

Annual Report of the Rectorate 2023

The Wonders of Science

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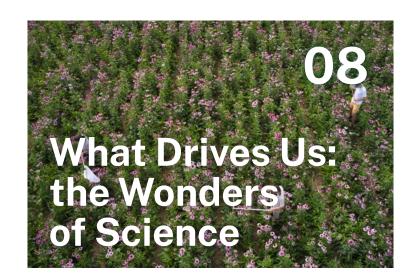
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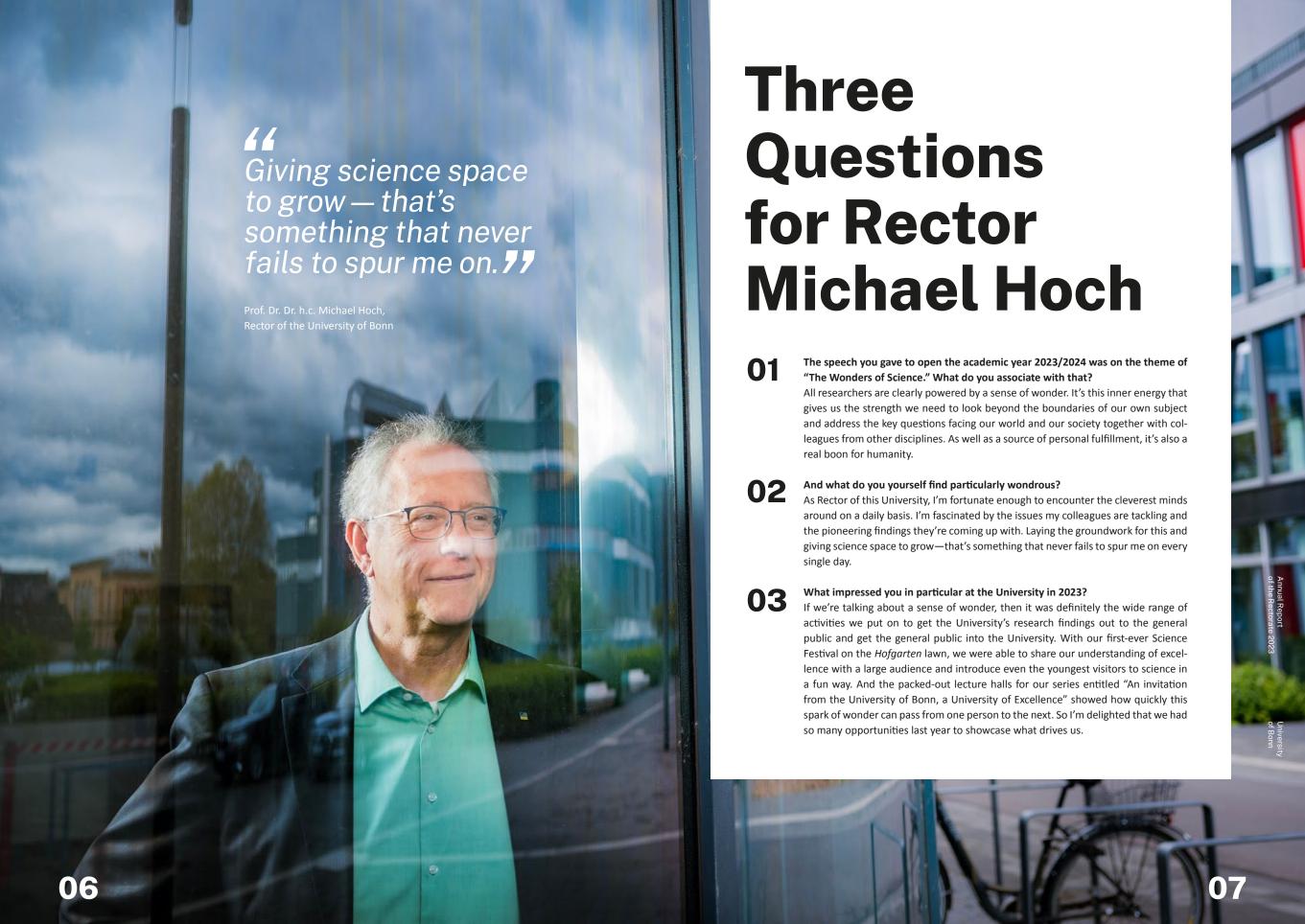
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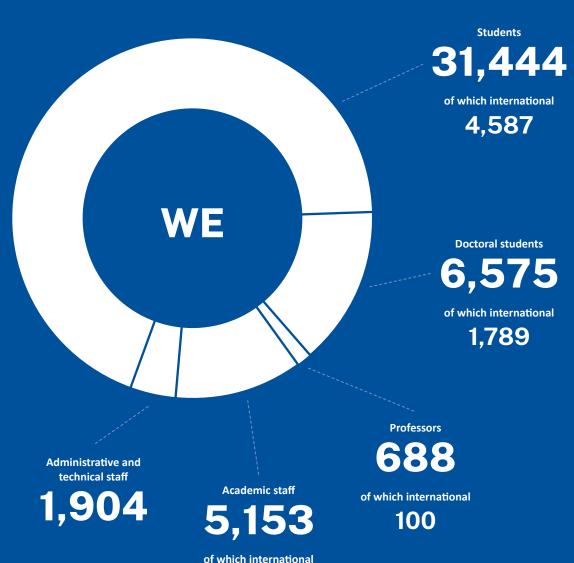
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2023

in figures



1,177

Degree programs

237

ERC grants

41

Clusters of Excellence

6

Transdisciplinary Research Areas

6

Palaces

Nobel Prize winners



Cores inside the new "Marvin" supercomputer

18,432

by way of comparison, a gaming PC has 8-12 cores

Budget

€850.357 million

Third-party funding

€206.901 million



Professor Denise Fischer-Kreer is passionate about academia, because it lets her unleash her creativity and teach her students that they are allowed to be bold and think big. When she heard about the Professorship for Entrepreneurial Behaviour in the Faculty of Agriculture at the University of Bonn, therefore, Fischer-Kreer did not have to think long before applying. "When I was offered the job, it felt like coming home," she remembers. In an interview with the editorial staff responsible for strategic University communications, she explained the hallmarks of her work at the University of Bonn and her main aims and objectives.

What led you to academia?

In all honesty, I'd say that academia found me. After I'd done an oral exam, my professor wrote me and asked whether I'd be interested in a doctorate; he said he'd like to have a chat with me about it. A few days later, I donned my rubber boots and raincoat—it was raining heavily and set off for my meeting. It wasn't until I was greeted by one of his doctoral students that I realized I was in for much more than just a pleasant chat over a cup of coffee. This was an official interview. And, after just half an hour. I knew I wanted to do a doctorate. For definite.

How did your future doctoral supervisor convince you?

He quickly made me understand just how varied the opportunities are that an academic career offers. But I still wasn't 100 percent sure after my doctorate. Yes, I flirted with the idea of an academic career, but the path to a professorship is a tough one. For instance, I asked myself whether I'd be able to juggle it with having a family. Back

then, I didn't know any women who'd had children while working on their Habilitation, and I didn't want to wait until becoming a professor before starting a family. My doctoral supervisor then tried a different angle. He asked me: "Is an academic career what you really want? Or do you only think you want it because you've never experienced anything else?" Even though I knew back then that I was passionate about university life, I wanted to give the idea a fair chance and went into industry. The issue of sustainability was very much on my mind, and I wanted to develop some strategies for it. Working as a strategic sustainability manager for the specialty chemicals group Lanxess gave me the opportunity to do both. I spent two years at board level there.

So you first made a career for yourself in the private sector. What brought you back to academia?

Many people I knew asked me that very same question... the conditions were good, the job was stimulating and the pay was great. But I was absolutely certain I wanted to go back to research, to teaching and to the students. Because here at university is my happy place. I feel I can be myself here. But I still benefited from my foray into the private sector, because it honed my profile as a professor. When I'm teaching, I always make sure to pass on to my students the skills that'll hopefully give them the best possible preparation for what awaits them in the outside world after they've graduated. I want to do my bit within my particular subject by sharing not only the theoretical knowledge but also the practical insights they'll need to succeed as entrepreneurs.

What made you decide to focus on entrepreneurship?

Because it suits me. Unlike some other people, I don't believe I've always been lucky in my career. It's simply that I've always been open to opportunities and new paths, and these are qualities that you'll also need if you decide to start your



own business. I originally studied industrial engineering, majoring in civil and structural engineering, before focusing on hydraulic engineering and water management. When I was given the opportunity to specialize in entrepreneurship in my doctorate after my master's, I didn't think twice. It was a gut decision that, quite simply, felt right.

What would you like to achieve at the University of Bonn? Both for your students and in general?

Working together with my team, I want to help boost people's entrepreneurial spirit. I want my students to have the chance to experience what an entrepreneurial mindset and approach actually means. And I'd like them to think carefully about whether—or not—they want to become entrepreneurs. Ultimately, there are other ways to make a career in business. I also want to empower my students to come up with their own projects and, armed with passion, to attempt to turn their ideas into reality. These are all things I'd like to encourage.

How do you pass on your knowledge at the University of Bonn?

"Entrepreneurial Behaviour" isn't a degree program in its own right. It

forms part of the Institute for Entrepreneurship—which is still fairly new—in the Faculty of Agriculture. Students can take both bachelor's and master's modules with me. I think it's important for them to tackle the issues of self-employment, entrepreneurship and starting a business early on. My courses give them the opportunity to devise their own business ideas and models and work on them in a really practical way. I support them through this process, and some impressive projects have come out of it. I work closely on this with the enaCom Transfer Center at the University of Bonn.

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We're not quite at the stage where the students from my seminars are going straight to the Transfer Center and turning their ideas into reality with its help. But that's the vision I'm working toward. This university is home to a lot of professors with a flair for start-ups, who I'm in close contact with. Gradually, I'd like to start offering my services to other faculties too. Talks are ongoing, and I hope to be able to run the first inter-faculty courses from the 2024 winter semester onward.

Who inspired you to follow your chosen career path?

Mine wasn't an academic family. Neither of my parents did the Abitur, and they've never been inside a lecture hall either. But they've always supported me and given me enormous freedom to do my own thing. I had the opportunity to try things out without any pressure whatsoever. They only wanted me to be healthy and happy. We had a plot in a community garden where I was allowed to grow and experiment with whatever I wanted. My grandpa also gave me his books as a present when I was still a little girl. He was a gardener. His encyclopedias were my absolute favorite books. I love them even now. I'd say this is another reason I feel so at home in the Faculty of Agriculture, as I routinely come across topics that have been part of my life since childhood.

Imagine you could go out for dinner with any famous researcher. Who would you choose and why?

Several people come to mind as possible answers to that question. Someone from my field would be Daniel Kahnemann, for instance. He was a psychologist who won the

Nobel Prize in Economics and helped to develop prospect theory. He studied cognitive bias. It's an area that's particularly important in my research, because the concept of cognitive bias can help us understand how businesses behave in the face of uncertainty or what attitude individuals have to risk.

I'd also like to share a meal with my favorite author Haruki Murakami. I really only read non-fiction, but his fiction writing is something else. Having the chance to chat with someone with an imagination like his would be great.

How are you intending to tackle the topic of transfer?

I'm well aware that a lot of researchers simply want to do research and teach, not necessarily set up companies. But my team and I are trying to get the whole University involved. Every project should consider the transfer element right from the start so that all the available potential can be harnessed and you can think

about who you can bring together with whom or put in touch with which company as early as possible. There are several questions that guide me in this process: How can knowledge be transferred from research and teaching into society even faster and more effectively? What are we measured on as researchers? Only on our research output? Or also on how our transfer work has helped to achieve something positive in society?

Some of your research you've done abroad, in India and China. What struck you most about your time there?

People there look at things in a completely different way. If I had even more time and resources, I'd run studies on entrepreneurial behavior in other countries. In India, I was lucky enough to get to know a community that was both a place of spirituality and supported startups that were dedicated to sustainability. For example, they made musical instruments there that were also sculptures, thus bringing

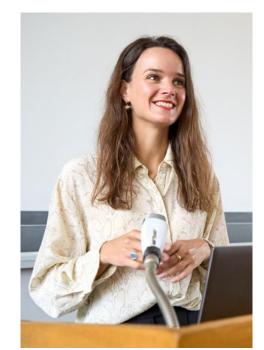
Being a researcher allows me to give myself scope to explore and to study new topics. This is precisely what I love about being here at the University of Bonn.

Prof. Dr. Denise Fischer-Kreer

music and art together in a unique way. They also developed sustainable menstruation products and readied them for market launch. I was particularly impressed by that, because it's actually something of a taboo subject in India. Even though it would have seemed unthinkable to me before I'd seen it, marrying spirituality with entrepreneurship can actually work. And it never hurts to expand your horizons a little.



▶ Professor Denise Fischer-Kreer was interviewed by Evelyn Stolberg (left), Editor for Strategic University Communications, in the University of Bonn's Botanic Garden.



What is it about academia that you find fascinating on a personal level?

When I was at school, I toyed with the idea of going into a creative profession. I initially wanted to study industrial or interior design. But I had an amazing math teacher, who steered me in a different direction and gave me a lot of encouragement. So I went on to study engineering. It didn't feel very creative at all at the start, until I realized how creative I could be doing scientific work. Being a researcher allows me to give myself scope to explore and to study new topics. This is precisely what I love about being here at the University of Bonn. The fact that the subject of entrepreneurship is based at the Faculty of Agriculture and that I

have some exciting possibilities at my fingertips for crafting different combinations with the various disciplines requires a lot of imagination on my part. Entrepreneurship tends to find a home in a business administration department, where completely different priorities are set to those that are possible here. Here, I'm able to forge some fascinating new connections. First and foremost, however, I'm able to teach my students that they're allowed to be bold, be creative and think big. Academia is something that never gets boring. You're always getting new momentum from somewhere, and I'm always being bombarded with new questions that I most definitely want to find the answers to.

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1 | April

Children's University marks 20 years

The Children's University has been a firm fixture on the calendar for 20 years now. Every lecture attracts some 350 schoolchildren, who come to be inspired by the exciting topics being presented.

▶ page 21

2 | Jun

Argelander and the stars

A fascinating character with an unquenchable passion for the stars. The first event in the "An invitation from the University of Bonn, a University of Excellence" series wowed an audience of over 300.

▶ page 19

3 L Iu

Unifest at the University of Bonn

This veritable institution attracts several thousand people to the *Hofgarten* lawn every year, even achieving a new record in 2023 with 4,000 guests and roughly 1,700 graduates.

▶ page 29

4 | July

Science Festival

Offering hands-on science for everybody to join in with, the event gave visitors young and old the opportunity to explore the world of science as they passed from station to station.

▶ page 18

5 | October

Unveiling "Marvin"

In "Marvin," the University has unleashed a high-performance computer designed to handle complex mathematical operations on its researchers' behalf.

▶ page 66

6 | December

Life in the space-time continuum

Like its predecessor, the second "An invitation from the University of Bonn, a University of Excellence" event likewise sparked the audience's imagination.

▶ page 19

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First-ever Science Festival offers handson science for everybody

During the summer, the lawn of Bonn's *Hofgarten* was transformed into a buzzing hub of science. Offering science that anyone could join in with, the University of Bonn invited visitors young and old to experience the fascinating world of research live and up close. Despite the soaring temperatures, the crowds flocked to the site to discover the University's many varied fields of research and activities.

The University of Bonn showcased its six Transdisciplinary Research Areas (TRAs), its six Clusters of Excellence and the strategies and priorities being pursued by its Vice Rectorates. A great many stations had been organized, where visitors could explore the world of science and find out what researchers are working on day to day. The festival was accompanied by a musical and cultural program, which made for a real party atmosphere.

▼ Vice Rector Professor Birgit Ulrike Münch introduces the German-French Creativity Lab.

Making science tangible

One of the event's main priorities was to enable visitors to get active and discover scientific phenomena for themselves. For example, they had the chance to try out an AI system, solve some mathematical riddles or learn more about what links flying robots, plant proteins and a sustainable future. At



the stall run by the ImmunoSensation² Cluster of Excellence, anyone who was interested could even extract DNA from bananas and use plasticine to understand how the immune system works.

Visitors of all ages also had the opportunity to get to know the six TRAs at a "TRAllye," a format that was familiar to younger participants in particular thanks to the popular science rallies. Those who completed a task at four or more of the seven stalls were able to win a voucher for the University's museums.

The Science Festival also marked the culmination of BONN*E FÊTE, the University's year-long celebration of France. The Centre Ernst Robert Curtius (CERC) joined forces with the Vice Rectorate for International Affairs and the Institut Français to put on a German-French creative workshop. Competitions, picture puzzles from the ARTE program Karambolage and German-French memory games provided opportunities to learn about some of the peculiarities of the Germans and the French.

A journey through the ages

Visitors to the stall staffed by the TRA Individuals and Societies could play the Metaflammation Game, a strategic board game that took them through various ages of history while they attempted to keep their health in balance. The TRA Matter's stand took a closer look at the Atacama Large Millimeter/Submillimeter Array (ALMA) in Chile's Atacama Desert. A LEGO model of the observatory was used to explain how distant galaxies are being watched closely through many small satellite-dish-like parabolic antennas connected up via computer.

The program on the festival's main stage embraced the twin themes of internationality and inclusion and put everyone in a good

mood with a steady stream of musical highlights. Proceedings were opened by the students' very own "Physics Show" featuring live experiments, followed by performances by the bands *Project Inclusion, Space Opera* and *The Peasants*. The University Jazz Choir wowed the audience with its stable of singers drawn from different disciplines, while the Adenauer-de Gaulle Prize-winning hip-hop band *Zweierpasch* brought a touch of international flair to the stage.

From star charts to the mysteries of time: two fascinating evenings at the University of Bonn

The University of Bonn set new standards in science communication in 2023 with the organization of two events. Part of the series entitled "An invitation from the University of Bonn, a University of Excellence," they provided a stage for exploring the topics of astronomy and time from a variety of angles. Besides scientific lectures, the evenings also featured performances that both delighted the audience and gave them food for thought.

Gazing at the stars: Friedrich Wilhelm August Argelander

The first event was devoted to the University of Bonn astronomer Friedrich Wilhelm August Argelander. Around 300 guests took up the invitation from the Rector, Professor Michael Hoch, to find out more about the life and work of the prominent scientist, including his magnum opus, the Bonner Durchmusterung star catalogue. Argelander mapped the northern night sky between 1852 and 1859, charting an impressive 324,198 stars across 48 maps. In their scientific lectures, the speakers for the evening highlighted the importance of his work-which still forms an important basis for astronomy to this day—and thus provided a fascinating glimpse into a number of current research projects, allowing non-experts too to learn things that they never knew before.

The student members of the *lit-terarium* group at the University of

▼ The series "An invitation from the University of Bonn, a University of Excellence" sees science topics explored from a variety of angles, complete with talks, discussions and performances.



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Bonn took a performative approach to Argelander's work. Through a play written especially for the evening, they brought their own interpretation of Argelander's life and work to the stage. The event concluded with a panel discussion in which the audience was also invited to pose questions to the experts.

Hunting down the mysteries of time

The second event in the series was entitled "Leben im Raum-Zeit-Kontinuum. Von inneren Uhren im und gegen den Takt" ("Life in the space-time continuum. All about biological clocks in time and off the beat"). Attracting an audience of 360, some of whom followed the livestreamed proceedings in an additional lecture hall, this interdisciplinary evening proved extremely popular. Five illustrious researchers from the worlds of philosophy, astrophysics, molecular physiology of the brain and medicine explored "time" from a range of angles.

Among other things, they covered how Albert Einstein came to develop his theory of relativity and why it is important to our understanding of space and time. The questions investigated included why a clock at the top of the Eiffel Tower runs more slowly than one at its base and how circadian genes determine our daytime and nighttime rhythms. There was also a discussion of plants' sense of time, as they can detect when the sun is about to rise and thus get ready to start photosynthesizing. The event threw up a few surprising bits of information and ample food for thought. The rapturous applause that greeted the speakers on both evenings was proof that the guests had been well and truly initiated into the wonders of science.

▼ Guests could explore the University of Bonn's exhibit and have fun at the same time.

MS Wissenschaft brings the wonder of black holes to Bonn

The public discussion entitled "Dialogue on Deck: Black Holes and the Limits of Space and Time," which was held on board the exhibition ship MS Wissenschaft in August 2023, attracted over 100 people. Astrophysics, theology and philosophy experts from the University of Bonn debated questions concerning the nature of space and time and the limits of our knowledge. The event formed part of the "Our Universe" Science Year 2023.

To fit the topic, a team from the University had devised an interactive exhibit for the ship, which functions as a floating science center. Entitled "Tracking the universe," the exhibit explained what makes the transdisciplinary study of our universe such a broad and fascinating pursuit. Representatives from the Argelander Institute for Astronomy, the Matter Transdisciplinary Research Area, the ena-



Com Transfer Center and other partners were involved.

Besides the panel discussion, the MS Wissenschaft also put on workshops for young people during its four-day stop in Bonn, in which they were given the opportunity to experience research live and up close. The city then played host to the "Universe on Tour" roadshow, complete with mobile planetarium and exhibition tent. All these events formed part of the Science Year 2023, which the Federal Ministry of Education and Research (BMBF) organized to foster dialogue in society about research.

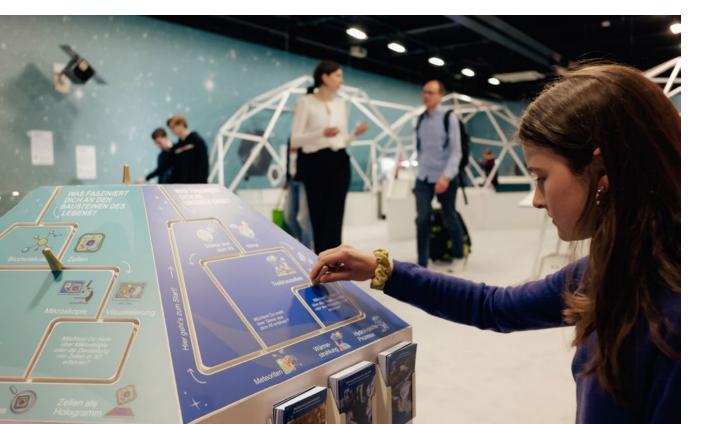
Where curiosity is set free: Children's University marks 20 years

The Children's University at the University of Bonn celebrated its 20th anniversary last year. For two decades now, this lecture series has given eight- to thirteen-year-olds the chance to find out about the world of science and what a university actually is and thus to be bitten by the science bug. The Children's University has already inspired countless children with the 250 events in all that it has hosted over 40 semesters.

