important and helpful, he says. "We have a dual assignment: opening up the culture of sport to students and, parallel to this, helping them to develop through play and sport," is how he summarises the concept.

Watching the children running around in the playground in the Münster district of Kinderhaus, Nils Neuber begins talking about something else dear to his heart: helping boys in their development. "It's well documented that boys have been lagging behind girls in all stages of education for the last 50 years or so. After years of promoting girls – and justifiably so – we've lost sight of the boys," he says. What to do? "We need to promote boys at an early stage and show them that masculinity is not one-dimensional and that they can be not only strong and assertive but also, to an equal extent, empathetic and helpful. And boys

need authentic role models," he adds. "This is why the first thing I would call for is for more men to become primary school teachers. Also, the work done by primary school teachers should at long last be recognised, and the importance of movement, play and sport for children's development should be taken seriously. Sport must not be treated as a superfluous subject at school."

Back to the beginning: Nils Neuber's positive experiences on the island of Baltrum in 2006 still influence him today. In 2016 he celebrated his ten years as a professor, and today he still travels to the small island once a year with students. "These visits have proved their worth in many different ways," he comments. "The fresh air at the North Sea clearly does both students and lecturers good."



# Dual career – full-time student and top athlete

**Cosmo Grühn** is studying law at the University of Münster and has been a member of the WWU Baskets team for just over two years now. In October 2022, the new season gets underway in the "BARMER 2. Basketball Bundesliga ProA", with the Baskets competing for the first time in the second-highest national division for men's teams. In four "quarters", Kathrin Kottke describes how Cosmo Grühn manages a balancing act between studying, training and competing.

Complete concentration in the library: Cosmo Grühn learning for his law studies.



Daily training sessions during the week, and matches almost every weekend. This is Cosmo Grühn's normal routine, and has been for quite some time now. Grühn, 25, has been playing basketball

since he was a youngster, initially with "USC Freiburg" in his home town of Freiburg. After passing his Abitur in 2016 he moved to Frankfurt am Main, where he played in the men's second team of Skyliners Frankfurt, in the ProB

Second Division. Four years later, in the summer of 2020, he moved to Münster and to the WWU Baskets – playing in the power forward position. "The main reason I came to Münster was because of the sport," says Grühn. "I'd already been in contact with the Baskets manager Helge Stuckenholz for a few years and I knew the club well. Also, I wanted to continue my law studies, which I had begun in Frankfurt. The fact that I really liked Münster as a city made the decision an easy one."

During his time in Frankfurt, he was always looking to achieve more. "At that time my sporting ambitions were to play in European basketball or in the First Division of the Bundesliga," he says, looking back. "But I soon realised that basketball by itself wasn't really enough for me." However, today he is certain, he says, that from a sporting point of view he has found his dream location in Münster. The reason? The exceptional team dynamics and the team

spirit. "It's amazing how well the different positions in the club all harmonise with one another. We all love playing together and we all want to work together to achieve success. There's not much room here for individualists," is how he describes the way the team sees itself. Some good friendships have grown up outside of playing the sport together.

When the Baskets moved from the University gymnasium on Horstmarer Landweg to the much larger venue in Berg Fidel, it was not without risk. But it has paid off: the home games are regularly very well attended. Indeed, a proper basketball boom got going in Münster around two years ago, and the WWU Baskets are a showcase for the city. The basketball stadium can hold up to 3,000 fans, including a large number of students, and they cheer the WWU Baskets on with singing and chanting, drums and whistles. "It's an incredible feeling - the stadium really heaves," says Grühn. "When we're warming up, I sometimes get distracted by all the sounds and movements. But when the match starts I'm focused 100 percent," he adds. Anyone watching Grühn during a match can quickly see that he holds the team together - both as an individual athlete and as a team player - and that he brings a particular dynamic and resoluteness to the game which the entire team benefits from.





Focus and concentration are what he also needs in his law studies - especially in the revision courses necessary for final exams. "The weekly workload is formidable," he says. "Re-

vising and all the training determine my daily schedule," says the aspiring jurist - without a word of complaint. "For me, it has always been extremely important to have clear rules and agreements with the basketball team, as well as with the coach and the manager, which means that my time to learn and study is sacrosanct."

