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Front cover: Embracing the slogan “Give peace a chance,” some 2,500 people answered the call of the University of Bonn’s International Choir and General Students’ Committee and came together on March 20 to form a singing human chain stretching from the University Main Building toward the UN Campus. Their aim was to send out a signal of peace against the backdrop of the war in Ukraine

Introduction

by the Rector



89th position in the world in the rankings. 76th in the Shanghai Ranking, fourth place in Germany. All in all, the University of Bonn achieved the best ranking results in its history in 2022. These outstanding achievements are a major indicator of our strength as a University of Excellence and one that has also attracted significant international attention. This strength is also reflected most notably in the many other awards, accolades and academic successes bestowed on our researchers and teachers, which you can read about in this Annual Report for 2022.

They give us fresh momentum and reaffirm our strategy for the future as set out in our University Development Plan for 2021–26, which the Senate and University Council adopted in 2022. We are confident that, through the strategies and measures that it contains under the heading “WE invest in people. WE foster networks. WE create impact,”

we will consolidate our successes in our Excellence Strategy. And by “WE” I mean all of us together: the Rectorate, the faculties and the various bodies and status groups. Together, we will shape the ongoing transformation of and new era for the University of Bonn as a University of Excellence.

Especially in challenging times. As well as the COVID-19 crisis, which continued to have a marked impact on our day-to-day life in 2022, we as a University—like so many others—were confronted by the fallout from Russia’s brazen invasion of Ukraine in violation of international law. Besides many other support measures, we also founded the Cologne/Bonn Academy in Exile. And, throughout the energy and energy costs crisis, we have made an important contribution to society’s efforts to meet savings targets through our own hard work and the constraints that we imposed.

Yet not even all these crises could prevent us from bringing the University forward last year. Our six Clusters of Excellence continued their outstanding development and are busily gearing themselves up for the next funding phase. The same goes for the new initiatives that we helped to submit preliminary proposals in May on the back of their exceptional academic and scientific potential. We have also worked closely together with partners from our region, particularly the University of Cologne—our most important university partner.



◀ Prof. Dr. Dr. h.c. Michael Hoch,
Rector of the University of Bonn

I have to say that the way we interact with our partners on the ground is first-class. And, with the unit that we set up for the Bonn Research Alliance (BORA) in 2022, we want to drive this interaction forward in a systematic way.

2022 saw us secure the services of some truly exceptional researchers for more Excellence chairs—Hertz, Schlegel and Argelander Professorships. They are injecting some fresh and invaluable momentum into our faculties and our Transdisciplinary Research Areas (TRAs), which are continuing to grow and develop astoundingly fast. We have also strongly improved in teaching, and our excellent performance in the rankings that I mentioned at the outset was due partly to better results in the Teaching category. On the international stage, we have taken our global network up a level and further expanded our activities as a member of the European University of Brain and Technology (NeurotechEU). The same goes for our University's very own transfer center enaCom, which offers an ideal environment for "sciencepreneurship" and can look back on numerous successes.

We are delighted to report that, working together with the faculties, we have increased the proportion of female researchers from around 19 percent in 2017 to 26.56 percent in 2022. For the second year in a row, half of the new professors appointed were women. We thus remain well on track to meet our 30 percent target and increase our general diversity on all levels.

The cranes are whirling away on our campuses, competitions for major construction projects have been held, ground has been broken on the new canteen on Nassestraße, and some significant new leases have been signed and sealed: we have also made great strides in our quest for temporary space.

"Mehr als eine Exzellenzeinrichtung" (More than just an excellent institution)—this was the heading that the *Frankfurter Allgemeine Zeitung* newspaper gave to a report on the academic study by Vienna's Economica Institute about the economic output generated by the University of Bonn. We are responsible for €700 million in total gross value added, provide some 18,700 jobs inside and outside our walls, and are on a level with global

“

More than just an excellent institution

”

DAX-listed corporations such as Deutsche Telekom and Deutsche Post DHL when it comes to our importance to the region's economy.

As a University of Excellence, we at the University of Bonn are making a valid contribution to society through our top-level research and teaching. And, with our knowledge transfer, we are maintaining the innovative strength and progress being achieved in our country and across the world. That was undoubtedly the case in 2022, and it will remain so in the future.

Prof. Dr. Dr. h.c. Michael Hoch
Rector

The University



The University of Bonn is working rigorously to pursue its Excellence Strategy and strategy for the future and has reached a number of significant milestones along the way with the appointment to more Excellence chairs. Its continued rise up the key international university rankings is further evidence of its consistently positive development. For the first time, a new study has put a figure to the significant economic benefit that the University brings to its city, region and country.

Milestones in the Excellence Strategy

Entirely in the spirit of “WE invest in people,” the University of Bonn succeeded in securing the services of yet more high-caliber individuals and further developing its research networks both within the University and with its external partners in 2022.

The strategy for the future is set out in the University Development Plan for 2021–26, which was signed off by the Senate and the University Council at the start of the year. With the University already midway through the latest phase of its Excellence Strategy, this plan will serve as a roadmap for its continued successful development. The six Clusters of Excellence—more than at any other university in Germany—have come on leaps and bounds and will be submitting follow-up applications in 2024. Some more highly promising cluster initiatives are also in the pipeline. The process under way to this end demonstrates that the academic and scientific potential at the University of Bonn is still a long way from being exhausted. Quite the reverse, in fact: it is being increased further by a growing number of exceptional partners based in the region. The addition of new

Excellence chairs—Hertz, Schlegel and Argelander Professorships—is supplying the University, its faculties and its Transdisciplinary Research Areas with new outstanding minds to draw on. Particularly pleasing is the fact that the proportion of female professors at the University of Bonn rose significantly once again in 2022, thanks not least to the new Excellence chairs. The figure currently stands at 26.5 percent compared to a mere 19 percent in 2017. The University is well on the way to achieving the binding target that it has set itself, namely hitting the 30 percent mark by 2026.

Two new Hertz Professors

No academic or scientific discipline is capable of solving major societal challenges and untangling the complex questions associated with them on its own. As part of its Excellence Strategy, therefore, the University of Bonn established professorships named after its former physicist Heinrich Hertz (1857–1894) and filled with high-profile researchers who are leading lights in their field of expertise and burnish the profile of the University's Transdisciplinary Research Areas. They receive €4.2 million spread across seven years in recognition of their efforts. The University welcomed two new Hertz Professors to its ranks in 2022:

Prof. Dr. **Dominik Bach** has been appointed to a Hertz Professorship geared toward linking different dis-

ciplines in a unique way. Within the Life and Health Transdisciplinary Research Area, the world-famous psychologist, physician and mathematician will establish a new area of research focus at the interface between the neurosciences, psychiatry and computer science. He and his team intend to use mathematical models to decode how the brain works and are analyzing human behavior in extreme situations to this end. His interdisciplinary approach will also benefit the Life and Health Transdisciplinary Research Area in particular. Dominik Bach is employing models and methods borrowed from theoretical neurosciences and artificial-intelligence research to decode how the human brain works. The brain uses mathematical operations to control actions, and Bach's research aims to describe these operations in detail.

The University is receiving additional reinforcement in the shape of the internationally renowned anthropologist, curator and critical heritage spe-



- Prof. Dr. Dominik Bach is a new Hertz Professor in the University's Life and Health Transdisciplinary Research Area

cialist **Paul Basu**, who has accepted an appointment to a Hertz Professorship in the Present Pasts Transdisciplinary Research Area. His research takes as its starting point a critical examination of the legacy of Western knowledge production and, in particular, how this legacy is reflected in academic archives and collections. In the process, he brings together the strands of various disciplines as well as the non-academic public. Paul Basu will be setting up a Global Heritage Lab at the University of Bonn, where he and his team will be experimenting with decolonial approaches to cultural heritage research. This will be done in consideration of the notion that academia, too, continues to be shaped by colonial structures to this day and that Western epistemologies need to be supplemented with the addition of various forms of knowledge.

Center for Life Ethics and House for Young Thinkers opened

How do we look at life? This was the question that ethicist and Hertz Professor Prof. Dr. Christiane Woopen discussed with the deans of all the faculties, an early-career researcher and a student to mark the opening of the Center for Life Ethics and the House for Young Thinkers, which forms part of it. Hendrik Wüst, state premier of North Rhine-Westphalia (NRW), and Katja Dörner, Mayor of Bonn, were also among the guests at the event. The Hertz Professorship is based in the Individuals and Societies Transdisciplinary Research Area, one of six University-wide research alliances created as part of efforts to promote excellence. They are geared toward solving major societal challenges in a joint effort and untangling the complex questions associated with them that straddle discipline boundaries. At the new Center for Life Ethics, Prof. Woopen and her team are working closely with researchers from other specialist disciplines,

with ethics the common thread that joins them all together. The affiliated House for Young Thinkers is intended to be a meeting place between the sciences and society.

Three new Schlegel Professors

The 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. Appointments to these professorships are made by the faculties for existing and developing research fields of major importance. Three new additions were welcomed in 2022: in Taiwan's **Shu-Perng Hwang**, the University of Bonn has appointed as a Schlegel Professor a legal expert who will open up new areas of research and provide key impetus. The researcher is studying the tensions that exist between national and international legal systems, putting individual freedom at the heart of her theoretical approach. Biochemist **Carmen Ruiz de Almodóvar** led a junior research group at the Heidelberg University Biochemistry Center between 2011 and 2018 before being appointed Professor for Vascular Dysfunction in the European Center for Angioscience at the same university. She is investigating how the vascular and nervous systems interact in various parts of the central nervous system. Theologian **Martin Keßler** is exploring how and why certain individuals have come to be seen retrospectively as key historical figures while others have not. His research focuses on the history of Christianity in the modern period, roughly from 1500 to the present day. Keßler was made a Heisenberg Professor in Frankfurt am Main in 2018 before moving on to the Chair for Church and Theological History at the University of Basel in 2020.

Milestones in the Excellence Strategy

- The new Schlegel Professors: Prof. Dr. Carmen Ruiz de Almodóvar and Prof. Dr. Martin Keßler



- ▼ Schlegel Professor
Prof. Dr. Shu-Perng Hwang



Economist Julia Mink named new Argelander Professor

How are pollution and climate change affecting our health—and healthcare costs? How do people adapt to the conditions around them, and what factors are key to this adaptability? These and other questions are being explored by **Julia Mink**, a new Argelander Professor at the University of Bonn. She will be based in the Individuals, Institutions and Societies Transdisciplinary Research Area (TRA) and work at the interface between environmental and health economics. 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.

TRA networking meeting in the Bundeskunsthalle

The TRAs are spaces for innovation in research and teaching. The University of Bonn has six such alliances, where top researchers work together across faculty boundaries on key academic, scientific, technological and societal issues relevant to our future.

Chemistry and physics play a key role in many areas of the life sciences, and vice versa—for example, when it is a question of developing detectors for imaging diagnostics or synthesizing chemical compounds for use in imaging and drug development. The various disciplines also come together at a shared interface in so-called biohybrid research, which blends technology and the natural world. At an out-of-the-ordinary networking event held in the



◀ Asst. Prof. Dr. Julia Mink is a new Argelander Professor at the University of Bonn

Bundeskunsthalle in June 2022, members of the Blocks of Matter and Fundamental Interactions (Matter) and Life and Health Transdisciplinary Research Areas at the University of Bonn got to know one another and exchanged ideas and opinions. They used the exhibition entitled “The Brain in Art and Science” as an opportunity to expand their network: 27 researchers presented the main areas of focus of their work and chatted in small groups that had been put together at random. One of the new research topics that has already been identified and on which the researchers intend to collaborate is the use and handling of large volumes of data across different disciplines.



- The networking event for researchers in the Transdisciplinary Research Areas formed part of “The Brain in Art and Science” exhibition in Bonn’s Bundeskunsthalle



Superb Ranking Successes

There are countless university rankings all over the world, which vary significantly in terms of the approach they take and the performance indicators they use. Although individual rankings do not have any great meaningful value when taken in isolation, some of these annual surveys are considered valid tools for assessing how well a university is performing. They help outsiders make up their minds about a university and give universities themselves the opportunity to benchmark themselves against their national and international competitors. At the same time, the overarching trends that are reflected continually in shifting rankings are a strong sign of how a university is developing in general. Happily for the University of Bonn, its own results indicate yet more continued improvement in 2022, when it achieved its highest-ever positions in many sets of rankings. An overview of the most prominent examples is given below.

The **World Reputation Ranking**, which is published by the prestigious *Times Higher Education magazine* (THE), puts the University of Bonn in the world's top 100. Its position in the group ranked 91st–100th marks a very strong performance by the University, which has also come an outstanding sixth place within Germany. Being placed 91st–100th represents a marked improvement on last year, when the University of Bonn was ranked 126th–150th. The Reputation Ranking compares universities all over the world based on their international reputation. Some 30,000 researchers from 159 countries told a THE survey which universities they regarded as the best in the world for teaching and research in their subjects. The two areas—research and teaching—were weighted 2:1 to produce the final results. The survey responses are

also used to determine the well-known **THE World University Ranking**, which put the University of Bonn an outstanding 89th this year.

