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Animal custodians of the countryside



A sheep appears curious and trusting, like the other animals in the meadow, at a press gathering on site in June 2017.

PHOTO: JÜRGEN GÖCKE

Sheep and goats graze the Freiburg castle hill – and help promote research, teaching and conservation

by Nicolas Scherger

"Hello!" cries Nicolas Schoof, moving two electric fence wires aside and entering the meadow – a slope on Freiburg's castle hill, grassland below, forest above. Peace and quiet. Then a black goat stretches its neck out between the trees, glances around and struts down the slope to meet the visitors. Frauke is the alpha. A few moments later four more goats follow her down. "That's the herd instinct," says Schoof and smiles.

But all the same the PhD student from the Faculty of Environment and Natural Resources of the University of Freiburg hasn't gathered all his flock yet. So off we go into the woods. There we find an old pagoda from the days when the area was still a park. In the shade lounging on the cool stone, three sheep chew the cud at their ease. So now they are all there, the eight custodians of the countryside working on behalf of conservation, research and teaching: this cooperation project with the Further Education Academy of the German Caritas Association that owns the area is expected to show the long term changes from grazing to flora and fauna, as part of its teaching work. The herd includes Waldschafe, a longwool breed of sheep, Tauernscheck goats and one Nera Verzasca goat – all farm animals at risk of extinction.

"I'm actively engaged in conservation, and so I had the idea of initiating a project at the University of Freiburg as well," says Schoof. In June 2016 he found the right partner: Dr. Dirk Sichelschmidt, Deputy Director of the Further Education Academy and as such responsible amongst other things for its quality and environmental management. He was immediately attracted by the idea. In addition, the Student Council of the University of Freiburg gave the grazing project funding of EUR 1,700 and with it financed the electric fence that is powered by solar panels as well as the purchase of the animals from an adventure farm in Neckartal. Even before they arrived, students recorded the vegetation on the site, in order to be able to compare data later. The meadow of almost



The magic nibbles tree: Nicolas Schoof, the initiator of the grazing project, gives two Tauernscheck goats a delicious treat.

waist-high grass and moss almost completely covering the ground was already starting to turn into forest – if it had been left untended, in just a few years shrubs and trees would have been growing. The forest itself had hollow trunks and dead wood which offer valuable ecological niches, but as a whole it was too dark there for many species.

Finally in April 2017 everything was ready. "It was lovely to observe how the animals straight away explored everything on the site," remarks Sichelschmidt. They were especially pleased with the brambles, but nettles were less popular. And there were clear changes after just a few weeks: the grass in the meadow now looks as if trimmed with a mower, and the soil has been loosened by hoofs walking on it, giving a chance again to seeds from other plants. Gradually, it is expected that the brambles and moss will recede too and wildflowers which are interesting to insects will start to grow instead. In turn, they could attract animals such as smooth snakes, wall lizards or bats. So species of plants and animals which were originally native here and which are especially valuable for conservation, would return to the site.

In the forest, meanwhile, the animals have nibbled the bark off many trees and eaten up small shoots. In the long term it is hoped that this will once again create a habitat for species which still find it

too dark here at the moment – such as cuckoo pint, melick, silver-washed fritillary or the speckled wood butterfly. "The law that no grazing can take place in the forest without special authorization is a real problem from the point of view of conservation," says Schoof. "The animals promote biodiversity in natural ways – it's far better than any habitat care with machinery." Over the coming semesters, he wants to study the long-term changes to flora and fauna in research projects together with his students. Other conservation measures are planned too, which students can also take part in: options include a pond for amphibians, piles of stones for newts or a 'bee hotel'.

An adventure area for guests

But that's not all! "The project is creating a new adventure area for guests of the Further Education Academy and everyone from Freiburg and the region," says Schoof. So far this is especially apparent at the Academy itself, which welcomes around 24,000 guests to conferences and for overnight stays each year. It is part of a pilot group of five Caritas organizations that in June 2017 received the European Union's EMAS certification for environmental management – the grazing project played an important part in this as an example of careful, sustainable management of the land. "The animals are very much enjoyed by our guests as well as by our staff, and give

rise to a wide variety of reactions," comments Sichelschmidt. Amongst other things, he is planning to survey guests to gather more detailed information about their experience of the environment.

"The meadow is a small example of how we can demonstrate that in conservation and cultural terms the arduous and economically barely recognized work of shepherds and goatherds is incredibly valuable," says Schoof. The team wants to install information boards to explain this to visitors. The project is also valuable for teaching about the environment, "Our animals develop relationships with people and have a calming effect, but they also differ widely in temperament." For instance, Lewi the sheep, a cuddly tearaway, likes to butt his head against people's legs to signal that he wants to be fussed. Franz the goat on the other hand prefers not to be touched – but at the same time is so curious that he will nibble at anything, even yew trees which are in fact toxic to him. Ideas for bringing people and animals together range from the possibility of students acting as temporary herders on the project for a full semester to an adventure space where children can learn about the environment. Schoof and Sichelschmidt relate, "The enthusiasm and the will to make the most of the potential of this project are massive for all involved."

Honor the verses, lift up your voice

The new Tsvetaeva (Zwetajewa) Center aims to present and enhance Russian culture in Freiburg

by Rimma Gerenstein

My verses will be like precious grapes of a fine vintage, their place will only be recognized in the future". Her words sound hopeful, pleading and a little bit defiant. When Marina Tsvetaeva wrote those words in May 1913, neither the 21-year-old poet nor the 20th century had suffered the devastating caesuras the future would bring. A year later, the tsarist empire began to crumble. Millions died in the storm of bullets of the First World War. In 1917, the Bolsheviks violently proclaimed the 'dictatorship of the proletariat' and Tsvetaeva, the daughter of a wealthy, bourgeois family became an enemy of the Soviet Union even as it was taking shape.

She fled first to Berlin, then Prague, and finally to Paris. In 1939, she returned from exile with her family. Her husband, Sergei Efron, was accused of spying and shot. Her daughter, Ariadna, was thrown into prison and Marina's sister Anastasia ended up in a Siberian labor camp. When the German air force, the Luftwaffe, dropped its first bombs on Russia in 1941, Tsvetaeva chose to take her own life. She left behind a young son and an opulent collection of poems, letters, diaries and prose.



"Within me are many souls, But my main soul is German." Marina Tsvetaeva admired the land of poets and thinkers. As a young person, she spent happy times in Freiburg and the Black Forest.

PHOTO: MARINA-ZWETAJEWA-MUSEUM MOSKAU

For Elisabeth Cheauré, Professor of Slavic Philology and Gender Studies at the University of Freiburg, this oeuvre embodies "the spirit of a European-minded author who wanted to create bridges between cultures. While doing this she became on the one hand, highly political, yet on the other, remained deeply personal."

The new center founded in her name is to showcase Russian literature, music and art, support Russian artists locally, and to provide a platform for cultural exchange. Cheauré will lead the center. The researcher emphasizes that the institution bears Tsvetaeva's name, "... particularly because she represents the close ties between Freiburg and Russia."

Tsvetaeva spoke German during her childhood. She admired Goethe and Heine, and with her sister attended school in Freiburg for a year. She also spent some time in the Black Forest. Cheauré refers to Tsvetaeva's famous poem *An Deutschland* in which the author gave herself to a lost cause. In 1914 when her compatriots are consumed with hatred for 'Germania' she shows solidarity with the land of poets and thinkers, writing, "In love with you for as long as I live, I swear eternal loyalty."

"You really have to admire the amazing courage that Tsvetaeva mustered," says Cheauré. "In a time filled with hate, she lifted up her voice and argued in favor of culture as a force that binds all peoples together." The center will continue this legacy. Cheauré goes on, "Particularly in politically tense times, valuing culture can guard against blunt nationalism." Baden is a bastion of Russian speakers of different ethnicities and nationalities, she elaborates, whether ethnic Germans who have only now returned from Kazakhstan, Lithuanian Jews, Ukrainians, White Russians or

Uzbeks. "We would like to bring all of them in contact with each other," says Cheauré.

City-University partnership

The Tsvetaeva Center located on Stadtstraße 5 is the product of a cooperation between the university and the city of Freiburg. What is important to Cheauré is that the center work together with the city's cultural institutions. "We want to support each other and consolidate our resources," says Cheauré. The center's offering is to expand gradually. Currently, readings, concerts, lectures and language courses are on the agenda. As is a gargantuan project set to begin in the autumn: one hundred years after the Russian Revolution, in October and November 2017 the center will offer events almost daily for seven weeks – ranging from exhibitions on the gulag in the University Library to concerts featuring experimental music from the 1920s and 1930s to a street art project.

The 'place of recognition' that the poet demanded for herself came late. Only in the 1960s, when the Soviet Union experienced a 'thaw' after the death of Joseph Stalin, was Marina Tsvetaeva rehabilitated and included into the canon of Russian literature. The only surviving member of the family, Ariadna, published the works her mother left behind. In 1992, the Marina Tsvetaeva Museum was opened in Moscow, in the last apartment where the poet had lived.

Tsvetaeva Center

The Tsvetaeva (Zwetajewa) Center for Russian Culture at the University of Freiburg is an independent, non-profit association that was founded at the end of 2016. The responsible bodies are the University of Freiburg and the Cultural Affairs Office of the city of Freiburg. The German Federal Cultural Foundation is financing the upcoming project in autumn 2017 to mark the 100th anniversary of the Russian revolution. Prof. Dr. Elisabeth Cheauré is the association's chairwoman. Rector Prof. Dr. Hans-Jochen Schiewer is Cheauré's deputy.

> www.zwetajewa-zentrum.de

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University of Freiburg Gets Top Grades

In the Thomson Reuters' ranking of Europe's Most Innovative Universities 2017, the University of Freiburg again took first place among universities in the state of Baden-Württemberg. The university has therefore occupied its top position in both Baden-Württemberg and Germany since the rankings were first published in 2015. Amongst the traditional, non-specialized, German universities it holds fourth

place, and in a comparison of all German universities it occupies fifth place. The CHE-Ranking 2017/18 ranked the university's research in the field of law in first place. With respect to department size, no other German university graduates more Ph.D. students in law. Freiburg also ranked first in terms of acquired funds per professorship in the state of Baden-Württemberg.

Vice presidents take up second term in office

The Senate of the University of Freiburg has confirmed that the two non-executive vice presidents will remain in office for a further three years. Prof. Dr. Gisela Riescher remains in charge of the areas of academic integrity, equal opportunities and diversity; Prof. Dr. Margit Zacharias will stay on as head of the Department of Innovation and Technology Transfer.

Both have been non-executive vice presidents of the University of Freiburg since 2014. Their new period in office begins on 1 October 2017. Riescher is planning to issue a guide on academic integrity and an information portal to provide more information and guidance. Zacharias wants to expand start-up and technology transfer skills as part of a comprehensive process.

The right routes

The 'Silk Road' is a romanticized view of historic trade relationships – Sitta von Reden explains why we need to rethink history

Stretching more than 10,000 kilometers – the distance from Rome to the ancient Chinese city of Xi'an, the home of the Emperor – the Silk Road was a network of trade routes that from ancient times linked Europe with Asia. Freiburg ancient historian Prof. Dr. Sitta von Reden is researching the lively trade that blossomed back then between the empires which had access to these routes. The academic believes China's current initiative of a 'new Silk Road' is a bogus claim. Verena Adt spoke with her.

uni'leben: Ms. von Reden, was there really a 'Silk Road', or is it just a European fantasy?

Sitta von Reden: The term is an invention of Ferdinand von Richthofen. He was a German geographer who in the 19th Century researched the Taklamakan Desert in the modern Xinjiang province and realized the significance of the exchanges in this area. This led him to name the routes along which silk was found in graves and ancient way-stations the 'Silk Road'. This idea was then tidied up by Richthofen's student, Sven Hedin, who between 1927 and 1935 led a major expedition in this region. This led to the 'Silk Road' becoming a romantic concept which bears no relation to historic reality.

How long has trade taken place along this route?

There were exchanges over great distances in the wider area of Asia back during the Persian Empire and even in the Bronze Age. Today, we prefer to speak of 'Silk Roads'.



"The idea of building up a trade route with one's own resources and organizing it politically was totally alien to the powers of ancient times," Sitta von Reden believes that China's present-day politics are being played down in the concept of the 'new Silk Road'. PHOTO: JÜRGEN GOCKE

from the 1st Century was in fact often imported from Egypt. But the long-distance trade with Asia wasn't just about silk but also pearls and ivory, precious perfume oils, pepper from India and spices from Arabia. There were many local trade networks in which luxury goods circulated and which were not controlled by Rome.

lation were farmers, and they had little to do with trade and nothing with the elites who consumed luxury goods. They had their border conflicts. It is said, however, that religious systems – Christianity, Islam, Buddhism, Manichaeism – spread along these routes.

invest much in increasing their imperial wealth through trade. The idea of building up a trade route with one's own resources and organizing it politically was totally alien to the powers of ancient times.