Many of his team colleagues are also students or have just started working. For this reason, regular exchanges and understanding for each individual situation are extremely important. The three most important qualities for Grühn, in his studies as well as in his sporting life, are discipline, stamina and motivation - which keep him literally on the ball. "Over the years I have learned to make compromises," he says, "primarily with myself, but also with other people. For me, ever since I was 13, it has been normal for everyday life to consist of learning and sport. My family, friends, fellow students and team-mates know about my dual career and accept it."

Grühn is not yet sure whether he wants to be a lawyer, a judge or a notary after he graduates. "I tend to think in small steps and see what the future brings," he says. "In my experience, most opportunities - whether in sport or in studies - arrive without being planned. But when they do,

I make the most of them." The next milestone is already clear for him: as a student, his focus is 100 percent on his first state examination.



THE GAMES FAN

Lengthy games evenings with friends - involving card games such as Doppelkopf or (board) games such as Root, Terra Mystica or Kartograph - provide Cosmo Grühn with

opportunities to relax after a hectic day of activity: the longer and more elaborate the game, the better. "As a rule," he says, "I can switch off well when I have to think strategically, without any elements of chance involved. But that doesn't mean that things can't heat up. Feelings often run high - after all, the aim is to win," he says. Grühn's passion for board games and parlour games goes back to his childhood. "At home in Freiburg the cellar in my parents' house is full of games."

Boxes of games have also piled up in the flat he shares with his younger sister, who is also studying in Münster. The games are regularly dug out for sessions involving either the two of them or larger groups. If he needs new input for his hobby, he visits his favourite shop on Frauenstraße. "If I could, I would love to spend more time there," he confesses. "I'd try out every single game in the shop."





Cosmo Grühn grew up almost 600 kilometres away from Münster. He sees many parallels between the university cities of Freiburg and Münster – for example the large numbers of bicycles and

students, the green spaces and parks, and the idyllic city centres with their historic buildings. He lives with his sister in a two-person flat to the east of Lake Aa - actually their third flat in two years. "By moving to different flats, I can get to know Münster best," he says. However, he very much misses Freiburg and his parents.

He and his father are keeping up a long basketball tradition in the family. It was his father - who used to be a Second Division coach in Freiburg and is now active in the over-55s team - who ignited Cosmo's enthusiasm for basketball. "I often went to watch my father's matches, and today we still sit down together and talk basketball. This passion we share makes our relationship a very special one," says Grühn. His parents never put him under any pressure, though. "They would have been just as happy if I had taken up a musical instrument and become a creative," he says.

Both his father and his mother have been an important source of support to him after sporting defeats or injuries for example in November 2021, when Grühn broke a carpal bone during training and was unable to play for several weeks. "Sport can give you fantastic highs, but also dreadful lows. When we lost the decisive match in the playoffs in 2021, I was devastated. On the other hand, when we won against Düsseldorf in November 2022, we were all on cloud nine," he recounts. "The low points go on for longer than the highs, though. Sometimes I've been unbearable for everyone for weeks on end. At such times I like to get out of town or have long talks with my parents – regardless of whether it's about my studies or my sport."



**OVERTIME** 

"Besides basketball, I go in for a lot of other sporting activities, for example beach volleyball, surfing or spikeball. I'd like to try out other types of sport,

such as martial arts or fencing – but at the moment there's no time for that in addition to my daily training."

"On a typical Sunday evening, what I like doing most of all is lying on the couch and watching an NFL match on TV with a good friend."

"I like cooking. My favourite dish is a fry-up with vegetables and rice or pasta."

"My favourite player is Steve Nash, a former NBA player. As a basketball star he is involved in a lot of social and ecological projects and draws attention to things that are not right in the world. People who get involved in things they believe in are a great source of inspiration to me."