The University of Bonn is represented by a total of 13 researchers in this year's **Highly Cited Researchers** international rankings. The individuals on this list are among the most influential one per cent of researchers in the world for their subject according to the compilers of the rankings. The survey uses the frequency with which a researcher's academic or scientific publications have been cited by their peers over the past decade (2011–2021) to gauge how much influence they exert. The rankings are published annually by the Web of Science Group and cover some 7,200 researchers from 69 countries.

The **U.S. News & World Report rankings**, which are widely respected in the US, reached a highly favorable verdict on many of the subjects at the University of Bonn that were eligible for assessment: the University is among the top five in Germany in six of the subjects that were ranked and in the top ten in fourteen subjects. It was particularly successful in Mathematics, Economics and Nutrition and Food Sciences.

The **World University Rankings by subject** compiled by the British magazine **Times Higher Education (THE)** puts the University of Bonn in the global top 100 for four subject groups: leading the field is Physics, which has climbed to 39th worldwide (previous year: 61st), followed by Economics in 71st (previous year: 67th). Life Sciences have moved up to 86th (previous year: 89th) and Computer Science to 99th (previous year: 101st–150th).

The **Shanghai Academic Ranking of World Universities** (ARWU) considers the University of Bonn to be one of the best four in Germany. It has been placed 13th in the list of top universities in the EU

and 76th in the world. The University of Excellence has thus moved up eight places on last year in a global comparison and five within the EU.

The latest **Global Ranking of Academic Subjects 2022**, part of the widely respected Shanghai Ranking, has underlined the University of Bonn's prowess in not one but several areas: besides taking top spot in Germany for Mathematics and Economics, it has also come third for Agricultural Sciences and Physics. And the University is even among the top 15 in the world in Mathematics, ranking it ahead of such luminaries as Harvard and Columbia.



The Shanghai Academic Ranking of World Universities (ARWU) considers the University of Bonn to be one of the best four in Germany.





▲ Aerial shot of the University of Bonn Main Building with the Hofgarten

University of Bonn Driving the Economy

Two recent studies from 2022 have highlighted the economic significance of universities in general and the University of Bonn in particular from a variety of angles.

With its 33,000 students and 7,500 employees, the University of Bonn represents a substantial “economic footprint” for the region. According to the figures, one in every 25 jobs in the city is linked to the University and every 40th euro in gross value added is generated by it. These were the findings of a study by the Economica Institute that was commissioned by the University of Bonn.

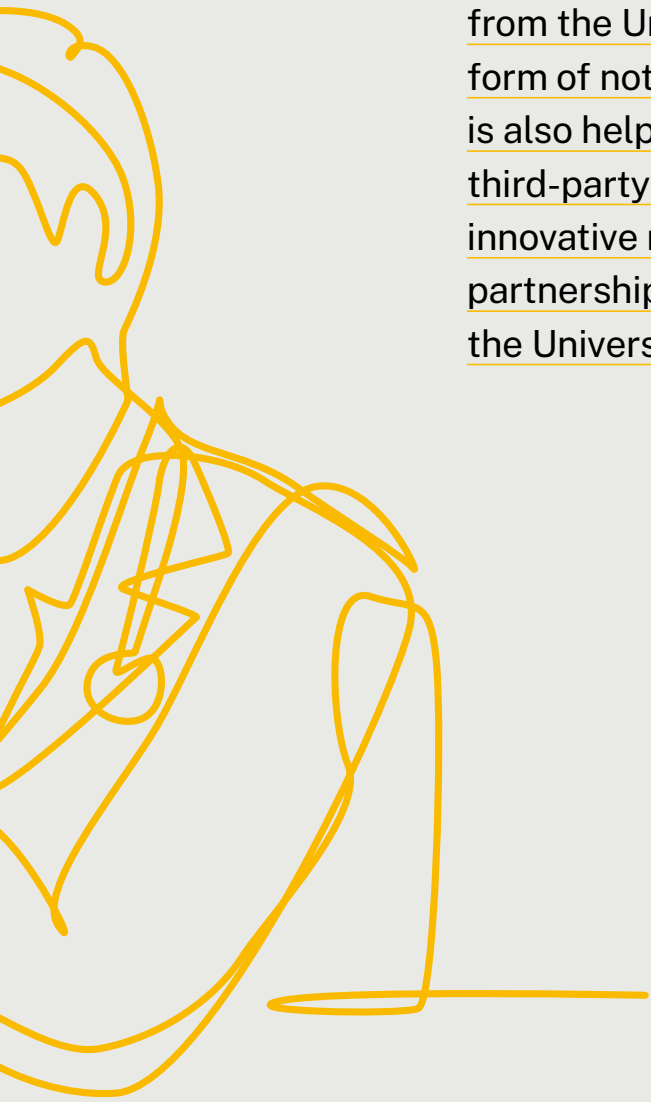
The study suggested that the University was responsible for roughly €700 million in gross value added in 2019—the last year pre-COVID—representing one out of every forty euros of gross value added generated in Bonn. It also indicated that one in every 25 jobs in the city is associated in some way with the University. In addition to the 7,500 staff of its own, therefore, the University of Bonn helps to provide around 10,700 jobs in all throughout its network of suppliers and service firms. This puts it “on a par in the city with the leading DAX-listed global corporations Deutsche Telekom and Deutsche Post,” according to a representative from the Economica Institute. Because a

particularly high percentage of its staff are university graduates, he said, the University of Bonn also delivers above-average incomes—a key factor in purchasing power.

These results were virtually mirrored by another study run on behalf of the Rectors’ Conference in North Rhine-Westphalia (NRW): based on conservative calculations, every single euro that NRW provides to its universities as core funding generates €4.01 in value. The study suggests that, from the net contribution of some €3.2 billion that they received from the NRW government, the federal state’s universities generated total value added of nearly €13 billion in the year being assessed (2019). This means that the universities contribute 1.5 percent to gross value added in the state. In addition, they are responsible—directly and indirectly—for over 175,000 jobs across NRW and thus generate an overall income effect worth €12.3 billion. There are also positive consequences spanning several years that cannot be expressed in monetary terms, such as the development of innovations through the transfer of applied knowledge from universities to society, business and industry. These effects will continue to multiply as the years go on.

Progress in Research





Remarkable progress in research was achieved in 2022 despite a challenging environment. Particularly pleasing has been the recognition that researchers from the University of Bonn have received in the form of not one but several prestigious prizes, which is also helping to raise the University's profile. New third-party-funded projects are opening the door to innovative research initiatives that have enabled new partnerships to be forged, both within and outside the University.

People and Prizes

Catharina Stroppel receives Gottfried Wilhelm Leibniz Prize

A researcher from the University of Bonn was once again among those honored with a Gottfried Wilhelm Leibniz Prize—known unofficially as “Germany’s Nobel Prize”—in 2022: the German Research Foundation (DFG) announced in December 2022 that Prof. Dr. Catharina Stroppel was to be presented with the award worth €2.5 million in recognition of her superlative research work. The researcher from the Hausdorff Center for Mathematics (HCM) at the University of Bonn is being presented with the award for her outstanding work on representation theory, particularly in the field of categorification. Representation theory is the field of mathematics that deals with symmetries and the various forms that they take. Symmetries are vitally important both in mathematics and in nature. One example of them in physics would be

the structure of crystals. Stroppel’s work in representation theory involves many different cross-overs with other fields such as knot theory and low-dimensional topology. Besides Prof. Stroppel, nine other researchers—three women and nine men—were also honored in this way.

Aimee van Wynsberghe awarded Alexander von Humboldt Professorship

At a ceremony held in Berlin in May 2022, 21 top-level researchers were presented with Germany’s most generous international research prize, an Alexander von Humboldt Professorship, which was also being awarded for artificial intelligence (AI) for the first time. The winners included Prof. Dr. Aimee van Wynsberghe, an AI ethicist at the University of Bonn. Her program line feeds into the German federal government’s national AI strategy and is geared toward international top-level researchers involved in researching and using AI and its impact on society. Aimee van Wynsberghe is an expert in the ethics of artificial intelligence and leads the

- Prof. Dr. Catharina Stroppel (left) receiving the Leibniz Prize from Prof. Dr. Katja Becker, President of the German Research Foundation





▲ Prof. Lucy O'Brien from University College London is coming to the University thanks to a Humboldt Research Prize

Sustainable AI Lab, a place where outstanding researchers from a range of disciplines are considering the environmental, social and economic costs of designing, developing and using AI in society. The professorships attract up to €5 million in funding.

Humboldt Research Prizes

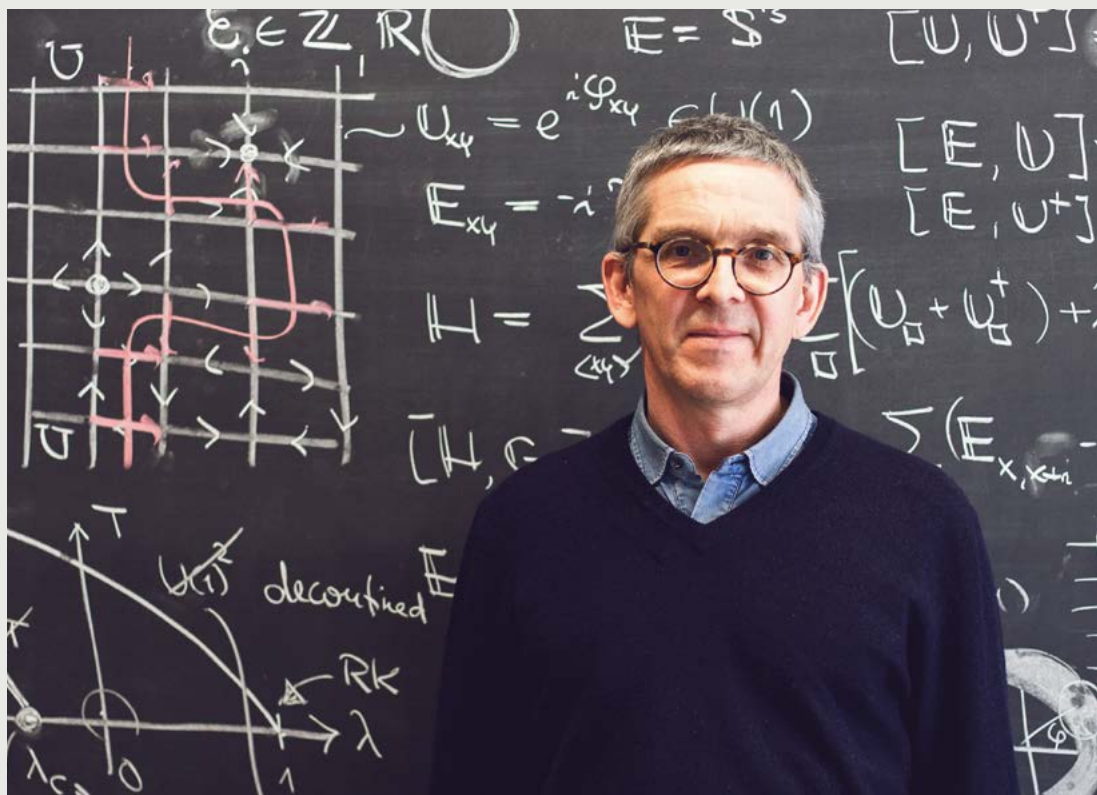
Prof. **Lucy O'Brien** from University College London has been presented with a research prize from the Alexander von Humboldt Foundation. Prof. Dr. Markus Gabriel from the Center for Science and Thought at the University of Bonn had put her name forward for the €60,000 award. The two researchers are now stepping up their collaboration. Professor O'Brien studies the nature of self-awareness and self-recognition. She is one of the leading researchers into the philosophy of the mind and focuses on theories of self-awareness. Prof. Dr. **Bill Cook** from the University of Waterloo in Canada has also received a Humboldt Research Prize. He will now be intensifying his collaboration with Prof. Dr. Dr. h.c. Bernhard Korte, Director of the Research Institute of Discrete Mathematics, and with the Hausdorff Center for Mathematics (HCM) Cluster of Excellence. Another award has gone to Prof. Dr. **Uwe-Jens Wiese** from the University of Bern, who had been nominated by Prof. Dr. Ulf-G. Meißner from the Helmholtz Institute for Radiation and Nuclear Physics at the University of Bonn.



- ◀ Humboldt Professor Aimee van Wynsberghe (center) with Bettina Stark-Watzinger, Federal Minister of Education and Research, and Hans-Christian Pape, President of the Humboldt Foundation

People and Prizes

- Prof. Dr. Uwe-Jens Wiese from the University of Bern, who is being funded by a Humboldt Research Prize, is collaborating with the University of Bonn



Breakthrough Prize Foundation honors Ana Caraiani and Vera Traub

Two mathematicians from the HCM at the University of Bonn, Prof. Dr. Ana Caraiani and Asst. Prof. Dr. Vera Traub, have each received an award from the Breakthrough Prize Foundation. Her \$100,000 New Horizons Prize in Mathematics marks Ana Caraiani out as an early-career researcher who has already had a significant influence on her field of expertise, while Vera Traub, an assistant professor at the Research Institute of Discrete Mathematics, received the \$50,000 Maryam Mirzakhani New Frontiers Prize. This is presented to up to three outstanding female mathematicians who have completed their doctorate within the past two years. Ana Caraiani, who is 37 and originally from Romania, has held a Hausdorff Chair since early September, making her the first woman in this role. HCM member Vera Traub was awarded the Maryam Mirzakhani New Frontiers Prize in recognition of her work on classical combinatorial optimization problems. She has recently been appointed an assistant professor at the Research Institute of Discrete Mathematics.