Is the 'new Silk Road' a bogus political claim?

The term 'new Silk Road' plays down the politics behind it. And the concept is unhistorical. The new Silk Road takes an entirely different route. Rome isn't included but Düsseldorf is! Continental European destinations were utterly irrelevant to the old trade routes. That's what I find so annoying: few people are willing to seriously consider ancient societies, their languages, ideas and physical remains, but they are frequently picked up as a symbol for the depths that our modern society draws from. A lot of money flows into contemporary projects, but then people refer without thinking to 'the Silk Road', 'the cradle of Europe' or 'the cradle of democracy'.

So were these people also actively traveling with a missionary purpose?

Absolutely not! The fact that humans migrated in 300 B.C. is not just due to trade. Military movements are also particularly important in my research project. There were always troops in this region, and they were a means of intercultural exchange. And the population was very mobile too. Nomads were not the only ones who migrated, other people did too, and took their goods and their faith with them. Many people traveled the trade routes who never traded.

The Chinese government has recently announced that it wants to establish a 'new' Silk Road. What distinguishes it from the 'old' Silk Road?

The 'new Silk Road' is a project of China alone, which aims to increase China's influence in Central Asia. It will boost infrastructure and bring a lot of money to the countries, but in the end the aim is for China to gain influence there. The first area involved was Kazakhstan in 2013. It's now the same in Pakistan. This control of trade from the center is not a historical concept. In ancient times, emperors and kings distributed money in large cities to demonstrate their status, but they didn't

didn't bring in the big money of course. You just have to compare the price of a barrel of grain and a small pearl. Animals and slaves always played a large part in the trade as well.

Did this vigorous trade prevent armed conflicts?

In ancient times, trade and politics were separate realms. Eighty per cent of the ancient settled popu-

Was it essentially a trade in luxury goods?

In the region of the Black Sea and around the Red Sea a lot of grain was shipped too,



Precious perfume oils, pearls, grain, spices from India and Arabia: the long-distance trade with Asia involved far more than just silk. PHOTOS: CHRISTAN JUNGE, SHOOTING88, ESPIES, SVETLANA KUZNETSOVA, EVGENE KUDRYAVTSEV, ALLEBAZIB/ALL BY FOTOLIA

Roads, not street. The plural indicates that it was a very complex network. There was also a sea route via India, which was more important for the transport of silk than the land route.

Did the silk always come from China?

What the Romans called silk and what was repeatedly listed in the descriptions of luxurious garments

Ten Million Francs in Funding for Center of Excellence

The Georg H. Endress Foundation has pledged to provide up to 10 million francs in funding over the next ten years for the joint project "Quantum Science and Quantum Computing" at the Universities of Basel and Freiburg. Under the umbrella of Eucor – The European Campus, the new center of excellence will consolidate the pioneering role of the two universities in quantum physics. At the heart of the new project is an international cluster for postdoctoral researchers and two doctoral programs in Basel and Freiburg. The postdocs will work on joint research projects at both universities. The goal is to train outstanding doctoral candidates and postdoctoral researchers, thus preparing the future workforce for the emerging market in quantum technologies.

Eucor awards "Seed Money"

With "Seed Money", Eucor – The European Campus has created its very first significant own funding instrument and will award 300,000 euros annually from 2018 to 2020. The goal is to finance new cross-border projects that foster the development of Eucor – The European Campus and its scientific network. Two lines of funding are planned: "Research and Innovation" and "Teaching". Each year between five and ten projects will receive a maximum of 60,000 euros each. Online applications are now being accepted via the Eucor Website until 2 October 2017. The financing will begin on 1 January 2018 at the earliest and runs for a maximum of 18 months.

www.eucor-uni.org/de/seed-money

University election results

In the university elections on 4 July 2017, enrolled students and postdocs at the University of Freiburg voted for their representatives on the senate and faculty councils. Participation in the senate elections was around eleven per cent. For the faculty councils it was approximately 6 - 23.5 per cent. From 1 October 2017 the members of the senate will be: Josefine Morgan from the JUSO university group, Samuel Wunderlich from the RCDS & LHG list, Phillip Stöck from the BVS A list and Iris Kimizoglu from the BVS B list. The senate represents all areas of the university. Elected members hold office for four years, while students hold office for one year. The faculty councils have similar duties and functions at faculty level as the senate for the university as a whole. Five or six members are elected to each of these bodies.

www.zuv.uni-freiburg.de/service/wahlplattform/universitaetswahlen

'Beyond the Silk Road'

The European Research Council (ERC) is funding Sitta von Reden's project 'Beyond the Silk Road' with an Advanced Grant. This award is one of the most prestigious European research awards and is endowed with EUR 2.5 million. Von Reden and her international and interdisciplinary team are hoping to develop a comprehensive model of the exchange between empires in ancient times, and to research the relationship between economics, cultural exchange and migration as well as the significance of border regions.

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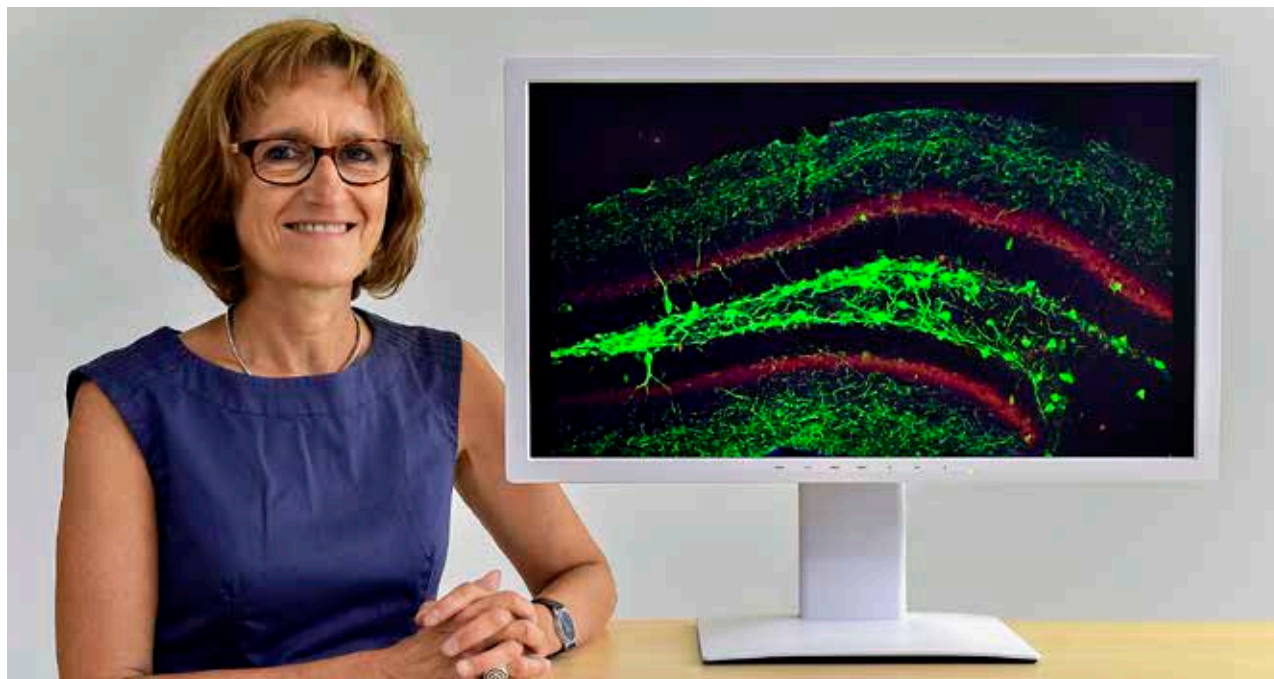
The strength of the minority

Inhibiting nerve cells make up only a fraction of the human brain – but their function is far more important than previously thought

by Claudia Füllner

Marlene Bartos cares about minorities: the object of her research is what are known as inhibiting nerve cells, which make up barely ten per cent of the nerve cells in the brain. The remaining 90 per cent are excitatory nerve cells, that transmit their signals using glutamate, whilst inhibiting nerve cells use gamma-Aminobutyric acid, or GABA for short. "Until now science has mainly focused on the function of excitatory nerve cells," says the professor, who heads a team at the Institute of Physiology. However research is currently undergoing a transformation: scientists are realizing that the inhibiting nerve cells, known as interneurons, fulfill important functions. Bartos and her team hope that their research will make a decisive contribution. Together with scientists from Kiel, Berlin and Austria, they are deciphering the complex role of interneurons.

Nerve cells, both inhibiting and excitatory, can be found throughout the central nervous system. They ensure that people receive information from their environment, can process, store and where necessary recall it. The activity of nerve cells, their strength and the distribution of the synapses that connect them



Marlene Bartos compares inhibiting neurons to the conductor of a large orchestra: they set the tempo, say who plays what together with whom or who takes a break. PHOTO: THOMAS KUNZ

change over the course of your life. Experts have shown that nerve cells network and intercommunicate more to encode information together. This capacity is called cellular and synaptic plasticity. It is a key mechanism and fundamental to the learning process, and has already been found above all in excitatory nerve cells. "We have discovered that interneurons are also subject to such plasticity," says Bartos. "They change their structure and their communication, and we believe that this capacity in-

fluences the learning process."

Bartos and her team are focusing on the plastic changes of interneurons and their role in the learning process in the motor cortex and in the hippocampus. While the motor cortex is critical to learning new movements such as playing tennis or cycling, the hippocampus is responsible for storing memories. The fact that interneurons play an important part in this is evident from the function or number of inhibiting cells being changed in many neu-

rological disorders such as schizophrenia or Alzheimer's, Bartos explains.

So how can inhibiting nerve cells help to store information in the brain? Bartos compares the interneurons to the conductor of a large orchestra: they set the tone, say who plays what together with whom or who takes a break – they inhibit. If they did not do this, all nerve cells would be active simultaneously and the brain would be ineffective and occasionally even inca-

pable. "The interneurons set the tempo in the brain, the share out the tasks," explains the researcher.

Incoming sensory information is temporarily broken down and structured into small information packages for processing, in the same way that different parts in a piece of music are in each case played together by a specific group of instruments. The task of distribution is handled by the interneurons. "It is therefore likely that changes in the function of inhibiting neurons or a reduction in their number can lead to cognitive malfunctions," says Bartos.

In every learning process, information must pass through the brain many times. The strength of the synaptic connections between the excitatory and the inhibiting nerve cells can permanently change and increase or decrease. Strengthening results in better interlinking and therefore consolidation of memory. "It is especially reinforcing when nerve cells are active together several times," Bartos reports. And therefore the interneurons are crucial in forming memories and leaving traces of them in the brain.

"There is still a lot to do," says Marlene Bartos. "There is the feeling that, after a period of minimal consideration, inhibiting neurons are now coming to the attention of science." And Freiburg has been involved from the start.