#### Cosmo Grühn – WWU Baskets

Date of birth: 4 March 1998 Nationality: German Height: 201 cm Weight: 105 kg

With the WWU Baskets since July 2020

2016 – 2020: FRAPORT SKYLINERS Juniors (Frankfurt am Main) 2012-2016: USC Freiburg

#### **Greatest sporting successes**

2015 and 2016: 3×3 U18 European Championships

#### Matches played

2. Bundesliga ProA: 2. Bundesliga ProB: 131 2. Regionalliga:



# **UNDER CONTROL**

It is the dominating issue in the autumn and winter of 2022: the energy crisis. The University of Münster, too, has to – and wants to – make cuts. One of the most important contributions to making such cuts is having lower heating temperatures in all the University's buildings. Heiko Maschke is responsible for technical building services at the University, and one of his tasks in November is to reduce so-called flow temperatures as rapidly as possible, and for as much of the University as possible. Sophie Pieper goes to take a look with him at the technical facility rooms on the PharmaCampus.

ast year, we all turned our heating down at home to save energy, and you did that for the entire University that sounds like a mammoth task ...

Yes and no. Naturally, my colleagues and I didn't go through all 240 buildings at Münster University, adjusting the thermostats. Our job covers the automation for all the technical facilities that can regulate heat, cold and indoor air. We can control the great majority of the installations remotely. What was certainly new, though, was having to reduce the temperature in all the buildings at the University.

The target was 19 degrees, which is the temperature that was stipulated for light physical and predominantly sedentary activities. In most of the buildings, we adjusted the programming of the control technology so that the flow temperatures could be reduced. In addition, the temperatures in the ventilation systems, for example, were also adjusted.

#### That sounds nerve-racking ...

It was. There were absolutely no empirical values we could fall back on,

and sometimes we couldn't predict with any accuracy whether it would all work. For that reason, we all had our hands full after the temperatures had been reduced - after all, we had to check everywhere to see whether the changes had taken effect.

#### Where were the problems?

The older buildings presented a few difficulties. Sometimes it wasn't possible to reduce the flow temperature because the buildings would have cooled down too much, and then we wouldn't have hit our target of 19 degrees. A lot ran smoothly in the case of the new buildings, though.

#### So you cooled down the whole University – and how did things continue after that?

At the beginning, we got some feedback - either from staff, via the crisis team's email address, or from the maintenance supervisors and the building managers. We took a look at the situation in the relevant offices and labs in order to find out where the problems were. The mild autumn weather was a challenge for us, with temperatures of 15 to 20 degrees during the day, but much lower at night. This meant that

the rooms cooled down during the night, but the heating didn't switch on because the outside temperatures were too high.

#### Why not?

That doesn't happen until the average outside temperature drops below 15 degrees for several days in a row. Transitional periods like these are tricky. It's better if it's cold all the time. But after a few teething troubles things ran relatively smoothly and staff coped well with the measures in place.

#### The autumn and the winter put you and your team in an exceptional situation. What does a normal working day look like for you?

The first thing my colleagues and I do in the morning is take a look at the building control system. We check to see what fault signals have cropped up and assess their urgency. We start work at 6:30 a.m. - and that gives us a short head start because the buildings are not usually being used much yet at such an early time, and we can upload any changes in the system. As soon as I've gained a general overview of



Portraits 2022

BA and ICE apply to the automation of all of a building's technical installations which regulate heat, cold and indoor temperatures. BA allows the University to make individual settings and templates for provision to many of its buildings, and a large number of the installations can be controlled and serviced remotely. The aim of ICE is to create the best possible conditions in rooms while at the same time reducing their energy requirements.

he state of play, and I've delegated tasks to my colleagues, I get to work on individual projects. These might be building projects, for example, which have been completed and for which I have to undertake the acceptance procedure.

#### How does such an acceptance proceed?

For an acceptance of the technical facilities I am present, on site, with at least one of my team. I take a close look at the facilities of the technical building systems. Does everything function as it should? Has anything been forgotten? There are always minor faults - and sometimes major ones, too. That's not unusual, because the technology for large buildings – especially research buildings – is complex. As a result of my experience I can quickly see where any problems are. Also, looking for faults is just fun. My colleagues say I sniff for faults like pigs sniff for truffles.