Gossen Award for economist Christian Bayer

Prof. Dr. Christian Bayer, an economist at the University of Bonn, has been honored with this year's Hermann Heinrich Gossen Award from the *Verein für Socialpolitik (VfS)* in recognition of his outstanding research work that has garnered international recognition. The €10,000 prize is awarded annually to an economist aged under 45

from a German-speaking country and is designed to promote the internationalization of economics as a field. The most important criterion when awarding the prize is publications in internationally recognized journals. Christian Bayer has thus been rewarded for his many significant contributions to the empirical analysis of macroeconomic mechanisms of action.

Pius XI Medal presented to Peter Scholze

Prof. Dr. Peter Scholze, a holder of the Fields Medal, Director of the Max Planck Institute for Mathematics and Professor at the University of Bonn, has been awarded a Pius XI Gold Medal by the Pontifical Academy of Sciences. The medal is awarded every two years to a young researcher under the age of 45 chosen for their exceptional hard work and dedication. Peter Scholze is only the fourth mathematician to receive this award.

University of Bonn graduate Maryna Viazovska awarded Fields Medal

In 2022, a Fields Medal went once again to someone with close ties to the University of Bonn in the shape of alumna Maryna Viazovska, who was presented with the extremely prestigious prize at the International Congress of Mathematicians in Helsinki. Every four years since 1936, the award has been conferred on mathematicians aged under 40. Viazovska, who is 37 and comes from Ukraine, completed her doctorate at the University of Bonn in 2013. She is currently a professor at EPFL, the Swiss Federal Institute of Technology Lausanne.

◀ The prizewinners Asst. Prof. Dr. Vera Traub (left) and Prof. Dr. Ana Caraiani (right)

- Mathematician Maryna Viazovska was awarded the Fields Medal



Soil scientist Dr. Melanie Braun receives Klaus Töpfer Research Prize

“Invisible” plastic, known as nanoplastics, can be found not only in the oceans but also in our soil. This is a problem, because it can be absorbed by plants and thus get into the food chain. But how much of it is hiding in the soil in the first place? Dr. Melanie Braun from the University of Bonn wants to devise a new method in order to find that out. In recognition of her innovative project, the early-career researcher has been presented with the €50,000 Klaus Töpfer Research prize, which is awarded internally by the Innovation and Technology for Sustainable Futures Transdisciplinary Research Area (TRA Sustainable Futures) at the University of Bonn. The person after whom it is named, the former federal environment minister and climate policy pioneer Prof. Dr. Klaus Töpfer, was among the guests at the awards ceremony.

European Research Council hands out numerous grants

The research fellowships known as “grants” that are awarded by the European Research Council (ERC) have long been regarded as a hallmark of quality among researchers. They come with varying amounts of funding and are intended for researchers at different stages of their careers. The University of Bonn was once again very well represented among the funding recipients in 2022 and secured more grants in a year than ever before.

- Four University of Bonn researchers secured an ERC grant (from left to right): Prof. Dr. Georg Oberdieck, Prof. Dr. Claude Duhr, Dr. Julian Schmitt and Prof. Dr. Valentin Blomer

Starting Grants: no sooner had he been appointed to the Faculty of Protestant Theology at the University of Bonn than the ethicist and theologian Prof. Dr. **Matthias Braun** secured a much-sought-after ERC Starting Grant. This is among the most illustrious forms of top-level funding provided by the European Union and will be worth €1.5 million over the next five years. The researcher and his team are studying the ethical and societal impact on humanity of “digital twins” in the healthcare sector. Prof. Braun, previously a researcher at Friedrich-Alexander-Universität Erlangen-Nürnberg, was appointed to the University of Bonn’s Faculty of Protestant Theology in October 2022. Other Starting Grants from 2022 went to Dr. **Julian Schmitt** from the Institute of Applied Physics, Prof. Dr. **Georg Oberdieck** from the Mathematical Institute, and Assistant Professor Dr. **Ala Bunesco** from the Kekulé Institute of Organic Chemistry and Biochemistry.

The **Consolidator Grants** grant program provides around €2 million in funding to outstanding researchers who show a high degree of promise and whose working group is currently in the con-

solidation phase. The University of Bonn enjoyed threefold success in this program in 2022: virologist and immunologist Prof. Dr. **Rayk Behrendt** secured funding for his work on nucleic acid immunity, while Consolidator Grants also went to the biochemist and system immunologist Prof. Dr. **Felix Meißner**, to Prof. Dr. **Jürgen Gall** from the Institute for Computer Science, and to Prof. Dr. **Claude Duhr** from the Institute of Physics.

Prof. Dr. **Valentin Blomer** from the Mathematical Institute was awarded a so-called Advanced Grant, which is worth up to €2.5 million and is reserved for top-level researchers with an exceptional track record.

Together with its partners, the University of Bonn enjoyed not one but two successes in the Synergy Grants grant program in 2022, which rewards teams of between two and four researchers. The first project, SuperWave, is being run in collaboration with Humboldt-Universität zu Berlin and Aarhus University and involves scaling up quantum systems from individual photons and atoms. The second, Horsepower, is studying the interrelation-



- Prof. Dr. Rayk Behrendt from the Institute of Clinical Chemistry and Clinical Pharmacology at the University Hospital Bonn



ships between sedentary and nomadic peoples in partnership with the University of Oxford, CRNS Toulouse and the British Museum. In particular, the ERC funding is intended to advance the research being done at the interface between established disciplines and unlock new knowledge. The projects will be supported to the tune of up to €10 million over the next six years.

Prize worth millions secured in international robot competition

Led by Prof. Dr. Sven Behnke, Team NimbRo from the University of Bonn won the \$5 million top prize in the ANA Avatar XPRIZE competition held in Long Beach, US, in the fall. The final of the contest, which is sponsored by Japanese airline All Nippon Airways (ANA) and organized by the XPRIZE Foundation, saw 17 teams line up from 10 different countries. Total prize money of \$10 million was up for grabs at the ANA Avatar XPRIZE, the most for any robot competition in history. The team from

the University of Bonn had already won over the international jury at the semi-final in Miami in September 2021, scooping the most points. The aim of the contest is to develop robotic systems capable of placing people in a different location using a control station and an avatar robot that are connected via the Internet. The sensors on the avatar robot detect the environment around it, which is displayed in the control station in such a way that the user has the sensation of being somewhere else far away. The user's movements are tracked and transmitted to the avatar robot, making it possible to move around, handle objects, use tools and communicate intuitively through language, facial expressions and gestures.

- ▼ The control station allows the robot to be operated remotely
- ▼ The robot completing some tricky tasks
Team NimbRo from the University of Bonn
- ▲ The robot in operation



Third-Party-Funded Projects

Third-party funding means money that the University of Bonn receives from a party other than the federal state that supports it. This can be a foundation under public law as well as private funding organizations. Applications can be submitted by the universities themselves or by individual departments or researchers. The total amount of third-party funding that a university secures is seen as a key indicator of its performance. Another is the number of third-party-funded joint projects, such as the Collaborative Research Centers (CRCs) and Research Units set up by the German Research Foundation (DFG).

CRC extended

An extension has been agreed for the Transregio 237 CRC entitled “Nucleic Acid Immunity,” in which researchers from the University of Bonn, TU Dresden and the Ludwig Maximilian University of Munich (LMU) are all working together. The DFG will be funding the alliance for a further period to the tune of around €10 million. The LMU’s Prof. Dr. Veit Hornung will be taking over as Speaker from Prof. Dr. Gunther Hartmann from the University of Bonn in January 2023 as planned.

Two new Research Units on AI

Research Units provide places for outstanding researchers to pursue a particular line of research over the medium term. The DFG has approved two more such projects at the University of Bonn,

pushing the number of Research Units based there up to ten. The new Algorithmic Data Analysis for Geodesy (AlgForGe) Research Unit has secured up to €3 million in funding. It aims to close the gap between the research currently being done in the fields of artificial intelligence and geodesy. Meanwhile, the Automation and Artificial Intelligence for Monitoring and Decision Making in Horticultural Crops (AID4Crops) Research Unit stands to receive up to €2 million in research funding over the next four years. Focusing on high-precision agriculture that harnesses the power of artificial intelligence, the Research Unit developed out of the PhenoRob Cluster of Excellence and links together the Sustainable Futures and Modelling Transdisciplinary Research Areas at the University of Bonn.

New Research Training Group for pharmacy

The German Research Foundation has set up a new “Tools and Drugs of the Future” Research Training Group in order to strengthen early-career research at the University of Bonn even further. Its goal is to modernize medicinal chemistry and train 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 starting from spring 2023. The number of Research Training Groups being funded at the University of Bonn has thus risen to five.

- Prof. Dr. Ilona Grunwald Kadow from the Institute of Physiology II at the University Hospital Bonn is the speaker for “iBehave”



NRW funding “iBehave” and other research networks

The state government of North Rhine-Westphalia (NRW) is providing total funding of €81.2 million to support five outstanding research networks involved in pioneering areas of research. They include “iBehave,” led by the University of Bonn, which has secured some €20 million of this funding. The University is participating in the NRW-FAIR and NRW-CANTAR joint projects. The iBehave alliance will conduct an in-depth, interdisciplinary and interspecies study of how humans and ani-

mals adapt their behavior in line with their environment from a neurological perspective. In the medium term, the researchers working on iBehave want to take their technologies and findings from the laboratory and introduce them into hospitals. The funding has a term of four years. Besides the University of Bonn, the iBehave project also involves the University of Cologne, the German Center for Neurodegenerative Diseases (DZNE), Forschungszentrum Jülich, the Max Planck Institute for Neurobiology of Behavior (caesar) and RWTH Aachen University.



Early-Career Researchers

“Early-career researchers” is something of a catch-all term that includes anyone who is working toward a doctorate after completing their degree or carrying out further postdoctoral research in order to become established in academia. However, there are various different forms of employment and funding available at the University of Bonn during this phase, from doctoral students and heads of research groups through to assistant and tenure track professorships.

Ombudsperson Office established for early-career researchers

With its Ombudsperson Office for early-career researchers, the University of Bonn set up a central counseling, mediation and arbitration body for doctoral students, postdoctoral researchers and supervisors in 2022. The office helps them to find potential solutions to disputes and challenges within a supervisory relationship. It is easy for either party involved in the dispute to contact, regardless of what faculty they are based in, and keeps all concerns, consultations and conversations confidential. The office is staffed by three ombudspersons, each appointed by the Rectorate for an initial one-year term of office: Prof. Dr. Daniela Pirazzini (French and Italian Linguistics), Prof. Dr. Karin Holm-Müller (Resource and Environmental Economics) and Prof. Dr. Volkmar Gieselmann (Biochemistry). The Bonn Graduate Center provides the office with administrative support.



Postdoc Day: first-hand academic communication

What's the best way for me to communicate with the general public? The University of Bonn's Postdoc Day on academic communication met with great interest, and there was hardly a spare seat to be had at the *Universitätsforum* on Heussallee in Bonn. The event had been tailored specifically to postdoctoral researchers, who are continuing to progress their academic career after successfully completing their doctorate. It became clear that academic communication is important, is fun, takes up time, is multifaceted, can advance one's career but also has its detractors. Dr. Insa Thiele-Eich from the Institute of Meteorology talked about her experiences as an academic communicator. She has been preparing intensively for a stint on the International Space Station (ISS) since 2017 as part of the privately funded *Die Astronautin* ("The Female Astronaut") initiative. In his welcome

address, Prof. Dr. Andreas Zimmer, Vice Rector for Research and Early-Career Researchers, highlighted the importance of democracy and academic freedom in the face of growing threats and called on the postdocs to get involved and become active communicators.

Professors discuss their work done abroad: the Argelander Career Talks

Early-career researchers have been able to get helpful tips and information first-hand about international careers in academia and other countries' academic systems from the new online "Argelander Career Talks" series, which launched in fall 2022. In a range of presentations spread across the semester, selected professors from different countries discuss their experiences and the pathways that took them to their professorship, outlining their own academic careers to date and providing valuable pieces of advice for how to have a successful one abroad. The series of talks is aimed at early-career researchers in all subjects, regardless of what field the speaker is active in.



- ◀ From left to right: Prof. Dr. Karin Holm-Müller, Prof. Dr. Volkmar Gieselmann and Prof. Dr. Daniela Pirazzini from the Ombudsperson Office for early-career researchers
- ◀ Postdoc Day 2022: there was barely a seat to be had in the *Universitätsforum* in Bonn to watch Prof. Dr. Andreas Zimmer, Vice Rector for Research and Early-Career Researchers, welcome the participants

New Emmy Noether research groups

What secondary schools do schoolchildren go to? How are they divided up into classes? How do sorting processes like this impact on social inequality and social cohesion? Dr. Hanno Kruse is exploring these and similar questions at the University of Bonn. The sociologist is heading up the “Sorting Decisions and Peer Processes in Schools” (SPINS) Emmy Noether research group, which has secured some €1.5 million in funding from the German Research Foundation (DFG). Another research group launched in 2022 goes by the name of “Numerical Methods for Nonlinear, Random and Dynamic Multiscale Problems” and is led by Prof. Dr. Barbara Verfürth.