Arousing scientific curiosity

Each of the 12 lectures last year began with a unique ritual, as the children counted down the final 10 seconds of waiting time out loud. At 5:15 pm precisely, always on a Monday, excitement peaked as around 350 pairs of eager young eyes followed the talks and experiments hosted by the lecturers. Whenever someone asked the first question or an "ooh" spread like wildfire round the room, it was clear that the spark of curiosity had been ignited. It showed that the children were now fascinated by a new topic that they had never considered from this scientific angle before.

Over the past 20 years, the Children's University has inspired an army of young people and introduced them to the idea of an academic career. Dr. Dilshad Mousa, who now works as a physician, found his fascination with medicine through the Children's University, while Dominic Ferber, who opted to study natural sciences, has fond memories of the lectures: "The Children's University definitely had a hand in me choosing to study natural sciences. It was the interesting mix of topics that captivated me and led to my biology degree. The Children's University also strengthened my bond with Bonn as the home of the University. I still live in the city and will soon be completing my doctorate."









Focusing on degree programs

The University of Bonn aims to offer its students excellent teaching and an inspiring degree program. It organizes a wide range of study-related events and provides targeted support to lay the foundations for their successful and enriching time as students. For the teachers, too, efforts are made to ensure that excellent ideas are encouraged in order to improve the quality of teaching even further.



Pioneering teaching

Teaching is extremely important at the University of Bonn, and there is ample proof of this: for instance, the University maintains a strategic fund to support projects for making curricula more open and flexible, awards teaching prizes every year to especially committed teachers and is pressing ahead with an internal quality management system (QMS) for teaching and learning.

"Future-Oriented Teaching" strategic fund set up

The University of Bonn has been supporting forward-looking teaching and learning projects via its "Future-Oriented Teaching" strategic fund since 2021. Applications for the project line, which is entitled "vielfältig.nachhaltig.digital" ("diverse.sustainable.digital") and which is now set to run from 2023 to

2026, were invited for what was actually the third time in consultation with the faculties. The annual funding volume averages €2 million.

Projects designed to make curricula more open and flexible and introduce new ways to acquire skills are eligible for funding. The aims are to facilitate personalized study options and pathways, incorporate learning and support formats, and help students to acquire skills that are geared squarely toward the future.

- "Lehr-Lern-LoK Agrar. Learning spaces working together to create practically minded teaching/ learning arrangements for the agricultural science professions," Professor Alexandra Brutzer, Faculty of Agriculture, **Nutrition and Food Sciences**
- "ProMaster pilot project," Professor Hartmut Schmieden, Faculty of Mathematics and Natural Sciences, Physics/Astronomy Department
- "FlipMathGeo: flipped classroom in mathematics for geosciences," Dr. Regula Krapf, Faculty of Mathematics and Natural Sciences, **Mathematics Department**
- "Practical pathways in religious studies: varied game-based didactics, lasting encounters and digitally aided subject guidance for new students," Professor Adrian Hermann, Faculty of Arts, Department of Oriental and Asian Studies
- "Flirting with a jail sentence legal fears in medicine (ReAni-Med)," Professor Tobias Raupach, Faculty of Arts, Psychology
- "Providing personalized student support through formative, adaptive testing," Professor Tobias Raupach, Faculty of Arts, Psychology
- · "Digital literacy. Teaching and learning activities for the Al-enabled acquisition of academic writing skills in foreign languages," Dr. Gisela Fehrmann, Faculty of Arts, Department of Language, Media Studies, and Musicology
- "LibRApp," Dr. Imke Lichterfeld, Faculty of Arts, Department of English, American, and Celtic Studies
- "Writing workshop for international law," Rohan Sinha, Stefan Talmon, Faculty of Law and Economics, Department of Law

Getting closer to an internal quality management system

The University of Bonn made major progress with its system accreditation in 2023. This project is geared toward establishing and certifying an internal quality management system (QMS) for teaching and learning, which will enable the University to accredit its degree programs itself and thus gain greater autonomy and flexibility in how it audits and improves quality.

The Rectorate approved the process proposals and revised core processes for introducing, modifying and discontinuing degree programs in April 2023. The new Evaluation and Accreditation Regulations for Teaching and Learning (Evaluations- und Akkreditierungsordnung Studium und Lehre, EvAO), which replace the previous evaluation regulations and incorporate the new internal accreditation processes, came into force three months later. Another milestone was reached with the first-ever Quality Conference in June 2023. Bringing together all the relevant people in quality management, including members of the evaluation project groups, deans of studies, degree program managers and students, it was convened in order to engage in results-focused debate on the system accreditation project and the QMS.

The first inter-faculty meetings were held in December 2023 to discuss ideas and perspectives for development and set them out in framework agreements. This ensures appropriate quality development for every aspect of the mission statement for teaching and closes the PDCA ("plan, do, check, act") loop at institutional level too.

The internal accreditation committee, which is set to play a key role in the University's internal accreditation procedures, was formed in August 2023. Comprising representatives from all relevant status groups and faculties plus the Bonn Center for Teacher Education, the body is mainly tasked with preparing the final accreditation decisions to be made by the Rectorate. The first internal accreditation pilot projects, which include the Cyber Security and Strategy and International Security degree programs, were completed successfully.

Supporting talented individuals even before they leave school

Since 2014, the Ministry of Culture and Science of the state of North Rhine-Westphalia (NRW) has been supporting an institution that is the only one of its kind in the whole of the German education sector: the Gelsenkirchen-based NRW-Zentrum für Talentförderung (NRW Center for Talent Development). Its job is to train the talent scouts who, based at their respective university, advise schoolchildren and thus accompany them on



- ▲ Representatives from the latest universities to join the NRW talent scouts program pose for a group photo
- ▶ Minister Ina Brandes presents the official plaque to Professor Klaus Sandmann, Vice Rector for Teaching, Learning and University Development.



their path to a degree program or vocational training. This advice is tailored to the individual and provided without any preconceived ideas about its outcome. The University of Bonn has now joined the program.

The state government will be providing around €10 million a year for this purpose from 2024 onward. The University of Bonn is one of six new partner institutions, and there

are a total of 100 talent scouts across the state looking after as many as 600 partner schools.

The program is geared primarily toward schoolchildren from households in which neither parent entered higher education. The talent scouts spot signs of exceptional achievements both at and outside school, encourage the young people to pursue their education or training single-mindedly and work with them to make plans for the future. The talent search also takes account of extracurricular activities. Without being put under any pressure to achieve a particular result, the young and talented individuals are then given personalized support and advice, which in some cases can continue for several years, in order to find the right next step for them to take on their educational or training journey.



Teaching prizes honor commitment and creative ideas

The University of Bonn presented fourteen of its teachers with teaching prizes last year in recognition of their dedication to the profession. The lecturers—six women and eight men—were chosen by the students themselves. They were handed their prize certificates at a ceremony on the *Hofgarten* lawn in Bonn that formed part of the *Universitätsfest* and was attended by over 4,000 people.

Professor Klaus Sandmann, Vice Rector for Teaching, Learning and University Development, thanked the teachers on the University's behalf for their outstanding hard work and dedication: "You have succeeded in conveying content to your students in a way that they understand and is relevant to the here and now, and the great enjoyment you get out of doing so is self-evident. Your motivation, your subject expertise and your methodological

skills are clear to see. Your students appreciate how you regularly go beyond the call of duty, make an active contribution to curriculum development, are always looking for ways to improve how you teach, draw on the very latest research and help your students to turn their own research ideas into reality."

▲ Fourteen teachers at the University of Bonn were presented with its teaching prizes in recognition of their dedication to the profession. They had been nominated by the students themselves.

2023's prize-winners are:

- Dr. Regula Krapf, Mathematical
 Institute
- Dr. Arnold Becker, Language Lecturer for Latin and Greek
- Professor Ute Weisz, Institute of Nutritional and Food Science
- Professor Margherita Disertori,
 Department of Mathematics
- Dr. Simone Giertz, Department of Earth Sciences, Geography
- Professor Finn Kristian Hansen, Department of Pharmacy
- Professor Walter Witke, Department of Biology
- Dr. Benedict Jürgensen, Oral and Maxillofacial Plastic Surgery

- Professor Philipp Sasse, Faculty of Medicine, Institute of Physiolory I
- Alba Iglesias Martín, Romance Studies
- Dr. Erika Linz, Department of Language, Media Studies, and Musicology
- Dr. Sebastian Speitel, Department of Philosophy
- Julian Hettihewa, Department of Law, Institute for Public International Law
- Professor Hendrik Hakenes, Department of Economics, Institute of Finance and Statistics

Focusing on studies

The University of Bonn sets great store by giving its students the best possible support so that the time they spend studying is both successful and enriching. For instance, the First-Semester Students' Welcome provides some initial guidance for newcomers, while the *Deutschlandstipendium* scholarship supports particularly gifted students, and the podcast produced by the Central Study Advisory and Counseling Service shares tips for stress-free studying.

Universitätsfest breaks all recordse

This year's *Universitätsfest* at the University of Bonn was a truly record-breaking event: never before had the University of Excellence bid a fond farewell to so many graduates as it did in 2023, with just shy of 1,700 of them signing up for the celebrations. They were joined on the *Hofgarten* lawn by some 4,000 guests to enjoy a lively party accompanied by glorious sunshine and temperatures to match. Bachelor's and master's

graduates from over 70 countries were in attendance this year, another record.

To kick off the event, Rector Professor Michael Hoch had a suggestion for the assembled graduates: "Today, we want to forget all our worries for once and just celebrate." Celebrate the fact that all the effort that has gone into studying has finally paid off and that the long-awaited degree is now in the bag. "You should be proud of yourselves," the Rector said. "You have obtained a degree from one of the best universities in Germany, in Europe and in the world!"

Over 30 stands were available for graduates to pop by, ranging from the gown collection station and a photo booth through to a flower stall. They also had the opportunity to be interviewed by the radio station bonnFM, immortalize themselves on the "Wall of Fame," sign up to the Alumni Network and/ or the Universitätsgesellschaft there and then or make use of the start-up consulting service provided by the enaCom Transfer Center. Meanwhile, the stall staffed by the

University's Career Service offered support for career entry and advancement. One of the more remarkable stop-off points en route featured the deans and vice deans of the various faculties, who were handing out the highly decorative presentation certificates written in Latin.

The *Universitätsfest* culminated in a fitting manner with the traditional "tossing of hats," which required just a single take. The celebrations were closed out by the Bonn-based brass band *Druckluft*, whose rousing rhythms lured everyone up onto the dance floor.

Ten years of the Deutschlandstipendium scholarship

Particularly gifted University of Bonn students have been able to obtain a *Deutschlandstipendium* scholarship since 2013. In its 10th anniversary year, 220 young people came together for the certificate presentation ceremony and thus joined the over 1,300 previous holders of *Deutschlandstipendium*



The latest recipients from all faculties received their scholarship certificate during the opening ceremony in the University's main auditorium, before meeting a large number of sponsors at the drinks reception that followed. Also in attendance were two alumni of the scholarship program, who discussed their career to date and their experiences and encouraged the "newbies" to make active use of the Deutschlandstipendium network. As far as Rector Michael Hoch is concerned, this is one of the most important objectives of the annual meet-ups: "I'm especially enthusiastic about the networking opportunities that Deutschlandstipendium scholarship holders are offered. They give both sides-recipients and sponsors—the chance to get to know one another and explore ways they might work together. It's a major achievement by all those who work on the Deutschlandstipendium scholarship, and I'm extremely grateful to everyone—and particularly the University of Bonn Foundation—for this achievement."

Professor Rainer Hüttemann, Chair of the University of Bonn Foundation, expressed his thanks for the generous support received: "I'm delighted that we've increased the number of scholarship recipients significantly yet again and, for the first time ever, will be able to fund 220 dedicated students in 2023/2024, which is a landmark anniversary. My heartfelt thanks go out to all the benefactors and to our sponsors for their magnanimous support." The successes that have been enabled by the Deutschlandstipendium program are key as far as he is concerned: "We as a university are able to recognize and reward our students' outstanding study achievements and social engagement," Hüttemann said. "In so doing, we're not only supporting and motivating particularly gifted and talented individuals today, we're also investing in the future of our University and our whole society."

First-Semester Students' Welcome marks the start of a new chapter in many people's lives

A few days before lectures actually started in the winter semester, some 2,000 new students came along to the First-Semester Students' Welcome put on by the University of Bonn. The emphasis was on giving advice and information and enabling people to get to know one another. Whether it was at the

▼ Deutschlandstipendium scholarships were awarded to 220 supremely talented University of Bonn students last year, giving them financial support for their studies.





▲ The University greeted its newest members with its First-Semester Students' Welcome complete with big party.

large-scale opening event, the info market in the *Arkadenhof* or the party in the evening, the First-Semester Students' Welcome provided ample opportunity for them to find out more about the University, their subjects and their fellow students.

The opening event was led jointly by Michael Hoch, Rector of the University of Bonn, and Janna Reif, President of the General Students' Committee (AStA). Other members of the Rectorate and representatives of various contact points at the University also took to the stage to introduce themselves. They included the Central Study Advisory and Counseling Service, the AStA's Department of Faculty Student Councils and the Studierendenwerk Bonn, which shared information about the counseling and other services that they offer.

"Be bold," Rector Hoch encouraged the first-semester students.

"As a University of Excellence, the University of Bonn offers not only

outstanding degree programs but also numerous opportunities to get involved and meet students from different subjects. I encourage you to seize these opportunities and embark on your studies with joy in your hearts!" Professor Klaus Sandmann, Vice Rector for Teaching, Learning and University Development, called on the new students to be open and welcoming. "You won't get anywhere in your studies fighting a lone battle," he said. "If you want to succeed, you'll have to join forces."

A call for engagement

Professor Andreas Zimmer, Vice Rector for Research and Early-Career Researchers, pointed out that the researchers of tomorrow would be found among the students of today: "You have the opportunity to do things that nobody has ever done before." For this reason, he added, it was important for the students to gain an insight into the world of academia and research even before they graduated, such as through internships.

Professor Annette Scheersoi, Vice Rector for Sustainability, discussed the University's sustainable transformation: "I warmly invite you to transform the University into a genuinely sustainable place." There were a great many hands-on activities to enjoy during the quarterly themed campaign months, she added. Students could also get in touch with Team N (N for "Nachhaltigkeit," or "sustainability" in German), she said, which includes representatives from the student-run, sustainability-focused Green Office alongside the Vice Rectorate for Sustainability and the Sustainability Unit.

Packing out the Arkadenhof

The topic of diversity and equal opportunity was covered by Professor Irmgard Förster, Vice Rector for Equal Opportunity and Diversity. "I want the potential that lies inside every single member of the University to be supported and fostered and for us to treat one another with appreciation and respect." She explained that the Rectorate had signed off a set of guidelines covering various aspects of diversity.

Following the opening event, the celebrations continued out in the *Arkadenhof*, where a wealth of Annual Report of the Rectorate 2023

of E

New degree programs and study options

The University of Bonn introduced several new degree programs and study options last year that cover a wide range of disciplines and are targeted at students from both Germany and further afield. These new programs offer innovative approaches and interdisciplinary perspectives that take account of the current requirements of the job market and the research landscape.

Theology and Social Work

This unique program combines the Magister Theologiae degree at the University of Bonn with the bachelor's in Social Work at the Catholic University of Applied Sciences of North Rhine-Westphalia (katho). The mutual recognition of study achievements under this partnership enables students to obtain both degrees at the same time. The standard period of study lasts fourteen semesters, thus reducing the time required to complete both degree programs by two semesters. The program is geared toward students looking to enter a Church profession or the welfare sector.

Master of Arts in Strategy and International Security

The master's degree program in Strategy and International Security provides an education in strategy research and security policy with a practical bent. Its interdisciplinary approach incorporates elements of politics, international law, the history of diplomacy, geo-economics and technology policy. An integrated colloquium allows students to apply their knowledge during internships in Germany or abroad and prepare themselves for working life.

Master of Arts in Greek and Latin Literature and Culture

This master's degree program focuses on analyzing and interpreting Greek and Latin texts in a cultural context. Students acquire an indepth knowledge of ancient, medieval and early modern literature and of the history of its reception. Regular guest lectures and symposia provide an insight into current research projects and facilitate active participation in academic debate.

Master's in Cyber Security (MSc)

Students on the master's degree program in Cyber Security study the security of computer systems and how to interact with them in a security-compliant way. They analyze technical and organizational aspects of security and devise ways of detecting and preventing attacks. The program has a strong research element and offers the opportunity to collaborate with prestigious research institutions and companies. It can be taken completely in English and will provide a route to a doctorate.

Master of Arts in Biblical Studies

Taught in English, the master's degree program in Biblical Studies has an international and interdisciplinary flavor and can be complet-

ed in two semesters. It is aimed at students who are keen to learn more about the latest research into Biblical texts. Besides analysis and interpretation of the Hebrew Bible and the New Testament, the program also features interdisciplinary modules on expanding historical knowledge and deepening the current reception of Biblical themes.

Studierendenfutter podcast launched

The Central Study Advisory and Counseling Service (ZSB) launched a new podcast, *Studierendenfutter* ("Fodder for Students"), in 2023. It is aimed at all students at the University, whether they have only just embarked on their degree program or are already writing their master's thesis. The aim is to give them useful tips and advice that will help them sail through their studies successfully and stress-free.

Each episode tackles various topics relevant to students, such as getting started with their studies, handling exam stress, organizing their daily routine and their options for gaining new skills by taking advantage of additional services. The podcast also features regular appearances by experts, who discuss and answer specific questions.

In addition, Studierendenfutter provides an insight into the various services offered by the University of Bonn. Listeners can learn more about what the ZSB can do for them, what support is provided by the Career Service and the many varied activities run by University Sports. The University's cultural and social program is also publicized in order to give students a comprehensive overview of all the possibilities open to them at the University of Bonn. Episodes are released monthly and are available on the University website and on all the main podcast platforms.



Bergfest: marking the halfway point

The Botanic Garden hosted the University of Bonn's *Bergfest* for the first time in 2023. "Celebrate what you've achieved and power up for what's left"—this was the order of the day for the event, which was organized by the Central Study Advisory and Counseling Service for students in their second semester onward. It was designed to reward students for what they had achieved so far while also giving them renewed strength for the challenges ahead.

The *Bergfest* offered a wide range of activities and information stalls that gave students both practical support and opportunities for self-reflection. Visitors were able to find out about various University services at the information stalls run by the various central service points and counseling services. The sporting activities organized together with University Sports were one particular highlight of the event.

As well as these sporting pursuits, students could also under-

take numerous exercises in self-reflection that helped them to think deeply about their study experiences to date and set themselves goals for the future. The empowerment stations gave participants the opportunity to hone their skills, boost their self-esteem and improve their decision-making ability with a range of hands-on activities.

Statewide themed days for students experiencing doubts about their studies

Higher-education institutions across North-Rhine Westphalia (NRW) organized the statewide "Thementage Studienzweifel"—a series of themed days for students experiencing doubts about their studies—as part of the NEXT CA-REER project. They gave students the opportunity to find out for free about topics such as switching subject or university, making a fresh start, alternative career paths and careers guidance. The event series aims to help students who are guestioning their choice of studies.

▲ Vice Rector Klaus Sandmann at the *Bergfest*.

To this end, the nineteen higher-education institutions involved put together a four-week program packed with more than twenty events, from talks and workshops to drop-in consultation sessions and first-hand testimonials from former students who suffered doubts about their studies. The aim was to give the students who found themselves at a crossroads some guidance and show them that, rather than having to be a taboo subject, having doubts about one's studies can also be an opportunity for a fresh start.

Organized as part of the statewide NEXT CAREER grant program and funded by the Ministry of Culture and Science of NRW, the event series represents a signal sent out by the higher-education institutions against the stigma of doubt and "failure." After all, there can be many different reasons why students might question their study decisions and set off in a completely new direction every once in a while. Annual Report of the Rectorate 2023

University of Bonn

Maintaining excellence through equal opportunity and diversity

People are diverse. Just like their character, lifestyle and potential. The University views this diversity as an enriching factor, because having differing views is the only way to tackle ideas from a range of angles in order to come up with all-encompassing solutions together.

In order to promote and strengthen equal opportunity and diversity over the long term, the Rectorate is committed to fostering an inclusive organizational culture that systematically uncovers and eliminates inequality and exclusion mechanisms. In keeping with its guiding principle of "maintaining excellence through equal opportunity and diversity," the University of Bonn focuses its work on five issues in particular: educational justice, family-friendliness, gender equality, inclusion and participation, and anti-discrimination.



Annual Report of the Rectorate 2023

University of Bonn

Equal opportunity and diversity

Creating a diverse university whose members can grow and develop in an environment that is as free of discrimination as possible is a top priority for the University of Bonn. For example, it is increasing its percentage of women professors in a targeted way and supporting students and doctoral candidates who have come to Germany as migrants or refugees as well as putting on the Diversity Days every year.

▼ The Diversity Days saw experts cast a critical academic eye over the issue of equal opportunity and diversity in higher education in Germany.

Proportion of female professors rising steadily

In its application for University of Excellence status, the University set itself the target of having 30 percent of its professorships held by women by 2026. Having been down at 19.2 percent in 2018, this figure had jumped to 29.2 percent by the cut-off date of October 1, 2023. Working in lockstep with the faculties, therefore, the target of 30 percent is now within touching distance.

Diversity Days held for the second time

The University of Bonn hosted the second round of its Diversity Days, which promote a sense of togetherness that champions respect, inclusion and equal opportunity. In a panel discussion entitled "Diversity in German Academia—A Reflective Look at the Current State," experts cast a critical academic eye over equal opportunity and diversity at higher-education and research institutions in Germany. Designed as a forum for people to share their experiences and knowledge, the debate explored ways of promoting discussion and change processes within individual institutions and raising awareness of diversity. At



the Fair of Opportunities, which was held to coincide with the Dies Academicus, some 15 diversity-related initiatives and contact points showcased their services in the Arkadenhof in the University Main Building, where they met and talked with University members.

Becoming part of the Chancengerechtigkeit network in the Rhineland

The University of Bonn has

joined the Chancengerechtigkeit ("Equal Opportunity") network based in the Rhineland. Founded in 2018, this alliance of leading teaching and research institutions from the region is committed to focusing on equal opportunity in all its various aspects in everything that it says and does. The alliance aims to establish a common framework that makes the organizations involved open to anyone with the right entrance qualifications regardless of their circumstances and social background and that fosters an environment where everyone is valued and appreciated. Among the issues that the network is keen to address are increasing diversity in managerial roles in research and administration, improving the compatibility of family and career and doing more to support talented teachers and researchers in a way that champions equal opportunity.