#### ... what a charming job description!

I have no problems with that. Because I've had years of experience, I now know exactly where to look. I'm pleased when I find any irregularities which are still covered by the warranty and have to be rectified. When you're doing an acceptance, you must always remember that the University – and ultimately the taxpayer – has paid for a certain piece of work to be done, and that the contractor is obliged to provide it.

#### What projects are you currently working on?

For one thing, it's the acceptance for building projects such as the Multiscale Imaging Centre, and there are also a lot of new buildings which will soon be ready such as the Centre of Mathematics, the Hüffer Campus, the extension to the GEO1 building, or the replacement building IG1 for the Faculty of Physics. I'm involved not only in the acceptance procedures for the buildings, but also in the preliminary stages. As soon as attention turns to the technical facilities at the planning stage, I'm called in to take a look at the drafts.

#### You've already been involved with a lot of building projects, and you're well acquainted with the University. How long have you been working here? And what were you doing before that?

I trained as an electrician and at the same time studied for my entrance qualification for universities of applied sciences. I then thought about whether to study engineering or become a qualified technician. At that time, though, there was no demand for engineers, so I opted for the technician's course. After I had completed it, my first job was as a service technician. A few years later I moved



In the autumn, Münster University starts an energy-saving campaign, introducing measures which aim to reduce consump-

- max. 19 degrees in workspaces
- no heating of public areas in buildings (e.g. corridors)
- cold water instead of warm water
- lighting in outdoor areas switched off





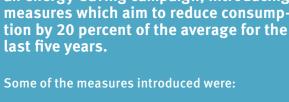
to a company based in Gronau which, among other things, installs control systems for the University of Münster. That's how I got to know the University and its buildings. A few years later I moved to a company in Rheine. For this company I was travelling around a lot - too much so. During this time my daughter was born, which was why I no longer wanted to travel all around Germany to various building sites. Fortunately, at that time a job was advertised for a control technician at Münster University. I applied for the job and got it. That's now twelve years ago - difficult to believe!

#### More than a decade at Münster University – and today you're section leader. When did you take up this position?

After I had worked as a control technician for several years, I moved into energy management, where I worked for three years - until the position as section leader became vacant. I've been head of building automation since 2018 and today I have a really good seven-strong team. Looking back, I can say that moving to the University was the best career decision I ever made in my life. I can work with technology every day, there are always new challenges, and I really enjoy my work – again and again, even after all these years.

#### You have a great passion for technology – in your private life too?

Absolutely, yes! Three years ago I built a house and saw to the electrical engineering and its automation myself. As a result, the heating and the lighting can be controlled centrally - and remotely too. Last year my wife and I fulfilled a dream we had and built a swimming pool in the garden. I planned and installed the technology for it and then put it into operation myself too. It's still functioning perfectly today. The reason may be that I check the water data meticulously - perhaps too much so. You might say that I made a career out of my hobby. It's the reason why I do my job with so much enthusiasm.





- (e.g. no illumination for the Schloss)





ou are one of the best junior researchers at Münster University. How did you hear about being awarded the Dissertation Prize? My doctoral supervisor, Prof. Johannes Bellmann, raised both his thumbs during a colloquium. I just thought that something good must have happened. At this point it wasn't clear to me what it was all about. When he asked me whether I had checked my emails, I said that I had ... but I still didn't know what he was driving at. He told me to check my emails again – which I did, although I was still a bit puzzled. Later that day - it was at the end of October - my father sent me a message on WhatsApp, saying it was incredible. At that moment I was a bit perplexed, and I asked him what he meant – whereupon he forwarded to me the email in question which notified me that I had won the Dissertation Prize.

# But how come the email landed in your father's inbox and not yours?

When I enrolled at the University, I gave the address of my father's email account – young and naïve as I was at that time.

#### And now you finally knew what was going on ...

Yes – finally! I was over the moon, of course. At the same time, I was flabbergasted – I could hardly believe it.