- ▶ Dr. Hanno Kruse from the Department for Political Sciences and Sociology at the University of Bonn is heading up the new “Sorting Decisions and Peer Processes in Schools” (SPINS) Emmy Noether research group
- ▶ The SPINS team (from left to right): Dr. Hanno Kruse, Senami Hotse and Susanne Böller



New Heisenberg Professorships

Anyone who meets all the criteria for being appointed to a permanent professorship can apply for the DFG's Heisenberg Program. Funding recipients prepare for a future management role in academia by working on high-caliber projects at the location of their choice and thus honing their academic reputation even further. Two new Heisenberg Professorships were established in 2022: "Narratives of Eating Disorders in Contemporary Media Society (Prose, Cinema, Series)—A Spanish Literary History of Tears—Digital Historical-Critical Anthology and Translation: Female Poets of the Middle Ages," led by Prof. Dr. Claudia Jacobi, and "The Temporality of Ancient Cities. Three Case Studies," led by Prof. Dr. Stefan Feuser.

New postdoc grant program: the Argelander Mobility Grants

The University of Bonn's own Argelander Program for early-career researchers was expanded further in 2022: with the Argelander Mobility Grants, the University of Bonn is now helping experienced postdoctoral researchers (who will have completed their doctorates up to five years ago) to gather relevant international experience. The funding covers a six- to twelve-month research visit to a research institution abroad. Once they get back, the postdocs are then given additional financial support in order to complete their research project and secure third-party funding. The scholarship is designed to hone research profiles, strengthen academic independence, and promote collaborative research and international networking.

Organization and Collaboration

Research would not happen without exchange and dialogue. Although collaboration between institutions enjoys a venerable tradition as it is, it becomes even more strategically important when international competition is growing fiercer. This is because securing the right partners can forge especially powerful research alliances. In this respect, the University of Bonn benefits from its favorable location in one of the most densely packed research landscapes in Europe as well as the many years it has spent building up academic networks.

Bonn-Aachen International Center for Information Technology marks 20 years

The Bonn-Aachen International Center for Information Technology (b-it) celebrated its 20th anniversary in the fall. It has provided a unique link between excellence in research and world-renowned teaching in the three master's degree programs in Information Science that it has offered since 2002. The b-it thus prepares students from all over the world for jobs in fields with great future relevance: food sciences, life sciences, media informatics and autonomous systems. With the support of the federal and state governments, the past 20 years of work have produced an institution that enjoys a global reputation but still has an impact on its local area through its innovative research findings and highly qualified graduates. The University of Bonn came together with RWTH Aachen University, Hochschule Bonn-Rhein-Sieg University of Applied Sciences and three Fraunhofer Institutes to set up the b-it. What makes it unique is how Universities of Excellence and non-university research organizations collaborate directly on curricula.

Joining forces for Earth system research

The University of Bonn, the University of Cologne and *Forschungszentrum Jülich* have signed a new contract underpinning their joint Center for Earth System Observation and Computational Analysis (CESOC). A joint scientific establishment set up by the three partner institutions, it has become an internationally visible driving force for monitoring the Earth system on a global level, gaining a comprehensive understanding of it and predicting how it might change in the future. The center is being bolstered further with a cooperation agreement signed with the European Centre for Medium-Range Weather Forecasts (ECMWF), which opened a base in Bonn in 2021. CESOC serves to pool vital skills from the three locations—Bonn, Cologne and Jülich—more closely together. It covers the fields of meteorology, atmospheric chemistry, hydrology, climatology and paleoclimatology, soil science and near-surface geophysics, plant and agricultural sciences, geodesy, remote sensing, geoinformatics, mathematics, scientific computing and computer science.

Preventing and tackling sexualized violence

The University of Bonn signed a cooperation agreement with the *Institut für Prävention und Aufarbeitung sexualisierter Gewalt* (Institute for Preventing and Tackling Sexualized Violence, or IPA) at the start of the year, under which the IPA became a private institution affiliated with the University (an *An-Institut*). The partnership launched at the beginning of the 2022/23 winter semester, with a ceremony held in September to mark the official inauguration of the project. It is designed to facilitate ongoing academic dialogue and specific joint initiatives in the areas of research, teaching and the

transfer of practical experience. The IPA is making an important contribution to the protection of children, young people, and adults in care while always keeping the views of those affected topmost in its mind. The University of Bonn is committed to safeguarding, diversity and equal opportunity and sees the new partnership as an opportunity to tackle one of the major challenges facing society together. Sexualized violence, power and abuse are already key research topics at the University of Bonn, particularly at its Faculty of Catholic Theology and Faculty of Arts. The IPA's networking activities are intended to help coordinate and dovetail the work being done in all manner of different disciplines and faculties even more closely together.



The IPA is making an important contribution to the protection of children, young people, and adults in care



Striking a balance between medical advances and animal welfare

The faculties of medicine in the state of North Rhine-Westphalia (NRW), which are based in Aachen, Bielefeld, Bochum, Bonn, Düsseldorf, Essen, Cologne and Münster, joined forces in spring 2022 and set up the new 3R Competence Network NRW to promote animal welfare in research. They are committed to upholding the “3R principle”: Replace, Reduce and Refine. The 3R Competence Network NRW is being funded by the state's Ministry of Culture and Science. The kick-off event was held at the University of Bonn in December 2022 and featured expert talks given by researchers and a welcoming speech by NRW Culture and Science Minister Ina Brandes. By pooling all of NRW's

scientific and research expertise in one place, the 3R Network is intended to become a key driver of innovation, including in the area of alternative methods, and thus strike a balance between medical advances and the highest possible standards of animal welfare.

Academic Communication and Transfer

Through its academic communication activities, the University of Bonn helps its researchers to explain their work even more effectively to the general public. Transfer, meanwhile, helps to enable the use of research findings to benefit society and the economy. The University's own enaCom Transfer Center plays a key role, from startup ventures through to transfer projects involving the private sector, society and the political sphere.

University of Bonn becomes founding partner in a transfer company

Some leading institutions in the fields of bioeconomics and agrobusiness in North Rhine-Westphalia (NRW) joined forces with the University of Bonn in early 2022 to set up CAMPUS Transfer Management GmbH, a limited-liability company under German law. The aim is to develop a competence center for the agriculture and food industries in the Rhineland. Together with 18 other applicants, the company has submitted a project proposal for some €39 million in funding, which it hopes to secure for innovations in sustainable food production, healthy eating and environmentally friendly land use. It also intends to support startups, artisan businesses and other firms in the industries and thus create new value chains and jobs in the Rhenish lignite mining area for after the phase-out of fossil fuels. The enaCom Transfer Center at the University of Bonn will be using Campus Transfer Management GmbH as a fixed reference point within the Rhineland and a key

strategic priority for its transfer activities. As the only university in NRW with a dedicated Faculty of Agriculture, the University of Bonn wants to help shape the transformation in the Rhenish lignite mining area and will, in particular, be providing scientific expertise from its Innovation and Technology for Sustainable Futures Transdisciplinary Research Area. In other words, the Rhineland is to become a "living laboratory."

Gold medal for "AutoDry" milking software

The "AutoDry" milking software module was awarded gold at the "Innovation Awards EuroTier 2022." Invented and co-developed by researchers from the University of Bonn's Faculty of Agriculture, the module automatically reduces the volume of milk taken during the last few days of lactation, adapting itself to each cow individually. This is done before the cows stop being milked ahead of their next calving to regenerate their udder tissue, a phase known as the "dry period." Automatically reducing milk output can reduce the risk of an udder infection during this period and thus cut the use of antibiotics in dairy farming. The award-winning team carried out the research project on the University of Bonn's Frankenforst Campus.

\$12 million for the Code Intelligence startup

Code Intelligence, a fledgling company that began life as a University of Bonn startup, is to receive funding worth \$12 million. It was set up in 2018 by Sergej Dechand, Khaled Yakdan and Prof. Dr. Matthew Smith from the Institute for Computer Science and helps developers by providing a platform for finding and fixing security flaws before a product is finished. The company had previously

been supported by an EXIST grant from the Federal Ministry for Economic Affairs and Climate Action. Code Intelligence is already being used by some high-profile firms at the cutting edge of technology such as Bosch, Continental and Deutsche Telekom, while the startup is also working closely with Google. Code Intelligence plans to use its injection of fresh capital to invest in product development in order to create a standard workflow for creating, debugging and managing test pipelines straight from the underlying code, the command line or any integrated development environment (IDE).

Successful spin-off

The British firm APIS Assay Technologies Ltd has acquired Clickmer Systems, a spin-off project at the University of Bonn, for a figure somewhere in the seven-digit euro range. The startup develops “clickmers,” a synthetic alternative to antibodies that can be used in research and medical diagnosis to find evidence of viral infections, check someone’s vaccination status or detect rejection reactions following organ transplants, among other things. The company now plans to launch its innovative products on the market quickly so that users will soon be able to benefit from them. It is drawing on the findings of the research group led

▼ The team from Code Intelligence



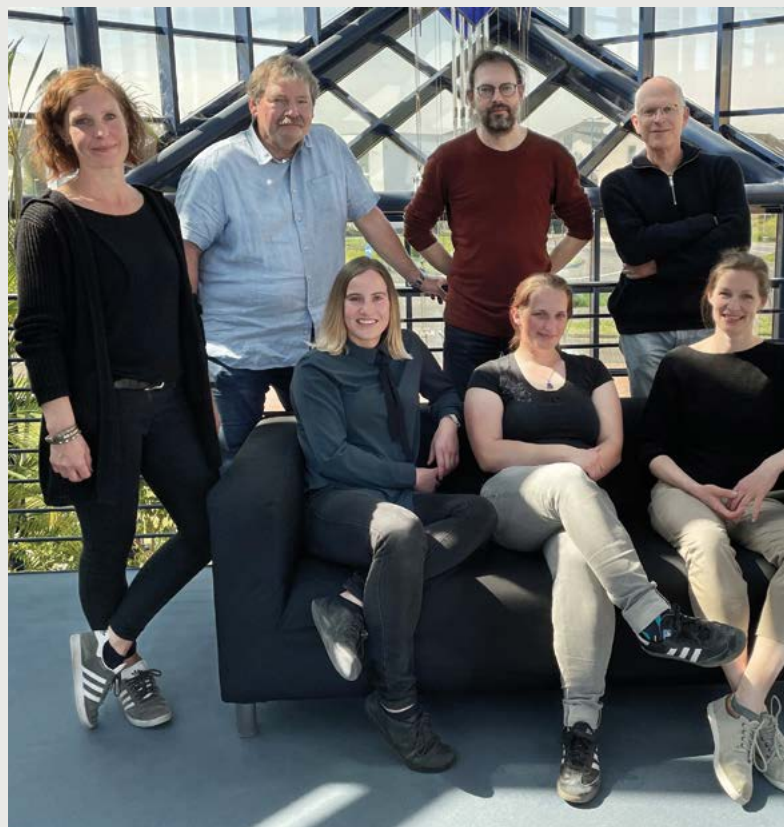
by Prof. Dr. Günter Mayer from the LIMES Institute at the University of Bonn, who has successfully replaced antibodies with synthetic “clickmers” for specific applications. With the Manchester-based company, there is now an experienced developer of molecular diagnosis tests on board to take the invention to market launch. The startup has spent the past three years at the Life Science Incubator being developed to a point where it was ready for investment. The project was funded by the Federal Ministry of Education and Research (BMBF) to the tune of €1.7 million, while the startup was also supported by the University’s own enaCom Transfer Center.

New *Hypothese* audio podcast series launched

Audio podcasts are on trend at the moment. With *Hypothese* (“Argument”), the University of Bonn has launched a new series of this format that sees specialists in various disciplines share their expertise in an interview. Each issue starts with a fundamental proposition—or argument—that the interviewee has prepared in advance and that is then explored in more detail in a 20- to 30-minute online conversation. First up was economist Prof. Dr. Moritz Kuhn, who was interviewed about the argument that “A market economy like Germany can cope with jettisoning Russian oil and gas.” The podcasts are available from all standard platforms. The series is designed to shine an academic and scientific light on important current issues that are the subject of fierce debate. The focus is on providing expert assessments drawing on scientifically proven expertise on new, topical questions that have not yet been answered and that are still being studied by researchers. Denis Nasser, a TV and radio journalist from Cologne, has the job of interviewing the researchers from the University of Bonn. As a University of Excellence, the Universi-

ty of Bonn offers outstanding working conditions for excellent researchers (“WE invest in people”), builds networks to tap into expertise outside its own four walls (“WE foster networks”) and makes the findings from its top-level research available not only to academics but to society at large (“WE create impact”). In this spirit, the new podcast series is an opportunity to make some of the views and insights offered by researchers accessible more quickly and easily for anyone who might be interested.