University joins Familie in der Hochschule e. V.

The University of Bonn was accepted into the association Familie in der Hochschule e. V. ("Family at University," or FidH) in fall 2023 and intends to keep on improving the compatibility of family, studies, research and career. The University has set itself several targets in order to achieve compliance with FidH's charter. These include: embedding a family-focused leadership culture among its researchers, teachers and technical and administrative staff; improving its infrastructure; demonstrating a strong commitment to onboarding and its dual-career service; evaluating and improving opportunities for family-friendly working; and supporting employees with family obligations in emergencies and other exceptional circumstances. FidH is aiming to make the compatibility of family, studies, career and research an integral feature of the German higher-education landscape and develop it further within the wider alliance of universities.

Pathways to Research grant program

Part of the University's current Excellence Initiative, the new Pathways to Research grant program launched at the start of the 2023 summer semester. The scheme is designed for students and doctoral candidates who came to Germany as migrants or refugees, who are more likely to face particular challenges in the German higher-education system. The program thus aims to reduce barriers for them and help them to achieve success in their degree program or doctorate. Pathways to Research is made up of various funding instruments. Students receive a monthly grant for one or, at most, two years and can attend a number of workshops, Doctoral candidates are likewise paid a monthly grant, in their case for up to three years, and given the opportunity to take part in coaching sessions and workshops. Establishing new social contacts is another important element.

€50.000 for diversity

The University of Bonn has received a grant worth around €50,000 as part of the "Diversity at German Universities" initiative, which the German Rectors' Conference (HRK) launched in partnership with the Federal Ministry of Education and Research (BMBF). The money can be used to fund measures that make diversity more visible both within and outside the University and enable all the various status groups to have a hand in its strategy process. This includes a campaign to underline the University's attitude to diversity and shine a spotlight on relevant institutions, people and services. Members of the University can talk about their careers to date and ideas for strengthening diversity in video clips and podcasts and thus serve as a role model for others. A lecture series on diversity delivered in partnership with the Research Unit Diversity in the Faculty of Arts and a suite of workshops on the key issues of gender equality, educational justice, family-friendliness, anti-discrimination and inclusion provide additional opportunities for participation.

"Inclusion Guides" project

The University of Bonn has been participating in the "Inclusion Guides" project run by the Bonnbased association Hildegardis-Verein together with other institutions and companies since September 2023 in order to reinforce its inclusive and diverse stance further in line with its strategy. The project is geared toward making the appointment process and working environment more inclusive for women with a disability. Ten female students with a disability will spend a

vice and the Representative for Stu-

dents with Disabilities.

Daycare places now bookable online

The University of Bonn is entitled to reserve spaces at nine daycare centers and similar facilities for pre-school-age children. A new digital sign-up system for this was launched in December 2023 that offers parents numerous benefits. They can now use the paperless registration process on the website of the Office of Family Services to book one of the reserved spots. The new system has greatly simplified all communication with parents and brought even greater transparency to how places are allotted as well as enabling the Office of Family Services itself to work more efficiently. A total of 133 childcare spaces in Bonn, Cologne and Königswinter are ringfenced for staff and students at the University of Bonn.

Policies for Protection Against Sexualized Discrimination and Violence published

Within the scope of its powers, the Rectorate sees itself as responsible for guaranteeing protection of the rights of the individual to personal freedom, punishing any violations of these rights and taking appreventive Published in early March, the new Policies for Protection Against Sexualized Discrimination and Violence set out standards of behavior, procedures and potential responses for dealing with sexualized discrimination and violence. Everyone covered by these policies is to be made aware of the need to ensure a non-discriminatory and non-violent campus and is called on to actively support these policy aims as students, teachers or other staff members.



Gender Studies Prize honors outstanding final theses

The Gender Studies Prize has been awarded since 2003 to honor exceptional final and doctoral theses that tackle an issue taken from the field of gender or queer studies. The Gender Studies Prize 2022 was awarded to three University of Bonn graduates in 2023: Luis Kumpfmüller for his bachelor's thesis "Der Männerbund, das Eigene und das Andere. Fremdzuschreibungen

und Othering in Männerbundum die diskursen Jahrhundertwende," Laila Riedmiller for her thesis "Geschlechmaster's terkonzeptionen im rechten Verschwörungsdenken. Potentiale und Grenzen einer geschlechtsspezifischen Analyse" and Michaela Doutch for her doctoral thesis "Women Workers in the Garment Factories of Cambodia. A Feminist Labour Geography of Global (Re) production Networks." There were a total of 15 submissions from 12 subjects.

Project funding in the faculties

The Gender Equality Office provided funding for two fund projects designed to foster the structural integration of gender equality in the faculties. One project, promoting family-friendly conferences in the geosciences, intends to develop guidelines for appropriate measures and a sustainable usage strategy in order to make it easier for female early-career scientists to juggle conferences and family life. The other, a project by the Research Group for Theological Gender Studies in the Faculty of Catholic Theology, plans to create a "Theological Gender Research" module, which will make issues of theological gender research and gender equality a prominent and mandatory part of the curriculum for all Catholic Theology courses.

Making gender equality work visible

The Gender Equality Office advises and supports the University in its efforts to realize its gender equality aims and acts as a point of contact for University members in cases relating to gender equality. 2023 proved a busy year in this respect, with a new University Gender Equality Commissioner taking up her post, the Gender Studies Prize awarded for exceptional final theses and two projects boosting the structural integration of gender equality in the faculties.

New Gender Equality Commissioner

Gabriele Alonso Rodriguez was appointed the new University Gender Equality Commissioner at the University of Bonn in October 2023. Her deputy is Felicitas Frigge. Gabriele Alonso Rodriguez previously spent six years in a similar role in the Faculty of Mathematics and Natural Sciences. Her main priority in the first few weeks of her time in office was to rebuild her team, with both her predecessor and her pre-

decessor's deputy having resigned their posts. A graduate of the University of Bonn, Gabriele Alonso Rodriguez will be focusing on ensuring gender equality and fighting gender discrimination and intends to bring about positive change together with her team. Although they are responsible for a wide range of projects, their focus is on making gender equality work visible. This includes workshops and training sessions focused on all status groups.



Awarding the 2022 Gender Studies Prize From left to right: Professor Andreas Krebs (member of the panel), Professor Marion Gymnich (member of the panel), Luis Kumpfmüller (winner), Laila Riedmiller (winner) and Michaela Doutch (winner).

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foster networks



Celebrating some outstanding successes

Curiosity, enthusiasm and tenacity are qualities that keep on spurring researchers on to leave the beaten track and be guided by their own sense of wonder. It is this fascination with science that also inspires the University as a whole.

Among the best 100 in the world

The University of Bonn put in a superlative performance in numerous international rankings in 2023. Continuing a trend that began a few years back, it is capable of holding its own against the very best in the world in terms of its strong track record in research and the freedom that it gives its researchers.

University of Bonn in world's top 100

This is the verdict of the THE World University Ranking published by the UK magazine Times Higher Education (THE), which puts the University of Bonn 91st in the world and 6th in Germany. Compared with its German peers, it performed best in the "Research Environment," "Teaching" and "Research Quality" categories, where it came 7th, 7th and 8th respectively. The rankings, which are produced annually, covered around 1,900 universities from 108 coun-

tries in 2023. Unlike many other German universities, the University of Bonn largely managed to retain its placings year on year.

The University is also among the

top 100 in the world according to the internationally renowned Shanghai Academic Ranking of World Universities. Occupying an excellent 67th place on the worldwide ranking list, it has thus moved up nine slots since last year. Within the EU, meanwhile, it is inside the top 10. In Germany the University of Bonn ranked fourth after Heidelberg University, the Technical University of Munich and the Ludwig Maximilian University of Munich. These four Universities of Excellence are the only German universities in the world's top 100 according to these rankings. No fewer than 1,000 universities are assessed against six indicators, including academic publications and high-profile awards. The University of Bonn came in the top five for four out of these six indicators. It improved its position, in some cases significantly, in three categories in particular: alumni with Nobel Prizes or Fields Medals, articles in Nature or Science, and total number of publications.

Strong subjects, top-level research and extensive international networks

However, it was not just the University as a whole that proved its position among the world's top 100 in 2023-individual subjects did too. This is an important indicator of how successful its individual departments are in an international comparison. The research-oriented Shanghai Global Ranking of Academic Subjects highlights the strong performance put in by the natural and life sciences at the University of Bonn as well as putting its mathematics and economics departments in an outstanding first place in Germany (23rd and 39th

wide) likewise ranked very highly.

That the University of Bonn is among the world's 100 best universities in over a quarter of its subjects that were ranked is also borne out by the QS Rankings by Subject compiled by Quacquarelli Symonds. For instance, it moved further up the leaderboard for Germany year on year in around half of the subjects for which it received a ranking. Leading the field among these subjects is Mathematics, which has come top in Germany and 39th worldwide. Also in first place nationwide is Dentistry, which has moved up two spots. As a member of the group ranked 51st–80th, the University also enjoys a very good position internationally. best-performing subjects include Economics and Econometrics (50th worldwide and 3rd in Germany), Agriculture and Forestry (66th worldwide and 4th in Germany), Philosophy (51st-100th worldwide

and 5th in Germany) and Archaeology (51st-100th worldwide and 6th in Germany). A total of 1,594 universities around the world were

Law and Economics, the two

subjects taught at the University of

Bonn that were included in the CHE

Ranking by the Centre for Higher

Education, scored very highly in the

rankings. Both faculties garnered a

large number of positive assess-

ments in the fact-based results as

well as the findings from the stu-

dent survey. Economics students were particularly complementary about how their degree programs are organized (4.7 stars out of 5) and the general situation regarding their studies (4.2 stars out of 5). The courses offered (4.3 stars out of 5), the assistance provided by teachers (4.3 stars out of 5) and the support available on semesters abroad (4.2 stars out of 5) were also rated especially highly. Meanwhile, law students reserved special praise for the support they received when preparing for examinations (4.2 stars out of 5), the availability of current and digital media in the library (4.3 stars out of 5) and assistance from teachers (3.9 stars out of 5). Turning to the fact-based results, students were particularly positive about the overall support given to them at the start of their studies (12 points out of 14) and when preparing for examinations (8 points out of 8). The two degree programs were thus among the best performers in the survey in all of these areas as well as a number of others.

The rankings issued by the Centre for Science and Technology Studies (CWTS) at the University of Leiden in the Netherlands have yet again confirmed the University of

Bonn's outstanding scientific and academic performance and the international significance of its research. This included the proportion of the University's papers that came within the top 1 and 5 percent of the most frequently cited publications, for which it came 3rd and 5th respectively in Germany and 2nd in both categories when compared to the other Universities of Excellence. The University of Bonn's strong partnerships with the very best minds the world over are illustrated by its performance in the "International Collaboration" category, which measures the percentage of publications authored towith international partners—it came 3rd in Germany and 1st among the Universities of Excellence. A total of 1,411 universities from 72 countries were compared in 2023.

The University of Bonn's highly successful international partnerships are also reflected in the latest QS World University Ranking, which put it straight in at 79th place worldwide and 3rd in Germany for the new "International Research Network" category. It also ranked very highly for long-distance international publications, defined as those involving co-authors from research institutions over 5,000 kilometers away, coming 2nd in Germany and, yet again, 1st among the Universities of Excellence. The University of Bonn's strong showing in terms of the percentage of its publications made open access reflects the substantial investment that it has made in ensuring the public accessibility and usability of its research work: it placed 6th in Germany and 4th compared to the other Universities of Excellence.

Politics meets university

Research would not happen without exchange and dialogue, including outside one's own four walls. As well as having an impact on civil society, therefore, the universities also afford political decision-makers some insights into their work.

Rector Michael Hoch and State Premier Hendrik Wüst visit Japan

Hendrik Wüst, State Premier of North Rhine-Westphalia (NRW), traveled to Japan in the company of the Rectors of the University of Bonn and Ruhr University Bochum,

a delegation of business leaders and the President of the Higher Regional Court of Düsseldorf. One of the main purposes of the trip-State Premier Wüst's first major visit abroad-was to consolidate partnerships in science and research. The itinerary took in places including Tokyo, Osaka and Fukushima.

The knowledge and research environment in NRW boasts strong international ties. The positive and close relationship that the two countries enjoy in these areas is to be consolidated further, particularly in fields of future relevance such as robotics/AI, quantum computing, hydrogen and battery cell technology. Also on the agenda was

greater collaboration on ethics between the Universities of Tokyo and

The University of Bonn has enjoyed strong links in research and teaching with the Institute for Advanced Studies on Asia at the University of Tokyo for a long time now, with the two institutions working closely together in a third-party-funded project on AI and desirable digitalization. An Agreement on Academic Exchange was signed to strengthen these links further, particularly with regard to greater collaboration on research projects of excellence. Among other things, the two sides agreed to launch a joint project on the future of capitalism.

The delegation also visited Osaka University, where a partnership is planned between the University of Bonn's ImmunoSensation² Cluster of Excellence and the Immunology Frontier Research Center (IF-ReC) at Osaka University. A joint international Research Training Group that is to award dual doctoral degrees from both universities in the future will be set up as part of this arrangement.





- ▲ Rector Professor Michael Hoch signed a raft of cooperation agreements with his Japanese partners in the presence of State Premier Hendrik Wüst.
- ◆ Rector Professor Michael Hoch signs a cooperation agreement.

Klara Geywitz, Federal Minister for Housing, Urban Development and Building, visited the University of Bonn last February at the invitation of Rector Michael Hoch. She met with members of the Rectorate and researchers to get to know

the University of Excellence in the city that is the home of the United Nations in Germany. The meeting centered around the University's Excellence Strategy and strategy for the future and its six Transdisciplinary Research Areas (TRAs). Within these spaces for innovation and exploration in research and teaching, researchers work across faculty

boundaries and with non-academic partners to tackle key scientific, technological and societal questions of great future relevance. By way of an example, Professor Jan Börner, Speaker for the TRA Sustainable Futures, reported on the latest research being done into institutional, science-based and technology-driven innovations in the field of sustainability. Also at the meeting was the Bonn-based agro-economist Professor Joachim von Braun, President of the Pontifical Academy of Sciences and former Speaker for the TRA.





Playing host II: Parliamentary State Secretary Jens Brandenburg

Dr. Jens Brandenburg, a parliamentarian and the Parliamentary State Secretary to the Federal Minister of Education and Research, paid an informal visit to the Rectorate of the University of Bonn in August. His meeting at the University of Excellence was mainly devoted to discussions with professors from various disciplines, all of whom had enjoyed an outstanding level of academic or scientific success despite only being at an early stage in their career.

Nine researchers from seven different countries gave State Secretary Brandenburg a fascinating in-

- Minister Klara Geywitz and her team met researchers and members of the Rectorate at the University of Bonn.
- ◆ State Secretary Brandenburg (front row, second from right) with Rector Professor Hoch, other members of the Rectorate and the researchers.
- Minister Gorißen on the Klein-Altendorf Sustainability Campus.



sight into their top-level research. They included several winners of prestigious research awards such as European Research Council (ERC) grants as well as three Argelander Professors. These professorships were established as part of the University of Bonn's Excellence Strategy in order to attract outstanding individuals at an early stage in their careers, who conduct research straddling several disciplines within a Transdisciplinary Research Area.

During the more relaxed chats that followed, the conversation took in topics such as excellent research in the face of global competition and current challenges facing national and international research policy. State Secretary Brandenburg said: "Besides being at the forefront of research and teaching in Germany, this University of Excellence is also giving German academia global visibility and recogni-

tion. It is a place that actively embraces excellence and internationality. I'm delighted to have been given an insight into a lot of current research topics and the views held by the researchers here in Bonn. This is a source of hope for the future."

Playing host III: Minister Silke Gorißen

Silke Gorißen, Minister for Agriculture and Consumer Protection of the state of North Rhine-Westphalia, visited the University of Bonn's Klein-Altendorf Campus (CKA)—otherwise known as its "sustainability campus"—in September. Her visit focused on the successful research that had been done there into renewable raw materials and the transdisciplinary nature of the campus's projects. The minister was shown sustainable and recyclable construction materi-

als as well as peat-free, resource-efficient fruit and vegetable cultivation. The PhenoRob Cluster of Excellence also presented the work that it had been doing in the field of agriculture and robotics.

Professor Ralf Pude, the CKA's scientific director, explained the research that he had been conducting for the past 20 years into silvergrass (Miscanthus) and the empress tree (Paulownia). His aim, he said, was to extract greater use out of the material contained in the plants before they are burned to produce energy.

During her visit, Minister Gorißen stressed the importance of innovations to the agriculture and forestry industries and praised the many varied projects that are serving both local agriculture and broader climate action efforts. "The wide range of research projects under way on the campus is truly impressive," she said.

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Last year saw a considerable number of important plans realized and awards won.

Enlarged University Council begins new term of office

The members of the recently elected University Council of the University of Bonn were handed their appointment certificates for their 2023-2028 term of office by Gonca Türkeli-Dehnert, State Secretary in the Ministry of Culture and Science of the state of North Rhine-Westphalia (NRW). At the inaugural meeting following the presentation, the University Council re-elected Professor Dieter Engels, former President of the Federal Court of Auditors, as its Chairperson. Engels has chaired the body since as long ago as 2013.

The University Council plays a significant role in helping to manage the University and develop it further. Under the University's Constitution, it is made up of thirteen members, at least six of whom must be women. Four members must come from within and nine from outside the University of Bonn. Besides advising the Rectorate and supervising its business, the University Council is also responsible for helping to elect and deselect members of the Rectorate, among other things. It receives regular reports from the Rectorate about any changes in the University's budgetary situation and signs off the budget. The body also makes recommendations regarding the University Development Plan.

Continuity was very much the watchword when the bodies involved came to elect the new University Council, with ten existing

members retaining their places. By way of a resolution by the University Senate, however, three new seats were added. These have been filled by: Professor Britta Klagge, Professor of Economic Geography at the University of Bonn; Isabel Pfeiffer-Poensgen, former Minister of Culture and Science of NRW; and Dr. Georg Schütte, Secretary General of the Volkswagen Foundation. They were elected back in December 2022.

The new University Council thus comprises:

External members:

- Professor Dorothee Dzwonnek, Honorary Professor at the German University of Administrative Sciences Speyer and former Secretary General of the German Research Foundation
- Professor Dieter Engels, Honorary Professor at the German University for Administrative Sciences Speyer and former President of the Federal Court of Auditors
- Dr. Claudia Lücking-Michel, Managing Director of AGIA-MONDO e.V. and former member of the German Bundestag
- Isabel Pfeiffer-Poensgen, former Minister of Culture and Science of NRW
- Ilona Schmiel, Artistic Director of Tonhalle-Gesellschaft Zürich
- Dr. Georg Schütte, Secretary General of the Volkswagen Foundation
- Professor Helmut Schwarz, former President of the Alexander von Humboldt Foundation
- Dr. Katrin Vernau, former Artistic Director of Rundfunk Berlin-Brandenburg (rbb)
- Professor E. Jürgen Zöllner, for-

mer Chair of the Executive Board of Stiftung Charité, former State Minister

Internal members:

- Professor Marion Gymnich, Department of English, American, and Celtic Studies, Co-Speaker for the Bonn Center for Dependency and Slavery Studies Cluster of Excellence
- Professor Britta Klagge, Department of Geography, Chair of the Earth Sciences section
- Professor Eicke Latz, Institute for Innate Immunity, Deputy Speaker for the ImmunoSensation² Cluster of Excellence
- Professor Stefan Müller, Hausdorff Center for Mathematics, Speaker for the Collaborative Research Center "The Mathematics of Emergent Effects"

Michael Hoch named "Rector of the Year 2023" and "Rector of the Decade"

Professor Michael Hoch, Rector of the University of Bonn, has once again been crowned "Rector of the Year" by the German Association of University Professors and Lecturers (DHV). After coming second in 2022 and first in both 2020 and 2021, he has now won this prize for an impressive third time. The accolade is presented by the professional organization representing researchers in recognition of exemplary performance in office. Professor Hoch was chosen in an online survey of the 33,000 researchers who are members of the DHV, coming out on top with a score of 1.60.

A few months later, he was also presented with a truly special award by the DHV, being named



DEUTSCHER

HOCHSCHUL

- ▲ The University's new University Council (from left to right): Marion Gymnich, Britta Klagge, Jürgen Zöllner, Eike Latz, Katrin Vernau, Helmut Schwarz, Rector Professor Michael Hoch, State Secretary Gonca Türkeli-Dehnert, Claudia Lücking-Michel, Dieter Engels, Dorothee Dzwonnek and Stefan Müller.
- Alberto Dörr, Head of Santander Universities Germany, recipient of the award Professor Michael Hoch and DHV President Professor Lambert T. Koch at the prizegiving ceremony.

"Rector of the Decade." "After being honored three times within a very short period of time, it would be inappropriate simply to go back to business as usual, because Michael Hoch's consistently excellent performance over such a long period of time is simply extraordinary," explained DHV President Professor Lambert T. Koch, who himself received the first-ever "Rector of the Decade" award in 2019 when Rector of the University of Wuppertal.

"Rector Hoch has consistently been characterized as an impressive and engaging personality. Over the years, he has received praise not just for his leadership and innovative work but also for his excellent communication skills and keen sense of empathy. So he provides a shining example of prudent leadership, based on the insight that a university can only be led in constructive interaction with its researchers."



Herman 2020

Michael Hoch named new President of German Academic Scholarship Foundation and Chair of

German U15

Acting on the recommendation of a nomination committee convened by the board of trustees of the **German Academic Scholarship Foundation**, Rector Michael Hoch was elected the new president of

the Rectorate 2023

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"His outstanding specialist expertise, extensive experience in research policy, inclusive communication style and strong ties to the German Academic Scholarship Foundation make him the standout candidate," said Professor Manfred Prenzel, chair of the foundation's board of trustees, who also led the nomination committee tasked with finding a new president. "The nomination committee is delighted to have secured his services for the office of President of the German Academic Scholarship Foundation."