Old fat increases weight gain

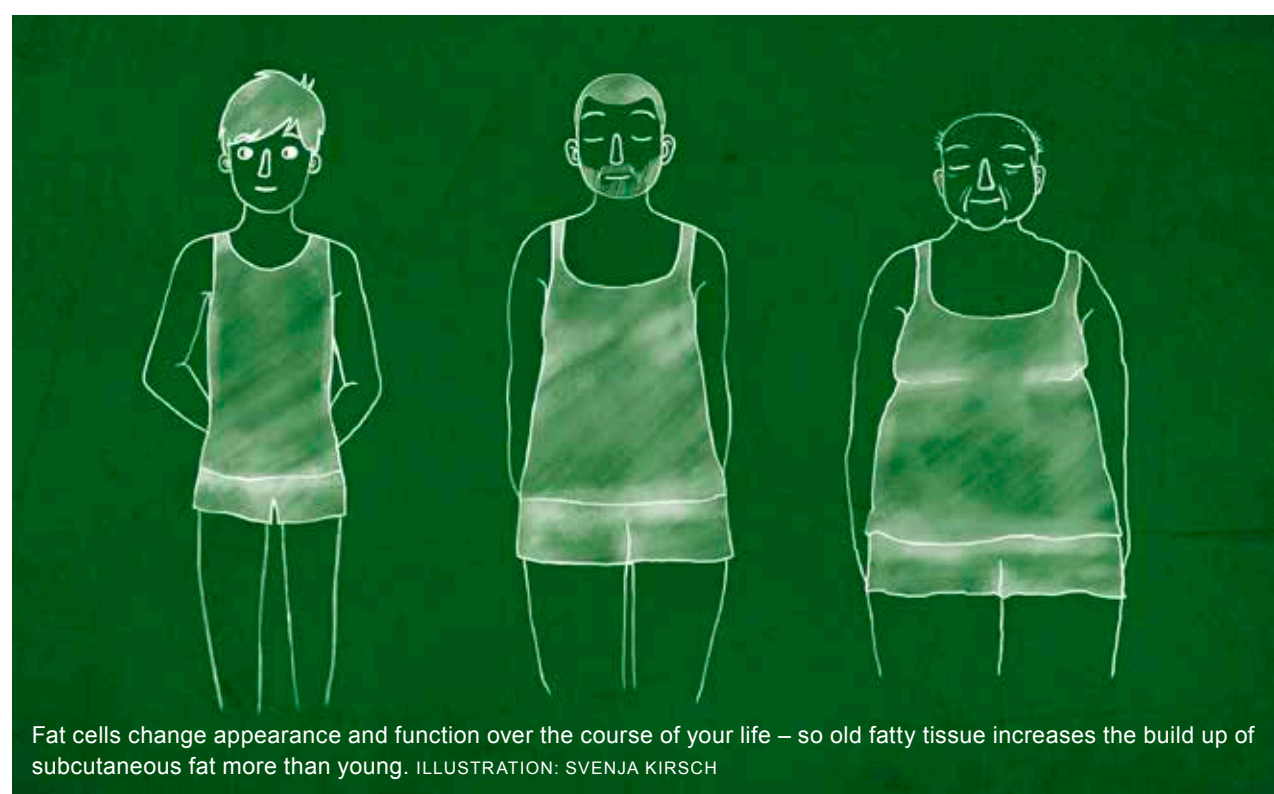
Roland Schüle is seeking active substances against severe obesity – and has activated a critical gene

by Jürgen Schickinger

The older you get, the easier it is to put on weight: fat cells change appearance and function over the course of your life. So, old fatty tissue increases the build up of subcutaneous fat more than young. Professor Dr. Roland Schüle, the scientific director of the Department of Urology at the Freiburg University Medical Center is researching the molecular background of this change. He is looking for ways to treat and prevent obesity with pharmaceutical agents. Now, he has succeeded in artificially activating a critical gene using substances. This makes fatty tissue stay young for longer.

Beige becomes white

Young fatty tissue consists mainly of beige fat cells. "They can burn fat for heat," says Schüle. In cold weather beige fat cells keep the body warm. They slow down the growth of subcutaneous fat by burning fat when there is too much available. However, as you age, more and more beige fat cells turn into white fat cells. These store fat instead of burning it. "The white fat cells in old fatty tissue are larger and continue to subdivide," explains the biochemist. The risk of obesity is growing. Schüle has shown that the level of the Lsd1 enzyme is responsible for this: it falls as age



Fat cells change appearance and function over the course of your life – so old fatty tissue increases the build up of subcutaneous fat more than young. ILLUSTRATION: SVENJA KIRSCH

increases. In parallel, beige fat cells dwindle.

"Lsd1 is our favorite protein," says the head of Central Clinical Research at the University Medical Center. Schüle's team discovered it twelve years ago. Lsd1 works epigenetically. It activates genes by loosening their protein shell, known as chromatin. Lsd1 is the start of some cell signal chains. "It has many functions in the body," says Schüle. Substances that attack Lsd1 disrupt many processes. So it is not well suited for therapies

against obesity. More promising candidates are genes that follow Lsd1 in the fat cell signaling chain – and the shells of which are loosened by Lsd1. These genes fulfill fewer functions. Schüle and his colleague Dr. Delphine Duteil looked for this next link in the chain, and found the Ppara protein. They were able to demonstrate that when the level of Lsd1 falls, less Ppara is produced. In the young, Ppara specifically activates the subsequent genes in the fat cell signaling chain that counteract the conversion of fat cells. This

inhibiting mechanism weakens with age.

Small molecules keep fatty tissue young

"Ppara can be easily stimulated by specific small molecules," Schüle explains. Duteil administered the appropriate substances to mice with low levels of Lsd1. The animals retained their beige fat cells far longer. Schüle and Duteil had compensated for the loss of Lsd1. "The activators are now in the clinical

phase," says Schüle. He estimates it will still be some years before a marketable active substance that prevents fat cells from aging can be developed. "We also want to try to stimulate precursor cells into producing beige fat cells." Schüle wants to continue to research the aging process and identify other elements of the signal chain. "It would go a lot faster if more public research funds were available," he complains. Stanford University in California receives as much funding as all the universities, colleges and polytechnics in Baden-Württemberg together.

In addition, Schüle wants to follow up the findings made in mice on humans. There are already a few parallels: mice form greater quantities of beige fat cells in cold conditions. The Inuit who live in the Arctic cold of the North Pole have more of them than Spaniards or Greeks. However the effect declines with age. It looks as if there is an optimal timeframe for cryotherapies, medications and other factors that influence fatty tissue. "Lifestyle definitely has an influence," says Schüle. Mice that eat too many calories forfeit their beige fat cells prematurely. So what is the perfect age to adjust to a sensible diet and plenty of walks in the snow? Fatty-tissue expert Roland Schüle says, "No one can be sure. But I would guess the younger the better." It certainly can't be a bad idea to follow this advice.



Achieving uniform standards: Martina Biebert hopes her results will be incorporated in the training of dog handlers. PHOTOS: CHRISTOPH BREITHAUPT

Find it, find it!

Sniffer dogs can detect explosive materials with great precision – and at the same time protect people's privacy

by Thomas Goebel

Why would you have a sniffer dog at a football stadium? Maybe it's nosing around the fans and hunting for fireworks. Emotionally-charged derbies especially are often seen as high-risk games, so organizers like to have intensive checks. But is it a good idea to use dogs in such volatile situations? For instance, how do football fans such as ultras respond to the animals? How successful are the dogs at detecting explosives? And what special care should the dog handlers take at work?

Biermann, Biebert is responsible for 'ancillary sociological research': her colleague looks at technical resources, she looks at sniffer dogs.

Human and dog are a team

One of Biebert's jobs is to determine the factors contributing to acceptance: what is the effect of the dogs on the people that they are supposed to be controlling? "Technical research has shown that use of certain methods can also have unintended consequences." For instance, use of the body scanner is effective, but it has given rise to resistance – many people feel it is a massive intrusion into their personal privacy.

hundred years, but also of the thousand years of shared history of humankind and dogs. Both mammals once lived together in a kind of symbiosis, "The dog cleaned up waste, kept the herd together, warned of danger and in return was taken care of by humans."

Biebert has held numerous interviews: with police dog handlers and industry safety managers, with team leaders and private security services, with ultras and with those responsible for the fans. She has accompanied a dog handler and his German Shepherd dog on patrol outside an exhibition hall before an AGM, and she has observed the Bundesliga game between Werder Bremen and the Hamburger Sportverein. Whilst irritated fans are entirely capable of kicking a screening machine apart, ultras told her that they tended to feel sorry for the dogs because they assumed the situation was stressful for them.

Great need for standardization

On the other hand Biebert detected a certain skepticism amongst team leaders and security managers about the use of sniffer dogs: they generally felt that technical tools were more reliable or predictable – which Biebert puts down partly to the individual relationship between dog handler and dog but also to the lack of uniform standards.

The project also aims to contribute to developing such standards. Fear of terrorist attacks has massively increased the demand for explosives sniffer dogs at major events. Biebert hopes that her results will be incorporated in the Deutsche Institut für Normung's revised standards for security service providers, "The demand is there – and there is loads of potential for standardization." For



Dogs can perceive even the smallest traces of scent – but we still don't know how they do it.

Cultural anthropologist Martina Biebert is interested in questions like this. She works at the Centre for Security and Society of the University of Freiburg on the EVADEX project, which aims to assess the many systems for detective explosive materials – in every area except the already strictly regulated aviation safety. Together with André

"A dog appears to intrude on people's privacy less," says Biebert. Whilst each deployment must be considered on its own, on the whole she draws a positive conclusion, "The dog is a very well-established tactical tool for deployments." This is not just a result of the tradition of the police dog in Germany that stretches back more than one

Developing Therapies for Older Leukemia Patients

A new research group at the University of Freiburg and the Freiburg University Medical Center aims to conduct fundamental and clinical research into acute myeloid leukemia (AML), a type of blood cancer diagnosed in around 3000 people a year in Germany. The German Research Foundation (DFG) has agreed

to provide 4.2 million euros in funding for the project over the next three years. The group spokesperson is Prof. Dr. Michael Lübbert from the Department of Medicine I of the Medical Center – University of Freiburg. He will be responsible for coordinating the project together with Prof. Dr. Christoph Plass from the

German Cancer Research Center in Heidelberg (DKFZ). "The approval of funding for this research group is a great success and further proof of the University of Freiburg's prominence as a center for epigenetic research," says Rector Prof. Dr. Hans-Jochen Schiewer.

German Research Foundation DFG supporting new Research Training Groups

The Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) has approved fifteen new Research Training Groups to further support early career researchers in Germany. At the University of Freiburg, the training groups "MeInBio – BioInMe: Exploration of Spatio-Temporal Dynamics of Gene Regulation Using High-Throughput and High-Resolution Methods" and "Statistical Modeling in Psychology (SMiP)" in which five universities are involved, have been established. They will receive around 10 million euros in funding. The training group for implementing genetic information into cell systems will receive around 4.8 million euros while the training group for statistical modeling of psychological theories will receive around 4.9 million euros.

Junior research group receives 1.4 million euros

Since 1 August 2017, a new junior research group headed by Dr. Andreas Hartmann at the Faculty of Environment and Natural Resources has been investigating water stress in karst landscapes worldwide – and how to ensure sustainable water supplies in these areas. The German Research Foundation is providing a total of 1.4 million euros from the Emmy Noether Program over the next five years. Karst is formed when carbonate rock weathers. Karst aquifers currently supply around one quarter of the world population's drinking water.

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Jimi, Jim und Janis

An exhibition pays homage to the spirit of Woodstock

by Alexander Ochs

San Francisco (Be sure to wear some flowers in your hair) or 'Day-dream Believer': songs that are essential to any flower-power collection. Scott McKenzie's floral hymn and The Monkees' hit both date back to 1967. And on June 1st that year, The Beatles' album 'Sgt. Pepper's Lonely Hearts Club Band' was released. Shortly after, the Monterey Pop Festival – seen as the musical dawn of hippie culture – took place on the west coast of the USA. Next came the Isle of Wight, then Woodstock: one festival followed another, tens of thousands swarmed to attend them. Peace and Love, the motto of the Summer of Love.

"In 1967-68, the first wave of the British Invasion which had come about thanks to bands like The Beatles, The Rolling Stones or The Who was on the wane. New bands and artists were conquering the charts," states Dr. Knut Holtsträter from the Center for Popular Culture and Music (ZPKM) at the University of Freiburg. "Scott McKenzie or The Mamas and The Papas appeared in the singles charts, in the USA and here too." So what could you hear on German radio, what music was in the charts back then? "In Germany 'Schlager' music [traditional German pop music] still had the upper hand, 1967 was a great year for Roy Black or Adamo." Udo Jürgens and Freddy Quinn had just become stars and were collecting number one hits. And a popular

custom was for German musicians to re-record English-language hits in German.

Rock music, frequently psychedelic in style, flooded out of the USA and into Europe: from Jefferson Airplane through The Doors fronted by Jim Morrison to Janis Joplin or Jimi Hendrix. All this was made possible by technology, "The 1970s are the decade of the LP," explains Holtsträter. "At the ZPKM we have an estimated 60,000 records in every possible format. I had the idea of putting on an exhibition to show the variety of what we have and to present research issues to the public using real objects." Working together with Uta-Beate Schroeder from the Carl-Schurz-Haus this led to the 'Summer of Love and the Long German Winter of Listening: Woodstock and Vinyl'. Devising the exhibition became the task of five students of the University of Freiburg, guided by their tutor Holtsträter.

12 inches – the perfect format

For one whole semester, the students rummaged around and listened to related material, did research on the Internet and familiarized themselves with the old – and now once again desirable – vinyl platters. "They had to work on the objects, give brief presentations and hold discussions. This inevitably led them to reflect on their own media biography," says the musicologist.

What resulted was, in the curator's words, 'a broad panorama': large album covers in 12 inch format and a



Scott McKenzie, Janis Joplin and Jimi Hendrix: the Summer of Love exhibition displays record covers and playback devices. PHOTO: PATRICK SEEGER

few singles are shown two each in 20 frames. Historic record players, magazines and books complete the exhibition line-up. Themes include questions of faith such as 'Mono or Stereo', the history of technology and the reception of the music, the importance of the German market for the US music industry, and the birth of the concept album. "The tendency towards the large format was of course also expressed back then by the bands through the LP. But we also show diversions such as a musical like 'Hair' which was a huge hit in Germany, and concept albums such as 'Tommy' by The Who."