- ▼ The Clickmer Systems team at the Gründer-und Technologiezentrum Rheinbach (from left to right): Stefanie Büsch, Dr. Joachim Schorr, Dr. Maren Hamann, Prof. Dr. Günter Mayer, Dr. Nora Karnowski, Prof. Dr. Michael Famulok and Dr. Elisa Merklinger



University of Bonn exhibit sails aboard *MS Wissenschaft*

The German exhibition ship *MS Wissenschaft* embarked on its tour of the country in summer 2022 with an exhibit from the Universities of Bonn and Cologne on board. Researchers from various disciplines who are working together in the Future Rural Africa Transregional Collaborative Research Center, which has been funded by the German Research Foundation since 2018, used the exhibit to explain how people in rural Africa are shaping their futures. Sub-Saharan Africa is experiencing an extremely fast-paced transformation that is beset by conflict and that has been caused by intensifying agriculture, expanding nature reserves and upgrading infrastructure, among other things.

The researchers' investigations are focusing on the question of how current processes in rural Africa are helping to shape the future. The exhibit consisted of three parts, each of which illustrated a different methodological approach to the key question. As well as a look ahead to "likely futures" shown on maps that drew on model-based studies, there were also personal testimonies from people in Africa who talked about their expectations and desires in a series of video clips. Finally, visitors had the opportunity to put themselves in the shoes of some fictitious characters and make their own decisions about their future.



- ◀ Cover art for the Hypothese podcast series

Teaching and Learning



With over 200 full and partial degree programs in all manner of different subjects, the University of Bonn offers an exceptionally broad range of study options. Students benefit from the strong research focus of the study content and the teachers themselves. In-person dialogue — a key prerequisite to successful learning and teaching — was made more difficult by the COVID-19 pandemic, so it was a moment of great relief when these restrictions could be lifted.

Finally — a return to in-person teaching

For many students still in their first few semesters, it was a novel experience: the University opened its 2022 summer semester with a return to face-to-face teaching for the first time since the pandemic struck, now that most of the legal regulations brought in to combat it had expired. This allowed the focus to return to events and courses held on site, or “in person.” However, hybrid and online teaching will continue to be offered where it is sensible and expedient to do so. Despite being freed from mandatory legal regulations, the Rectorate called on everyone to be mindful of hygiene measures and worked in lockstep with the faculties.



Following two years under the shadow of the COVID-19 pandemic, the Bonn University and State Library (USL) was also able to provide all its learning and working spaces once again and open seven days a week. A further learning space was created in November with the opening of the MNL Branch Library's Media Center, which is supporting teaching with its state-of-the-art workspaces and training courses on media and information literacy.

With the coronavirus restrictions now lifted, the final-year students from the class of 2021/2022 were once again able to celebrate with a large-scale open-air event held in the *Hofgarten* in summer 2022. Over 1,000 graduates from 17 countries took up the invitation to mark the end of their study journey together with their family and friends. Following an online-only event in 2020 and a hybrid one in 2021, 2022's graduation ceremony was given a new format that retained successful elements from previous years but also focused on the shared experience and shared celebrations. As well as the program on the main stage, featuring welcoming speeches and music, participants were also able to take part in various activities on the *Hofgartenwiese* including a live video and photo station and stalls where they could learn more about various University organizations. Two highlights were the official presentation of certificates by the deans and the obligatory "tossing of hats."

In early October, the "First-Semester Students' Welcome" marked the first day at the University of Bonn for around 2,000 new starters, who were given various opportunities for getting to know one another and strike up a conversation. The program also featured a big party in the *Arkadenhof* and the canteen marquee. At the opening event in the main auditorium, which was also streamed live in several lecture halls in the University Main Building and on the Poppelsdorf Campus due to sheer

numbers, students were welcomed by Rector Prof. Dr. Dr. h.c. Michael Hoch and Madita Mues, President of the General Students' Committee. Prof. Hoch said that, with its focus on transdisciplinary research and teaching, the University of Bonn was just the right place to start looking beyond traditional subject boundaries while one was still a student. He also called on the students to make use of the rich variety of extracurricular activities on offer and play an active role in helping to shape the University with its venerable tradition.

Bonn: a fantastic location for priest training

The University of Bonn—a University of Excellence—is an outstanding place to study for the priesthood. In a joint statement issued in summer 2022, the Rectorate, Senate and University Council of the University of Bonn declared their firm opposition to efforts to move priest training out of the city, particularly to the new Cologne University of Catholic Theology, whose grand chancellor is the Archbishop of Cologne. This is because the excellent priest training offered at the University of Bonn means that there is no need for another institution where it can be studied.

The joint statement by the University bodies underlined the importance for the University of Bonn of the two Faculties of Theology, which are contributing their expertise to its Excellence Strategy. The University bodies make it explicitly clear that theological studies for pastoral ministries and religious education teachers are supported and form an integral part of the University of Bonn's identity. The bodies also stress the binding nature of the concordat and the agreements concerning religion under the German constitution, which specify Bonn as the location for training priests. There is no need in their view to establish any additional

places for priest training within the Archdiocese of Cologne. The University bodies will resist any attempt to undermine these provisions, which have been in force for almost a century. They expressly declare that, in their view, the concordat and the agreements concerning religion under the German constitution that have been concluded in respect of the Faculties of Theology must be observed.

The concordat is the treaty between the Holy See and Prussia—of which the federal state of North Rhine-Westphalia is one of the legal successors—which is binding under international law. This treaty stipulates that priests are to be trained in Bonn.

System accreditation and new unit

The University of Bonn is pressing resolutely on with its activities in the area of teaching and learning and is taking greater responsibility for the quality and quality management in this area in a way that is also visible to the outside world. To this end, a two-stage system accreditation project was launched in 2022, led by the Vice Rector for Teaching, Learning and University Development. As well as liaising closely with all the faculties, the Bonn Center for Teacher Education (BZL) and other University stakeholders and ensuring that they are involved every step of the way, it has also brought in an external accreditation consultancy. The purpose of this system accreditation is to establish an efficient quality management system for teaching and learning that degree programs are required to be subject to before they can be successfully accredited internally.

The system accreditation obviates the need for each individual bachelor's or master's degree program to be re-accredited every eight years by an external agency and will thus save time, resources and administrative costs in the long term.

The project is also geared toward developing and embedding an ongoing and participatory culture of quality for teaching and learning as well as streamlining the entire reporting process.

A University of Bonn whose systems have been accredited is in a position to adapt its assessment procedures in line with internal conditions autonomously, flexibly and as requirements dictate. What is more, having “system-accredited” status makes a University of Excellence more competitive. To coordinate and support the project and the University's journey toward formal system accreditation, the Teaching and Learning Quality Management Unit (SQLS) was established within Division 9—Studying, Teaching, Academic Planning and, in mid-2022, a team was appointed to run it. After the University of Bonn has been certified as a system-accredited university, the unit will serve as the first port of call for all issues relating to the quality assurance and quality development of its degree programs and internal quality loop system.

Working together with various organizational units, the team provides support, templates and organizational and support services with the faculties' and the BZL's procedures and thus expands the range of topics covered by Section 9.1 relating to creating, fine-tuning and discontinuing degree programs.

Teaching

The University of Bonn promotes and cultivates the sciences as a holistic union of research and teaching. It wants to inspire young people for the sciences and help them develop their individual professional and personal skills as best possible.

The HD-Snack: a new format designed for teachers

Conceived and delivered by the Bonn Center for Higher Education, the *HD-Snack* (*hochschuldidaktischer Snack*, or “university teaching snack”) is a series of short sessions on topics relevant to university teaching. Lasting an hour each and held over lunchtime, they give teachers some fresh ideas—the perfect accompaniment to their lunch, which they are welcome to bring along too. As

well as input from a leader, the sessions also offer ample scope for asking questions, sharing experiences and chatting with colleagues. The HD-Snack is held on Zoom at 12:30 pm every second Wednesday during the lecture period. The final two sessions are not allotted a particular theme, allowing teachers and tutors to suggest their own topics to get some new teaching ideas for.

“Future-Oriented Teaching” strategic fund

Adopting the motto *vielfältig.nachhaltig.digital* (“diverse.sustainable.digital”), the Rectorate will be funding five projects in the coming years that help to strengthen the potential of individual students, raise awareness of sustainable development and make acquiring digital skills an integral part of teaching.

Projects funded 2022–2025

“Dynamic Map of Ancient Israel (c. 1208–300 BCE)”—Dr. Søren Lorenzen (Faculty of Protestant Theology)

Nachhaltige Ernährung und digitale Instrumente in den Ernährungswissenschaften: NutriDiary Teach (“Sustainable food and digital tools in the nutrition sciences: NutriDiary Teach”)—Prof. Dr. Ute Nöthlings (Nutrition and Food Sciences)

Prospektiv, kreativ und verantwortet angewandte Ethik betreiben (“Practicing applied ethics in a creative, accountable and forward-looking way”)—Prof. Dr. Dr. Jochen Sautermeister (Department of Moral Theology)

Urbane Religionsvielfalt Digital (“Urban religious diversity done digitally”)—Prof. Dr. Sabine Feist and Asst. Prof. Dr. Jan Runggemeier (Department of Archaeology and Cultural Anthropology and Faculty of Protestant Theology)

Virtueller phytopathologischer Lehrgarten – eine neue Dimension der praktischen Wissensvermittlung (“A virtual phytopathological training garden—a new dimension in practical knowledge-sharing”)—Prof. Dr. Armin Djamei (Crop Science and Resource Conservation)



▲ Prof. Dr. Klaus Sandmann, Vice Rector for Teaching, Learning and University Development (center), with some of the winners of the teaching prizes

The “digiFellows” prize

Every year, the state of North Rhine-Westphalia (NRW) in cooperation with DH.NRW grants funding to teachers who are implementing projects related to digital teaching and learning and thus improving their students' digital literacy. Innovation Fellowships in Digital University Teaching (“digiFellows”) worth €50,000 can be awarded to teachers who are developing or trialling digitally supported teaching and examination formats or designing modules and courses that use digital technologies throughout. The 2022 prize went to the project entitled *Virtueller phytopathologischer Lehrgarten – eine neue Dimension der praktischen Wissensvermittlung* by Prof. Dr. Armin Djamei (Crop Science and Resource Conservation).

Awards ceremony for 2022 teaching prizes

This year saw the University award teaching prizes to 13 individuals in recognition of their outstanding teaching. During the awards ceremony for the prize certificates held in the Rectorate garden, Prof. Dr. Klaus Sandmann, Vice Rector for Teaching, Learning and University Development, thanked the winners for their exceptional hard work and dedication and stressed how important training and educating its students was to the University. The teaching prizes are awarded on a cross-faculty basis, with each faculty and the Bonn Center for Teacher Education (BZL) given a quota dependent on their student numbers and size. Candidates are nominated based on student evaluations or by bodies with significant student involvement.

The prize-winners from 2022

Prof. Dr. Peter Scholze, Faculty of
Mathematics and Natural Sciences,
Mathematics Department

Prof. Dr. Heiko Röglin, Faculty of Mathematics
and Natural Sciences, Computer Science
Department

Prof. Dr. Hartmut Schmieden, Faculty of
Mathematics and Natural Sciences, Physics/
Astronomy Department

Dr. Wilfried Assenmacher, Faculty of
Mathematics and Natural Sciences, Chemistry
Department

Jan Voosholz, Faculty of Arts, Department of
Philosophy

Dr. Hendrik Hess, Faculty of Arts, Department
of History

Prof. Dr. Kristian Berg, Faculty of Arts,
Department of German and Comparative
Literature and Culture

Prof. Dr. Dariusch R. Hadizadeh, Faculty
of Medicine, Diagnostic and Interventional
Radiology

Dr. Florian Recker, Faculty of Medicine,
Obstetrics and Gynaecology

PD Dr. Kathrin Brei, Faculty of Law and
Economics, Department of Law

Helene Mass, Ph.D., Faculty of Law and
Economics, Department of Economics,
Institute for Microeconomics

Dr. Jan Martin Brockmann, Faculty of
Agriculture, Institute of Geodesy and
Geoinformation

Prof. Dr. Christian Blumenthal, Faculty of
Catholic Theology, Department of New
Testament Studies

Learning

Student survey revamped

The redesigned version of the student survey produced by the Center for Evaluation and Methodology (ZEM) made its debut in 2022. The survey aligns with the University of Bonn's objectives and focuses on the academic challenges that students will face during their degree programs, taking particular note of their experiences, attitudes and perceptions. For instance, students are asked whether they have ever experienced examination anxiety or doubts about their studies and, if so, how they dealt/deal with such issues. There are also questions about being respected and the feeling of having been treated unfairly or in a different way to someone else. Besides numerous other topics, students are also given the opportunity to say if they would like to see some University services expanded, such as help finding internships, psychological counseling, advice on launching their career or even what books are stocked in their libraries. The survey also gives students an idea of what advice and support is available for various issues as they work through it, meaning that they learn some new information as well as having to answer questions.

Workshops to strengthen students' own resources

"Reboard Your Study Life"—this new series of workshops was the Central Study Advisory and Counseling Service's response to the challenges faced during the pandemic. It focuses on enabling students to get (back) into the groove of studying

on site and learning in person and helping them to improve their skills and abilities with lasting effect and strengthen their own resources. The workshops and coaching sessions are tailored to students' needs. The series was very well received by the target group and is set to continue in the 2023 summer semester under the title *RessourcenStark durchs Studium* ("Sail Through Your Studies with Strong Resources"). The measure secured funding from the state of North Rhine-Westphalia's COVID-19 emergency fund.