2023 also saw Michael Hoch elected chair of the German U15 alliance, having been Deputy Chair since as long ago as September 2022. The German U15 represents the strategic interests of 15 research-intensive, full-fledged classic universities of the arts and sciences in Germany with an international reputation. Nearly a third of all German and international students in Germany attend one of the U15 universities, which also supervise half of all the doctorates completed in Germany. The U15 universities attract 40 percent of public third-party funding across the board and as much as 60 percent in the medical sector. Strengthening its links with the most research-intensive universities in the world is a

particular priority for the alliance.

"The U15 universities are home to some top-level research and pioneering innovations," Michael Hoch said. "As such, they are doing more than most to ensure a future that is shaped by self-determination and is worth living in: by conducting groundbreaking research, fostering exceptional talent and investing in knowledge transfer. This requires politicians to give us the right underlying conditions, and we will continue to campaign for these. Expanding our partnership with leading universities all over the world, from Canada to South Korea, will also play a key role. We can only solve the global challenges by working together."

Provost Holger Gottschalk elected for another six years

The Electoral Assembly of the University of Bonn re-elected Provost Holger Gottschalk (▼ Photo) for a further six-year term. Holger Gottschalk took up his post at the University of Bonn at the start of 2017, with his second term of office beginning on January 1, 2023.

Holger Gottschalk was born in Kelkheim/Taunus in 1970 and studied economics in Frankfurt. He held various senior roles at Goethe University Frankfurt from 2004 on-

ward, including being appointed its Vice Provost in 2011 and, finally, Provost in July 2012.

Among many others, the major projects that Gottschalk has taken on for his new term include leading the University administration's contribution to defending its "title" in the 2025/2026 Excellence contest. He also intends to press on with digitalization across all administrative processes and services: "I want a strong administration that's on a very firm footing in terms of its personnel and its structures and that, proactively and in the spirit of partnership, provides the best possible support to the University of Bonn's bodies and members as they tackle their considerable tasks going forward," Gottschalk said. He felt that what has been achieved to date has been very much a team effort that Central Administration can be proud of: "What we've managed to do over the past five years is in itself extraordinary. I'd like to thank my colleagues for their support and the University bodies for the trust they continue to place in me."

Opening of the academic year 2023/2024

The University of Bonn started the academic year 2023/2024 with the traditional ceremony, as the





The International Choir and other groups were on hand to enrich and enhance the opening of the academic year.

members of the Rectorate and the deans of the seven faculties greeted several hundred staff and students and numerous guests from the academic and business communities as well as policymakers and influential figures in local government in the main auditorium of the University's Main Building. Also on hand for the event were eight Bonn University Ambassadors, whose role is to represent Bonn as their alma mater vis-a-vis other universities around the world. The University of Bonn traditionally opens each academic year on October 18—the date of the institution's founding.

Solidarity with Israel and Ukraine

Rector Professor Michael Hoch opened his remarks by referencing the various crises currently facing the world: "The Russian Federation continues to wage a war of aggres-

sion against Ukraine, in violation of international law. And today we stand stunned by the attack on Israel by Hamas, in a deliberate and strategic use of terrorist violence against a civilian population." Under the University's Constitution, he noted, it was committed to work toward the aims of worldwide peace and democracy, which was one of the reasons why the University had immediately taken a public stand condemning the attacks in the strongest possible terms. "We

stand against anti-Semitism, terror, hatred, violence and war; we stand for peace, freedom and democracy. This lies at the core of our identity today and will remain so in future."

In his speech, Professor Hoch emphasized the importance of a sense of wonder and passion for anyone working in science or academia. Persistence, he said, was another essential trait for researchers. He also stressed the vital role played by basic research, among other things: "After all, new knowl-

Rector Hoch listed a host of successes and awards earned by the University of Bonn and its members, including securing third-party-funded projects, top placings in rankings, and prizes and funding for outstanding research work. He also highlighted the development of the Cologne-Bonn Innovation Park at the two neighboring universities on the Rhine, calling it a "project of the century" for the science region. "Our common aim is to develop an innovation landscape in collaboration with strong business and industry partners boasting excellence in science, innovative teaching, and transfer through start-ups and entrepreneurialism." The two universities, backed by the state government, had made great strides in recent months, he said.

Major progress on the Excellence Strategy

Rector Hoch went on to say that the University had also made significant headway with implementing its Excellence Strategy, including filling its Excellence chairs and the fast-paced development of its faculties and Transdisciplinary Research Areas (TRAs). The University's six Clusters of Excellence had performed magnificently once again in 2023, he continued, and had a good chance of securing continued funding despite tough competition. Outlines for new clusters had also been submitted, he added. Cooperation with partners from

outside the University was made an integral part of its operations, and efforts to expand its international networks were stepped up further.

Rector Hoch was also able to announce considerable progress on a matter close to his heart, as the target set in the application for University of Excellence status of having 30 percent of professorships held by women by 2026 is now within touching distance: "I'm pleased to say that, as of October 1, 2023, we're now at 29.2 percent. Many people had thought this was nigh on impossible, especially since we were down at 19.2 percent in 2018. What fantastic news for equal opportunity and diversity," he said, concluding: "We're most definitely 'on track!'"

Funding studies still the biggest concern

General Students' Committee President Janna Reif presented the students' perspective on developments, noting how the problems students were struggling with were not new ones. As in previous years, she said, their biggest concern was how to finance their studies. A mere 11 percent of students received the BAFöG, she pointed out, which was not enough to fund a degree program at the University of Bonn even at its maximum level. The one-off €200 paid to offset higher energy costs 'evaporated' quickly, she argued. However, she acknowledged, the University of Bonn had communicated the information about it smoothly and much better than others had. Reif called for rapid clarification of what was to become of the student transit pass now that the nationwide Deutschlandticket existed, with no decision having yet been made on the matter despite the transport companies and politicians wrangling over the question of who is responsible for what. Reif then expressed her heartfelt thanks to University management for its support, saying: "The students' concerns are always a high priority for the members of our Rectorate."

University of Bonn Senate reinstates doctoral degrees of four alumni

At its meeting in November, the University of Bonn Senate commemorated the victims of Nazi injustice and restored the doctorates of four former graduates who had been persecuted by the regime for being Jews or on other ideological grounds. At the time, the University had withdrawn the titles—three in the Faculty of Law and Economics and one in the Faculty of Medicine—because their holders had fled abroad.

Since it reopened its doors in 1945, the University of Bonn has repeatedly distanced itself from cases of injustice committed during the Nazi dictatorship, including in its own name. In 1998, for example, the Senate made an exhaustive study of the revocation of doctoral degrees during the Third Reich and issued a formal reversal. A resolution passed in that year named around 60 individuals whose doctorates were to be reinstated retrospectively. Even back then, however, the committee had been aware that its list of reinstated degree holders could not have been complete due to gaps in the record-keeping; ultimately, some of the University's archives had been lost as a result of the war. The Senate resolution of the time thus expressly stated "that the University will examine and rule on each additional individual case presented to it as part of its efforts to remedy Nazi injustice."

After the University was recently made aware, following the unearthing of new source material, of four more cases of revoked doctorates not among those named in 1998, the Senate reinstated the titles of the following doctoral degree holders:

- Professor Otto Kirchheimer (doctorate in law, 1928)
- Dr. Friedrich Mayer-Alberti (doctorate in law, 1929)
- Dr. Hans Oberländer (doctorate in law, 1933)
- Dr. Franz Paul Glees (doctorate in medicine, 1935)

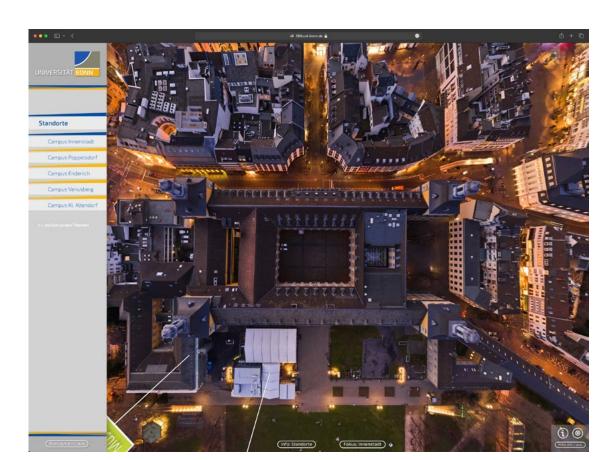
Chairperson of the Senate Professor Rainer Hüttemann said: "We're well aware that there might be even more cases of Nazi injustice that were committed but that haven't yet come to light, so discovering, reviewing and remedying such instances will remain an ever-present duty for both ourselves and generations to come."

Gaining spectacular insights into University life

The University of Bonn has come up with an innovative way to explore its campuses and the city it calls home, wherever in the world people happen to be: a 360-degree tour, which they can take online from the comfort of their own home. Providing a bird's-eye view and a wealth of information about the University, the tour aims to help prospective students get to know it better, make life easier for new starters and much more besides.

What makes the University of Bonn's 360-degree tour so unique is the wealth of information—links, photos and videos—just waiting to be discovered on visitors' virtual journeys of discovery. These details allow users not only to experience the University's surroundings but also to dive deeper into its day-today life. Initially, the tour is mainly geared toward new and prospective students. It is offered in German and English and will be developed further on an ongoing basis. Two guided tours of the University and the city, each one led by a student, are particular highlights.

The tour can be taken online at www.360.uni-bonn.de.



Annual Report of the Rectorate 2023

University of Bonn

WE foster networks Excellent research hinges on strong international networks. Our students and researchers benefit from our close partnerships with prestigious universities all over the world. Dialogue helps drive innovation, including — and in particular during times of global crisis. 77 Professor Birgit Ulrike Münch, **Vice Rector for International Affairs**

Strong international networks

We firmly believe that internationalization is key to increasing the quality and competitiveness of the University of Bonn's research, teaching and administration even further and so we are pressing ahead with internationalization across the board in a targeted manner. Besides recruiting outstanding international researchers and students, this also means establishing and strengthening international partnerships.

Internationalization, partnerships and networks

The University of Bonn's internationalization strategy is underpinned by international networks and partnerships, which make scientific collaboration easier to achieve across national borders, pool expertise and enable both sides to learn from each other through examples of best practice. 2023 saw the University of Bonn bolster its international partnerships significantly once again.

Final report submitted for "Internationalization of Universities" re-audit

The completion of its final report marks a major milestone for the University as part of its re-audit for the "Internationalization of Universities" scheme run by the Ger-

man Rectors' Conference (HRK). Members of the Internationalization Commission, which was formed following the first audit in 2017, devoted months of hard work to drawing up the report. Led by the Vice Rector for International Affairs, the committee is made up of members of all the faculties plus representatives of Central Administration and the student body.

The progress made on implementing the University of Bonn's Internationalization Strategy for 2025 was discussed in various one-to-one meetings during a visit by HRK representatives and two external auditors. Besides the Rector and the Vice Rector for International Affairs, further members of University management and the dean's offices as well as international students and researchers were also

interviewed for this purpose. The University of Bonn impressed with its successful track record of achieving its objectives and the flexibility it showed in adapting its strategy to radical changes such as the COV-ID-19 pandemic and the Russian invasion of Ukraine. The auditors spoke of "impressive success," e.g. recruiting international top-level researchers, expanding strategic partnerships with universities all over the world and improving the environment for international researchers and students in Bonn.

For instance, collaboration with the United Nations in the city of Bonn has also been stepped up successfully. Among other things, joint events have been held, a network has been set up with universities in other "UN cities," and digital cours-

"Our transformation into a genuinely international university is a key strategic priority," underlined Professor Birgit Ulrike Münch, Vice Rector for International Affairs. "Recruiting international top-level researchers, securing the study success of international students and improving intercultural skills among our students and staff-all of these elements are closely intertwined and often interdependent. I'm very grateful for the hard work put in by the members of our commission and many other colleagues, because our success hinges on the importance of internationality being recognized across the board at the University."

The University of Bonn was certified as part of its "Internationalization of Universities" re-audit in spring 2024. The Internationalization Commission will continue to develop the existing measures further and help to devise a follow-up strategy, which will also incorporate the observations from the re-audit. After all, the goal is clear: the University of Bonn wants to remain one of the best destinations for research and teaching anywhere in the world.

Global Network launched

The University of Bonn signed a memorandum of understanding with Emory University (US), the Hebrew University of Jerusalem (Israel), the University of St Andrews (UK) and Waseda University (Japan) in 2023, thus laying the foundations for collaboration within their

Global Network. The purpose of the newly formed network is to promote multilateral cooperation between the partners in three core areas: education, research, and leadership and innovation. By taking this step, the universities hope to facilitate academic collaboration, cluster expert knowledge and learn from one another through best practices. The partners share a common approach to internationalization and will cooperate bi- and multilaterally on a range of projects in order to promote excellence in research and teaching and extend the partners' global impact.

NeurotechEU funding extended

The European Commission made a decision in 2023 on the second round of funding for its European Universities initiative, which is designed to strengthen cooperation in education and research. NeurotechEU—the European University of Brain and Technology, which the University of Bonn is part of, is among the alliances to have secured a further four years of funding. Led by Radboud University

in Nijmegen, NeurotechEU is an alliance between nine leading European universities and more than 250 partners from industry, academia and civil society. The aim is to build an innovative, trans-European network of excellence for brain research and brain technologies. Neurotechnologies supported by artificial intelligence (AI) are set to make up more of the alliance's work in Phase II. By incorporating specialist expertise from various disciplines and promoting transdisciplinary research, NeurotechEU is helping to uncover new insights into how the brain works and devise solutions for neurological disorders and illnesses. Structurally speaking, the focus in this phase is on introducing joint degree programs and lifelong learning courses.

▼ The Board of Rectors of the European University NeurotechEU met in Stockholm Rector Professor Michael Hoch (right) with his counterparts from the partner institutions.





Bonn-St Andrews joint appointments established

2023 saw the Universities of Bonn and St Andrews establish a new Bonn-St Andrews joint appointment scheme and thus take their strategic partnership up a level. Joint appointments are a way for the two universities to create added value for both institutions. The program helps colleagues at both establishments to spend 20 percent of their work time researching and teaching at the other university, thus smoothing the pathway to conducting joint research and applying for high-level funding. The program's first four researchers took up their three-year positions in August 2023: Professor Seán Allan, School of Modern Languages (University of St Andrews); Professor Peter Wahl, School of Physics & Astronomy (University of St Andrews); Professor Christian Moser, Department of German and Comparative ▲ With the new Bonn—St Andrews joint appointment scheme, the two universities (shown here: St Andrews) are taking their partnership up a level.

Literature and Culture (University of Bonn); and Professor Johann Kroha, Faculty of Mathematics and Natural Sciences (University of Bonn). Both universities have committed to running the scheme for three rounds initially, with up to four joint appointments to be made in each round.

Brazilian visiting professorship scheme successfully secured

The University of Bonn secured yet another visiting professorship scheme in 2023 to support exceptional Brazilian researchers by enabling them to spend six months or a whole year in Bonn. One new feature is the fact that both a postdoc and a doctorate position are now

being funded. The scheme is to receive €500,000 in funding over five years from the CAPES Foundation (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, or Coordination for the Improvement of Higher Education Personnel). There are only around ten professorships of this kind in the world at present, three of which are based in Germany. With the program, the University of Bonn hopes to attract some outstanding researchers and harness additional synergy effects for future research projects involving top Latin American researchers. The first time the scheme was run, Professor Roberto Hofmeister Pich from the Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS) was appointed as a visiting professor at the University of Bonn. He is now one of the Bonn University Ambassadors, who represent the University all over the world, and has done much to strengthen the partnership between the two institutions.



International Days 2023

The University of Bonn held its International Days on October 19 and 20, 2023, focusing in particular on Ghana and Brazil this year. A long list of international projects and initiatives launched by the University were showcased, current challenges and future opportunities in international cooperation were discussed, and the funding available for launching collaborative projects or gaining experience abroad was explained. The event opened with the presentation to outstanding students and early-career researchers of the German Academic Exchange Service's DAAD Prize as well as the state awards, which are conferred by the governments of France, Spain, the UK and

the US. The Global Fair on October 20 was devoted to the University of Bonn's international partnerships, especially those with Ghana and Brazil in the areas of research and teaching. Also in attendance at the event were delegations from the University of Ghana and PUCRS in Brazil as well as the Bonn University Ambassadors.

Success in the International Student Barometer

The University of Bonn received very good feedback from its international students as part of the International Student Barometer (ISB) for 2022/2023. An overall satisfaction score of 89 percent among students and 93 percent among doctoral candidates put the Univer-

▲ The International Days were all about showcasing various international projects and initiatives by the University and discussing some of the challenges and opportunities involved in cooperation

sity ahead of the benchmark for Germany. The satisfaction level was also well above 80 percent in a number of individual categories: arrival, learning, day-to-day life and support. In terms of the expertise of its lecturers, the University of Bonn even came an impressive 15th worldwide.

Conducted annually by the polling company i-graduate, the ISB is the world's largest survey of internationally mobile students concerning their choice of destination and their satisfaction with their studies. Across the world, 120,622 bachelor's and master's students and doctoral candidates from 146 universities (including 17 in Germany) responded to the survey. Participating in the ISB provides the University of Bonn with valuable data that it can use as a basis for determining its attractiveness to international students and improving this through targeted measures. The data is now to be made available to the faculties so that they can devise their own individual measures and services as well to improve the quality of the study experience for international students even further.

Researchers accepted into Cologne/Bonn Academy in Exile

Founded in summer 2022, the Cologne/Bonn Academy in Exile supports researchers from Ukraine who have fled the war in their country as well as visiting researchers from Belarus and Russia who are being persecuted for opposing the conflict. They have all been invited to continue their work in the Rhineland. The first round of selection was held in early 2023, with eleven researchers being welcomed into the academy: six from Ukraine, three from Russia and two from Belarus. Six of them will be continuing their research projects in the fields of law, history, culture, language, and politics and social sciences at the University of Bonn, with the other five doing so at the University of Cologne. The academy provides administrative support, equipped offices and academic mentoring schemes in order to help the researchers to integrate into the local, national and European university landscape.



International partnerships expanded with Erasmus+ Worldwide

The University of Bonn successfully concluded new cooperation agreements for the next 36 months with partner universities in Israel (Weizmann Institute of Science) for physics and Tanzania (Mzumbe University and Sokoine University of Agriculture) for geography in the 2023 call for applications for the Erasmus+ Worldwide Exchange Programme. The year also saw the start of the scholarship projects that had been secured or extended in 2022 involving a number of other partner universities: California Polytechnic State University (US) for physics; Ilia State University (Georgia) for biology; Tbilisi State Medical University (also Georgia) for human medicine and global health; and Hebrew University of Jerusalem and Tel Aviv University (both Israel) for economics.

Erasmus+ Worldwide scholar-

▲ Researchers who had fled Ukraine, Belarus or Russia debated the future of Eastern Europe with their mentors at the winter school organized by the Cologne/Bonn Academy in Exile.

ships are awarded via the University of Bonn directly. Recipients get their tuition fees paid plus a grant. Students are given funding for one semester. Eight students were funded via the funding line in 2023. Teachers and staff from Central Administration are awarded a lumpsum contribution to their travel and mobility expenses and can spend five days at the partner institution in their destination country. A total of five members of the academic and non-academic staff at partner universities had their stays at the University of Bonn funded by the program in 2023, while four members of the University's academic staff received a grant to spend time at a partner university.

The University of Bonn is now an associate partner in the ENTRANCE project launched by the Federal Ministry of Education and Research (BMBF). A joint venture between Forschungszentrum Jülich and RWTH Aachen, ENTRANCE stands for "Expertise & Transfer Network on China & Europe." Between 2023 and 2026, it aims to build the skills required for partnerships with China and devise new processes for making these partnerships easier to get off the ground. As an associate partner, the University of Bonn is able to benefit from the continual professional development and networking opportunities that the network offers as well as hold events of this kind in Bonn with EN-TRANCE's support. The offering is available to all members of Bonn's universities, from students and researchers through to administrative staff. In particular, the EN-TRANCE project is designed to help

build legal expertise within a network of partners and to discuss and share this expertise at regional, national and European level.

Global Exchange Program partnerships expanded

A number of new partnerships in the Global Exchange Program for non-EU countries were established last year, with two contracts already being signed. Students can now consider the University of St Andrews in the UK and Tel Aviv University in Israel as destinations for an inter-faculty exchange, while students at both these institutions have the option of coming to Bonn for one or two semesters. The agreement struck with the prestigious University of Tokyo resulted from a visit to the International Office by Professor Masami Nakao, Vice Director of the Center for Global Education, and Tsugihiro Shimura, who is responsible for international education in September.



How can we shape a good future for everyone despite the differences in our beliefs and worldviews? This was the question addressed by the summer school entitled "Valuing Plurality, Decolonising Socio-ecological Futures," which was held in July. On the part of the University of Bonn, the summer school was organized by its Center for Life Ethics and International Office in cooperation with professors from both universities. Twenty master's and doctoral students, half from each university, took part in the event.

The participants devised potential solutions in workshops and on field trips, including to the Klein-Altendorf Campus. They gained new awareness of the sheer diversity in the makeup of complex futures and debated how a good future could be secured for everyone despite the differences in our beliefs and worldviews. The summer school was financed using funds from the Excellence Strategy as part of the subproject entitled "WE create Impact: Kooperationen im Globalen Süden" ("Partnerships in the Global South").



At a joint summer school with the University of Ghana held in Bonn, students from both universities discussed how to shape a good future for everyone.



Official visits: welcomes, partners

Partnerships would be nothing without people meeting people. The University of Bonn thus regards it as highly important to meet up with its international partners in person on a regular basis and engage them in intensive dialogue, be this via joint research projects, teaching formats or student exchange.

University of Ghana attends International Days 2023

In a landmark moment for the partnership between the two institutions, a high-profile delegation from the University of Ghana visited the University of Bonn in October 2023 in connection with the International Days. The two universities are strategic partners, collaborating across all areas institution-wide: degree programs, teaching and research. Numerous

discussions were held to develop and deepen this partnership further in line with the strategy. The topics discussed included plans for major joint projects between the Center for Development Research (ZEF) and the University of Ghana. The partner universities agreed on the framework for shared teaching under the Katekisama program by arranging for a Collaborative Teaching Agreement to be signed between the Centre for Migration Studies in Accra and the Center for Advanced Security, Strategic and Integration Studies (CASSIS) in Bonn. Stepping up cooperation with the illustrious University of Ghana forms an integral part of the University of Bonn's Internationalization Strategy in terms of its partnerships with the so-called Global ▲ The two universities signed a Collaborative Teaching Agreement to establish a framework for shared teaching.