Do we also get to hear any of it? "No," responds the 44 year old with a smile, "because if we were to be historically precise we would have to play the records from the 1960s and 1970s using old record players. But then you'd only hear half of it, and it wouldn't do the records any good. All the same, we hope that our selection of titles and covers will introduce a few catchy tunes." So he and the team of students have succeeded in the trick of recreating the sound and the spirit of Woodstock – purely visually, entirely without sound.

Summer of Love Exhibition

The exhibition 'The Summer of Love and the Long German Winter of Listening: Woodstock and Vinyl' runs until 8th September 2017 in the foyer of the Carl-Schurz-Haus, Eisenbahnstraße 62, 79098 Freiburg. It is open Monday to Friday from 9 a.m. to 6 p.m. and Saturday from 11 a.m. to 3 p.m. Admission is free.

> www.zpkm.uni-freiburg.de

Mnemonics and networks

Start-up Meditricks' visual aides-memoires simplify learning for medical students

by Lars Kirchberg

Many medical students know the problem: an excess of difficult-to-learn terms and nnumerable similar-sounding substances. What are the connections, what side-effects did that medicine have again, and how can it be used effectively? Using the visual aides-memoires technique of their start-up Meditricks, doctors Dr. Paul von Poellnitz and Dr. Michael Seifert want to provide a remedy. The visual aides-memoires offer clues to complicated issues: carefully-drawn figures are designed to offer students an easy entry into medical terminology.

The cow in the cell

Penicillin is shown as pens. "Q fever" makes a pun on the German pronunciation of the letter Q to show a cow in a prison cell, at the same time hinting at the fact that the disease is caused by an intracellular pathogen. So associations appear gradually, which the two doctors use to weave small stories with a lot of humor that explain the connections between the individual figures and symbols;



Making associations, telling small stories: the humorous visual aides-memoires ensure that acquired knowledge can be recalled easily. SOURCE: MEDITRICKS

sometimes so entertainingly and crazily that you can't forget it. The knowledge learned this way is easily recalled in an exam. Many figures also appear in other pictures and connections, increasing their memorability even more. "Our aim is to create as many mnemonics and networks as possible," says von Poellnitz.

"Especially as someone who has already followed the path of a medical student, it is lovely to see that you can influence something and make dry learning more enjoyable."

Von Poellnitz and Seifert hit upon the idea of the visual aides-memoires while preparing for their

state examinations. Inspired by some American forerunners, they are the first to transfer the concept to the German-speaking world. There is now a one hundred page book on the subject of antibiotics, which arose from a year of intense work. Von Poellnitz and Seifert also offer 70 learning videos in which they comment on the visual

aides-memoires and put them together step by step. The two doctors have great plans for the future too: amongst other things, a comprehensive illustrated textbook on the subject of infectiology and interactive learning software are in the making. "Our aim is to cover as many areas as possible. We still want to do a lot on pharmacology, because the subject is also important for practising doctors," says Seifert.

Scholarship for the founders

The two founders have now set up a small team of doctors, illustrators and IT specialists. Recently, the young company received an EXIST start-up scholarship from the Federal Ministry for Economic Affairs and Energy (BMWi), which brings with it EUR 137,000. "It's great when many enthusiastic and talented people come to us and say: we think that's great, we'd like to join in," Seifert remarks. "It's a nice idea being able to take these people on permanently and continue to grow. Now we have the chance with the scholarship."

> <https://meditricks.de>

Freedom on two wheels

The team from Bike Bridge teaches female refugees to cycle

by Sarah Schwarzkopf

Sahrazad Mohammadi had to ask one of the basketball players on the sports field at Bissierstraße whether any women lived at the refugee home too. She had watched him and his friends jumping and dribbling for some time and not seen any women anywhere. The man explained that they were in the apartments. "He told me that there were no leisure activities for women. Then I had a long talk with his wife," Mohammadi, a PhD student in Sports Science and Physical Education at the University of Freiburg, explains. That was the birth of Bike Bridge.

Bike Bridge teaches female refugees to cycle. The aim of the project is to reduce the social isolation of female refugees and facilitate social inclusion. "We increase their mobility and put them in contact with local women," says Mohammadi, whose dissertation looks at gender aspects of sport. Following her experience in the refugee home, she and her co-organizers Clara Speidel and Lena Pawelke found out that there really were no sport-related projects for female refugees. The trio wanted to fill the gap. But why specifically bicycles?

"In my country the culture doesn't allow me to ride a bicycle," explains a Yazidi woman who prefers not to see her name in print. She has lived in Germany for two years and learned to cycle with Bike Bridge. "In many Islamic



Freedom for women: Bike Bridge wants to strengthen the autonomy of female refugees. PHOTO: PETER HERRMANN

countries such as Iraq or Syria women are forbidden from cycling," adds Mohammadi, "the pressure comes from society there. In Iraq it is even prohibited by law. In Germany, however, bicycles are very important, particularly in Freiburg." So cycling not only offers participants mobility but also integrates them into society. "It's given me a lot of freedom," confirms the Yazidi woman.

First walk, then pedal

The project had its pilot phase in 2016 at the largest refugee home in

Freiburg on Bissierstraße. A course with Bike Bridge takes three months. Ten participants meet twice a week. Every woman gets a tandem partner as a trainer to accompany them. The groups learn the rules of the road and how to cycle, and get language lessons. In the beginning they ride without pedaling, with the women simply pushing the bicycles with their feet to get a feel for it. They also learn how to repair the bicycles. "The participants love the repair workshop: they learn and they practice – it's wonderful," Mohammadi says with

delight. In the third month the group goes on cycle tours. How often they go and whether they go to a park or a museum is decided by each group for itself. Wherever they go, the women have a picnic, chat and learn a bit about that part of town. At the end of the course they can keep their bicycle.

So far there have been four courses in various residential homes. Participants have ranged in age from 20 to 65 and come from Afghanistan, Pakistan, Iraq, Syria, Iraq, Nigeria,

Somalia and Cameroon. The common language is German – the trainer translates if there are communication problems. The trainers include former participants. "The group can profit from their language skills and it makes the project more sustainable: we don't just wave goodbye to the women at the end of the season," Mohammadi explains. That was the case for the Yazidi woman from Iraq, for example. She speaks Arabic, Kurdish and German, and is now helping to give her first course working together with German-speaking trainers.

Donations for bicycles and helmets

The project has already won a few national and regional awards. But the waiting list is long. And there are inquiries from Hamburg, Frankfurt and many other cities which would like to introduce the idea, but so far the project has lacked capacity. "We are trying to build up a good base in Freiburg first," explains Mohammadi.

So far Bike Bridge has financed bicycles, helmets and locks from donations. Since they lack the equipment for bad weather the courses only take place in spring and summer. Next year the team wants to offer ten courses. The latest idea is designed for advanced students: Mohammadi wants to teach mothers how they can transport their children safely by bike too.

<https://bikebridge.org>



Raise your horns: the horn troop practises regularly outside the Herder building. PHOTO: JÜRGEN GOCKE

Sounding the horn

Students bring the sound of the wild to the former Herder press building

by Stephanie Streif

It's a Wednesday evening in May. As the evening rush hour traffic winds its weary way along the Habsburgerstraße, sixteen hunting horn players in green polo shirts stand on the lawn in front of the former Herder press building. All is peaceful. Not a sound. Then the order is given "Raise your horns!" And now the horns are at everyone's lips, sounding out against the engine noise and humming of the tram. Suddenly, it's as if the forest is around us.

Founded by two students of Forest Sciences, the group of hunting horn players comes from the University of Freiburg. One of them is Valentin Platten. Three and a half years ago when he came to Freiburg to study, he had already decided to join the hunting horn players. He knew from his uncle, who had studied Forest Sciences at the University of Freiburg before him, that there had to be such a group. So Platten went looking for them. And found – nothing. Not one hunting horn player to be found far and wide. So in 2014, together with his fellow student Patrick Zaglauer, he founded a new horn player group on the spot.

Both believe you need a little tradition. Why? "It's a little bit of history that shouldn't be forgotten," says Platten. "Without hunting horns," Zaglauer adds, "hunts could never have been organized in the past." Back then, signals such as 'Start beating' or 'Dead pig' were sent through the forest by horn. "There were no mobile telephones, and the hunters had to communicate with each other somehow." One important custom was 'Sounding the kill', when the game had been bagged at the end of the hunt and the hunters took up the horn to honor it for one last time.

Any time the forestry students celebrate anywhere, the horn troop are

there, at Christmas or Summer parties for instance. Last year they even played together with the Dreisamtal hunting horn players at the Wasserschlössle festival of Freiburg's energy supplier Badenova.

Applause from passers-by

Whenever the weather allows, the hunting horn players like to take their rehearsals into the garden of the Herder building. Above, the foliage of beech and lime – and in front of them passers-by, who sometimes even stop, listen and applaud. To begin with it was just Platten and Zaglauer. But now between 15 and 20 students play with them, including three women and one non-forestry student: Leopold Pfluger is studying Renewable Energies, but he also has a hunting license. He joined the horn group because he loves 'blaring something out together'. "Young hunters playing hunting horn, that's cool," he says.

When he joined the troop he could hardly get a sound out of his little Fürst Pless horn, but within just two years he worked his way up from third to second horn. But not without difficulties: barely a year ago his neighbor rang his bell one evening and asked him to please, please stop playing, because he just couldn't hear any improvement. Pfluger plugged on. Other horn players from the group get their horns out sometimes when they are stuck in traffic on the A5. "It's great practising in the car," says Leonard Kloos.

The atmosphere is cheerful. A lot of chatter, a lot of laughter, and in the breaks between practising the odd beer is opened. Now and then as the troop

are standing around chatting, the warm summer evening wind blows a page of sheet music from the stands and whisks it across the grass. Then there's a merry chase after it.

When classic tunes from the German repertoire such as 'Ein Jäger aus Kurpfalz' or 'Auf, auf zum fröhlichen Jagen' ring out in several parts, Platten and Zaglauer take up the large Parforce horns. Compared to the Fürst Pless horns, they sound fuller and deeper, and both horns work entirely without valves. "The notes are made with the lips," explains Zaglauer. That's why hunting horn players are better kissers, someone jokes.

Horn players are better kissers

But then they get serious. "Hunters' march number three," announces Zaglauer. "Keep in time, please, loud, soft, soft, loud. And ... raise your horns." What happens next is almost instantaneous. The players raise the horns resting on their right thighs to their mouths. And then note follows note. A woman is walking along the path on the other side of the fence. She looks into the garden, raises her hand and waves. And marches off in time to the music ringing out in the summer evening.

Join in!

Anyone who would like to join in is warmly invited to play with the horn group – you don't have to be studying Forest Sciences. A Fürst Pless horn is provided for a try-out.

E-Mail: Patrick.Zaglauer@t-online.de

“Great Britain, humor, rain and heart”

What the game ‘Concept’ reveals about people’s thoughts

by Sonja Seidel

In the “Abgezockt!” series, members of the uni’leben editorial team meet with University of Freiburg researchers to play a game. The aim is to shed light on board games from an academic perspective. Or something like that.

The Game

‘Concept’ is ‘Taboo’ for the taciturn: the teams explain terms to each other by linking up various symbolic pictures that represent individual significant aspects. Is the answer an object or a person? Fictional or real? Big or small? The players put a marker on the right symbols. They aren’t allowed to speak. But even without words, ‘Concept’ says a lot about how people think about the world.

The Players

Prof. Dr. Wolfgang Freitag, Saliha Soylu: Epistemology and philosophy of science

Judith Burggrabe, Rimma Gerenstein: Press and publicity work



Wolfgang Freitag and Saliha Soylu try to explain a term without words. In an ideal world team mates know what they are describing and agree how to describe it. PHOTOS: PATRICK SEEGER

The Process

Some things are especially important in ‘Concept’: for instance,

if you want to explain a term, you need to know it first. It’s even better if you share the same idea of what you are describing to the other players. Unfortunately, in the Freitag/Soylu versus Burggrabe/Gerenstein contest, this isn’t always the case.

Freitag and Soylu disagree from the start. They have to explain the concept ‘Yellow Pages’. In front of them is a board with a lot of colorful images organized in columns. For their first symbol both use a book. But what comes next? They could choose the picture ‘Ear’ or ‘Mouth’. Which body part is more important when telephoning? Soylu and the ear win out. “An audio book?” Gerenstein is on the wrong track. A marker is placed on the square for the color yellow, and one on the symbol for ‘Use’. Burggrabe has got the clue, “A telephone book is yellow. Yellow Pages!” However Freitag hasn’t

done with the question of whether telephoning is mainly about speaking or listening. “I was visualizing an old telephone with a mouthpiece. Ms Soylu was thinking more of a mobile and listening.” So, ear or mouth is a generational question.