General study guidance services

Formats designed to provide general guidance about studying at university, such as school talks, on-campus events, workshops and education fairs, are a good way of establishing initial contact with prospective students and make them aware of how to go about making a sound decision on the right degree program for them. In addition to its standard consultations, the Central Study Advisory and Counseling Service organized 86 study guidance events for schoolchildren in 2022 and reached out to almost 9,000 people. Not only is this back at pre-pandemic levels—various follow-up activities in schools actually pushed the number of new contacts up even higher. One real highlight of 2022 was an event organized together with the faculties and the Bonn Center for Teacher Education: the University of Bonn Days, for which over 2,000 people signed up.

New version of eCampus and new e-books

The upgrade to the latest version of eCampus has seen many features optimized, while its new, state-of-the-art user interface also makes it easier to use on mobile devices. As well as the University of Cologne, eCampus is now linked to Heinrich Heine University Düsseldorf.

Users at all three institutions can approve courses for one another and access them via the dedicated learning platform. No fewer than 4,500 videos for teaching were uploaded via eCampus and the eLecture video platform in 2022. The winter semester saw a switchover to the educast.nrw system. In this state-wide project, a video platform was made available that all universities can use and that is connected to the learning platform. More than

10,000 computer-assisted written examinations (eKlausuren) were sat. To support online teaching, a large number of e-book packs from German and international publishers had been unlocked for the Bonn University and State Library by the end of 2022 as part of the "eBooks-nrw" initiative. There are now roughly 400,000 e-books available, nearly 88,000 of which have been purchased permanently for the University of Bonn.



More than 10,000 computer-assisted written examinations (eKlausuren) were sat.



Zimmer frei?! helps students find accommodation


Bonn has been a popular place to come and study for a long while now. However, there are not enough places for students to live. And the importance of suitable accommodation was thrown into sharp relief during the pandemic, when students

were often only able to work within their own four walls. Zimmer frei?! ("Got a room?!") wants to bring the landlords of student housing in the region and their student tenants closer together. The platform is helping to unlock the student housing market in Bonn and the wider Rhein-Sieg district by putting offers and requests for accommodation in one central place. The portal was relaunched in 2022 after a technical makeover. It allows landlords to enter the details of their properties themselves

really easily and with step-by-step instructions. If necessary, though, staff at the University of Bonn Information Desk will be on hand to help them through this process. Besides listing the accommodation available, the portal also tells students about various living arrangements that will allow them to study successfully in Bonn.

Equal Opportunity/ Diversity





As a learning organization, the University views the existence of and need to achieve diversity in its community — including different levels of personal potential, types of character, experiences, physical abilities, backgrounds and ways of life — both as an enrichment and a challenge. By bringing together different approaches to life, diversity paves the way for new perspectives, ideas and questions and more comprehensive potential solutions to one's problems. As such, it is a significant opportunity and valuable resource.

Family-friendly for life

In June 2022, the University of Bonn was officially presented with a lifelong “Family-Friendly University Audit” certificate at an online event organized by *berufundfamilie Service GmbH*. The University has been committed to ensuring the compatibility of family and career for a long time now and has held this certification continuously since 2011. Its successful completion of the dialogue process has now been crowned with a lifelong certificate. As a University of Excellence, the University of Bonn considers the compatibility of family and career to be relevant to its strategy, because this shows that it offers the brightest minds the best possible conditions, whether they are coming here to work or to study. Besides setting up the Office of Family Services as the first port of call for staff and students with questions about childcare, parental leave or caring for family members, many other measures have also been put in place. These include giving staff flexibility over their working

hours, providing childcare in emergencies and during vacations, and setting up a discussion group with professional support for people with responsibility for caring for family members.

Diversity Days promote diversity, openness and tolerance

As well as signing the Diversity Charter, the University of Bonn also wants to ensure that all staff and students are aware of it and espouse the ideas and values that it contains. With this in mind, and to mark the campaign day for the Diversity Charter—German Diversity Day—on May 31, the Vice Rectorate for Equal Opportunity and Diversity and the Equal Opportunity and Diversity Unit organized the Diversity Days. Over a period of three days, all the University’s members were invited to learn more about diversity from different angles and suggest some ideas for what an



► The University Sports team at the Diversity Days 2022

inclusive campus might look like. Offering diverse perspectives in research, teaching and learning and respecting individual lifestyles are vitally important to the University of Bonn. The purpose of the Diversity Days was to make a statement—in favor of diversity, openness and tolerance. Events like these are designed to help find out what the people involved are interested in and identify where there is still room for improvement in terms of being an inclusive university. The Diversity Days enabled organizers to gather valuable feedback that they can use in planning their strategy and measures.

Tampons and sanitary pads in campus toilets

With a pilot project, the University of Bonn became one of the first universities in North Rhine-Westphalia to provide free period products to its students. Dispensers were installed in seven locations in an effort to make essential hygiene products accessible to all and help destroy the taboo surrounding menstruation. The project was the brainchild of the General Students' Committee, while the pilot phase was organized and funded by the Vice Rectorate for Equal Opportunity and Diversity. The aim was to eliminate financial and social inequality—a major step toward equal opportunity and educational justice. The project began life as a pilot during the summer semester and, following its successful completion, the Rectorate has now given the green light to its continuation and roll-out. An online survey of students on their need for free period products was also conducted at the same time, with 93 percent of respondents agreeing that they should be made available. Two thirds of those surveyed said that the scheme made them less worried about menstruation.

Gender Equality Office

*Her*Spectives* — the new gender equality magazine

The Gender Equality Office has launched a new magazine, *Her*Spectives*, which is full of information on the latest topics, projects and measures on which it and the University Gender Equality Commissioner have been working. The first issue centered around the abuse of power in academia. Published annually, the magazine is available online as an accessible PDF and as a bilingual German/English printed edition.

Maria von Linden Prize

The Maria von Linden Prize was founded in 2022 to recognize and highlight outstanding dedication and commitment to gender equality at the University of Bonn. It will be awarded every other year, alternating with the fund projects for the structural integration of gender equality. The first winner of the Maria von Linden Prize was student **Paula Heidemeyer**, who organized a series of workshops in the Department of Psychology in 2021 on opposing discrimination and promoting gender equality and diversity. These workshops were intended to raise awareness of gender equality and discrimination among members of the department.

Career network for female researchers

The WHATS UB (Women in Higher Education And Top Science – University of Bonn) network was set up within the University for female researchers who are working toward or have already embarked on a career in academia. It is open to women early-career researchers, Habilitands, professors and assistant professors. Regular networking opportunities, events on topical issues and workshops on useful qualifications for an academic career provide a platform for dialogue and exchanging ideas. The network's founder and patron is Professor Diana Imhof. It is being continuously expanded in terms of its organizational setup and the activities that it offers its members.

Online discrimination complaints notification form from the Gender Equality Office

Sexualized discrimination and violence, sexism, homophobia, transphobia and other forms of discrimination based on sex or gender are still commonplace, including at universities. Anyone who has witnessed abuse of this kind can contact the Gender Equality Office in confidence by filling out an online discrimination complaints notification form. Although reports can also be made anonymously, this is no substitute for an official complaint. Anonymous complaints feed into the considerations being made about further prevention measures at the University.



- ▲ The winner of the Maria von Linden Prize, Paula Heidemeyer (left), together with the recipients of the Gender Studies Prize: Marina Lynn Krambrich, Benedikt Johannes Gnosa and Joline Sophie Kretschmer

Digitalization at the University



The onward march of digitalization is showing no signs of stopping in any area of our lives. It is fundamentally transforming how universities are pursuing their research and teaching objectives and structuring their administrative processes, while digital tools and platforms are taking on an ever-increasing number of tasks. The University of Bonn is putting a lot of energy into its own digital transformation with a large number of projects.

Strategy development process with the faculties now on the home straight

Efforts to develop a comprehensive Digital Strategy for the University, which is the job of the Digital Science Center (DiCe), made further progress in 2022 with the launch of an initial participatory strategy development process together with the faculties. Across nine workshops, the University's seven faculties used design thinking methods to build a corpus of more than 700 compelling statements about their positive visions for the future that, although specific, could nevertheless also serve as examples. The results were then analyzed, grouped into themes and incorporated into an overall vision covering developments in and requirements for future-oriented, internationally interconnected research, teaching and IT services as well as strategic measures for the University's digital transformation. To ensure that the Digital Strategy continues to be developed and implemented consistently and as requirements dictate, the DiCe will be relying on a continuous quality assurance system that enables it to respond to changes and trends on an ongoing basis.

High-Performance Computing and AI

New mainframe for high-performance computing

With the purchase of its new high-performance computer christened “Marvin,” the University of Bonn has taken a major leap forward in its work supporting research in the faculties, Clusters of Excellence and new artificial intelligence (AI) centers. The powerful mainframe computer will enable complex calculations and simulations (“high-performance computing,” or HPC) as well as sophisticated learning tasks in fields such as AI, machine learning and deep learning. As a Tier 3 computer, Marvin is available exclusively for use by researchers from all departments at the University of Bonn and the partners with whom they are collaborating directly. The University of Bonn has also set up a service point within University IT that provides training and advice in cooperation with the long-established HPC/A Lab in the Digital Science Center. Marvin is expected to begin operations at some point in 2023.



▲ Marvin, the University of Bonn’s new high-performance computer

WestAI: connecting up AI activities

Artificial intelligence (AI) started changing our lives well before AI applications like ChatGPT and Stable Diffusion came on the scene. WestAI—one of only four service centers in the whole of Germany—has now opened its doors, making it easier for companies and research institutions to access and implement AI applications. To this end, it develops methods and provides computing infrastructure for training large AI models, transferring them efficiently to a wide range of everyday applications and enabling industry and society to harness



▲ The PhenoRob Cluster of Excellence is being strengthened through funding from the DFG

them in various ways. The project is receiving €12.3 million in funding from the Federal Ministry of Education and Research over four years and is being coordinated by the University of Bonn.

New Lamarr Institute: a hub for top-level research

The Lamarr Institute for Machine Learning and Artificial Intelligence was inaugurated in the summer. The new top-level research institute is shaping a new generation of artificial intelligence that will make a powerful, lasting, trustworthy and safe contribution to efforts to overcome key economic and societal challenges. It is one of five university-level AI competence centers across Germany, which are being given long-term funding as part of the federal government's AI strategy. Researchers at the Lamarr Institute want to set new standards in the value-based study and development of an ultra-powerful AI that is also trustworthy and resource-efficient. It is supported by the University of Bonn, TU Dortmund University, the Fraunhofer Institute for Intelligent Analysis and Information Systems (IAIS) and the Fraunhofer Institute for Material Flow and Logistics (IML).

AI in teaching

BNTrAinee is forging structural links between existing AI expertise in computer science and users from various specialist disciplines, developing needs-based teaching and learning materials and releasing them on a learning platform. It allows computer scientists to apply the AI knowledge that they possess on their own subject to new academic and scientific problems from other fields of expertise, to reflect on them critically together with researchers from another field, and to adapt or fine-tune their own methods where appropriate.

As well as improving how AI is handled in these subjects, the aim is also to engage in interdisciplinary dialogue in order to find tailored models for the problems currently sitting on researchers' desks. In 2022, doctoral students and postdocs from all subjects were given their first-ever opportunity to learn the basics of AI for their own research in an interdisciplinary course entitled "Foundations of Machine Learning in Python."

AI projects secure DFG funding

Two new Research Units on artificial intelligence—one for geodesy and one for high-precision agriculture—have secured funding from the German Research Foundation (DFG). This is giving a further boost to AI research at the University of Bonn, an area that has been growing for many years now.

The Algorithmic Data Analysis for Geodesy (Alg-ForGe) Research Unit has been set up to devise methods for using AI to improve analyses of the extensive range of spatial and temporal data that geodesy supplies.

The PhenoRob Cluster of Excellence is also receiving reinforcement in the shape of Automation and Artificial Intelligence for Monitoring and Decision Making in Horticultural Crops (AID4Crops), a Research Unit newly funded by the DFG. It will be developing new kinds of AI algorithm in order to link sensor systems with decision-making and thus establish a completely groundbreaking interconnection between monitoring and decision-making in high-precision agriculture and in horticulture.

Digitalization of the Administration

The University's central administration has instigated the Digitalization of Administrative Processes Program (PDaP) to tackle the digital challenges that it faces. This is being done partly for legal reasons, with the e-government and online access legislation introduced by the federal and state governments imposing strict requirements that have to be met—often by tight deadlines. However, the University has also made it a stated aim to make as many of its processes as possible completely digital by 2025 and to leverage the potential that doing so will generate. A roadmap of focus projects for the digitalization of administrative processes at the University of Bonn was drawn up in 2022. Tasks on the agenda range from introducing a digital workflow for staff travel expenses using SAP self-services through to electronic file management.



The University has also made it a stated aim to make processes completely digital by 2025.



Settling travel expenses digitally via SAP

Settling travel expenses digitally is designed to make life much easier. Between 15,000 and 20,000 transactions, including advance payments, approval requests for business trips, and invoices, were processed every year before the pandemic and are now to be logged electronically. The pilot phase began for the first few teams in December 2022. It is aimed at significantly relieving the burden on researchers and administrators, streamlining processes and making them more transparent by enabling travel expenses to be reimbursed faster and staff to track exactly what status their travel expenses claim currently has.