Six Ghanaian universities visit Bonn

In December 2023, the University of Bonn welcomed the vice-chancellors of six Ghanaian universities in order to consolidate existing partnerships and instigate new ones. Ghana is one of the focus countries for the University of Bonn's international cooperation. Discussions were held with Professor Nana Aba Appiah Amfo, Vice-Chancellor of the University of Ghana, regarding some specific follow-up projects, and the topics explored during her delegation's visit to Bonn in October were addressed in more detail. In particular, Professor Amfo expressed an interest in leveraging synergy effects between

Partnership with University of Saskatchewan stepped up

The University of Bonn consolidated its nascent partnership with the University of Saskatchewan in Canada in 2023. A small Canadian delegation visited Bonn in spring, with the University of Bonn's management team paying a return visit in September. Finally, a high-caliber eight-strong delegation from the University of Saskatchewan, led by its President Professor Peter Stoicheff and its Vice-President Research Professor Baljit Singh, came



to the University of Bonn in November. The intensive discussions addressed research fields of major global importance such as the development of new drugs, food security and quantum research. Researchers from both universities held round tables to work on potential topics for joint research relating to the individual fields. Tangible steps for future cooperation were also set out, ranging from joint teaching formats and virtual networking sessions and colloquia

through to specific projects under German-Canadian grant programs.

- ▲ A delegation from six Ghanaian universities visited Bonn.
- ▼ The delegation from the University of Saskatchewan, including its President Peter Stoicheff (seventh from left) and their hosts from Bonn, among them Rector Michael Hoch (sixth from left).



Partnerships with Australian universities strengthened

A delegation from the University of Bonn visited Australia in November 2023 with three main aims in mind: cultivating partnerships, strengthening exchange programs and exploring options for collaborative research. The main event was a trip to the University of Melbourne, with which the University of Bonn has enjoyed a strategic partnership for many years now. The two uni-

versities collaborate in areas such as transdisciplinary research projects and at management and administrative level. The official visit saw them extend their existing university-wide partnership agreement and agree to step up their joint work training doctoral students. Specific projects were also looked at together with researchers from both universities in an attempt to consider what the partnership might look like in the future, especially for medicine. After Melbourne, the delegation from

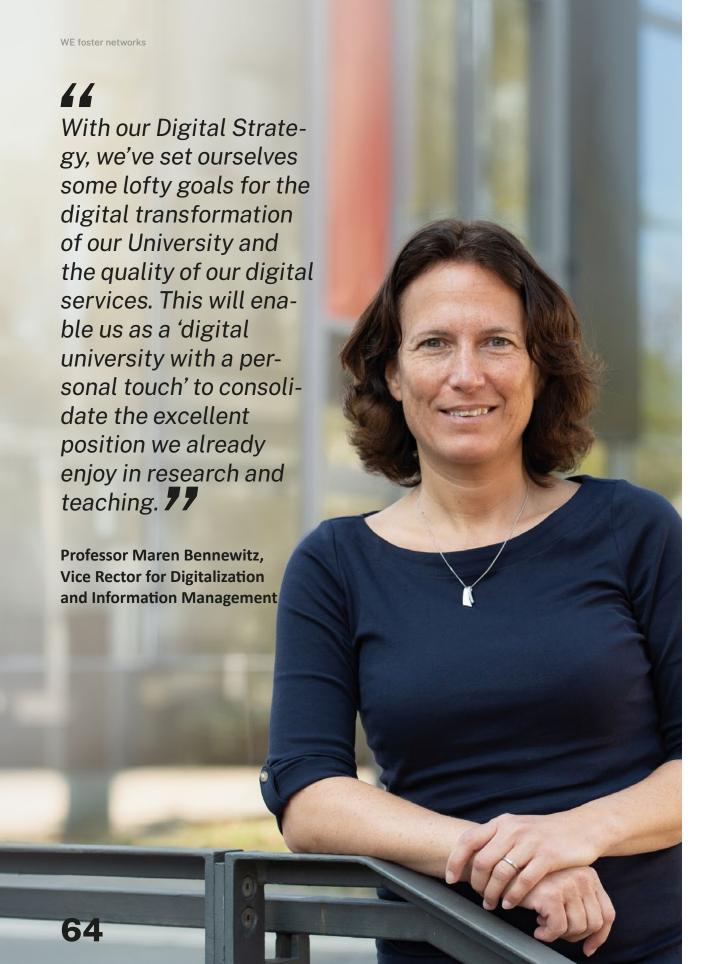
Bonn moved on to the Australian National University in Canberra and the University of New South Wales in Sydney to check in with existing contacts and explore possibilities for collaborative research.

▼ A delegation led by Rector Professor Michael Hoch (front row, first from left) visiting the University of Melbourne.



\nnual Report of the Rectorate 2023

University of Bonn



Digital transformation

Fascinating research into robotics and artificial intelligence. An app that also works as a student ID. And people who are connecting up the University in a whole new way from the inside out, finding all-encompassing digital solutions and thus achieving the aims of the Digital Strategy that they devised in a participatory process: the University is positioning itself as both a university in the traditional sense, i.e. where teaching takes place on site, and one that embraces the possibilities afforded by digitalization. In this process, it is focusing on future-oriented research with international links, innovative teaching and IT services.

Going forward together: the digital transformation of research, teaching, learning and work at the Universitys

The University of Bonn has formulated a Digital Strategy that establishes the framework for a transformation to make it fit for the future and for which an extensive participatory process is currently under way.

Digital transformation continuing apace

How can the University of Bonn meet the varying needs of its researchers, teachers and students precisely in order to develop future digital structures and processes or adapt existing ones accordingly? The Digital Strategy has managed to do just that. This is because, rather than simply setting a target to work toward, a participatory process was embraced right from the start. Over a period of fourteen months, therefore, the University's

seven faculties held a total of nine workshops to produce around 700 statements about a successful digital transformation of research, teaching, learning and work at the University of Bonn. These were condensed into 45 inter-faculty guiding visions to produce the University of Bonn's overall vision with its seven sets of objectives:

New areas in research and teaching: we will use digital methods to open up new areas in research and teaching and will be exploring academic and scientific questions posed by digitalization.

Knowledge transfer and society: we will change how knowledge and skills are transferred between ourselves and society as it undergoes its digital transformation.

Legal framework and security: we will both utilize and shape the legal framework in the service of our digital transformation.

Infrastructure for research, teaching and services: we will continue to develop our secure and future-proof IT infrastructure.

Organizational structure: we will develop and transform our organizational structures in order to leverage the potential offered by digital work, learning and research.

Digital skills: we will incorporate, promote and harness the individual digital skills of our members

New spaces for encounters: we will create new spaces for virtual and in-person encounters, interac-

The Digital Strategy was finally published in May 2023, coinciding with the deadline for submitting the outlines for the new Clusters of Excellence. "With our Digital Strategy, we've set ourselves some lofty goals for the digital transformation of our University and the quality of

our digital services. This will enable us as a 'digital university with a personal touch' to consolidate the excellent position we already enjoy in research and teaching," explains Professor Maren Bennewitz, Vice Rector for Digitalization and Information Management.

The whole process was supported, coordinated and moderated by the Digital Science Center (DiCe),

which will continue to ensure that future requirements are identified early on and incorporated into the strategy. The venerable IT Forum was also transformed into the DiCe Project Forum in 2023 to give the University's digitalization managers and digitalization project leads a way of sharing ideas and opinions.

A digital space for creative, future-oriented collaboration on research, teaching and administration

From encouraging efficient and secure cooperation to building skills and improving digital structures, a lot was achieved or begun in 2023 in terms of digitalization.

Enabling digital research and teaching

With its new high-performance computer "Marvin," the University of Bonn is making it easier for its researchers to use artificial intelligence (AI) and machine learning. The acquisition was partly financed from Excellence funding and represents a milestone reached in the University's Digital Strategy. This is because Marvin's ability to process and analyze vast amounts of data opens up new possibilities for research in areas such as robotics, climate research, astrophysics, life sciences and sustainable crop production as well as the humanities. Requirements and activities relating to high-performance computing are coordinated and pooled by the **High Performance Computing and** Analytics Lab (HPC/A Lab for short), which can help researchers with specific applied or methodological







▲ Guests at Marvin's official switchon had the chance to see the supercomputer for themselves.

problems, for instance, or put them in touch with potential contacts for partnerships. Another new team, this time for High-Performance Computing (HPC) in University IT, provides technical and general support and takes care of operations. Equipped with high-performance cores and graphics processing units (GPUs), Marvin is at the disposal of researchers from all University departments as well as its partner institutions. With its scalable GPU partition for AI applications, the computer—which was switched on

in fall 2023—is one of the top 500 in the world.

However, it is not only AI that is changing research and teaching: teaching methods and resources have to be adapted too. With its Digital Strategy, the University of Bonn is focusing on providing scope for its teachers to translate the transformation of their subject area into processes of change for their curriculum. This integration will enable these processes to take effect in the corresponding teaching and learning concepts.

Playing a key role in this is the Virtual Collaborations (ViCo) project, which is establishing relevant tools for new forms of teaching and learning and training teachers accordingly. One concrete example of ViCo's work is the creation of virtual 3D worlds that enable archaeology or art history students to explore spaces that would otherwise be sealed off or to try out scientific theories on a digital model. At the same time, tools introduced as part of ViCo, such as Recogito Studio and JupyterHub, allow documents, charts, texts and videos to be transcribed, analyzed, edited and studied and mathematical tasks performed in a collaborative process, findings to be discussed in a virtual seminar room and assignments to be handed in or out. The need for these digital learning concepts was established in close consultation with the faculties, and they were

largely devised in cooperation with the institutes and departments involved. For instance, the development of Recogito Studio was closely coordinated with and driven forward by the University's Germanists. Students are now able to work together to comment on Middle High German sources and carry out precise and structured work on texts while supporting one another with their different skillsets and background knowledge. The threeyear project was funded by the Foundation for Innovative Teaching in Higher Education (Stiftung Innovation in der Hochschullehre) to the tune of €2.15 million. The University of Bonn is planning to firmly embed the various systems and support structures in order to improve teaching and learning scenarios over the long term and facilitate transfer to other areas.

Researchers have been working with data—images, texts and numbers-since time immemorial. Thanks to artificial intelligence and corresponding speech and image recognition models, it is now often possible to analyze this data on a grand scale too. Besides a fundamental understanding of the data structures, however, this also requires an awareness of how the various models work. To support its researchers' continual professional development in this area, the University of Bonn's Digital Strategy is focusing on digital skills.

Projects such as **BnTrAlnee** have a key role to play in this area. The aim here is to teach researchers working in fields not traditionally



associated with AI about what it and machine learning can do, adopting a "learning by doing" approach. Experienced researchers in the fields of medicine, neurobiology, history or linguistics spend three weeks working together to formulate the basics of the mathematics and processes that they will need as well as learning Python, a programming language. Nobody else in Germany is doing anything like this. However, the project is also relying on collaboration between IT students and researchers. For example, the use of AI has enabled the image-based recognition of archaeological structures such as charcoal piles, bomb craters or burial mounds on aerial photographs as well as the detection of prostate cancer in a medical context. Other projects, meanwhile, have focused on analyzing drug delivery efficiency levels and evaluating hundreds of thousands of pages of 19th-century newspapers so that information on the economic situation at the time can be obtained and as-

Improving digital structures in the faculties and administration

What do researchers in faculties, departments and institutes need if they are to continue to be able to optimize digital processes together with their university in a coordinated way? They need experts with their sights set firmly on precisely these aspects. The University of Bonn's seven digitalization managers are pursuing a common aim, namely working with key

people to put structures in place for the University's digital transformation and connecting faculties up with one another. To this end, they share ideas and opinions on anything from teaching and room planning tools to workflow automation and issues relating to the University's overarching IT governance. They discuss ongoing digitalization projects in the faculties or pass on feedback from them and from the individual departments. The end result of this collaborative process—the only one of its kind in Germany—is digital structures that fit like a glove.

The University of Bonn's digital strategy is called "Going Forward Together." "Everything that's gone into the Digital Strategy was taken straight from the positive visions for the future that the faculties for-

▼The digitalization managers assemble: Mats Liedhegener, Martin Stuke, Petra Störring, Stephan Herritsch, Professor Valentin Stein (Speaker for the Faculty of Medicine's IT Strategy Committee), Gregor Wiescholek and Dr. Jens Barth.



Building skills

Researchers have been with data—images, texts an

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mulated for the digital transformation of our University," says Vice Rector Professor Maren Bennewitz, who is also Speaker for the DiCe. It was therefore only logical that, even before the strategy was developed, the University of Bonn should establish the new posts responsible for digitalization management within the faculties. These posts were fully filled in 2023 for the first time.

The digitalization managers are brought on board at an early stage and act as a link between the faculties and the project management teams. They work in lockstep with key people from the DiCe, Central Administration's Digitalization of Administrative Processes Program (PDaP) and University IT. The contribution that the faculty-based digitalization managers make to the overall digital transformation is pivotal for the University as it makes it fit for the future. In 2023, for exam-

ple, the seven digitalization managers worked on introducing a central document management system and clarified interfaces with existing systems and requirements. However, they also manage their own projects based in their respective faculty and make proposals for University-wide roll-outs, e.g. for electronic examinations or a standardized software package for detecting plagiarism.

Fostering efficient and secure collaboration

Collaboration tools such as Atlassian Confluence have been introduced and opportunities for holding videoconferences created in order to enable researchers and other staff to work (together) more effectively and efficiently. Central Administration's new Service Portal is built on Confluence's technical foundations, for instance. The

focus on security was also stepped up: the level of privacy and data protection afforded when using videoconferencing services was increased further as, via **Zoom X** and in cooperation with Deutsche Telekom, the University of Bonn has now established the necessary framework for ensuring that Zoom can continue to be used securely.

University IT is planning to roll out **YubiKeys**, which have so far only been used in Central Administration, to researchers as well in a gradual process in order to add an extra layer of security to digital access. This will allow additional digital services to be tackled going for-

▼ Provost Holger Gottschalk, Vice Provost Dr. Holger Impekoven, project leads Lena Zimmer and Daniel Epple, and project manager Sebastian Jaron press the "go live" button on the Service Portal.



ward, including e-documents, which will enable researchers and administrative staff to access their documents in digital form.

A large number of minor improvements were also made within the framework of the Online Access Act (Onlinezugangsgesetz). These include the electronic doctor's note (elektronische Arbeitsunfähigkeitsbescheinigung, or eAU), which was introduced in spring 2023, as well as electronic registration and allocation management for childcare places and the possibility of claiming expenses for business trips electronically via the University of Bonn's self-service travel expenses system. Another partial objective was achieved in 2023 with the launch of the new campus management system HISinOne. HISinOne DOC, a dedicated module for the management of doctoral students, allows them to be logged electronically. DOC was successfully used to submit official statistics on doctoral students to the regional authority for the first time in 2023.

2023 also saw the groundwork laid for the University of Bonn's research data policy. The Research Data Service Center lends researchers effective support with their workflow for planning and applying for funding for research projects all the way through to publishing and archiving their research data. With bonndata, its repository of research data, the University of Bonn has had a central solution at its fingertips for the long-term storage, sharing and reuse of research data since 2023. In line with FAIR (findability, accessibility, interoperability and reusability) principles, this enables the transparency and traceability of research findings to be ensured, collaboration between researchers to be supported and the visibility of individual pieces of

work to be improved. The data can also be stored securely and permanently in bonndata, thus guaranteeing their integrity and availability over the long term. Another development in 2023 was the appearance of the new **Uni Bonn App** for download. It makes life easier

for students and staff alike by combining their student or staff ID and canteen menus in a single user-friendly application. There are also plans to integrate public transport tickets and general University information into the app going forward.



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WE create impact That the University of Bonn came out of the Excellence contest as the most successful university with six Clusters of Excellence is testimony to our exceptional researchers. It puts us in the best possible position to tackle whatever the future might throw at us. 77 Prof. Andreas Zimmer, Vice Rector for Research and **Early-Career Researchers**

Excellent research

The University of Bonn is one of the most prestigious research-driven universities in Germany. It continued to live up to this billing in 2023, attracting an army of top-level researchers to Bonn, achieving great success in securing third-party funding and seeing its researchers win prestigious prizes. These are all ideal preconditions for continuing to compete with the big names in research in the future.

University of Bonn welcomes high-caliber newcomers

Continuing the trend of previous years, a host of top-level researchers accepted a position at the University of Bonn in 2023. They will be opening up new fields of research, bridging gaps between disciplines and honing the profile of the Transdisciplinary Research Areas (TRAs). Particularly pleasing is the fact that many of the illustrious new intake are women.

Birke Häcker named new Schlegel Professor of Law



Schlegel Professorships, named after the University of Bonn's

famed philologist August Wilhelm Schlegel (1767-1845), are prestigious chairs created as part of its efforts to promote excellence. The University appointed one new Schlegel Professor in 2023 in the shape of Professor Birke Häcker, a legal expert. She now holds the Professorship for Civil Law, Common Law and Comparative Law and heads up the Institute of International Private Law and Comparative Law as its director. Although Häcker will also be opening up new fields of research at the University of Bonn, her specialisms are core private law and comparative law with a focus on English common law. However, the researcher is also interested in the overlaps between private law on the one hand and commercial, business, tax and public law on the other, where she sees herself as building bridges between the disciplines and legal cultures in different countries. Häcker has spent many years studying and teaching in the UK and led the Institute of European and Comparative Law at the University of Oxford.

Ina Danguah appointed to Hertz Professorship



As part of its Excellence Strategy, the University of Bonn has established professorships named after its former physicist Heinrich Hertz (1857-1894) and filled with illustrious researchers who are leading lights in their field of expertise and burnish the profile of the Transdisciplinary Research Areas (TRAs). They receive €4.2 million spread across seven years in recognition of their efforts. The University welcomed one new Hertz Professor to its ranks in 2023: Professor

Three new Argelander Professors

The Argelander Professorships for early-career researchers, named after the Bonn-based astronomer Friedrich Wilhelm August Argelander (1799–1875), are geared toward expanding the research profile of the University's six TRAs, where researchers work together to tackle issues of great relevance to the future across subject and faculty boundaries. The University of Bonn welcomed three new faces in 2023.

How can people work together to forge new, environmentally sustainable paths in a complex system? This is the question being tackled by Assistant Professor Wolfram Barfuss, the new Argelander Professor in the TRA Sustainable Futures. He is developing mathematical models for collective learning and linking different research areas, including complex systems, cognitive science, artificial intelligence and social ecology, in order to identify key levers for eas-

ing the transition to sustainability. He is devising a new human-environment modeling tool that will be made freely available and constantly expanded to permit its use by researchers from different disciplines. Barfuss and his team are based at the Center for Development Research (ZEF).

Assistant Professor Jacqueline Lorenzen will be focusing her research on legal issues connected with sustainable urban development. Within the TRA Individuals & Societies, she is working at the interface between law, economics and the social sciences. Her research takes in the questions of what levers cities can pull in order to reinvent themselves as green, equitable, productive and healthy communities and what legal constraints are holding them back from doing so. Various contemporary tools and concepts for mastering these processes of transformation are being discussed in spatial planning circles, including the "vertical city," the "sponge city" and the "resilient city," and Lorenzen is studying these concepts from the perspective of administrative law and administrative science.

How can knowledge creation at museums and cultural heritage sites be made more sustainable and equitable? As well as researching cultural, political and economic interrelationships in the past and present in her role as Argelander Professor, Assistant Professor Julia Binter will also be giving them a new form in a number of collaborative film and exhibition projects. Within the TRA Present Pasts, the cultural and social anthropologist is leading on a collaborative research, curation and restitution project involving collections from Namibia that is entitled "Confronting Colonial Pasts, Envisioning Creative Futures" together with German and Namibian colleagues. This project sees the researchers collaborate with figures from the worlds of art, academia and local government as well as the general public to devise new, fairer and more sustainable ways to return cultural heritage taken in a colonial context.



Jun.-Prof. Dr. Wolfram Barfuss



Jun.-Prof. Dr. Jacqueline Lorenzen



Jun.-Prof. Dr. Julia Binter

Two female top-level researchers appointed to Hausdorff Chairs

Based at the Hausdorff Center for Mathematics (HCM) Cluster of Excellence, Hausdorff Chairs are professorships for particularly exceptional researchers. These illustrious positions are awarded for life. The University succeeded in filling not one but two Hausdorff Chairs with outstanding mathematicians in 2023.

The first, **Angkana Rüland**, is the second woman to hold this post and is herself an alumna of the University of Bonn. Her research takes much of its inspiration from problems that have their origins in the natural sciences and that lead to exciting mathematical questions and structures. One example from the materials sciences is the precise analysis of so-called



Prof. Dr. Angkana Rüland



Prof. Dr. Lisa Sauermann

shape-memory alloys. These are special alloys whose thermodynamic behavior gives them a "memory" and seem to allow them Physicist Lena Funcke named new Clausius Professor

to "remember" a previous shape

even after they have been substan-

tially deformed. Rüland's research

also covers "inverse problems,"

where the aim is to obtain the most

accurate information possible

about objects by taking indirect,

non-invasive measurements, as is

done with X-ray tomography, for in-

stance. Promoting early-career re-

searchers and, specifically, engag-

ing in dialogue with students are

particularly important to the re-

alumna Lisa Sauermann, previous-

ly an assistant professor at the

Massachusetts Institute of Technol-

ogy in Cambridge (US), has likewise

accepted the offer of a Hausdorff

Chair. Her main area of research is

known as probabilistic combinato-

rics, which involves using tech-

niques borrowed from probability

theory to study combinatorial

problems. There are numerous ap-

plications for combinatorics within

mathematics and other related are-

as, such as coding theory and com-

puter science. Sauermann is based

at the University of Bonn's Institute

for Applied Mathematics on ac-

count of the decidedly applied na-

ture of her research field. She has

been regarded as a tremendous

mathematical talent ever since she

was a girl. While a pupil at a spe-

cialist mathematics school in Dres-

den, she competed several times in

the International Mathematical Ol-

ympiad, winning four gold medals

and one silver and thus becoming

the most successful participant

ever at that time.

Her fellow University of Bonn

searcher.



Assistant Professor Lena Funcke was appointed a new Clausius Professor in March 2023. Together with her team, she is devising new models that go beyond the Standard Model of particle physics as well as new computer-aided calculation methods to determine model forecasts for future experiments in order to answer some of the fundamental questions of particle physics. To this end, the 28-year-old is collaborating with researchers from other disciplines-physics, computer science and mathematics—and is thus establishing a new research focus within the TRA Matter at the University of Bonn. The TRAs are where researchers work together across faculty boundaries on key academic, scientific, technological and societal issues relevant to our future. The concept is centered around dedicated professorships designed to link different disciplines together in a unique way. One of these is the Clausius Professorship, named after the University of Bonn physicist Rudolph Clausius (1822-1888).