Gerenstein and Burggrabe attempt to do the classic 1960s British TV series The Avengers. The team opts for the image of a camera, and for one with a raincloud. Soylu, “I’m singing in the rain?” Burggrabe puts down a marker on the symbol for ‘Eat’. Well, sometimes you’ll eat your hat. Can Freitag/Soylu get the idea? Blank faces. Gerenstein summarizes the other pictures again, “Great Britain, humor, rain and heart.” Freitag suggests a Mills & Boon author. Not exactly! “Charlie Chaplin?” Then Burggrabe intervenes, breaking the rules, “And what does Chaplin wear

on his head?” The point sinks in for Freitag/Soylu. Appreciative laughter for Burggrabe’s idea about the bowler. Why was it so hard to guess the title? “It’s just that our TV knowledge is limited,” opines Freitag. “I think my knowledge in that area is excellent,” jokes Soylu. “I’m just too young to know the series.”

The Analysis

The players’ cultural background and life experiences determine their success in the hunt for points with ‘Concept’. “What have I experienced, what have I read, how old am I, what region and social class am I from? All of this becomes clear whilst playing,” explains Freitag. After playing a few rounds it’s clear: to collect points you need to be familiar with pop culture and watch a lot of films. Freitag thinks this is a shortcoming, “The game is naturally tailored to its market. I would find it more exciting and challenging if the players also had to explain more abstract concepts.”

But the game does offer one other insight – that is, that modern people think in parallel. Quite unlike earlier times. “If we had played ‘Concept’ with the ancient Greeks the board would have looked quite different. The ancient Greeks thought hierarchically. They would have organized the individual associations of a term systematically and not just placed them side by side on a par.”

But can people make themselves understood only using such images – a sort of visual Esperanto? “I don’t think it would work. We had to talk a lot and give tips to explain the terms,” Soylu remarks. Freitag adds, “Human thought is far too complex to communicate just using images.” So we can’t really do without words.

„Concept“,
Repos Production/Asmodee
www.asmodee.de



Players place the markers next to the picture that fits what they are trying to describe.

Advanced Museum Studies for Professionals

Overseeing, Collecting, Exhibiting, Teaching, Marketing, Managing and Digitizing: “museOn – weiterbildung & netzwerk” (museOn – advanced training & network) has developed an advanced learning module for each of these areas of a museum. Having completed a one-year test phase, starting in the winter semester 2017/2018 it will become a regular course of study with 26 courses that are categorized according to each module. The advanced training is designed for professionals working in museums or in the area of exhibits and collections who wish to professionalize their work and expand their skill sets. It is also designed for people who would like to respond to the changing external and societal circumstances and cultural diversity or to the structural impact digitization is having in order to further develop their abilities in the workplace.

> www.museon.uni-freiburg.de

A paper-and-cardboard Freiburg

The old town of Freiburg – with the synagogue, theater, St. Martin’s Gate, the Old University, and Collegiate Building IV – which was then the university library – in a kind of 3D snapshot from 1920: this 1:275cm scale model, constructed of painted paper and cardboard, is now on display as part of the permanent exhibition at the University of Freiburg’s Uniseum. Model maker Fabian Maier used city maps, postcards, and photographs in books and the Badische Zeitung newspaper to create the image. He modeled the buildings in every possible historical detail in an area of approximately 1.3 by 1.8 meters. Fabian Maier, born in Freiburg in 1991, has been building models as a hobby for 20 years. His latest project is an Eiffel Tower made of matchsticks.



Approximately 1.3 by 1.8 meters: Fabian Maier used city maps, postcards and photographs from books and the Badische Zeitung newspaper to create the model. PHOTO: MAX ORLICH

> www.uniseum.uni-freiburg.de

Study Health Promotion while working

For all those who have a Bachelor’s degree or professional training in the field of health promotion, preventive medicine, or rehabilitation, and would like to obtain a further qualification in the field, there is a new course on offer. Starting winter semester 2017-18 Furtwangen University and the University of Freiburg will teach Interdisciplinary Health Promotion in a joint program. It culminates in a Master of Science degree. Its special feature is that participants can take the full Master’s program – or individual modules from it. They can also choose the speed and intensity of studies which suits them.

> www.igf-studium.de

Mangold's a veg

A visit to the Münstermarkt farmers' market becomes a German lesson for foreign students

by Alexander Ochs

The colorful stems with the large leaves radiate canary yellow, crimson and ruby. "What's that?" asks one of the group, who comes from India. "Mangold!" replies the vendor. "Mango?" they echo. "Nowt like! Mango's fruit, 'at's a veg!" declares the expert. A typical scene for this morning, which recalls the 'Learning by Doing' method. You learn what you are doing by doing it. The 'Walking Dialogues' are very similar: foreign students go out and experience real life with their German tutors, in order to test out their language skills in everyday scenarios. No dry exercises, no fake situations, no rote learning.

The idea for this German lesson came from Yani Guo from the Studierendenwerk Freiburg-Schwarzwald and team members Katharina Knop, Nicole Nicklas and Marielle Raih, all students with a background in teaching. Before each upcoming session they simply provide the participants with appropriate vocabulary in a classic lesson, to prepare them for the Language Café walkabout.

Vocabulary training on the hoof

Today, a hectic Saturday in July, a Freiburg classic is on the schedule: shopping at the Münsterplatz farmers' market. "We'll go around the market once," Nicklas explains the procedure. "And then we'll have a bratwurst or – for the vegetarians – tofu." "You have tofu here?" asks Yang Peng, a twenty-one year old from China. "Can you barbeque tofu?" Peals of laughter. "Well, that's what the Germans are always doing," Yang persists. And



Radishes, raspberries, savoy cabbage: it's easier to pick up vocabulary in real life than in a lesson.

PHOTO: JÜRGEN GOCKE

straight away we have come to a socio-cultural question. Germany, country of eternal barbecuers? Nicole – everyone is on first name terms here – meanwhile presses on blithely, pointing out gooseberries, rhubarb, blackcurrant.

Jijo George and Swertin Paul are IT students from India, and have been in Freiburg since autumn 2016. On the tour, they try things out and explain things alternately. Grab a bite to eat at the baker's stall, then to the cheese stall. "My housemate always eats blue cheese," George reports in still halting German on

his everyday life. Talking about dairy produce at a cake stall Nicklas explains, "Sour cream, that's a kind of cream. Sow-er cream," she pronounces carefully and deliberately. Peng repeats after her, "Sow ... sow cream." He has lived in Freiburg for almost four years, and as a philosopher he is very highly skilled in the field of languages (Heidegger!). As they pass the stalls selling lettuce and other salad vegetables, Nicklas explains the expression 'Da hast du den Salat!' – 'What did I tell you?' This makes Peng think of something: "Kabelsalat!" – cable spaghetti. However

he didn't learn it on the German course but on the Internet.

Tofu dressed as bratwurst

The summery range on offer at the market bewitches the senses. Radishes are a welcoming deep red, everywhere berries beckon in shades of red, pink, purple and blue, the courgettes glow yellow. Yellow courgettes? "Normally they're always green," says one. His gaze falls on a box of plump cherries. "I first ate cherries in Germany," says Peng, "we don't have them at home." "We do," responds Guo. Both can talk in

Mandarin. However Guo from the Studierendenwerk cheerfully reminds his compatriot, "In German!"

But when things get too difficult in German, the three Indians, Paul, Jijo and Raghu and Jibrán from Pakistan can switch to their mother tongues. "Hindi and Urdu are similar, but only when speaking," explains Jibrán. The four young men from South Asia cook almost daily, and therefore are very familiar with foods and their preparation. Gradually, people get hungry. Time for a snack. One tries a 'lange Rote', the traditional Freiburg wurst, another a veal sausage. Raghu, whose name is pronounced like 'r-gout' in French, has found a vegetarian snack: tofu dressed as bratwurst. With a lot of yellowy-orange gleaming spices. "Aaah!" he cries out when he tries it, "very hot!" "Really?" the group responds, surprised. "No," he plays it down with a smile. He was just imitating the typical German reaction to spicy food of course. Everyone laughs. And all look forward to the next session; regular events begin again in the 2017/18 winter semester.

Walking Dialogues

Gathering language practice in everyday life – whether on a cycle tour, visiting the Mundenhof zoo or at the Freiburg Museums Night: this is the idea of the Walking Dialogues, an event organized by the Studierendenwerk Freiburg-Schwarzwald. Between semesters they take place about once a month. The free offer is designed for students at Freiburg's universities and colleges. Please register if you are interested.

E-Mail: guo@swfr.de.

> www.swfr.de

win a voucher!

uni'cum

Stationery, bibs, rubber ducks: The University of Freiburg's uni'shop supplies a wide range of goods not just for everyday life on campus but also for every other kind of situation. In this series, uni'life presents a few of its products and there is a prize draw for coupons.

Enjoy substance with style

by Martin Jost

We're simply saying: avoлатte. It's a Latte Macchiato served in half a scooped-out avocado. There are already 700 pictures of avoлатtes on Instagram. But that still does not make it a trend that will revolutionize the world just yet. However avoлатte is what we might be faced with if we don't soon stop polluting the world with paper cups. Or else we might have to sip our coffee from an oily fruit husk.

We don't want to put anyone off their coffee on the way to the lecture, or even during the lecture. And it's impossible to meet the demands of student or academic life without caffeine today anyway. (Rumors that the Bologna Process was a triumph for the coffee lobby are however excessive and unsubstantiated.) Fortunately it is extremely easy to



Sipping coffee from avocado hulls is a fleeting pleasure. But the cups and thermos beakers from the uni'shop are forever.

PHOTO: JÜRGEN GOCKE

enjoy a coffee while out and about or during a lecture: just keep a thermos beaker in your bag at all times.

We won't lie about it, we think the University of Freiburg's coffee cup range is very chic. You can buy porcelain cups or thermos beakers with

the logo at the uni'shop – and they are designed to last.

Insulating to keep hot

Presenting the Freiburg Uni thermos beaker in a new design and new quality. It is snowy white with choice of blue or red detailing and a printed logo. The inside of the new model has a double-wall in stainless steel, to keep contents hot for a very long time. The silhouette is clean and ergonomic. You can open and close the sipper with just one hand using the button on the lid. When the sipper is closed, the cup is absolutely leak-tight, so it could fall over in your bag without soaking your books and laptop.

If you are an old-school consumer and like to take time for your dose of caffeine at the kitchen table or desk instead of drinking on the go, the uni'shop also has something for you: porcelain cups in two different styles. The slightly larger cup is shaped roughly like a tumbler and

has a capacity of 300 ml, while the slimmer cup with a triangular handle holds 250 ml and is white on the outside with a choice of red or blue inside. All the porcelain cups feature the emblem of the university printed on the outside.

So, enjoy your coffee either sitting comfortably or to go when you like. But please invest in a sustainable cup – and give the avocado goblet a miss this time.

Competition!

Win one of two 25 euro coupons for the uni'shop. Send an e-mail to unileben@pr.uni-freiburg.de by 8th September 2017.

The coupon winners will be drawn from all the entries received.

> www.shop.uni-freiburg.de

Oh no, he's calling again!

How employees can cope with constant availability – and how companies can improve the situation

Having work contact you at all hours, having to adapt ever faster to changing demands: it's no surprise that mental illness is now one of the commonest causes of absence from work. But there are things that can be done about it. Anita Ruffer spoke to the Freiburg business psychologists Dr. Nina Pauls and Dr. Christian Schlett. Together with colleagues from other universities they have carried out two research projects to develop tools to promote mental resilience, and working with companies have trialed new approaches for dealing with constant availability.

uni'leben: Mr Schlett, do you leave your mobile telephone off when you are on holiday or at weekends?

Christian Schlett: My private mobile isn't even set up to receive work e-mails.

Why is it important to be unavailable to your employer in your free time?

Nina Pauls: We know from our research that if you don't it can become difficult to switch off and separate work from private life.

Schlett: If I were always on call and wondering if someone was going to ring or if an e-mail was coming, I would find it harder to relax in my free time. As a result I wouldn't rest as well and be able to recover from work. So I'd be neither here or there.

Maybe some people are afraid of losing out and remain perpetually set to receive in a

kind of cowed anticipation?

Pauls: An employer doesn't and shouldn't expect this. But depending on the corporate culture such feelings may be encouraged. One's own performance standards also play a part: you want to do good work so you continue working at home if you don't manage it all during regular working hours. It's often a sign of overload.

But aren't there also advantages in freely arranging your time between work and private life?

Schlett: Only if I decide for myself. If I'm always being driven by my work, the result can be stress, burn-out and physical problems such as sleeplessness.

What practical solutions have you come up with?

Pauls: Working with selected companies, we developed rules for how employees can divide up work and leisure better. Before new projects are started, for instance, a company looks to see whether it has any capacity for them, so that no one is forced to take work home with them.