Electronic third-party funding file

The University administration has used a digital system, the electronic third-party funding file, for third-party-funded projects since 2015. To prevent duplicate records being kept and thereby free up resources for other tasks, the institutes and departments now have electronic access via SAP to these stored documents and the workflows that they contain, meaning that everything need only be stored once. This access represents an expansion of the existing service. The electronic third-party funding file is a sub-section of the “e-document” project, which will go on to play a central role within a digital administrative system.

Processing incoming invoices electronically

The electronic processing of incoming invoices (“e-invoicing”) was introduced in 2022. As purchase orders and incoming goods are already logged digitally, e-invoicing is closing the gap in the University of Bonn’s procurement process and thus ensuring media continuity. Once they have been digitized centrally or logged by External Accounting as appropriate, invoices can be assigned directly to the correct purchase orders and posted and paid without further ado. This is making work easier for staff in the administration, faculties and central units.

Two more projects—“Electronic Personnel Files and Electronic Processing of HR Workflows” and “University of Bonn Service Portal”—were also launched in 2022. The first is geared primarily toward setting up an electronic personnel file and making all HR-related processes digital, while the second is creating a central, user-oriented portal that, in particular, brings together information and services from central administration that are relevant to all staff and arranges them by topic.

Digitalization of Research and Teaching

Students collaborating in the virtual space

On the teaching front, the ViCo (Virtual Collaboration) project has begun work. The joint responsibility of the Vice Rectorate for Teaching and Learning and the Bonn Center for Teacher Education, it is geared toward developing teaching further. It provides advice to any teacher who is interested on how they can integrate digital small-group work into their courses on a conceptional level, focusing on three interdisciplinary themes: multimedia annotations, scientific computing and coding, and immersive 3D worlds. Besides offering advice on and training in media didactics, this also involves introducing new digital services and systems, funding assistants and carrying out formative and summative evaluations. 2022 saw all three project groups begin their pioneering work on teaching/learning scenarios using virtual collaboration and implement these with a number of test users. More departments have also signed up to use ViCo's services.

Academic Advisory Board on Research Data

Since 2019, researchers have been supported by the Research Data Service Center, a joint initiative by the Bonn University and State Library and University IT that forms part of the "People 5" program line (Implementation of an Open Science Culture and Open Science Service Infrastructure at the University of Bonn) under the Excellence Strategy. The service center is continuously adding new advisory services and infrastructure. A further milestone was reached in 2022 with the formation of the Academic Advisory Board on Research Data within the Digital Science Center: for all the various categories of research data generated at the University, experts were identified who will work together in the future to shape the continued strategic development of the service center and what it offers.

- ▼ The ViCo project has begun work, focusing on three interdisciplinary themes: multimedia annotations, scientific computing and coding, and immersive 3D worlds



International Affairs



The University of Bonn boasts an exceptional global network, maintains excellent relationships all over the world and sees itself as part of the international knowledge society. This identity is underlined by its high percentage of international students, the significant amount of mobility afforded to its students, and the interest shown by researchers in spending time at the University. Crises and conflicts in the world, most notably the war in Ukraine, are overshadowing the University's international ties in various ways.

Solidarity with Ukraine

The war in Ukraine dominated events in the global academic community in 2022. Appalled by the sight of Russian troops marching over the border, and standing shoulder to shoulder with all the other German universities and research institutions, the University of Bonn declared its solidarity with Ukraine and condemned Russia's act of aggression. The first moves taken were to "freeze" partnerships with universities and research institutions in Russia, put financial transfers on hold until further notice, and call a halt to new projects. Speaking on behalf of the whole University of Bonn, Rector Prof. Hoch expressed his sympathy to the 111 students from Ukraine who had been enrolled at the University at the start of the war and promised them its support. A dedicated hotline and web pages full of information were set up to this end.

A whole host of University of Bonn researchers from a range of disciplines offered their services as experts to meet the media's immense need for information during the crisis. Many of them made regular appearances on the radio, on television and in print over the course of several months in order to offer their professional view on events.

In the first few months since the Russian invasion alone, among other things, a telephone hotline that had been set up as long ago as early March fielded over 1,100 queries from Ukrainian students, which were answered by the International Office, the Student Registry and the Central Study Advisory and Counseling Service. As early as the summer semester, a number of interested students were able to be given a place on a preparatory German language course and have their course fees covered by the *Integra* and *NRWege* grant programs. Some of them were then given the chance to start studying a degree program at the University of Bonn in the very next semester once they had achieved their certificate.

Another opportunity for linking up with the University of Bonn came when the EU Commission decided to open up the Erasmus+ Programme to Ukrainian students, which enabled 12 people to study at the University during the 2022/23 academic year without having to abandon their studies in their home country.

As the war is still ongoing and is not the only crisis raging in the world, demand for support for refugees remains high. Help is being provided by the Ministry of Culture and Science of the state of North Rhine-Westphalia and the Federal Ministry of Education and Research (BMBF) in the form of funding under their aid programs for refugees.

Cologne/Bonn Academy in Exile founded

In summer 2022, the Universities of Cologne and Bonn set up the Cologne/Bonn Academy in Exile in order to support researchers from Ukraine who had been affected by the war. It also welcomes researchers from Russia and Belarus who are being persecuted for speaking out against the invasion. The academy's work focuses mainly on European

integration and promoting knowledge about the affected region. It is particularly strong on law, history, cultural studies and linguistics. In line with Ukraine's hopes of joining the EU, one of the overarching aims of the academy is to contribute to European integration. It will also work toward preserving and expanding knowledge specific to the region, however, meaning that projects relating to comparative politics and law, comparative linguistics and European history are key priorities. The academy is starting its work with a group of around 20 researchers. The Universities of Bonn and Cologne are providing office space and administrative support and helping the researchers to feel part of the local academic community.

Grant programs for refugees continued and expanded

The programs supporting refugees at the University of Bonn are not only being continued, but expanded. Funds for a total of three grant programs have been secured. Funding from the Ministry of Culture and Science of NRW and the BMBF is enabling two programs to continue: *NRWege ins Studium* ("NRWays into Studying") and *Integra*. They lay the foundation for the University of Bonn's existing "Academic Integration for Refugees" (FdIS) integration measure, which helps refugees interested in attending university prepare for their studies with an intensive language course and other activities such as workshops and excursions. The "iStart Career Program for International Students", part of the *NRWege Leuchttürme* ("NRWays Flagships") grant program, is also being extended. Its support concept helps international students with or without a refugee background to make the transition to a job in Germany that matches their qualifications. Students accepted onto the program receive information and training on the German job market, the basics of residency law and career guidance. A new grant program

has also been established for refugees already at the University, offering full and partial scholarships. Specifically for students from Ukraine, project funding was secured as part of the *Zukunft Ukraine – Stipendienprogramme für Geflüchtete aus der Ukraine an deutschen Hochschulen* (“The Future of Ukraine—Scholarship Programs for Ukrainian Refugees”) program line. This seeks to enable students and doctoral candidates who have been affected by the war to complete or continue their studies and, like the *Integra* grant program, is being organized via the German Academic Exchange Service (DAAD). Funding is being provided by the Federal Foreign Office.

International Days boast a varied program

With a diverse program of events spread out over nearly two weeks, the International Days 2022 were dedicated to the University of Bonn's international links and initiatives. They took in everything from academic panel discussions and workshops through to research policy formats and cultural happenings. This year's International Days opened with the state awards being presented to outstanding early-career researchers by representatives from the British, Spanish and French Embassies. Taking its inspiration from the Frankfurt Book Fair, the concept behind the International Days involves paying particular tribute to one of the University's partner countries. In 2022, it was Japan—not least because last year marked the 60th anniversary of German-Japanese friendship. However, the International Days also addressed the war in Ukraine and the unique challenges posed by internationality in the context of specific countries such as China, Russia and Iran. One particular cultural highlight was the immersive exhibition by the renowned US composer and artist Ari Benjamin Meyers. The International Days also saw outstanding early-career researchers presented with the state awards, which are sponsored by the governments of Spain, France and the UK. They have traditionally been presented at the same time as the DAAD Prize of the German Academic Exchange Service for noteworthy accomplishments benefiting society and/or university life.

Erasmus: Connecting Europe

Established in 1987, the EU's Erasmus education program supports the international mobility of students, doctoral candidates, teachers and staff as well as international cooperation projects in Europe and worldwide.

University of Bonn expands Erasmus+ partnerships

The University of Bonn concluded new cooperation agreements with three partner universities in 2022: California Polytechnic State University (CalPoly) in California, US, and Ilia State University (ISU) and Tbilisi State Medical University (TSMU) in Georgia. Its ongoing ventures with the Hebrew University of Jerusalem (HUJI) and Tel Aviv University (TAU) in Israel were also extended successfully. The new mobility partnerships involve various departments: Physics (CalPoly), Biology (ISU), Human Medicine/Global Health (TSMU) and Economics (HUJI, TAU). Including the partnerships with institutions in Ghana and Tanzania that are already in place, therefore, students, teachers and administrative staff now have five different countries to choose from on the Erasmus+ Worldwide Exchange Programme.

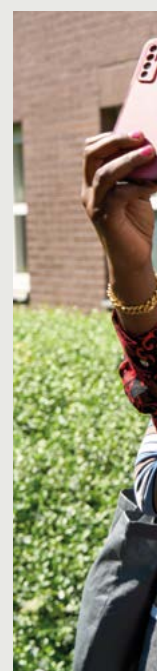
Erasmus: next generation launched, covering 2021–2027

The latest generation of the Erasmus Programme commenced its seven-year term in late 2021. It is focusing on promoting inclusion and “green travel” as well as the digitalization of the program's administration with the Erasmus Student Card Initiative (ESCI) and Erasmus without Paper (EWP).

The underlying processes required to implement the next generation of the program were launched successfully in 2022. The digitalization requirements have been selected as a focus project of the “roadmapping for the digitalization of administrative processes” as part of the work being done to deliver the University of Bonn's digitalization strategy. The numbers of students, teachers and other staff undertaking mobility placements recovered from their coronavirus-induced dip in 2022 and managed to match or even exceed their previous level.

First International Staff Week at the University of Bonn

The University of Bonn welcomed 15 guests from partner universities from across the world to its first-ever International Staff Week, which ran between May 2 and 6, 2022. They shared their views and experiences on the topic of “working in a diverse environment.” What do the various countries and universities understand “diversity” to mean? What opportunities and challenges come with collaborating in diverse teams? It proved a highly enriching experience, because everyone was able to take home inspiration for their own work and expand their network. The subject-specific dialogue was rounded off with a day spent shadowing in various administrative units at the University of Bonn and a varied and extensive program of supporting events.



- ▼ The University of Bonn is expanding its global Erasmus+ partnerships



Conference dedicated to the skills shortage

As well as receiving ample media coverage, the shortage of skilled labor in Germany is also being discussed in academic circles. Funding provided by the Ministry of Culture and Science of North Rhine-Westphalia (NRW) via the German Academic Exchange Service (DAAD) enabled the International Office to organize a conference entitled *Internationale Studierende als (zukünftige) Fachkräfte vs. Fachkräftemangel?* ("International Students as (Future) Experts vs. the Skills Shortage?"), which addressed the issue from both an academic and a practical perspective. Besides colleagues from other German universities, the conference also attracted employer representatives, the International Department of the General Students' Committee and a number of international graduates. The International Office's iStart team took the opportunity to present their new practical guide to the 50 guests who were present. The iStart program teaches participants tangible knowledge and valuable skills that will enable them to write successful applications for jobs in Germany. It is geared toward giving them a successful career path both during and after their studies, thus making it easier for them to enter the job market.



◀ Participants in the Staff Week

Centers of Collaboration

New center for reconciliation research

COVID-19, climate change, populist movements and, last but not least, the war in Ukraine are making the question of how and, indeed, whether reconciliation can be achieved extremely topical and relevant. Opened in summer 2022, the Bonn Center for Reconciliation Research (BVZ) pools research activities on the topic in cooperation with partner organizations in order to analyze reconciliation practices in different cultural, social and regional contexts from an interdisciplinary and comparative perspective. The BVZ is helping to raise the University of Bonn's profile and ties in with the work being done by its Individuals and Societies and Present Past Transdisciplinary Research Areas, with which it is collaborating closely. Four faculties are involved at present—the Faculty of Arts, the Faculty of Protestant Theology, the Faculty of Catholic Theology and the Faculty of Law and Economics—as are the Bonn Center for Dependency and Slavery Studies Cluster of Excellence and the Center for Historical Peace Research at the University of Bonn. Also on board are the German Development Institute (DIE), the Bonn International Centre for Conflict Studies (BICC) and the Institute for Advanced Study in the Humanities (KWI) Essen. Its international partners include the centers run by the German Academic Exchange Service (DAAD) in Israel and Japan and the Democracia y Derechos Humanos research institute at the Pontificia Universidad Católica del Perú (PUCP) in Lima. The sociologist Prof. Dr. Hans-Georg Soeffner is the Speaker for the new center.