#### **Dissertation Prizes**

Promoting junior researchers is a central strategic task for the University of Münster. Awarding the Dissertation Prizes for outstanding doctoral theses is a traditional part of this. The 15 Faculties at the University can each propose their year's best dissertation for the award. Each prize is worth 3,500 euros. The prize money serves to support research work undertaken by the winners either at Münster Universit or at another university in Germany or abroad. The winners are selected by the Rectorate on the recommendation of the Rectorate Committee for Academic Personnel Development.

#### Why?

Today I still have a great deal of respect for the subject of my dissertation, in which I examine and analyse pedagogical reflection on the basis of follow-up discussions after lessons, seeing it as a phenomenon which could be worked up into a general theory. While reflection is normally understood as being something which is detached and impersonal, I thought it was remarkable that the teachers I accompanied talked about their lessons with a great deal of engagement and emotional involvement. I didn't see this as a deficit, but rather as a starting point for an attempt to work on an ethical approach to reflection. This approach doesn't correspond to the usual research perspective on reflection on the part of teachers, so in that sense it was a gamble. So it was all the more gratifying when I read that my broad and bravely chosen subject was just right.

#### You studied english and educational science at Münster University with the aim of becoming a teacher. Didn't you want to become a teacher after you graduated?

Yes, it was what I wanted – but the aim wasn't set in stone. When I was in Abitur classes at school, it was literature – I had german and english as advanced courses – and educational science that interested me. For me, it wasn't a bad combination and so I enrolled for english and educational sciences in the winter semester of 2011. I must admit, though, that what I expected to do in these subjects had nothing to do with the reality of university studies – which is probably nothing unusual.

### So was it by chance, or was it intentional, that you didn't end up in a classroom but in research?

Both. In my studies I soon became aware of my fascination for developing content and becoming immersed in topics. In the educational sciences in particular, you have to open yourself up to arguments and contexts, as well as being open for criticism relating to the use of terms. It's not about learning theories by heart, but rather about a way of thinking and asking. I hadn't expected that before I started my studies, but the culture of the subject interested me very much. While I was writing my bachelor's thesis about how society handles disabilities and inclusion, I came across the research colloquium held by the professor who later supervised my doctoral thesis. For me, it opened the door to the world of academic research. While I was on my master's course, I had an opportunity to work as a student assistant for Johannes Bellmann in the working group of general educational science. After I graduated, I had a chance to write my doctoral thesis as a research associate at the Institute of Education. And it



was Johannes Bellmann who put my name forward for the Dissertation Prize.

#### How was your time as a doctoral student at Münster?

It wasn't an ivory tower in which I had to work all alone. Quite the opposite: I benefited from discussions with colleagues in my working group. These colleagues greatly eased my arrival as a newcomer in the team in 2017. I got a lot of useful tips – whether on planning and organising a seminar for students, or on attending a conference for junior researchers. What always helped me in getting into subject matter was discussing ideas together with other people. Of course, when I was working on my dissertation I often sat alone in the library, poring over books. The support I received from my supervisor, as well as his critical feedback, was also a great help for me. The beneficial collegiality I experienced is something I would very much like to continue – now that I have completed my doctoral degree and am working as a research associate and degree course advisor in the working group on subject-specific didactics of educational theory.

# Talking of sitting in the library for hours: what hobbies do you have in your free time as a counterbalance to your working life?

In my private life I actually enjoy reading – best of all, contemporary English literature while lying in bed or on the sofa. To clear my mind, I like to go jogging with music. But my favourite sport and pastime is dancing. From an early age I was a Tanzmariechen (a dancing girl at German carnivals) and was in a carnival dance troupe in my hometown near Soest. Unfortunately, though, I had to give that up in my third semester as an undergraduate because I couldn't manage the regular commuting anymore to rehearsals and performances. I then started doing jazz dance and modern dance in Münster. While dancing in a carnival troupe is very rigid, I now have to dance with much more expression and feeling. Today, I'm a member of a dance group and we take part in tournaments. It's a great outlet for me. After a long working day there are no excuses not to go to training. And after a maximum of ten minutes I no longer have to think of work, but only whether we can do our lift properly.

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