Schlett: Our studies have shown that two-thirds of employees are uncertain whether they have to respond to work inquiries in their free time, and how rapidly. We worked on clarifying these expectations: if something is really urgent, a text message can be sent asking for them to read an important e-mail. And if someone has tried to reach an employee three

times you have to assume that it's really important and call back.

Can individual employees also arm themselves better mentally against over-demanding work conditions?

Pauls: Yes! in cooperation with the Freiburg software company Haufe-Lexware we have developed web-based training that reinforces mental resilience.

This 'resilience' isn't innate, then – you can practice it?

Schlett: There are basic tendencies, but there are aspects that can be trained effectively with regard to work.

Such as?

Pauls: Anyone who is often distracted and absent-minded at work and therefore unable to deal with really important things can benefit from mindfulness training. With guided exercises in focusing

on our Internet platform, people learn to notice when their mind starts to wander. Conscious perception enables a conscious decision: to stop wandering off the point and focus on the substance.

Schlett: Or take a customer adviser who is faced with an unpleasant conversation with a dissatisfied customer. Instead of losing heart, he could remind himself of his strengths and recall similar situations that he has dealt with successfully. This strengthens his self-belief. Then there is also posture: anyone who attends an interview with bowed shoulders has less chance than someone who approaches the opposite party in an open and upright way.

Keeping employees fit so that they are capable of greater workloads – can employers misuse this sometimes?

Pauls: Training isn't an isolated measure but part of operational health management. This also includes courses on healthy leadership.



Nina Pauls and Christian Schlett are trying out new approaches to dealing with constant availability. PHOTO: PATRICK SEEGER



PHOTO: TIMUROCK/FOTOLIA

Exercise at your desk

Sitting motionless, eyes fixed on the screen: often students and office workers will stay put like this for hours. And then as deadlines and exams get ever closer, there's no chance at all for relaxation. No surprise then that as time passes this frequently leads to backache, stiff neck, headaches or just plain discomfort because of a sluggish circulation. But it isn't really that hard to gain relief. In this series, staff from the Fitness & Health Center at the University of Freiburg describe exercises that are easy to do at the desk at any time.

Are you sitting comfortably? Strengthening the back muscles

by Petra Völzing

Sitting for hours at a desk is no good either for your musculo-skeletal system or for your circulation. In the long term you become tired and listless. Your back aches and your feet grow cold. It's no crime to stand up from your office chair now and then. And if you want to do something really good for part of your body, we recommend this dynamic exercise which strengthens the musculature of your lower back to your thighs and reinvigorates you for a period of sitting. It makes use of the buttock muscles, the rear of your thighs and the lower back. A



nice side effect is that the hip flexor which is always shortened while sitting is thoroughly stretched.

To do this exercise, stand up and lay your forearms on the desktop.



Slightly bend one leg and push it back and upwards. Take care to keep your hips level and not to twist. While doing the exercise you can keep the leg you are standing on straight or bend it slightly too

– whatever suits your own flexibility. Repeat this exercise with both legs 15 to 20 times each. Try to keep the movement as steady and smooth as possible throughout.

A leg up: this exercise strengthens the back muscles and refreshes you when you are sitting. PHOTOS: KLAUS POLKOWSKI

Get moving!

If you want to get some exercise, contact the Fitness & Health Center or ask PausenExpress about booking regular exercise appointments in your office.

www.fgz.uni-freiburg.de
www.gesunde.uni-freiburg.de/angebote/projekte/pausenexpress



Dressed as a witch the biologist Henriette Gruber shows a tour group of the Botanic Garden the benefits to health that can be obtained from blossoms and leaves. PHOTO: PATRICK SEEGER

Knowledge breeds trust

The German U15, a group of fifteen universities with a wide spectrum of subjects, long traditions, major medical schools, and world class research, has published a magazine, *Wissen schafft Vertrauen*. "The humanities and social sciences and cultural disciplines are highly valued in Germany. They enable people to critically interpret the world and the changes in it, and to position themselves in it. In this way, they create social resistance to dangerous oversimplifications – as well as faith in the future of our society; particularly in the face of rising challenges from strengthening nationalism, from climate change, terrorism, even integration," says Professor Hans-Jochen Schiewer, University of Freiburg Rector and chair of the German U15. Fifteen researchers, including Freiburg historian Ulrich Herbert, hope their contributions to the magazine will stimulate a reasoned and constructive debate.

> www.german-u15.de/epaper-wissen-schafft-vertrauen/index.html

Good spirits clad in green

A guided tour of the Botanic Garden through Magic, Myth and Medicine

by Sonja Seidel

A blazing hot afternoon at the Botanic Garden of the University of Freiburg. A crooked old dame stands beneath a birch tree, a black scarf over her head. Turning her besom she pokes the stick towards the elderly man standing before her. "The birch emanates a powerful magic, a protective magic," she whispers and looks with narrowed eyes at the group. A brief silence, then a grin passes over the faces of everyone present. The old dame straightens up, removes her headscarf, revealing the dyed red hair of Dr. Henriette Gruber, a young woman in a silky summer dress. She laughs heartily and explains in practiced tones, "The birch had a spiritual significance back in Germanic mythology. But you can drink a tea of birch leaves or birch juice as an excellent treatment for cellulite and swollen legs."

A group of thirteen Freiburgers has gathered under the leadership of the biologist for the 'Witches, Ghosts and Genetics' guided tour on medicinal plants and science. These guided tours of the Botanic Garden are a tradition and have been offered by the association of friends and sponsors of the Botanic Garden of the University of Freiburg for more than ten years now. Up to four times a semester, biologists roam the grounds and glasshouses with guests. For Gruber it's her premiere: in real life she is a tutor at the Freiburg University of Education, but today she is playing the part of the wise woman.

Taste, smell, feel

Gruber pours a delicate yellow liquid from a stone jug into plastic cups and hands it round. An old recipe of her grandmother's, from

northern Germany. "So, what can you taste?" The group sips at the drink thoughtfully. An elderly lady wearing a pink blouse, string of pearls and summer hat pipes up, "It smells and tastes of elderflower." The others agree. "That's right, you can't mistake the fragrance of elderflower – it's almost indecent,"



Delicate yellow, sweet and fragrant: a drink of elderflower and lemon balm tickles the taste buds of participants.

says Gruber, going on to tell them a lot more about the plant. As she does so, she adopts the role of the foreteller of doom, "The elder is one of the most magical plants. It is inhabited by good spirits. But never hang a branch of elder above a child's cot, or the fairies will get it." How serious Gruber is with such practical tips is hard to say. Medicine and magic are very closely related. Take the elder: it is diaphoretic – it induces sweating – and strengthens the immune system. "But that hasn't been scientifically proven," adds Gruber.

The group proceeds to the sensory garden, where oregano, bay and sage give off a beguiling scent. Bees are restoring themselves from the purple and white blossoms. The participants feel the furry leaves of sage and then smell their hands. "It's great for sweaty feet," explains the biologist. "That's the result of thujone, an essential

oil. Its effect was long known before people spoke of witches and wizards. But be careful! Never drink too much sage tea, because if you do thujone has a toxic effect." "So how many cups a day are okay?" asks a middle-aged man in beige trekking shorts worriedly. "Well, three or four cups, but not

from the group contradicts her,

"Until the 20th Century they used to hang yarrow in the window in the forests of Bavaria, to keep the plague from the house." Konrad Müller is an expert on the plague and has already written many books on the Black Death. He knows enough to give at least one guided tour of the Botanic Garden.

To conclude the tour Gruber wants to cast a spell herself, and so she has brought a blend of herbs with her that are traditionally burned at midsummer in mid-June. The longest day of the year is a mystical date which was celebrated with feasts by the Germans and the Celts. Gruber burns oak bark, sage, mugwort, fleabane, frankincense and myrrh in a small metal bowl, a blend that is supposed to capture the energy of the sun and attune one to the second half of the year. In addition, the dried leaves and crumbs of resin protect travelers from impending disaster. "This passes the energy of the herbs to us," explains Gruber, fanning the rising column of smoke towards the group which stands there sniffing it, and promises, "Today you go home purified and with the maximum of protection."

more," says the expert. At least one participant looks likely to switch to chamomile now.

Mind-expanding and delicious

Another herb that can be found in every kitchen cupboard has unimagined powers, "Bay is mind-expanding, but only if you burn it, not if you stir it in your spaghetti sauce," Gruber reports. "The priestesses of the Oracle in Delphi slept on laurel leaves and inhaled the smoke from burning bay and laurel, to foretell the future." The 21st Century priestess also uses it, not least to enchant her sweetheart. Yarrow on the other hand is a rather boring plant from a witch's point of view. It can be found in the Botanic Garden in one of the eight round themed plots that are organized by region and period. "Yarrow has no special magical powers," says Gruber, starting to move on to the next plant. But an elderly man

Discover the Botanic Garden

There is an autumn walk with head gardener Dirk Rohleder at the Botanic Garden on 23rd September 2017. Meet at the main entrance of the Botanic Garden, Schänzlestraße 1, 79104 Freiburg, at 2 p.m. Admission costs EUR 3.00. Children and teenagers aged up to 16 can take part free of charge. No need to register.

> www.botanischer-garten.uni-freiburg.de/freunde-und-foerderer

Neues Karriereportal

Alles auf einen Klick: Die Universität Freiburg hat mit dem Karriereportal einen neuen Service eingerichtet, der Mitarbeiterinnen und Mitarbeiter über Weiterbildungs- und Beratungsangebote, Förderprogramme sowie Maßnahmen der Personalentwicklung informiert. Das Portal richtet sich an Beschäftigte aus Wissenschaft sowie Verwaltung, Service und Technik auf allen Karrierestufen. Interessierte finden in einer Stellenbörse zudem alle offenen Positionen an der Universität. Das Portal ist in einer Zusammenarbeit der Stabsstelle Strategie und Hochschulentwicklung, den Freiburg Research Services, dem Wissensmanagement und der im Januar 2017 eingerichteten Geschäftsstelle Personalentwicklung entstanden. Die Abteilungen werden künftig das Angebot des Karriereportals weiter ausbauen.

> www.uni-freiburg.de/karriere

Successfully Applying for DFG Grants

What are the keys to a successful application to the German Research Foundation (DFG)? What do evaluators rate particularly highly? These and other questions on the topic "Applying Successfully for DFG Funding" ("Erfolgreich DFG-Mittel einwerben") are the focus of a panel discussion. Prof. Dr. Annegret Wilde, the DFG liaison officer at the University of Freiburg, and the Science Support Centre of Freiburg Research Services are issuing an invitation to the event. The DFG liaison officer will be joined on the panel by DFG colleagues, a member of the DFG's Approval Committee and the Senate Committee on Research Training Groups and the Group Leader of DFG's Emmy Noether Program. There will be a Q&A and discussion at the end. The event takes place on 10 October 2017, 2 p.m. in Biology I lecture theater, Hauptstraße 1, 79104 Freiburg, and is open to researchers of all disciplines. Please register by email to kursprogramm@frs.uni-freiburg.de by 15 September 2017.

Feedback after 100 days

Petra Engelbracht is developing a personnel development concept for the University of Freiburg

by Rimma Gerenstein

If you run until your legs smart and your arms feel limp, you still should never be so out of breath that you're unable to speak. Mute sweating should only happen when you sprint. If you want to make progress, you breathe and you talk. How are the children? Where are you going on holiday this year? Have you read the new thriller by Jussi Adler-Olson? Petra Engelbracht has put on her trainers many times for half-marathons with her running team of sixty – in Leipzig and in Remich, Luxembourg.

Sports lore has already helped the 52 year old to reach the finishing line after 21 kilometers. The economics graduate also uses it in her job. This year she has to manage a mammoth task at the University of Freiburg: to create a personnel development concept for all 2,000 employees from administration, service and technology – from the caretaker to the department heads. "You need stamina for this job," laughs Engelbracht. "You have to keep making a fresh attempt, adjust your pace and always communicate."

Four stages

Since arriving in Freiburg in early 2017 she has not stopped communicating: Engelbracht buzzes from department to department, talking to the management and staff about workplace conditions, organization, their wishes and difficulties. The final goal is an understanding that brings



Inspiration from the Art Nouveau palace: when Petra Engelbracht needs to come up with new ideas, she sits on a bench in the Colombiapark. PHOTO: KLAUS POLKOWSKI

together all the information and measures and integrates them into the four professional work stages of recruitment, integration, development/retention and retirement/discharge. The area of management and strategy is also covered. However the concept is just one element: together with its equivalent on the academic side, it will form the personnel development concept for the entire university.

Engelbracht is highly qualified in this area. Over the past fifteen years she established personnel development at the University of Trier. "To begin with there was just one page of A4 with six CPD events. That was it," she recalls. Engelbracht upped the

pace, expanded CPD, developed training courses for management, carried out and assessed staff surveys and gained the first-ever "Family-friendly University Audit" certificate nationally for the University of Trier.