Germany's joint federal and state program supporting early-career researchers (WISNA) is funding 1,000 tenure track positions at 75 universities throughout Germany. With funding approved for 28 professorships, the University of Bonn was the most successful university in the state of North Rhine-West-

phalia during the second round of applications in 2019. The last of these 28 professorships was filled in 2023. The WISNA professors include seven high-profile tenure track professorships in five different TRAs. The program is aimed at early-career researchers, who can take up a lifetime professorship after six years if they successfully prove themselves as a university professor and pass their final evaluation. The program is geared toward making career paths for ear-

ly-career researchers more transparent and easier to plan and enabling young researchers to make a decision on remaining in academia long-term sooner than used to be the case. It readies them for careers both within and outside academia by providing extensive advice and training opportunities, which are continuously being developed further alongside and in addition to the program.

Award-winning research

A look at the many prizes that its researchers won in 2023 demonstrates once again the University of Bonn's ability to do excellent research. The haul ranges from a Doctoral Award for physics to the prestigious Heinz Maier-Leibnitz Prize, the most prominent accolade available to early-career researchers in Germany.

Vera Traub scoops Heinz Maier-Leibnitz Prize



Assistant Professor **Vera Traub** from the Institute for Discrete Mathematics was presented with the Heinz Maier-Leibnitz Prize con-

ferred by the German Research Foundation (DFG). It is considered the most important award available to early-career researchers in Germany and is intended to encourage recipients to keep pressing on with their career in research. They can put the €200,000 prize money toward their continued research work for up to three years and also receive a program allowance of 22 percent. Vera Traub conducts research at the interface between discrete mathematics and theoretical computer science. Her field is that of combinatorial optimization, which tackles questions for which a particularly good solution needs to be found from a large number of equally feasible variants. She is currently a member of the Modelling Transdisciplinary Research Area at the University of Bonn.

First-ever "Modelling for Life and Health" Transdisciplinary Research Prize awarded



Prof. Dr. Thomas Schultz



Priv.-Doz. Dr. Theodor Rüber

2023 saw the "Modelling for Life and Health" Transdisciplinary Research Prize of the Modelling and Life and Health Transdisciplinary Research Areas awarded for the first time. It went to Professor Thomas Schultz from the Institute for Computer Science II at the University of Bonn and Adjunct Professor Theodor Rüber from the Clinic and Polyclinic for Epileptology at the University Hospital Bonn. The €120,000 prize funds highly innovative research projects at the interface between mathematics or computer science on the one hand and medicine or life sciences on the other. The pair of winners will be using their prize money, which can be used very flexibly over a twoyear period, to study improved diagnostic strategies in the run-up to epilepsy surgery. The innovative and interdisciplinary nature of the project that is now to be supported was what secured it its groundbreaking funding.

Hausdorff Chair holder Angkana Rüland awarded New Horizons Prize



The mathematician Professor Angkana Rüland was presented with the illustrious New Horizons Prize conferred by the Breakthrough Prize Foundation. Also known as the "Oscars of Science," the annual Breakthrough Prize is

regarded as the biggest international award in science. Each of the five main prizes is worth \$3 million, while the New Horizons Prizes come with \$100,000 each. Rüland received the New Horizons Prize in Mathematics for her outstanding work on applied analysis, more specifically on investigating microstructures in phase transitions in certain materials, and for her research into inverse problems. She will be donating some of her winnings to the Bonn Math Club, which supports young, talented mathematicians and where she herself worked as a student. The 35-yearold researcher holds a Hausdorff Chair in the Hausdorff Center for Mathematics (HCM) Cluster of Excellence.

Hausdorff Chair holder Lisa Sauermann wins von Kaven Award



Professor Lisa Sauermann was honored with the 2023 von Kaven Award in recognition of her outstanding scientific achievements. The €10,000 prize is presented by the von Kaven Foundation, which is managed by the German Research Foundation (DFG), and generally goes to early-career mathematicians on the DFG's Heisenberg or Emmy Noether Programme. Lisa Sauermann holds a Hausdorff Chair in the Hausdorff Center for Mathematics Cluster of Excellence and

mainly conducts research into what is known as probabilistic combinatorics, which involves using techniques borrowed from probability theory to study combinatorial problems. Researchers in this subdiscipline of discrete mathematics are interested in the maximum possible number of sets or other objects under certain conditions, for example.

New award for basic research in the natural sciences



The Renate and Karlheinz Schmidt Prize was presented for the first time in 2023, going to Dr. Lorenzo Bonaguro from the LIMES Institute at the University of Bonn in recognition of his outstanding biochemistry research. Bonaguro's work centers on immunosenescence-the progressive deterioration of the immune system among the elderly—and especially on the interaction between innate and adaptive immune responses. He is particularly interested in measurements at population level and is investigating the variation of gene expression among healthy individuals to predict the function of a particular gene. The €10,000 award is presented jointly by the Renate and Karlheinz Schmidt Foundation and the University of Bonn Foundation.

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The Physics and Astronomy Foundation presented Dr. Zlata Fedorova with the Doctoral Award for her doctoral thesis entitled "Simulation of time-periodic and topological tight-binding systems with plasmonic waveguide arrays," which was supervised by Professor Stefan Linden from the Nanophotonics team at the University of Bonn's Institute of Physics. The properties of a quantum system can be modified by "shaking" it periodically, e.g. using a laser beam. In her thesis, Fedorova examined how this technique—known as Floquet engineering—can be used to control the topological characteristics and the transportation of light in optical waveguide structures. Worth €4,000, the award is presented by the Bonn-based Physics and Astronomy Foundation together with the Wilhelm and Else Heraeus Foundation.

Two researchers admitted to NRW Academy

The North Rhine-Westphalian Academy of Sciences, Humanities and the Arts welcomed 14 new members to its ranks in 2023, including the mathematician Professor Catharina Stroppel and the quantum physicist Professor Dieter Meschede from the University of Bonn. The members are united by exceptional research work in their area of expertise. Within the field of representation theory, Professor Catharina Stroppel looks at symmetries and the various forms that they take, for which she was awarded the Gottfried Wilhelm Leibniz Prize by the German Research Foundation (DFG). Professor Dieter Meschede from the Institute of Applied Physics has been studying questions of atomic, molecular and quantum physics for over three decades. He is a senior professor and author of three textbooks and was President of the German Physical Society from 2018 to 2020.

Four new Heisenberg Grants

The German Research Founda-

tion (DFG) accepted four University of Bonn researchers onto its Heisenberg Programme in 2023: Dr. Max Crüsemann from the Institute of Pharmaceutical Biology, Dr. Illia Karabash from the Institute for Applied Mathematics, Professor Paul Marx from the Department for Political Sciences and Sociology and Professor Lisa Sauermann from the Institute for Applied Mathematics. The program is open to researchers who already meet the criteria for being appointed to a permanent professorship. It gives them scope to continue working on their own high-caliber projects in order to burnish their academic and scientific reputation, with the aim being to take up a management role in academia within five years.

▼ A celebratory photo during the NRW Academy's annual ceremony (from left to right): Professor Catharina Stroppel, Academy President Professor Julia B. Bolles-Wilson and Professor Dieter Meschede.



Assistant professor heads up new Emmy Noether Research Unit



How are bacteria on our mucous membranes affected by type-A antibodies (IgA)? Assistant Professor Tim Rollenske works at the University Hospital Bonn to study the impact of these immune system effects, particularly on our intestines. The researcher is heading up a new Emmy Noether Research Unit at the University of Bonn, which he hopes will open the door to a professorship. The DFG will be providing up to €2 million in funding for the project over the next six years. The research findings could lead to more effective vaccination strategies for the mucous membranes and support efforts to counter antibiotic-resistant bacteria.

Soccer robots defend World Championship title

At the RoboCup World Championship in Bordeaux in July 2023, the University of Bonn's Team NimbRo won the soccer tournament in the Humanoid AdultSize category and thus successfully defended their title. The lifelike, soccer-playing robots had been developed by the Autonomous Intelligent Systems working group at the Institute for Computer Science. Team NimbRo had whipped four humanoid

soccer robots, each around 135 cm tall, into shape in a bid to defend its world title. In particular, the software used inside the robots had been improved, such as by speeding up their visual perception so that they could capture the state of play in real time. How the robots generated movement had also been overhauled, so that they could regain their balance even after sustaining heavy knocks, while their kicking movements had been made more flexible. In the final, the robots from Bonn came up against Team HERoE-HS from Hanyang University in

South Korea. NimbRo pulled off an emphatic 8-0 victory. The RoboCup is an international initiative designed to use competitions as a way to encourage the further development of smart robots. The aim by 2050 is to create humanoid soccer robots capable of beating the human world champions of the day.

▼ The humanoid soccer robots from Team NimbRo at the University of Bonn (left) inflicted a crushing defeat on the HEROEHS (right) at the RoboCup World Championship in Bordeaux.





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Early-career researchers

The term "early-career researchers" covers all manner of different groups, including students working toward a doctorate after graduating or those entering the world of research after completing their doctorate to establish themselves as a researcher. And the University of Bonn offers a wide variety of employment and funding opportunities during this phase.

University of Bonn creates online training course on research impact for researchers

Available to University of Bonn researchers at all stages of their careers, the new online training program entitled "Research Impact: Creating Meaning and Value" teaches the basics of the impact of research in business, politics and society. It was developed by the Bonn Graduate Center, the funding advice team and the enaCom Transfer Center at the University of

Bonn as part of an international group of experts led by the online training provider EPIGEUM. The University of Bonn is one of the first higher-education institutions in a German-speaking country to offer this course.

First two Argelander Mobility Grant recipients go abroad

The Argelander Mobility Grants are designed to help more experienced postdocs who completed their doctorates between one and five years ago to gather relevant international experience by undertaking a six- to twelve-month research visit and thus position themselves successfully for the next stage in their careers. The first two individuals to be funded in this way embarked on their research visits in 2023: Dr. Farah Afzal from the Helmholtz Institute for Radiation and Nuclear Physics spent time at the Department of Physics at the

College of William & Mary in Williamsburg, US, while Dr. Veruschka Wagner from the Department of Oriental and Asian Studies used her grant to visit the Department of History at Istanbul Bilgi University in Turkey.

First work shadowing placement in research management as part of the "Doctorate plus" certificate

"Doctorate plus," a training program for doctoral students, was expanded and supplemented with add-ons as part of Excellence measure P3 ("Career Transitions"). After obtaining their certificate in one of three tracks—Research, Research Management or Business and Organizations—doctoral students can apply for careers coaching or work shadowing. The first such shadowing placement as part of the "Doctorate plus" add-on for research management was ar-

ranged in October 2023. They are designed to enable doctoral students and freshly minted doctorate holders to prepare themselves for a career in research management in a targeted way and obtain some valuable insights into day-to-day work. The placement was under-

taken by Dr. Claudia Reitz, who obtained her doctorate in Greek philosophy from the Faculty of Arts at the University of Bonn in July 2023. During her time in Research and Innovation Services—specifically in the Central Unit and Research Contracts and the Research Funding

section—she gained practical experience of research management and priceless insights into the profession and was able to ready herself for the next step in her career in the best possible way.

Funding for top-level research

One of the many indications of the high-caliber nature of the research done at the University of Bonn is the steady stream of sizable grants that it receives. In 2023, the University once again secured substantial third-party funding from the German Research Foundation, the Federal Ministry of Education and Research and German Cancer Aid (Deutsche Krebshilfe), among others. University of Bonn researchers also achieved considerable success with European Research Council (ERC) grants, winning no fewer of these muchsought-after research fellowships.

Consortium formed to predict cardiovascular diseases

Obesity is a serious problem in Europe that affects over 436 million people. There are hopes that AI will significantly improve the precision and practicality of the methods currently used to assess risk. To this end, eleven partners from eight countries have formed a consortium for the project entitled "Trustworthy AI Tools for the Prediction of Obesity Related Vascular Diseases (AI-POD)," aiming to develop a state-of-the-art AI risk score that will aid clinical decision-making as well as a mobile app for personalized risk assessments and predictions of cardiovascular diseases

caused by obesity. The research project is being coordinated by the University of Bonn and funded by the European Union to the tune of some €5.3 million over four years as part of its Horizon Europe research and innovation program.

Worm infections (helminthias-

Eliminating worm infections with eWHORM

es) affect around 1.5 billion people worldwide. A new multidisciplinary alliance between research institutions, university hospitals, universities and not-for-profit organizations was formed in 2023 to combat them, specifically in sub-Saharan Africa (SSA). The African and European partners are working together in the eWHORM project to establish a new platform for adaptive clinical trials and improve the clinical research infrastructure in several SSA countries. The project is being coordinated by Professor Marc Hübner from the Institute for Medical Microbiology, Immunology and Parasitology (IMMIP) at the University Hospital Bonn, who is a member of the Life and Health Transdisciplinary Research Area at the University of Bonn. The project is designed to implement the roadmap for neglected tropical diseases (NTDs) set out by the World Health Organization (WHO) and reduce

the number of cases of illness caused by worm infections. It is set to receive total funding worth €11.3 million from the European Union and the Swiss government.

University of Bonn to coordinate new DFG Priority Programme

The German Research Foundation (DFG) is setting up a new Priority Programme to be coordinated by the University of Bonn. Professor Thomas Becker from the Institute of Biochemistry and Molecular Biology and his colleagues will be looking at how mitochondria—the "power stations" inside our cellsare integrated into the cellular proteostasis network. The term "proteostasis" refers to the fundamental processes of cell biology such as the folding, transportation and degradation of proteins. A deeper insight into the interplay between mitochondria and the proteostasis network may aid our understanding of neurodegenerative diseases and aging processes. The DFG's Priority Programmes are supra-regional research networks set up to investigate the scientific basis of particularly topical or emerging research areas. The DFG will be providing this particular alliance with some €7.8 million in funding over three years.

A new Collaborative Research Center (CRC) entitled "NuMeriQS: Numerical Methods for Dynamics and Structure Formation in Quantum Systems" aims to advance our understanding of dynamics and structure formation in quantum systems. Originally approved by the DFG in November 2023, the research alliance began its work in 2024. Forschungszentrum Jülich and the Max Planck Institute for Coal Research in Mülheim an der Ruhr are also involved alongside the University of Bonn. The consortium, which was born out of the Matter Transdisciplinary Research Area, is set to receive some €8 million over a period of three years and nine months. Professor Carsten Urbach from the Helmholtz Institute for Radiation and Nuclear Physics is Speaker for the CRC, with Professor Barbara Kirchner from the Clausius Institute of Physical and Theoretical Chemistry at the University of Bonn as his Co-Speaker.

Transregio CRC extended

The DFG has approved a further four years' funding for the "Aortic Disease" Transregio CRC, which involves University Hospital Cologne, the University Hospital of Düsseldorf and researchers from the University of Bonn and University Hospital Bonn. Total funding for the four-year period (2023–2027) amounts to €17 million. The Speaker for the CRC is Professor Georg Nickenig, Director of Medical Clinic II at the University Hospital Bonn.



Two new DFG Research Units

Roads, bridges and dams are all

getting older. A Research Unit established in 2023 and entitled "Deformation analysis based on terrestrial laser scanner measurement (TLS-Defo)" is working at the University of Bonn to investigate how long structures like this will remain able to bear any weight. The researchers are using terrestrial laser scanners to scan the surface of objects and spot even the tiniest changes at an early stage. The DFG is providing the unit with some €2.4 million in funding over four years. Another new Research Unit bears the name "Urban impacts on the Mongolian Plateau - Entanglements of Economy, City, and Environment." The research project is looking at the remains of two cities in what is now Mongolia and focusing on the urban "metabolism," including topics such as energy supfood production and construction materials. This Research Unit for the Mongolian Plateau, which is set to receive four

▲ Major success for heart research in Bonn: the DFG has agreed to fund the "Aortic Disease" Collaborative Research Center (TRR 259) for a further four years Shown here: Professor Georg Nickenig (right) during an operation to implant a new aortic valve.

years' funding from the DFG, is the 11th such group currently based at the University of Bonn.

New Research Training Group

The DFG established a new Research Training Group, "Tools and Drugs for the Future," at the University of Bonn in 2023. It was instigated by Professor Christa E. Müller, who is also its Speaker. The project is geared toward modernizing medicinal chemistry and training a new generation of medicinal chemists and researchers at the interface with neighboring disciplines. The projects also aim to contribute to the development of new drugs. Close to €6.3 million in funding will be provided over five years.

€8.1 million for an innovative research greenhouse

A new type of research greenhouse is being built on the University of Bonn's Klein-Altendorf Campus. Although growing crops in greenhouses produces high-quality food, it is also very energy-intensive. This is where researchers on the Klein-Altendorf Campus want to come in with their START ("Sustainable greenhouse production types and resource efficient technologies for future cultivation") project and make greenhouse cultivation resource-efficient and more sustainable. For instance, water and nutrients are to be recovered and recirculated, energy is to be obtained via sustainable processes, and energy-intensive substrates are to be completely eliminated using a cutting-edge greenhouse technology—deep-water cultivation—in which the plants are cultivated directly in water tanks. The project,

which will see partners from various institutions work together across discipline boundaries in the coming years, has been awarded €8.1 million in funding from the Federal Ministry of Education and Research (BMBF).

▼ A deep-water culture greenhouse, where plants are cultivated in water tanks, is being built on the Klein-Altendorf Campus.





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Data analyses help patients and the people treating them to make a better assessment of the risks associated with cardiovascular diseases. This allows heart health to be given more targeted protection and heart conditions to be prevented from deteriorating.

Having an overall picture of a person's medical state makes it easier to spot their individual health risks and customize preventive measures and treatments for them. The BMBF-funded ACRIBiS project ("Advancing Cardiovascular Risk Identification with Structured Clinical Documentation and Biosignal Derived Phenotypes Synthesis"), which is set to receive more than €9 million over four years, now intends to use highly complex data analyses to make progress on this in cardiovascular medicine.

Gaining insights in virtual spaces

InVirtuo 4.0 is an interdisciplinary collaborative project based in Bonn and Dortmund that was set up in 2023 to establish experimental research in virtual environments as a new research strand in its own right. The project has secured €3 million in funding from the Ministry of Culture and Science of the state of North Rhine-Westphalia and combines expertise from the fields of computer science, media studies, ethics, the neurosciences, behavioral research and psychiatry. Alongside the University of Bonn and the University Hospital Bonn, the project consortium also includes TU Dortmund University and the German Center for Neurodegenerative Diseases (DZNE).

ADME4NGRA shines the spotlight on xenobiotics and gut microbiota

Launched in 2023, ADME4NGRA is a collaborative project to study how xenobiotics affect the human body and has been approved by the European Food Safety Agency (EFSA). A veritable roll-call of German and international institutions are involved alongside the University of Bonn. The various projects have secured total funding worth €3 million over four years. This is the first project of its kind at the University of Bonn. A team of its researchers are investigating the impact of gut microbiotics on the chemical modification of xenobiotics, i.e. chemical substances not found naturally in the human body. Micro-organisms and their enzymes inside the intestine play a crucial role in the xenobiotic metabolism and can contribute to changes in toxicity. Xenobiotics also often modify the composition of our gut microbiota and can thus increase the risk of metabolic disorders. Although the overall picture is becoming clearer, toxicological studies have so far failed to take adequate account of interactions of this kind. Toxicological risk assessments cannot be carried out without a molecular-level understanding of gut microbiota.

NRW to fund collaborative projects for comparative theology transfer

The Centre for Comparative Theology and Cultural Studies (ZeKK) at Paderborn University and the International Center for Comparative Theology and Social Issues (CTSI) at the University of Bonn are expanding their existing partner-

ships in the field of comparative theology: the Ministry of Culture and Science of the state of North Rhine-Westphalia (MKW NRW) is providing nearly €2 million in funding for a collaborative project to develop a cooperation platform for the societal transfer of comparative theology. Comparative theology involves interweaving the theologies of the various religions in such a way that they become capable of working together to propose solutions to problems facing society, reducing the potential for violence in the various religions and reinforcing the ways in which they are productively interconnected. This particular collaborative project is developing inter-religious formats for encounters at various centers of learning in comparative theology in NRW as well as teaching and learning materials on comparative theology for both children and adults that meet the needs of the individual religious communities and the educational authorities at federal and local government level.

German Cancer Aid funds early-career oncologist



A research unit led by Dr. Laura Surace from the Institute of Clinical Chemistry and Clinical Pharmacology at the University Hospital Bonn has secured an €800,000 grant from German Cancer Aid (Deutsche Krebshilfe). Surace and the other

members of her research unit are mainly focusing on methods of immune-based cancer therapy, which involves supporting patients' immune systems in such a way that they are able to independently recognize malignant tumors for what they are, attack them and ultimately destroy them. The funding is coming from the Max Eder Junior Research Group Program, which provides targeted support to the research being done by up-andcoming oncologists at an early stage of their careers. The aim is to benefit the field of oncology as well as aid the researchers' own education and training. Surace is one of around 30 early-career researchers across Germany to have received such a grant.

Numerous ERC grants secured

Grants from the European Research Council (ERC) are an important hallmark of quality for researchers. They come with varying amounts of funding and are intended for researchers at different stages of their careers. 2023 proved another year in which numerous researchers obtained an ERC grant.

Starting Grants: Assistant Professor **Yongguo Li** from the Institute of Pharmacology and Toxicology at the University of Bonn was awarded a much-sought-after ERC Starting Grant. The researcher is investigating how the lipid metabolism can be influenced so as to consume as many calories as possible, thus opening up potential new ways to treat obesity and diabetes. The ERC will be funding his project to the tune of some €1.5 million in funding over five years. Also receiving a Starting Grant is Guglielmo Lockhart from the Institute of Physics and the Bethe Center. With his

EXTENDED research project, he is investigating the role played by extended objects (vortex strings and other field configurations based on two or more dimensions) in quantum field theory. Adolfo Arroyo-Rabasa was another successful entrant in the competition for the much-in-demand funding. One of the mathematician's main research projects, which is studying the overlaps between the calculus of valuations, geometric measure theory, harmonic analysis and partial differential equations, is being funded with an ERC Starting Grant.

Consolidator Grants provide

around €2 million in funding to re-

searchers who show a high degree

of promise and whose working group is currently in the consolidation phase. The University of Bonn enjoyed fivefold success in this program in 2023: Professor Dennis Lehmkuhl from the Department of Philosophy is studying the efforts made to develop Einstein's General Theory of Relativity between 1955 and 1975, in the course of which several researchers revolutionized the mathematical tools and physical concepts that the theory employed. His is the first ERC Consolidator Grant to go to the Faculty of Arts at the University of Bonn. Consolidator Grants were also secured by Professor Annaliese Mason from the Institute of Crop Science and Resource Conservation (IN-RES), Professor Jan Hasenauer from the Life and Medical Sciences Institute (LIMES), Professor Florian I. Schmidt from the Institute for Innate Immunity and Dr. Evgeny Shinder from the Mathematical In-

Advanced Grants: how can inflammatory reactions be stimulated or inhibited? How do inflammasomes function as inflammation

switches at molecular level? These are the questions being explored by Professor Matthias Geyer from the Institute of Structural Biology at the University Hospital Bonn, who is a member of the Life and Health Transdisciplinary Research Area and the ImmunoSensation² Cluster of Excellence. The ERC is stumping up some €2.5 million over five years to fund his research. Another Advanced Grant recipient is Professor Eicke Latz from the Institute for Innate Immunity, who is researching how inflammation processes in certain skin conditions, such as atopic dermatitis and psoriasis, vary over time and in response to spatial factors. Gaining a better understanding in this area will enable new and better treatments for these widespread conditions to be developed that target their root cause. Advanced Grants are designed for top-level researchers with an excellent academic track record.

Proof of Concept Grants help researchers to translate their ideas from previous ERC projects into commercial applications. Not one but two University of Bonn researchers secured one in 2023. The work being done by the biologist Professor Bernardo S. Franklin from the University Hospital Bonn is geared toward returning hematopoietic stem cells to their original state in order to "wipe" the immune system's harmful memories of inflammation. To achieve this, he is using customized "mini-antibodies" known as nanobodies, which he has already studied with the help of an ERC Starting Grant. Franklin intends to utilize his newly secured grant to validate the use of nanobodies to combat inflammaging and license this technology for industrial partners. Together with his team, Professor Simon Stellmer

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from the Institute of Physics at the University of Bonn is studying how measuring devices that are already highly accurate can keep on being improved and refined. In the "Gy-

roRevolution" ERC project, for which they have now secured funding, they want to develop gyroscopes – spinning sensors that are extremely precise and that can

measure the Earth's rotation or earthquakes, for example, even more accurately.



Professor Dennis Lehmkuhl from the Department of Philosophy secured the Faculty of Arts' first-ever ERC Consolidator Grant.



An ERC Advanced Grant is supporting Professor Matthias Geyer from the Institute of Structural Biology at the University Hospital Bonn during his research into inflammatory reactions.



Professor Eicke Latz from the Institute for Innate Immunity has been awarded an ERC Advanced Grant to continue his work on the course of inflammation processes in certain skin conditions.



Biologist Professor Bernardo S. Franklin from the University Hospital Bonn has secured a Proof of Concept Grant to get customized "mini-antibodies" into a form that can be used by industry.



Simon Stellmer from the Institute of Physics is using his Proof of Concept Grant to develop ultra-precise spinning sensors capable of measuring phenomena such as earthquakes even more accurately.

Transfer and spin-offs

The University continued to strengthen its commitment to knowledge and technology transfer and to supporting spin-offs in 2023. A swathe of innovative projects that demonstrate the strong entrepreneurial spirit at the University were delivered together with partners from industry and society.

New Professorship for Entrepreneurial Behaviour

Professor Denise Fischer-Kreer took up the new Professorship for Entrepreneurial Behaviour at the Institute for Entrepreneurship in the Faculty of Agriculture at the start of the 2023 winter semester. She was previously an Akademische Rätin (a lecturer with civil servant status) in the Innovation & Entrepreneurship Group (WIN) at RWTH Aachen University and has also gained experience working in industry. The professorship has been awarded start-up financing as part of the accompanying "U BO GROW" project managed by the "Exzellenz Start-up Center.NRW" initiative. The new institute pools the various activities offered for start-up research and teaching. The medium-term aim is to make the teaching content available to students in other departments too in order to increase the potential for University-led start-ups even further.

First EXIST Women participants start at the University of Bonn

Sixteen women from four faculties embarked on the first-ever round of the EXIST Women program at the University of Bonn in

2023. With funding from the Federal Ministry for Economic Affairs and Climate Action, the enaCom Transfer Center is helping the participants get ready to start their own business with workshops, mentoring and networking opportunities. Ten of the women also received a grant worth up to €9,000 and a lump-sum material allowance of €2,000 to progress their idea for a start-up. The participants hail from all manner of different fields, from astronomy and geodesy and geoinformation through to the neurosciences. Whilst some are motivated by a desire to found a sustainable company, others want to make their entrepreneurial dreams a reality or set social innovations in motion. Over a 12-month period, they will be supported by experienced female experts and taught all there is to know about starting a business. The University of Bonn is one of the first universities to launch an EXIST Women program.

Co-working labs to stimulate innovative product developments

The co-working labs on the University of Bonn's Endenich Campus enable researchers to validate their research findings and develop them further with a plan to commercialize them. They meet the statutory safety standards for Level 1 and are kitted out with state-of-the-art equipment, enabling new products to be readied for market launch.

One example of how the co-working labs are being used is provided by the van Sweethoven team of start-up entrepreneurs at the University of Bonn. The young researchers with a background in biotechnology, computer science

▼ The co-working labs are available to University of Bonn researchers keen to get their project off the drawing board and put it into practice.



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The premises have enough space for several start-up teams, who can share ideas and benefit from one another's experiences, thus generating synergy effects—entirely in the spirit of a shared workspace. Early-career researchers at and graduates of the University of Bonn with appropriate laboratory experience are eligible to apply. Due to the equipment provided, the offer is primarily designed for researchers working in the natural sciences.

Prototyping grants fund innovative product developments

In the third round of its prototyping grants, the enaCom Transfer Center is supporting innovations from three distinct fields: Al-powered social sciences, sustainable agriculture and medicine. Researchers at the University of Bonn and University Hospital Bonn are using the funding of up to €50,000 per project to come up with innovative prototypes for tackling current challenges. Their ultimate aim is to use their research findings to get their products or services ready for market launch.

For instance, one team is working on an Al-powered analysis that can improve our understanding of the dynamics of user communities and collaborative ecosystems in research infrastructures. This is designed to help research infrastructures to make sound decisions and thus boost their socio-economic impact and potential for innovation

Meanwhile, another team—this time from the Agricultural Robotics and Agricultural Engineering work-

ing group and the PhenoRob Cluster of Excellence—is building a smart weeding robot. The system identifies the degree of biodiversity in a field and removes weeds precisely and in a species-specific way, allowing farmers to use less herbicide, save money and protect the environment.

A group at the University Hospital Bonn is working on "Coldex," a nasal spray designed to prevent viral infections by activating the body's own cells to fight viruses effectively as soon as they arrive. The team aims to get their product market-ready quickly in order to curb the impact of both the common cold and pandemics.

PANsight Health promises personalized medicine by grouping patients

PANsight Health, a start-up project from the University of Bonn, received about €270,000 in funding in 2023 from the "Start-up Transfer. NRW" program. The team led by Dr. Kevin Baßler is developing a modular analysis system that can group patients quickly based on transcriptome data. By combining various sources of medical information such as imaging and laboratory data, the aim is to identify groups of patients that are more stable or more susceptible with regard to a certain disease—a major step toward personalized medicine. The funding will now allow the team to add a highly developed data integration function to the system. Once their project is completed, they plan to found the company PANsight Health GmbH to make the software platform available to a range of customers.

Melodizr and Datapods: innovative ideas for music and data protection

Two other start-up projects from the University of Bonn-Melodizr and Datapods-likewise received funding of some €270,000 via "Start-up Transfer.NRW" in 2023. Melodizr is developing a platform for musicians and fans. Via an app, musicians can record their ideas and songs using deep learning and share them with their fans, earning money in the process. The smart listening technology that Melodizr employs uses a smartphone to automatically detect and log the harmonic structures, chords and notes produced while the music is being performed. The project's link with the Institute for Computer Science at the University of Bonn and the support provided to the team by Professor Michael Meier are enabling the latest research findings to be incorporated into Melodizr's development.

The Datapods team, meanwhile, wants to give users more control over their personal data. Its app acts as a data custodian, which makes it easier to request data held on the user by companies, stores it in a digital safe in compliance with the EU General Data Protection Regulation (GDPR) and presents it in a clear visual form. Data can also be erased or rectified. In addition, the project is working on developing a secure platform for data exchange that will allow data to be exchanged between individuals and the research team. It is being supported by a scientific mentor in the form of Professor Louisa Specht-Riemenschneider from the Chair for Information and Data Law at the University of Bonn, who is a member of the Individuals and Societies Transdisciplinary Research Area



The funding will now enable both teams to continue validating their ideas, come up with prototypes and press ahead with starting their businesses.

SmartContrast saves on contrast agents in brain imaging

relios.vision GmbH, another start-up incubated at the University of Bonn, has secured funding from the European Innovation Council's Women TechEU program. The interdisciplinary team of medics and mathematicians is developing SmartContrast, a piece of software powered by artificial intelligence. The aim is to use less contrast agents for magnetic resonance imaging scans of the brain in order to reduce costs and risks for patients and the environment. Women TechEU exists to provide targeted support to deep-tech start-ups involving women, because they are still significantly under-represented

▶ Dr. Katerina Deike-Hofmann, Professor Alexander Radbruch (third from left), and Professor Alexander Effland (second from right) with the team from relios. vision GmbH, which is working on reducing the use of contrast agents.

across the EU. Besides a grant worth €75,000, the support also includes mentoring, coaching and access to an EU-wide network of entrepreneurs.

Millions of euros in funding for innovative laser beam shaping

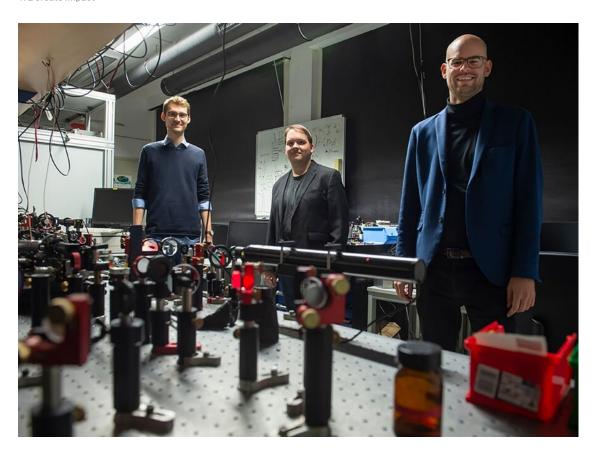
The Bonn-based start-up Midel Photonics, a spin-off from the University of Bonn, has invented a new kind of technology for shaping lasers. Based on research conducted at the University's ML4Q Cluster of Excellence, the technology uses special mirrors to solve some of the problems presented by convention-

al methods and opens the door to new industrial applications, e.g. in cutting metal for making smartphones and electric cars.

Midel Photonics has now successfully secured €1 million in seed funding. Its investors include the High-Tech Gründerfonds (HTGF) as well as high-profile industry experts. The four founders—David Dung, Frederik Wolf, Christian Wahl and Christopher Grossert—were assisted on their journey by the start-up consultants from the enaCom Transfer Center at the University of Bonn.

The start-up intends to use its fresh capital to position its innovative technology more broadly on the market and expand the scope of its application. Alongside ena-Com, Midel Photonics was also supported by an EXIST Transfer of Research grant from the Federal Ministry for Economic Affairs and Climate Action as well as NRW. BANK, the High-Tech.NRW network and RWTH Aachen University's Incubation Program.

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▲ The Bonn-based start-up Midel Photonics, a spin-off from the University of Bonn, has invented a new kind of technology for shaping lasers. Shown here: its founders Frederik Wolf (left), Christian Wahl (center) and David Dung (right).

Start-up DR. VIVIEN KARL attracts over a million euros in funding

The pharmaceutical start-up DR. VIVIEN KARL has successfully raised €1.5 million. Its founder Vivien Karl studied pharmacy at the University of Bonn before setting up her own company in 2021. Her start-up sells intimate care products made of natural materials in line with scientific approaches. The investors in-

clude Dieter von Holtzbrinck Ventures as principal investor as well as Tina Müller, the former CEO of Douglas, who will also sit on the advisory board, and the business angel club Better Ventures. The startup consultants in the enaCom Transfer Center provide targeted advice addressing the needs of female start-up entrepreneurs and offer them specific training. One such consultant, Anna Müller, supported Vivien Karl through the early days of her start-up, which was born out of her doctorate at the University of Bonn.

Postdoc Day 2023: where science meets policymaking

The University of Bonn's Postdoc Day saw prominent researchers come together to discuss key questions about the links between science and policymaking. Sandra Speer from the enaCom Transfer Center stressed how transfer to the policy sphere should be factored in right from the start of the research design process in order to magnify its impact.

During the panel discussion, experts shared practical insights and tips for successful policy advice, arguing that building trust, cutting complexity and presenting research findings in visual form were key. The independence of science and the problem of objectivity were also addressed. There was general agreement that, despite the time required for it, policy advice was a highly satisfying line of work that offered scope for international involvement, especially in Bonn with its close links to the UN.

- ▶ The Postdoc Day featured a discussion of some of the key questions relating to the links between science and policymaking.
- ▼ Dialogue and networking among the postdocs formed a key part of the event.





University of Bonn shines during Nacht der Technik 2023

More than 2,500 people attended the third Nacht der Technik in Bonn and the Rhein-Sieg district on October 20, 2023. The University of Bonn also ran its very own station at the technology night for the first time, providing some fascinating insights into research fields including

robotics, geodesy and astronomy.

At the prompting of the enaCom Transfer Center, the University opened the doors of its Institute of Computer Science to around 500 visitors. Guided tours and hands-on activities gave them the opportunity to experience live and up close what researchers were working on. And the experts themselves were on hand to answer questions on anything from harvesting robots and

radio telescopes to digital maps.

enaCom was also in attendance itself with a creative offering that invited visitors to use building blocks to come up with their own ideas for the UN's Sustainable Development Goals. The aim was to see how quickly people could find potential answers to key questions of future relevance and put them into practice in a science-based start-up.

The sustainable transformation of the economy and society will be the decisive issue of the next few decades. With the huge amount of work we're doing in research, teaching and operations, we're making a major contribution to this and are laying the groundwork for change. 77

Professor Annette Scheersoi, Vice Rector for Sustainability



Taking responsibility through sustainability

What is the University of Bonn doing to boost sustainability? Quite a lot, as it happens! Looking at 2023, it is clear that a great many initiatives and projects are committed to putting research, teaching and operations on a more sustainable footing, with numerous events and campaign months inspiring people to join in. Its performance in several sustainability rankings and the awards that it has won show that the University is already making good progress through its hard work and dedication.

Top for sustainability

It is not just in research and teaching that the University of Bonn repeatedly comes at or near the top in international rankings: it also performs very well for sustainability in both a Germany-wide and international comparison, as not one but two major rankings illustrated in 2023.

Impressive results in THE's Impact World Rankings for sustainability

The Times Higher Education (THE) Impact World Rankings for 2023 put the University of Bonn among the top 50 universities worldwide in two out of the five categories in which it was ranked. The study highlights the impact that universities are having on each of the UN's Sustainable Develop-

ment Goals (SDGs). The University achieved its best results for SDG 2 (Zero Hunger), where it came 45th. This category considers a universi-

ty's research into fighting hunger as well as its degree programs and its teaching on food sustainability and sustainable agriculture Ranking



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QS Sustainability Rankings put University of Bonn well among the leading pack

The University of Bonn achieved very good results in the QS Sustainability Rankings in 2023, coming an excellent sixth in Germany in the overall scoring and 138th among the 1,400 or so global universities that were evaluated. Compiled by analysts at Quacquarelli Symonds (QS), the rankings assess the work that universities are doing to tackle the most urgent environmental and social problems facing the world. The University of Bonn performed particularly well in several categories: "Equality" (1st among German

universities and 24th worldwide), "Health & Wellbeing" (second in Germany and 46th worldwide), "Environmental Research" (4th in Germany and 64th worldwide) and "Social Impact" (4th in Germany and 78th worldwide). It has moved up both in the overall rankings and in eight of the categories and subcategories assessed, in some cases significantly. However, the results are only comparable with last year's to a limited extent due to a change in the ranking methodology and a near-doubling of the number of universities included.

academia and civil society, the independent body of 15 counts not one but two specialists from the Faculty of Agriculture at the University of Bonn among its members in the shape of Professor Monika Hartmann and Professor Ralf Pude. They are to work together on a bioeconomy strategy for NRW over

the next two years. Professor Hartmann has led the Agricultural and Food Market Research Department at the Institute for Food and Resource Economics since 2002 and studies what shapes environmentally, socially and economically responsible behavior in the agriculture and food sector. Professor

Pude is Professor for Renewable Raw Materials at the Institute of Crop Science and Resource Conservation (INRES) and Scientific Director at the Klein-Altendorf Campus. He is also a pioneer in renewable raw materials, a field that he played a significant role in developing.

Award-winning education for sustainable development

The University of Bonn received a National Education for Sustainable Development award in 2023 from the Federal Ministry of Education and Research and the German Commission for UNESCO in recognition of its exemplary commitment to education for sustainable development (ESD). The University puts on numerous innovative ESD-related courses, including the interdisciplinary "StadtKlimaWandeln" ("Transforming the Urban Climate") project seminar. This sees students from different subjects work together to develop ideas and concepts for making green spaces in Bonn climate-resilient biodiversity hotspots. Another noteworthy initiative is the CampusAckerdemie pilot project, which integrates ESD into teacher education. Students on teaching degrees plant, sow, cultivate and harvest up to 30 different kinds of vegetables on the University's own farm and thus acquire all the farming skills they need to teach a successful in-school gardening class later on in their careers. Meanwhile, supplementary workshops cover a range of teaching methods.

Award-winning sustainability

The University of Bonn's sustainability efforts are being very well received, be this in the fact that not one but two researchers have been appointed to the new Bioeconomy

Advisory Board of the state of North Rhine-Westphalia (NRW) or that the University has won an award for its education for sustainable development.



University of Bonn contributes expertise to NRW Bioeconomy Advisory Board

Biobased business management and biotechnological processes can do much to turbocharge the climate-friendly transformation of industry and a resource-efficient circular economy. The government of NRW assembled a Bioeconomy Advisory Board in late 2023 to strengthen the state as a center for the bioeconomy and undertake a comprehensive analysis of the opportunities and risks. Made up of figures from the world of business,

■ Expertise from the University of Bonn is in high demand on the NRW Bioeconomy Advisory Board: Professor Ralf Pude and Professor Monika Hartmann on the Klein-Altendorf Campus.



◆ Pia von Falkenhausen ((left) and Jennifer Sobotta (right) from Team N accept the award.

Events to get actively involved in

Events and campaign months are key to the University of Bonn's sustainability strategy. Ultimately, they not only raise awareness of everything that is going on here in terms of sustainability: events are also a way to move and inspire people and thus encourage them to pitch in and help bring about a more sustainable future.

World Café looks at sustainability in University life

April witnessed the first-ever World Café, organized by the student-run Green Office, the General Students' Committee (AStA) and University management in order to come up with ideas for making University life more sustainable in a candid and honest dialogue. Students, staff and representatives from University management came together to discuss visions and tangible actions in a creative atmos-

phere. Various facets of sustainability were explored at five themed tables, from environmentally conscious University operations and how to integrate the issue into teaching and research through to questions of participation, networking and transparency and embedding a sustainability culture that was actively embraced. Welcoming those present, Professor Annette Scheersoi stressed the importance of dialogue: "With the World Café, we want to provide an initial opportunity for discussions. Everyone must be heard. Express your wishes and desires, present your own ideas for a sustainable University and take other people's away with you when you leave." The brainstormed ideas were collected up and noted down and have since served as a basis for ongoing discussions and the continued development of the University's Sustainability Strategy.

Workshop on sustainability research for doctoral students

Interdisciplinarity was the order of the day at the doctoral students' workshop at the Universitätsclub Bonn. Eleven participants from seven disciplines gave talks and engaged in debate on a wide range of sustainability topics, from ethical issues and geopolitical challenges through to ideas for technical and social solutions, All those taking part shared an interest in the question of what a sustainably designed future might look like and what we as individuals need in order to achieve it.

The two keynote speakers, Professor Zita Sebesvari and Dr. Si-

▼ Students, staff and members of University management gathered at a World Café event to discuss how to inject greater sustainability into University life.



mone Sandholz (both researchers at the United Nations University), who kicked off each day of the workshop, were also a particularly important source of inspiration in terms of the content being discussed. By the end of the event, it was clear that sustainability issues and interdisciplinary dialogue are a match made in heaven. Overarching problems that made such interdisciplinary exchanges essential were identified in many different areas. Everyone involved expressed great interest in continuing to grapple with sustainability in theory and practice and to create spaces for further dialogue.

University lends expertise in sustainability in museums

Vice Rector Professor Annette Scheersoi contributed her expertise in a sustainable museum culture to the new permanent exhibition at the LVR-Landesmuseum Bonn entitled "Welt im Wandel" ("The World in Transition"). During the opening event, she participated in a discussion with the museum's director Thorsten Valk, Institut für Zukunftskultur director Tabea Leukhardt, and author and activist Samuel Kramer about the opportunities and challenges that sustainability presents to a museum's operations. As well as raising awareness of the issue of sustainability, the museum also wanted to reflect critically on its own environmental footprint, e.g. in relation to the loan of works

Besides supporting the permanent exhibition with her specialist expertise, Vice Rector Scheersoi is also involved in a joint research project between her Vice Rectorate for Sustainability and the LVR-LandesMuseum: the "Museum der Zukunft," or "Museum of the



▲ Eleven doctoral students from seven disciplines debated various aspects of sustainability in an interdisciplinary workshop.

Future." Forming the centerpiece of the new exhibition, it is designed to foster dialogue about current issues and questions of great future relevance and provide a fixed location that shines a spotlight on visitor participation. Participation, in the sense of actively having a say in and helping to shape something, plays a key role both at the LVR-LandesMuseum and in BOOST, the University's very own sustainability program. A two-year voluntary research position has been established in this area to design, implement and evaluate easily accessible formats for participation. Vice Rector Scheersoi is thus providing support both through her knowledge of sustainability matters and her scientific expertise in the sustainability-driven transformation of a major research and educational institution.