But the recipe for successful personnel development can't simply be transferred from one campus to another. The University of Trier, a spring chicken from the 1970s, has about 14,000 students and 1,200 staff. "It's a considerable bit smaller." But in fact Engelbracht finds the size and variety of the Freiburg super-tanker exciting. She has a free hand, like an architect planning a building floor by floor, "There are many

excellent provisions and measures here already, but so far there's no overall concept." She was surprised to find this was the case at such a highly-regarded university. So it was time to turn up the pressure. Particularly with the upcoming excellence competition.

A warm welcome and a hot goulash

Engelbracht called the assessment she gave to the staff meeting in July her "100 day feedback". She used it to set out the strengths of the university, but also suggestions for development. In her expert view, there are opportunities when employees leave – the motto is "securing knowledge" – for individual career planning, for selection of

personnel and for communications. "For instance, there is a mission statement of the Central University Administration, but there's almost no sign of it in the building itself." Why not put up a poster in the conference rooms? "You can waste a lot of time with that," she says with the look of a taciturn northerner in response to a chatty southerner. "It doesn't hurt to remind people now and then about the values of their institution."

However Engelbracht doesn't cavil with her praise: she is very enthusiastic about the training and CPD opportunities and highlights the university's family friendliness. And one special strength struck her: the appreciative and welcoming culture. "I have been received openly and warmly everywhere." Even before she moved to Freiburg she was invited over to dine by a couple of groups of colleagues. There was goulash soup, and in the evening she signed the lease for her new apartment.

Gradually Engelbracht is getting to know her new territory – and she gets around: the Freiburg Campus takes her all round the city. And if she needs to come up with new ideas she sits for half an hour on a bench in the Colombiapark. It doesn't bother her if the building site in front is busy – the view of the Art Nouveau palace takes her far away from the noise. In her spare time she trains for her next half marathon: in October 2017 she and her running group will be meeting in Amsterdam, The Netherlands. Until now Engelbracht has trained on her own in the south. "But I'm sure I'll soon find companions." And the motto will be: breathe and talk, talk and breathe.

All the world's a stage

Freiburg literature scholar Simon Sahner is an actor, poetry-slammer and author

by Julia Dannehl

When you stand on a stage to show people the best you can do, it's always got a bit of narcissism about it," says Simon Sahner. He has no problem admitting to the desire to present himself and receive affirmation, or with talking about the fact that he has a stammer. To him, it is all a part of what makes him the person he is.

The 27 year old regularly goes on stage: in the university theater, at poetry slams and with 'Laut und Lyrik', the spoken theater group of the Department of German at the University of Freiburg. He is studying for a postdoc at the 'Factual and Fictional Narration' Graduate School on the subject of the Beat and Underground Literature of 1960 to 1990. He also writes short stories, spoken word pieces and sometimes musical pieces. His activities on the stage give him a welcome break from academic work, "At a poetry slam the performance is of enormous importance. Even the best texts don't work if they are presented badly. So – unlike at the university – rhythm and sound are often more important to me here than linguistic nuances."

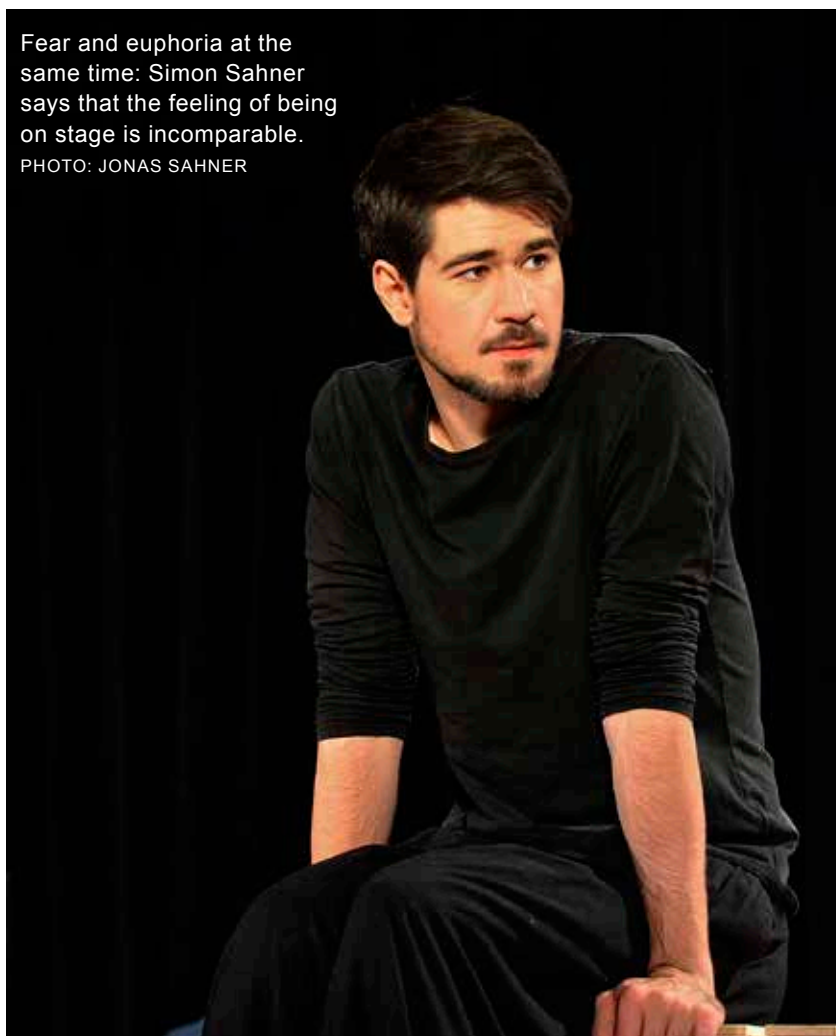
As a teenager he was convinced that he would be a great writer one day. Since he wanted to write important novels, true to style he bought himself a typewriter. After leaving school, he liked to sit with an intense look on his face in cafes, writing down his thoughts in notebooks. Today he laughs about it, "Eventually I realized that I was just playing the part of the great artist for myself. Just how I imagined creative people to be back then." He has long since given up trying to act out any clichés, and no longer takes himself so seriously, allowing his creativity to be guided more by enjoyment than dreams of success.

Simply audition

Stage plays always interested him, even at school. So one day he tried it out – things went well and he enjoyed it a lot. Looking back, he says that stammering never stopped him doing anything. If he hadn't got stuck on consonants now and then, he wouldn't be the person he is today. For instance, he joined 'Laut und Lyrik' because he did speech therapy with the leader of the group, Wilfried Vogel, who invited him to audition. That was back in 2011. Sahner is still a part of the group. "Articulation and breath play a major part in our appearances," he explains. Many of the exercises have helped him in day to day life too.

Fear and euphoria at the same time: Simon Sahner says that the feeling of being on stage is incomparable.

PHOTO: JONAS SAHNER



"The feeling of standing on stage is a mixture of fear and euphoria which nothing else brings. On the one hand there is the tension: you know there's no going back, that nothing can be allowed to go wrong. At the same time you enjoy showing what you have prepared and positive

responses from the audience bring out huge feelings of joy." Anyone who has stood on a stage wants to do it again. And, for Sahner, producing art means knowing oneself better and testing one's limits. At a poetry slam, for instance, he doesn't play a fictional character but just stands there on stage as himself. "I pick out individual aspects that I refine and exaggerate, but basically it's still me." This is a vulnerable thing to do, and it doesn't always attract a positive reaction – but that isn't just okay, it can even increase self-confidence, "Once you've made a complete fool of yourself in front of 200 people then you know that you can manage to give a lecture at a conference."

Anything, so long as it's not boring

Sahner would like to continue to go on stage regularly in future too. Every new theater production gives rise to such tension and dynamism that it is never boring. However he will be cutting back on the poetry slams, "I'm lacking ideas for the poems. Anyway, it's time for something new." His next project is the literature podcast "Buchdruck – Literatur in der Mangel", which starts in autumn 2017.

Awards

The winners of the first phase of the Startinsland business plan competition have been named: **Benjamin Baumann**, **Mathias Klenner**, **Bernhard Schöne** and **Christian Zech** won the 'Innovations from Science and Universities' category with their project 'OndoSense'. They are developing an innovative intelligent sensor for taking measurements in environments where optical or acoustic sensors are imprecise or fail completely. First prize in the category 'Innovations from Business and Society' went to **Jerome Meinke**, **Lilian Rettegi** and **Dr. Lukas Spohn** for their 'ClinEx' business concept, an app for digital documentation of physical examinations. The special prize for 'Green Economy' went to **Marco Armbruster** and **Benedikt Hauer**. As 'Arbeitsgruppe Biomasse' they aim to offer advice, laboratory analyses and automated fermentation test stands with appropriate software to operators of biogas facilities. **Esther Arroyo Garcia**, **Frederik Böhm** and **Christian Hirth** impressed with their 'DeepVA' (Deep Video Analysis) business concept, taking the 'Digital Future' special prize. The system can automatically extract various features from videos, generate metadata and classify and describe the video using this content.

Materials expert **Dr. Hatem Abushammala** who was supervised by the Professor of Forest Biomaterials has received the Ecology prize from the Sigrid-und-Viktor-Dulger-Stiftung for his thesis. This looked at how nanotechnology can enrich traditional wood science. The Ecology prize is endowed with EUR 6,000 and was presented at the Heidelberg Academy of Sciences and Humanities. It is awarded annually for a work in the fields of humanities, social sciences and science or engineering that aims to resolve environmental problems.

The biologist **Dr. Milena Bertolotti** from the Università Vita-Salute San Raffaele in Milan, Italy, has received the Humboldt research scholarship from the Alexander von Humboldt Foundation for post-docs. With its scholarship, the foundation supports highly qualified scientists from abroad at the start of their career. Bertolotti will be using a new method to investigate the localization and interaction of receptors on B-lymphocytes and B-tumor cells on the nanometer scale at the University of Freiburg. She is hosted by Prof. **Dr. Michael Reth** from the Institute of Biology III, BIOS Centre for Biological Signalling Studies, and the Max Planck Institute of Immunobiology and Epigenetics, Freiburg.

The Deutsche Gesellschaft für Pädiatrische Infektiologie has awarded the Theodor Escherich prize, which is endowed with EUR 20,000, to **Dr. Roland Elling**. Elling is a specialist at the Zentrum für Kinder- und Jugendmedizin of the University Medical Center and a fellow on the Berta Ottenstein program for clinician scientists of the medical faculty. He was awarded the prize for his planned project to study the effects of glucocorticoid hormones on immune cells in tuberculosis and other inflammatory processes using CRISPR/CAS9 gene editing technology.

The University of Freiburg has conferred the University Medal on **Karin Endress** and **Margot Selz**. Endress, President of the foundation board of the Georg H. Endress Foundation, received the University Medal for the foundation's extensive support of the Technical Faculty, Freiburg sustainability research, and the European Campus. Selz, the initiator and chair of the Aktionskreis Freiburger Schule – Initiative für Ordnungspolitik e.V., was given the distinction for her lasting impact on the public discourse about fundamental issues of a social market economy in dialogue with the University of Freiburg.

Dr. Karim Mohamed Gad from the Institute of Microsystems Engineering received the Südwestmetall incentive award for his dissertation which looks at the use of functional nano-layers in silicon solar panels. The incentive award honors outstanding achievements by junior researchers at the nine universities in the federal state of Baden-Württemberg. The award brings with it EUR 5,000 for work of significance to the industrial world of work or its socio-political framework. Gad researched how different nano-layers can be used to produce passivated heterocontacts on the basis of silicon crystals.

The neurobiologist **Prof. Dr. Carola Haas** has received the Alfred Hauptmann prize. The prize for the best scientific work in clinical and experimental epileptology in German-speaking countries, which brings with it EUR 10,000, is awarded every two years. Haas was honored for a study carried out in 2016. In it, she examined developmental disorders of the human temporal lobes that frequently occur in conjunction with medication-resistant epilepsy. Haas shares the prize money with a Swiss research team, including associate professor **Dr. Gian Marco De Marchis** of the Universitätsspital Basel and **Dr. Deborah Pugin** of the Hôpitaux Universitaires de Genève.

The internist and senior physician in the Department of Infectiology at the University Medical Center, **Prof. Dr. Winfried Kern**, has been honored by the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) for his research work and contributions to society by being named an honorary member of ESCMID, the European Society for Clinical Microbiology and Infectious Diseases. Kern has been on the board of ESCMID since 2009 and is now the program director of the annual conference, which is one of the largest international events in the field of infectiology and clinical microbiology.