Sustainability lecture series launched

The sustainability lecture series saw researchers from various disciplines provide insights into key issues with a bearing on sustainability, including economics, law, consumption, biodiversity, ethics and collective behavior. The series is designed as a basic course that sets out to give participants an initial understanding of some of the problems and challenges involved in sustainability. It was developed as a measure forming part of the University's Sustainability Strategy and will be run once a year in the future, giving students and interested members of the public the opportunity to grapple with sustainability issues and key research questions that the University of Bonn's researchers are currently investigating. Through their work, they are acquiring the knowledge that will underpin efforts to solve some of the urgent challenges facing society and contributing their expertise to the policy debate.

Fairer Februar

Aimed at raising awareness of sustainability issues among its members and encouraging them to get involved, Fairer Februar is one of four campaign months devoted primarily to sustainability at the University of Bonn. Alongside a digital University-wide flea market, a competition to build bug hotels to boost biodiversity and the protection of insects, and recycling initiatives in partnership with the Nature And Biodiversity Conservation Union (NABU), the first World Café was also held with the mission of "shaping the sustainable transformation together." Also on the program was the University Hospital Bonn with a public Sustainability Assembly, while the NEiS project contributed recipe and sustainability tips.

Mighty May

2023 saw the second Mighty May campaign month, which offered University of Bonn members a wealth of exciting sustainability-related activities. The month kicked off with the fair trade cam-



paign week, which marked the University's successful recertification as a Fairtrade University. The program included a movie night plus various workshops and initiatives, including communal plogging. The Healthy Campus Bonn Week was also on during Mighty May, inviting passersby to get involved with its activity stands on health, sport and nutrition as well as a special Healthy Campus menu in the CAMPO-Mensa canteen in Poppelsdorf. The GreenBonn Hackathon at Digital-Hub Bonn offered people an opportunity to work together on digital

▲ The very first World Café on sustainability was held during Fairer Februar 2023 at the University of

solutions for making climate-related professions more relevant and thus contribute their own creative ideas. The real highlight of Mighty May was the Sustainability Day, when key players in the sustainable transformation at the University of Bonn were on hand to introduce themselves at a wide range of stalls and offer numerous hands-on activities. The campaign month closed out with the Diversity Days, featuring the Fair of Opportunities and a panel discussion on diversity in higher education in Germany.

Sustainable September

Once again, a great many members of the University were out in force in September, taking part in a wide range of hands-on activities to promote sustainability. For instance, they picked up trash on the

◆ The Sustainability Day was the main highlight of the Mighty sustainable campaign month

banks of the Rhine for the international RhineCleanUp and collected crown-cap bottle tops for charity. "Grill & Chill - Sustainable Style," an event organized by the Environmental Department of the General Students' Committee (AStA), offered vegan sausages from the barbecue and a relaxed atmosphere. The Institute of Crop Science and Resource Conservation (INRES) took a stand against food waste by giving University members the chance to take away organic potatoes that were too small to go on sale and pick apples from the orchards. The scythe course for University staff run by the Agroecology and Organic Farming Group (AOL), meanwhile, attracted numerous participants eager to learn how to handle the implement and thus boost biodiversity on the University's lawns in the future. Finally, in the nationwide City Cycling compe-

▼ University members turned out in their droves to collect trash on the banks of the Rhine for the big RhineCleanUp in Sustainable September.

tition, which sees people get on their bikes in the name of climate action, the University of Bonn came top in the "Best Team" category with 58,512 kilometers under its

Nachhaltiger November

Nachhaltiger November, the fourth and final campaign month of 2023, once again saw many members of the University taking part in the various activities and chatting about sustainability. The recipe reels put together by NEiS, an initiative of the Verbraucherzentrale NRW consumer association, furnished ideas for making delicious meals from seasonal ingredients or yesterday's leftovers. Two workshops were held to upcycle old, broken cassette tapes and vinyl into bags, bowls, clocks and much more besides. An interdisciplinary workshop for doctoral students was held to discuss people's wants and needs in the context of finite resources, where eleven doctoral candidates from seven disciplines tackled a number of ethical questions, geopolitical challenges and potential technical and social solutions. The agenda featured some tried-and-tested event formats once again in the shape of Students for Future Bonn's Public Climate challenges, among other things.





◆ Participants in Nachhaltiger November's upcycling workshop turned old cassette tapes and vinyl into new bowls, bags and clocks.



Many different initiatives and units at the University of Bonn are committed to driving the sustainable transformation forward together, and 2023 was no different: once again, a raft of exciting projects were instigated and implemented, from a standardized University-wide system for managing waste to a seminar where students came up with ideas for improving the urban climate.

Standardized waste management system introduced

The University of Bonn introduced a new, more sustainable system for managing waste in 2023. Color-coded trash cans have now been installed at all sites for separating out paper, packaging and general waste. This is an important step in ensuring that valuable resources are recycled more effectively, thus reducing greenhouse gas emissions and saving resources. Drawing on help from its members, the University has compiled a dedicated "Waste ABC"—a list of differ-

ent kinds of waste and how to dispose of each correctly—to make sure that waste is separated in the right way even in non-obvious cases. Needless to say, however, the best kind of waste is that which is never generated in the first place. Overall, therefore, the University of Bonn has reduced the number of garbage cans in offices, communal kitchens, library rooms, lecture halls, labs, foyers and corridors. As well as doing away with containers and trash bags that are not really necessary, this is also intended to make throwing away waste something that everyone is more aware of as they go about their day.

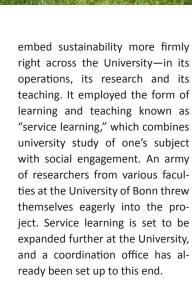
Bike repair stations installed

Stop by, get fixed, set off again: to promote the use of bikes among University members and the general public, the University of Bonn has installed a bike repair station on each of its campuses in the city, Poppelsdorf and Endenich. The posts, which are also open to the public, let people carry out minor

bike repairs quickly and easily themselves. Besides a bicycle pump, they also provide a standard set of tools comprising wrenches, Allen keys, screwdrivers and pliers. These tools make it possible to carry out all common minor repairs such as fixing a flat tire or a slipped chain. The stations were paid for out of the University's "funding pot for sustainability", which gives all University members the opportunity to turn sustainable project ideas like this into reality.

Students campaign for a healthy urban climate

The "StadtKlimaWandeln" project, a partnership between the University of Bonn, Bonn city council and WILA Bonn, is bringing researchers, city officials and locals together in a bid to help solve at community level the big challenges facing society such as climate neutrality and preserving biodiversity. An interdisciplinary seminar was held where students from 13 subjects came up with proposals for the dog-friendly meadow on the Rheinaue floodplain and for the Tannenbusch dunes. The focus for the Rheinaue was on boosting biodiversity while making the space a more attractive place to spend time in. The students' suggestions included insect-friendly plants, an obstacle course for dogs and more shady spots for people. For the Tannenbusch dunes, a stretch of inland dunes deemed particularly worthy of protection, they made recommendations such as stepping up care and maintenance of the area, getting the local community on board too. The seminar is a good example of the work being done to



First sustainability reader published

The student-run Green Office released the University of Bonn's first sustainability reader in 2023, which is designed to enable all its members to find out about sustainable development at the University in a clear and compact form. The reader illustrates what progress the University has made on sustainability, pools relevant information and sets out what measures and projects have already been implemented or are in the pipeline. Besides chapters dedicated to sustainability in teaching and learn-

▲ The student-run Green Office has published its first sustainability reader, which pools information on sustainability at the University of Bonn.

ing, in research and in operations, there are also more in-depth sections on sustainability at the Studierendenwerk and the University Hospital Bonn. In particular, the Green Office is also hoping that its reader will encourage people to get involved themselves, take the initiative and join one of the many existing groups showcased in the publication.





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An agile administration

The University's Central Administration has tasked itself with providing the best possible assistance to its researchers. Through its "Service Concept 2.0" and closer links between the various key people involved, it is helping to ensure that the faculties, departments, institutes and individual researchers get tailored support for whatever it is that they need.

Proactive and service-focused

The University management and its Central Administration are working tirelessly to give researchers space to grow while relieving them of the burden of red tape.

Satisfaction survey reveals good results

In the 2022/2023 winter semester, academic personnel and staff directly working for/with the former, such as secretarial staff of the faculties and institutes, were invited to take part in what was then the most extensive satisfaction survey that Central Administration had ever run. No less than 35 percent of those contacted took the survey. The results showed that 78 percent of respondents were "very satisfied," "satisfied" or at least "somewhat satisfied" with the work done and services provided by Central Administration. The findings were used to identify potential for improvement and five action areas—"Perceived innovativeness," "Information findability," ceived lower administrative burden," "Reachability" and "WE are

University Central Administration"—for which a range of measures are to be devised and implemented. The survey is set to be run again in the 2024/2025 winter semester.

The Service Concept 2.0

Developed as part of the "Proactive Administration" measure from the Excellence Strategy, the Service Concept 2.0 is to be rolled out to all divisions and Central Administration units via strategy days and strategy workshops. The main aim is to relieve the administrative burden on researchers and teachers and support them in line with their needs. Through the service concept, the support provided in the divisions is being established and expanded on four levels. For instance, measures have been devised to facilitate round-the-clock support and embed an increasingly specialized service structure from the front desk through to agile matrix teams. The measures include the Service Portal, which replaced the previous intranet in late 2023 and that helps user groups navigate by theme through the various services available. Agile teams made up of specialists from various sections and divisions are on hand to tackle complex issues that affect the whole organization. A satisfaction survey was also conducted to align the administrative services as closely as possible with the needs of staff. Feedback from it has been used to identify several action areas and take concrete action.

Intranet replaced by Service Portal

After a mere 12 months of project work, the University of Bonn's Service Portal went live in December 2023. Replacing the old intranet, which had to be discontinued due to technical shortcomings, the portal brings together all the information and services relating to Central Administration and arranges them neatly by topic. Even users without an in-depth knowledge of the University's setup and workings can now find what they need quick-

Provost begins second term; new appointments in administration and University Archives

are being taken into account.

Provost Holger Gottschalk began his second term of office on January 1, 2023. In post since 2017, he had been elected for a further six-year term by the University Electoral Assembly in November 2022.

Dr. Holger Impekoven's appointment as Vice Provost saw Dr. Ulrike Pag and Mirco Theiner take over as interim heads of Division 7-Research and Innovation Services before Dr. Barbara Sheldon was appointed to lead the division on a substantive basis on April 1, 2023.

▶ DThe University of Bonn is honoring four apprentices who came out of their apprenticeships top of their training year. From left to right: Provost Holger Gottschalk, Nils Meiswinkel, Sina Burmann, Dr. Peter Preuß, Mika Früh, Denise Scheidt, Markus Krisinger and Professor Robert Glaum.

She previously worked at the Alexander von Humboldt Foundation, where her achievements included overseeing the establishment of the Philipp Schwartz Initiative for

researchers at risk. After 25 years at the University of Bonn, the Director of the University Archives, Dr. Thomas Becker fondly known as the "University's memory bank"-took his wellearned retirement in 2023. In an emotional celebration held in the University's Grand Hall, colleagues reminisced over the much-loved archivist's incredible wealth of knowledge and the great service that he had rendered to maintain and edit the University's chronicles. Also paying tribute was Dr. Becker's successor Hendrik Mechernich. The archivist, who studied history at the University of Bonn, has been Head Archivist at the University since October 2023. Following the successful completion of University Archives' complex move out of the University Main Building, he will be focusing primarily on digital longterm archiving work.

Four apprentices named among the best

As well as a place for excellent research and teaching, the University of Bonn is also an outstanding company to do an apprenticeship in, with an impressive four apprentices rounding off their training by being crowned the best in their year in 2023. Holger Gottschalk, Provost of the University of Bonn, presented a certificate to all the former apprentices and the representatives from their training teams in December. The award-winners were: Sina Burmann, a former apprentice and now a qualified chemical technician, and the Institute for Inorganic Chemistry training team; Nils Meiswinkel, a former apprentice and now a qualified precision engineer, and the Mechanical Workshop training team; Mika Früh, a former apprentice and now a qualified sports and fitness administrator, and the University Sports training team; and Tale Vach, a former apprentice and now a qualified farmer, and the Off-Site Agricultural Laboratories training team.



Properties

The relocation of the faculties out of the University Main Building marks a major step in the project to renovate what is the iconic symbol of the University of Bonn. However, building and renovation work is also under way elsewhere, because good-quality premises are crucial to excellent research and teaching.

Moving out temporarily

With the University Main Building requiring extensive renovation over the next few years, the Electoral Palace is having to be vacated. New premises have been rented in the city to provide space for students and administrative and faculty staff during the building work.

Renovating the University Main Building

Bonn's Electoral Palace, which has served as the University's Main Building for more than 200 years, will be undergoing a fundamental renovation. Set to start in 2024, the program will last at least ten years and will require the building to be emptied completely. The former palace in the city center will be renovated in line with the latest technical and energy efficiency standards and made fit for future use, including as a place for excellent research and teaching. The University of Bonn remains committed to retaining a presence in downtown Bonn that is as central as possible ideally within the immediate vicinity of the University Main Buildingto keep University life as normal as possible for the duration of the works.





Lecture halls and museums

Alternative locations are being found for the 17 lecture halls and the main auditorium in the University Main Building, with negotiations still ongoing in this regard. Until the arrangements have been finalized, the current lecture halls in the University Main Building will continue to be used. A bespoke solution is being devised for the three museums located inside the

- ▲ The University Main Building is set to be a building site for at least ten years during its complete refurbishment.
- ▲ Spanning 12,000 square meters, the modern building in Rabinstraße has space for nearly 500 workstations plus libraries and seminar and meeting rooms.

Rabinstraße

Boasting a central location, five floors and modern offices, the 12,000-square-meter building at Rabinstraße 8 has space for nearly 500 workstations plus libraries and seminar and meeting rooms. A bistro and the library of art history welcome visitors, students and staff on the first floor, while the various philology libraries—for English Studies, Romance Studies and German Language and Literature—are now all together on the fifth floor.

A new way of working at Deutscher Herold

Another sizable temporary home is the former Deutscher Herold headquarters on Poppelsdorfer Allee. In this listed office building, a new working environment has been created for some 300 staff, who are now working in an innovative office setting that enables and encourages new forms of cooperation. Several administrative divisions and sections, University Archives, Printing Services and the Mail Room have now found space here. "Relocating to the 'Herold' was a good opportunity for us to design the spaces there to meet the needs of a modern university administration," explains Provost Holger Gottschalk. As well as being modernized before being moved into, therefore, the Herold building



was also converted into an innovative suite of offices that provides a conducive environment for project work and collaboration. "This kind of 'new work' is a key ingredient of our approach to university development. The new rooms inside Deutscher Herold specifically encourage and enable new ways of working together," Gottschalk says. Spread across more than 5,000 square meters are workstations in both traditional and open-plan offices, several meeting and seminar rooms, kitchenettes and a parent-child room.

Working side by side in the new Rectorate building

After many years of existing in separate locations, the University Rectorate has now moved into a shared building not far from Bonn's central station. University management and several of its units as well as the offices of the University Council and other administrative units have been based in the former headquarters of the Stollfuß publishing house since late 2023. As well as being close to the various campus sites, the striking and

brightly lit building is compact and has an open and friendly atmosphere. The fact that everyone is now working side by side makes it easier to share ideas and opinions. Besides numerous meeting rooms, there is also a large atrium that is flooded with natural light where delegations from other universities can be welcomed and small-scale events held. Basing several strategic teams closer together also makes for more intensive dialogue between them, making it easier for different people's ideas to be combined together.

Energy strategy bearing fruit

The University has adopted a common energy strategy. Practicable solutions were sought to significantly reduce the amount of energy consumed by around 40 buildings that, taken together, make up over 90 percent of the University's energy consumption. The University was able to save more than 12 million kWh in heating alone between November 2022 and December 2023—enough to heat around 1,150 two-person households for a year. For heating, therefore, the tar-

get of a 20 percent saving compared to the average for 2017–2021 was actually exceeded by 126 percent. The 20 percent savings target for gas consumption was also exceeded by an impressive 171 percent. "We're not just looking to score a one-off success with our energy strategy," says Provost Holger Gottschalk, summing up. "Rather, we want to put the University's energy consumption on a completely new footing, including for the long term."

University of Bonn generates its own solar power

The University of Bonn has been powered by green, sustainable electricity since as long ago as 2019. Seeking to make its own contribution to the energy transition too, the Rectorate has approved the installation of six photovoltaic systems and has earmarked around €750,000 in the budget for this purpose. Estimates suggest that the systems could produce over 300,000 kWh of solar power a year, which is roughly equivalent to the annual consumption of 100 What two-person households.

makes them unique is that the energy produced on site will be fed into the University's own grid for its own consumption. The first of the six systems was installed in Katzenburgweg in Poppelsdorf at the beginning of the year and is set to generate some 82,000 kWh a year.

Topping-out ceremony for "Rotation Building" on Poppelsdorf Campus

The North Rhine-Westphalia state construction and real estate agency (Bau- und Liegenschaftsbetrieb NRW, or BLB NRW) is constructing a laboratory and seminar building to serve as a "Rotation Building" that is set to have the capacity to provide temporary accommodation to University institutes and departments on an alternating (or "rotating") basis. The construction project reached another milestone with the topping-out ceremony in May 2023. Most of the building is being constructed from prefabricated steel modules. Despite delivery and assembly of the individual modules only getting under way in February, the shell of the new building was more or less complete just over eight weeks later. Once it is ready, the Rotation Building is intended to give institutes and departments more room for maneuver in its capacity as a temporary facility. Students, researchers and teachers will mainly be able to make use of laboratories, offices and seminar rooms in the newbuild with its 8,300 or so square meters of usable space.

New lab building to be extremely energy-efficient

The multifunctional laboratory

building (MFL) earmarked for the University of Bonn's Poppelsdorf Campus as part of its redevelopment has been signed off. Equipped with solar panels, a green facade, state-of-the-art insulation and heat recovery, the MFL will provide a total of 7,000 square meters of laboratory space for the Faculty of Mathematics and Natural Sciences and Faculty of Agriculture. The rooms are being designed to allow students, teachers and researchers to work independently of one another, while open "communication zones" encourage knowledge transfer. Sustainability and energy efficiency are two key priorities: large parts of the roof areas and facades are to be covered with greenery, while trees will be planted in the inner courtyard to offer shade, cool the building and simply make it a nicer place to spend time. Solar panels are to be fitted on the roof in order to generate climate-neutral electricity on site. The aim is to achieve a newbuild that meets the Efficiency House 40 standard. Energy-efficient laboratory systems and technical services, heat insulation and a ventilation system fitted with heat recovery will reduce energy consumption significantly.



nnual Report f the Rectorate 2023

University of Bonn



Facts, figures dates

Number of academic disciplines with various degrees

| in the bachelor's segment | 124 |
|--|-----|
| in the master's segment | 104 |
| State Examination degree programs | 5 |
| Degree programs culminating in a Church Degree | 2 |
| Magister degree programs (degree: Magister Theologiae) | 2 |

Collaborative and ERC projects (ongoing in 2023)

| Clusters of Excellence | 6 |
|--|----|
| Collaborative Research Centers | 12 |
| Research Groups | 10 |
| DFG-funded Research Training Groups | 4 |
| BMBF collaborative research projects | 14 |
| ERC projects (including two ERC Proof of Concept projects) | 41 |

Students, doctoral candidates and degrees

| | total | male** | female | diverse/KA** |
|---|--------|--------|--------|--------------|
| Students excluding enrolled doctoral students | 31.444 | 13.537 | 17.818 | 89 |
| Enrolled doctoral students | 3.568 | 1.759 | 1.809 | 0 |
| Students including enrolled doctoral students | 35.012 | 15.296 | 19.627 | 89 |
| of which international (excluding enrolled doctoral students) | 4.587 | 2.037 | 2.543 | 7 |
| of which international (including enrolled doctoral students) | 5.764 | 2.619 | 3.138 | 7 |
| Doctoral students* | 6.575 | 3.028 | 3.547 | 0 |
| of which international | 1.789 | 875 | 914 | 0 |
| Graduates | 4.641 | 1.916 | 2.725 | 0 |
| Doctorates | 623 | 333 | 290 | 0 |
| Habilitationen | 39 | 25 | 14 | 0 |

^{*} Final data as per the official statistics on doctoral students as of December 1, 2023 ** For data protection and privacy reasons, the "Non-binary/Not stated" category has been combined with the "Male" category

where it contained five people or fewer.

Staffing data as of December 1, 2023 based on the Research Core Dataset (Kerndatensatz Forschung, KDSF)

| | total | male** | female | diverse/KA** |
|--|----------|----------|----------|--------------|
| Staff (including third-party- and state-funded)*** | 7.824 | 3.895 | 3.929 | |
| Professors (including Faculty of Medicine) | 688 | 492 | 196 | |
| Academic staff (including Faculty of Medicine) | 5.153 | 2.610 | 2.543 | |
| Administrative and technical staff**** | 1.904 | 746 | 1.158 | |
| Apprentices and interns**** | 79 | 47 | 32 | |
| | | | | |
| Full-time equivalents (FTEs)*** | 6.441,39 | 3.346,66 | 3.094,73 | |
| Professors (including Faculty of Medicine) | 643,21 | 455,51 | 187,70 | |
| Academic staff (including Faculty of Medicine) | 4.100,45 | 2.140,74 | 1.959,71 | |
| Administrative and technical staff*** | 1.624,07 | 707,31 | 916,76 | |
| Apprentices and interns*** | 73,66 | 43,10 | 30,56 | |
| | | | | |
| FTEs, University professors | 487,96 | 341,26 | 146,70 | - |
| FTEs, University Hospital Bonn professors | 155,25 | 114,25 | 41,00 | - |
| FTEs, University academic staff | 2.122,74 | 1.220,71 | 902,03 | |
| FTEs, University Hospital Bonn academic staff | 1.977,71 | 920,03 | 1.057,68 | - |

Finance volume in thousands of euros Budget 2023

| Final budget (University budget plus Faculty of Medicine third-party funding) | 850.357 TSD EUR |
|--|-----------------|
| of which final third-party funding (University budget and Faculty of Medicine) | 206.901 TSD EUR |

^{**} For data protection and privacy reasons, the "Non-binary/Not stated" category has been combined with the "Male" category where it contained five people or fewer.

^{***} As of December 1, 2023; staffing data determined based on the KDSF

^{****} Excluding Faculty of Medicine and University Hospital Bonn



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