The University College Freiburg (UCF) has awarded the sociologist **Matthias Leanza** the Erasmus Prize for the Liberal Arts and Sciences 2017 for his dissertation 'Die Zeit der Prävention. Eine Genealogie der Krankheitsvorbeugung'. The UCF has awarded the prize annually since 2013 for work which treats its subject in an exemplary fashion from a perspective of the science of history or epistemology and that contributes to an interdisciplinary methodical and theoretical exchange. The prize is endowed with EUR 5,000 and is funded by the Sparkasse Freiburg-

Nördlicher Breisgau. In his dissertation, **Leanza** traced the development of prevention in a modern context, taking as an example disease prevention.

Prof. Dr. Jennifer E. Reardon from the University of California, USA, has received the Friedrich Wilhelm Bessel Research Award. The Alexander von Humboldt Foundation honors internationally-recognized foreign scientists with the prize, which is endowed with EUR 45,000. Reardon will be working on Big Data in the life sciences at the University of Freiburg. She will be investigating how scientists deal with the problem of interpretation of large quantities of data. Her host is **Prof. Dr. Veronika Lipphardt** of the University College Freiburg.

This year, the University of Freiburg is awarding the University Teaching Award for outstanding teaching achievements to **Dr. Anna Rosen**, research assistant at the Department of English, and **Prof. Dr. Tim Krieger**, holder of the Wilfried Guth Endowed Chair for Constitutional Political Economy and Competition Policy. The prize is endowed with EUR 5,000 for each recipient. Endowed with EUR 500, the special prize for student initiative goes to **Alexandra Haag**, a student of medicine. The prizes will be presented in October 2017 at the start of the 2017/18 academic year. The university is honoring **Rosen's** teaching concept 'Applying Linguistics in the Foreign Language Classroom', which enables prospective English teachers to engage with the authentic speech of school pupils in research projects of their own. **Krieger** receives the University Teaching Award for his many years of acclaimed teaching in economics and above all for his teaching concept 'Economics Blog'. **Alexandra Haag** will receive the award for her children's reference book 'Paula und die Zauberschuhe'. This offers insight into the world of a child with a physical disability.

The Islamic scholar **Prof. Dr. Walid Ahmad Saleh** from the University of Toronto, Canada, has received the Konrad Adenauer Research Award. The Alexander von Humboldt Foundation awards the annual prize, which is funded by the German Foreign Ministry, to an internationally-recognized researcher from Canada. The prize is endowed with EUR 60,000. **Saleh** will be researching glosses to the Koran commentary of **al-Baidawi**, the most important and widely-known Sunni Koran commentary up until the 20th Century. His host is **Prof. Dr. Johanna Pink** of the Oriental Seminar.

At the end of March, **Prof. Dr. Nadine Schlüter**, research professor at the Department of Operative Dentistry and Periodontology of the University Medical Center Freiburg, received the Basil G. Bibby Young Investigator Award at the annual meeting of the International Association for Dental Research in San Francisco. The prize is endowed with USD 2,500 and honors work to date by junior researchers in the field of cariology.

Faculty News

Faculty of Theology

The Faculty of Theology has awarded three honorary doctorates. The distinction was given to **Prof. Dr. Christine Axt-Piscalar**, holder of the Chair for Systematic Theology and head of the Institutum Lutheranum at the University of Göttingen, **Prof. Dr. Wolfgang Bernhardt**, honorary professor for corporate governance at the University of Leipzig and chair of the Supervisory Board of the Frankfurter Allgemeine Zeitung until 2012, and **Prof. Dr. Rudolf Langthaler**, management of the Institut für Christliche Philosophie at the Faculty of Catholic Theology of the University of Vienna.

The rector has awarded associate professor **Dr. Stephan Wahle** the title of adjunct professor for the duration of his license to teach at the University of Freiburg.

Faculty of medicine

With effect from 1 May 2017, the rector has appointed **Prof. Dr. Harald Binder**, University Medical Center at the Johannes Gutenberg University of Mainz, professor of Medical Biometry and Statistics.

With effect from 1 May 2017, the rector has appointed **Prof. Dr. Tilmann Brummer**, Institute of Molecular Medicine and Cell Research, professor of Medical Cell Research and Signal Transduction.

With effect from 1 May 2017, the rector has appointed **Prof. Dr. Matthias Eder**, Deutsches Krebsforschungszentrum Heidelberg, professor of Radiopharmaceutical Development after the Jülicher Model.

With effect from 1 April 2017, the rector has appointed **Prof. Dr. Olaf Groß**, Technical University of Munich, professor of Experimental Neuropathology.

With effect from 1 May 2017, the rector has appointed **Prof. Dr. Andreas Vlachos**, Heinrich-Heine-Universität Düsseldorf, professor of Neuroanatomy.

Faculty of Philology

Prof. Dr. Rolf Kailuweit has accepted the appointment offered by the Heinrich-Heine-Universität Düsseldorf. He is leaving the Professorship in Romance Languages and Media Studies at the Department of Romance Languages and Literatures here.

Faculty of Humanities

With effect from 1 May 2017, the rector has appointed **Michael Abeßer** from the Department of History to be an administrative officer for the period of three years.

Prof. Dr. Jörn Leonhard has declined the appointment offered to him by the Ruhr-Universität Bochum in connection with an appointment by the Kulturwissenschaftlichen Institut in Essen.

Faculty of Mathematics and Physics

With effect from 21 June 2017, the rector has appointed **Dr. Andrea Knue** from the Institute of Physics to be an administrative officer for the period of three years.

Faculty of Chemistry and Pharmacy

The rector has appointed **Prof. Dr. Dr. Andreas Barner**, President of the Stifterverband für die Deutsche Wissenschaft e.V., honorary professor.

Dr. Michael Summer has accepted the appointment offered by the Chemnitz University of Technology.

Faculty of Biology

Prof. Dr. Ilka Diester from the Institute of Biology III has declined the appointment offered by the Eberhard Karls University of Tübingen.

Faculty of Environment and Natural Resources

With effect from 1 June 2017, the rector has appointed **Dr. Malte Junge** of the Institute of Geology and Environmental Sciences to be an administrative officer for the period of three years.

With effect from 12 July 2017, the rector has appointed **Dr. Gerwin Wulf** of the Institute of Geology and Environmental Sciences to be an administrative officer for the period of three years.

Faculty of Engineering

With effect from 1 July 2017, the rector has appointed **Dr. Alfons Dehé**, Infineon Technologies AG, professor of Smart Systems Integration.

Prof. Dr. Thomas Brox from the Institute of Computer Science has declined the appointment offered to him by the Eberhard Karls University of Tübingen.

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Prof. Dr. Manfred June, Institute of Pharmaceutical Sciences
Lothar Mertink, University Computer Center
Ralf Rich, Central University Administration

40th ANNIVERSARIES

Prof. Dr. Elisabeth Cheauré, Department of Slavic Languages and Literatures
Prof. Dr. Ulrich Landgraf, Institute of Physics
Prof. Dr. Oliver Landmann, Institute of Economic Theory and Public Finance

VENIA LEGENDI FOR

Dr. Nicole Falkenhayner, English Literature and Cultural Studies
Dr. Alberto Rodríguez González, Physics
Dr. Tobias Hack, Moral Theology
Dr. Benjamin Kohlmann, English Philology
Dr. Sonja Levsen, Modern and Contemporary History
Dr. Alexander Mischnik, Medical Microbiology

Pictured



PHOTOS: SANDRA MEYNDT, PATRICK SEEGER

Genes from sweet gummy chews, modern measuring technology and robots with morals and a wig: around 60 exhibitors from the University of Freiburg, Freiburg University Medical Center, cooperating companies and other universities from the region presented research to touch and try out at the Science Market in July 2017.

Pronounced

PHOTO: MAX DALLOCCO/FOTOLIA

Freedom or Freiburg

Off into the wide wide world: taking a semester abroad is very popular with students.

Many even claim that time abroad is essential if you want to get ahead these days. But are they right?

Rimma Gerenstein (pro) and Nicolas Scherger (con) argue the point – a little.

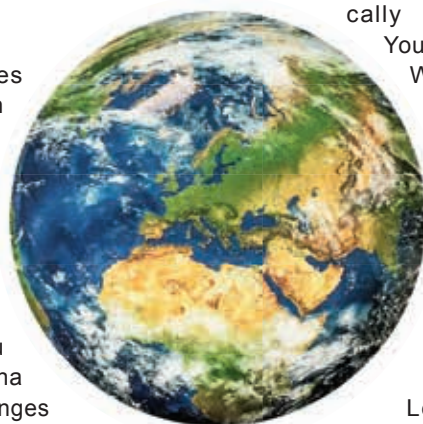
Pro: the great voyage of adventure abroad

"We're at the start, and the world is large," roughly put, was the absolute truth delivered by German rap band Absolute Beginner. The message is clear: students of all countries, pack your bags! Get out of your stuffy rut, get on that plane and away! But the rappers didn't invent the idea of spending time abroad. History is full of tales of travel, and it always led to enrichment of one sort or another: Odysseus encountered vocal maids of the ocean, Columbus found foreign friends in America, and Laika the dog fetched sticks amongst the stars.

Foreign travel is never more impressive than in Arthurian legend or the educational novel: the hero goes out into the world (heroines tended to stay at home), overcomes adventures great and small, gains deep psychological insight and in the end knows where he belongs in society. This is something we need even more urgently than before: ever since the Bologna Process with its obsession

with ECTS drove the spirit of Humboldt out of German universities, a semester abroad can appear to be the only option if you want to take charge of the process of maturing for yourself.

The possibilities are endless: in Japan you can live, eat, sleep, work, have a crisis and discover the philosophy of minimalism in two square meters, or in India you can discover Nirvana in the holy river Ganges whilst swollen cow cadavers and clumps of arsenic float by, or in the USA you can pay privately for your own heart bypass after a 3,000 calorie meal. And these experiences are yours forever. Then, after this voyage of adventure you are at last ready – for whatever comes.



Con: the world is coming to Freiburg

Want to contact friends in Spain, Japan and the USA? It's easy: here's Facebook, Skype and WhatsApp. Want to see Australia, Brazil and South Africa? They're fantastically documented on YouTube and Instagram. Whatever it is you want to experience in the world: it's available here, in Freiburg, on the sofa in your own room – thanks to digitization. Travel? How old-fashioned.

Leaving Freiburg to see the world is over. Today, the world is coming to Freiburg. And it's coming for all stick-in-the-muds, not just via the screen. Seen globally, Freiburg is the center. In the 2017 summer semester, students from 133 countries were registered at the university, even including some from

Bavaria. Anyone who wants to build intercultural contacts just has to talk to their fellow students. And what doesn't this city have to offer in global superlatives? A national football team with the best talent, a music festival in a tent with the latest bands, a gastronomic scene with superb cuisines. There's a United World College where the international elite of the future are educated, our twin cities such as Wivili, Nicaragua, Madison, USA, or Innsbruck, Austria, are top-ranking economic and cultural metropolises, and our mayor was born in Australia. Why do hordes of foreign tourists flood into this city? Exactly.

And to the incorrigible few, who despite everything still really want to leave Freiburg just once, I say: you can comfortably experience a range of countries in an afternoon – in a nearby theme park!

Masthead

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Picked-up

PHOTO: JÜRGEN GOCKE

A Sparkling Discovery

The university employs a staff of animals on Freiburg's castle hill: sheep and goats are grazing an area of grass and forest on behalf of the Faculty of Environment and Natural Resources (see title page). But the quadrupeds aren't alone there. Recently a magnificent crystal was discovered there too. Max Orlich bade it welcome

uni^{leben}: Hello, beautiful crystal. How does it feel to be wrenched from your natural environment?

Crystal: To begin with I was a bit annoyed. I very much enjoyed being a microhabitat for amphibians, reptiles and insects.

Who thwarted your plans?

Well, you know, scientists won't leave us stones alone, they're so curious. A group of students dug over the woods for stones – and since I'm not that mobile, I was dug up along with them. Although I did very cleverly manage to lie with my crystal side down on the mossy ground.

You wanted to remain unrecognized?

Yes! I don't really like to sparkle. When 3.5 kilograms glitter, it can be a little showy at times.

Your finder certainly thinks differently!



She ran screaming with joy through the forest with me! I was utterly shocked! But okay, if you are just plan-

ning to build homes for insects and find me instead, I suppose that can make you jump for joy.

by Max Orlich

So you aren't cross any more?

No, we get on fine. At present I'm even living at her place. It's quite a contrast, I tell you – after sitting outside in the wind and the rain for such a long time, to be dry and cozy on a comfortable shelf – it's pretty good.

All the same there is still one question: are you a true amethyst?

You think I'll tell you? First of all I let myself get found, and then I have to tell everyone about my family background? I'll leave the hard work of finding out who I really am and how I found myself in the forest to the experts.