Centre Ernst Robert Curtius opened

The University of Bonn's Centre Ernst Robert Curtius (CERC), which opened in June 2022, studies European cultures from a German and French perspective. Adopting an inter-faculty approach, it helps to advance projects with a connection to France and serves as a forum for French-German-European dialogue. The center for French studies is named after one of the most famous teachers in the University of Bonn's history: Ernst Robert Curtius (1886–1956). The CERC also draws inspiration from his work for its program, consciously echoing the breadth of Curtius's profile as a literary critic, philologist and cultural scientist. Unlike most of its counterparts elsewhere in Germany, the CERC sees itself as a center for research and focuses on "European cultures from a German and French perspective." Anne-Marie Descôtes, the Ambassador of France to Germany, highlighted three anniversaries that all fell in the year of the CERC's foundation: the Institut Français in Bonn had been established 70 years previously, became affiliated with the University 60 years previously and moved into its premises 50 years previously. She said that opening the CERC marked an important step in the close collaboration between the German and French sides that had been going on at the University of Bonn for many years.



- ◀ CERC speaker Prof. Dr. Michael Bernsen at the inauguration ceremony for the Centre Ernst Robert Curtius

New center for comparative theology

The newly established International Center for Comparative Theology and Social Issues (CTSI) at the University of Bonn is geared toward fostering global dialogue between theologians of different religions as well as connecting them with other disciplines. Officially inaugurated at the start of May, the CTSI is led by the Catholic theologian Prof. Dr. Klaus von Stosch. He was appointed a Schlegel Professor at the University of Excellence last year and is a recognized expert in comparative theology, specializing in Islam. Comparative theologians seek to engage in dialogue with other religions from the perspective of their own faith and use this as a basis for learning more about their own theology. To achieve this aim, the members of the CTSI are keen to expand their international collaboration, most notably with universities from the Islamic world. The Faculty of Catholic Theology already boasts a strong network of contacts in Tunisia, Iran and Turkey. The research being done at the CTSI also centers around questions of ethics and law, peace and conflict research, and a comparative study of the concepts of identity and ambiguity. A

further area of focus is a historical-critical approach to the Near East of late antiquity, which is intended to help improve our understanding of the origins of Islam and its interactions with Judaism and Christianity. There are also plans for a range of initiatives to promote early-career researchers, including an Annemarie Schimmel Fellowship, which will enable researchers who are just starting out in their careers to come and spend time in Bonn. These activities are closely tied to the University of Bonn's Individuals, Institutions and Societies Transdisciplinary Research Area.



- ▲ The new logo of the Center for Comparative Theology and Social Issues (CTSI)

NeurotechEU: rectorates come together in Romania

Back in June 2022, NeurotechEU, the European University of Brain and Technology, sent out invitations to its Board of Rectors meeting at Iuliu Hațieganu University of Medicine and Pharmacy in the Romanian city of Cluj-Napoca. A delegation from the Rectorate of the University of Bonn was in attendance in order to help move the project into its second phase. The idea for a European university came from Emmanuel Macron: back in 2017, he called for the establishment of a network of universities from across Europe. Now, just five years later, there are already some 41 European university alliances that share a vision of international mobility for students, teachers and researchers, excellence in education, and close cooperation in research and teaching. Launched in 2020, the NeurotechEU alliance is comprised of eight university partners in total. For the Rectorate, the meeting marked its first strategic visit since the start of the coronavirus crisis. Rector Prof. Hoch was accompanied by Prof. Dr. Birgit Ulrike Münch, Vice Rector for International Affairs, and Dr. Katharina Fuchs-Bodde, Director of the International Office. The delegation also included Prof. Dr. Christian Henneberger and Dr. Anna Thorwart, scientific director and coordinator respectively of the project back in Bonn, as well as two Student Council representatives. Discussions, lectures and intense work sessions were held on expansion of the alliance to include further European universities, among other things.

High-level visit from St Andrews

The senior leadership team from the University of St Andrews visited Bonn in May 2022 with the aim of consolidating the strategic partnership between the two universities. Prof. Sally Mapstone, who heads the renowned Scottish university as its Principal and Vice-Chancellor, traveled to the city with a top-ranking delegation in order to discuss the strategic development of the two excellent universities and their diverse partnership activities. St Andrews and the University of Bonn have enjoyed a strategic partnership since 2018 and have been “sister universities” since as long ago as 1911. The delegation’s visit to Bonn also saw the bilateral Strategic Board convene for its annual meeting. This has laid the foundations for the next phase of their cooperation, which covers exchanges for students, researchers and administrative staff, among other things.



- ▲ The Scottish delegation from St Andrews and their hosts from Bonn pose for a group photo

Prioritizing Sustainability



Sustainability is extremely important at the University of Bonn. As a University of Excellence, it is doing its bit for sustainable transformation processes. With a dedicated Vice Rectorate, a Sustainability Unit and a Green Office, the issue of sustainability is firmly embedded in University management and plays an important role in all areas of its life — research, teaching and operations.

The BOOST Sustainability Program

In spring 2022, sustainability at the University of Bonn was given a name: BOOST. The new Bonn Program for Sustainable Transformation encapsulates the wide-ranging knowledge, projects and dedication of University members for taking responsibility in how we treat our fellow human beings, our natural world and its resources. With its mission statement, “Working Together for Sustainability,” the University is setting itself sustainability goals and committing itself to sustainable development across the board, to which all its members can contribute. The aim is to gradually reduce environmental pollution and the consumption of resources in the interests of climate neutrality, help to answer urgent questions facing society through top-class research and teaching, and establish a culture of sustainability at the University of Bonn.

The University is pressing ahead with developing a sustainability strategy and is embedding sustainability systematically in everything it does to ensure a present and future worth living in. Various key players are joining forces at the University of Bonn to foster a culture of sustainability: student initiatives such as the “Fairtrade University” group and numerous sustainability working groups and dedicated individuals in central and decentralized areas of the University. Adopting the mantra *Nachhaltigkeit (er)leben* (“experiencing and embracing sustainability”), its members take part in regular campaign months by, for example, making suggestions on integrating sustainability into their day-to-day lives. An ideas inbox allows anyone to make a suggestion to boost sustainability at the University of Bonn, while a funding pot is on hand to support pilot projects that will make its campuses more sustainable.

“Team N” (the Vice Rectorate for Sustainability, the Sustainability Unit and the Green Office) pools the efforts of everyone involved and coordinates the transformation process. This sees it liaise closely with the BOOST working group, which is made up of representatives from all status groups at the University.

University of Bonn joins NRW sustainability network

The University of Bonn helped to set up a new sustainability initiative for the universities in North Rhine-Westphalia in 2022. Christened Humboldtⁿ, it brings together the state’s 16 universities in a bid to drive forward efforts to make sustainability an integral part of their research, teaching, administration and infrastructure. Membership

of the initiative helps to improve networking and communication with the other NRW universities and establish a link to the political sphere. The University of Bonn hosted the first-ever Humboldtⁿ Summer School in September 2022. Entitled “Climate Change—Risks and Adaptation,” it involved doctoral students from across NRW discussing issues such as sustainable land use, food security and energy security. The Humboldtⁿ sustainability initiative is being funded by the Ministry of Culture and Science of NRW.

First Sustainability Day at the University of Bonn

The first-ever University-wide Sustainability Day was held on the Poppelsdorf Campus on May 12. Anyone who was interested had the chance to meet, chat and network with some of the key figures in sustainability at the University of Bonn. Through sporting activities, sustainable food, insights into sustainability research, innovative startups and much more, they were able to experience live and up close the many facets of sustainability and the wide-ranging work being done at the University. The event culminated in a performance of the play “*Wer im Treibhaus sitzt...*” (“People in Greenhouses...”) by the group *Haus der Springmaus*.

Pressing ahead with the strategy development process for sustainability

The University’s strategy development process was advanced further in 2022 in line with its “Working Together for Sustainability” mission statement. Following on from the active efforts of the BOOST working group and the Operations sub-working

► A snapshot from the Sustainability Day 2022



group back in 2021 to set specific targets and devise operational measures, the sub-working groups for the Research and Teaching fields of operation likewise got going in 2022. Work to formulate measures for the overarching fields of operation—Participation and Student Involvement, Communication and Transfer, and Networking—also continued apace. A wide range of activities designed to raise awareness of sustainability issues was also created while the participatory strategy development process was being worked on. These include interdisciplinary lecture series, scythe training at the INRES Institute, upcycling events and helping out together at the RhineCleanUp. Establishing a culture of sustainability will remain a key pillar of the University's strategy development activities.



Honoring the Visionary Rudolph Clausius

When it comes to the finite nature of resources, Rudolph Clausius was several steps ahead of his 19th-century contemporaries. Even now, his discoveries in the field of thermodynamics and entropy remain foundational for physics, chemistry and many other fields. With his rallying cry for sustainability all those 150 years ago, he shone a spotlight on the drastic situation facing the world today. His research in the liminal spaces where physics, chemistry and mathematics meet revealed an understanding of inter- and transdisciplinarity that the University of Bonn, as a University of Excellence, feels even more of a duty to preserve than ever before. With a ceremony to commemorate the 200th anniversary of the birth of its physicist Rudolph Clausius, the University shone the spotlight back on the great visionary. The Institute of Physical and Theoretical Chemistry was renamed the Clausius Institute to mark the occasion. The highlight of the evening came with speeches by Nobel Prize winners Prof. Dr. Jean-Marie Lehn (Chemistry, 1987) and Prof. Dr. Steven Chu (Physics, 1997).





- ▲ The sign outside the newly christened “Clausius Institute” is unveiled at its renaming ceremony. From left to right: Rector Michael Hoch, Dean Walter Witke and Peter Vöhringer

- ◀ Nobel laureates Jean-Marie Lehn (left) and Steven Chu (right) on a panel discussing the significance of the discoveries made by Rudolph Clausius

Getting Active for Sustainability

CampusAckerdemie pilot project launched

Adopting a mantra of “out of the lecture halls... and onto the fields!,” the University is bringing the topic of Education for Sustainable Development (ESD) into teacher education. On the University’s own CampusAcker farm, students are planting, cultivating and making use of up to 30 varieties of vegetables, thus acquiring all the farming skills they need to teach a successful in-school garden-

ing class. The practical sessions are supplemented with workshops exploring teaching methods for ESD. The project ran for the first time in the 2022 summer semester and is to be developed further in the future with the help of all subject didactics and educational science specialists from the Bonn Center for Teacher Education. The project’s partners are the association Acker e.V. and the *Verbraucherzentrale NRW* consumer association (NEiS initiative).

Ideas inbox and funding pot for pilot projects

All members of the University of Bonn are able to make an active contribution to the transformation



process that is making it a more sustainable place to be. Once again, they put forward a wide range of suggestions for doing just that in 2022 via the “ideas inbox.” Many of the suggestions can be implemented straight away or be incorporated directly into the work being done on the sustainability strategy. Several innovative projects secured funding from the funding pot in 2022. Among them is the “Plogging” initiative, which combines collecting trash with jogging and was added to the range of activities offered by University Sports after receiving startup financing from the funding pot. The “ShrinkMyTrash” project, meanwhile, is geared toward improving waste disposal in medicine and is focusing on, among other things, the correct way to dispose of or recondition medical products. Another application for funding is to see bike repair stations set up at various University locations in the course of 2023, thus promoting cycling among University members and the general public. As well as helping to cut carbon emissions, this will also reduce traffic noise and improve overall health.

Service learning seminar: “Climate Change – Learning for Future”

Service learning involves students tackling real-life societal challenges together with local practitioners or even key players from the University itself (the “whole-institution approach”). In the “Climate Change—Learning for Future” interdisciplinary seminar series, students from the University of

Bonn are re-envisioning what “university” means: in a first step, they devised suggestions as to what students of all subjects should learn in order to be able to tackle the complex challenges posed by the climate crisis. Launched in summer 2022, the project is geared toward strengthening university teaching in close alignment with Education for Sustainable Development (ESD) and is being run in partnership with *Wissenschaftsladen Bonn e.V.* Its list of recommendations and other educational materials are available for the general public to use and will be trialed in actual teaching for the first time in the 2023/24 winter semester. The project is being funded by the *Stiftung Umwelt und Entwicklung NRW*, an environmental and development foundation for North Rhine-Westphalia.

First sustainability reader published

The Green Office has created a sustainability reader that offers all University members the opportunity to obtain compact and clear information on sustainable development at the University of Bonn. It bundles basic information on sustainability in teaching, research and operations and presents which measures and projects are already being implemented or planned. In addition, central groups of actors and contact persons are named. The reader is intended to encourage people to become active themselves, to lend a hand on site, to take the initiative or to get involved in one of the numerous existing initiatives.

- ◀ Rector Michael Hoch and Vice Rectors Annette Scheersoi (second from left) and Birgit Ulrike Münch (right) at the Koenig Museum’s stand during Bonn Science Night

Sustainable goody bags for first-semester students

The start of the 2022/23 winter semester saw a first at the University of Bonn: sustainable goody bags for new students. Instead of a pile of useless things that will soon end up in the garbage can, they were given information about sustainability at the University as well as a spatula, a notebook with a wooden pen, a small treat made from fair-trade chocolate and some seeds to grow local flowers. All of these came packaged in a fabric bag that the students could use to keep fruit and vegetables in at home or take shopping with them to avoid having to buy any plastic containers. The goody bags for first-semester students were provided by the *Verbraucherzentrale NRW* consumer association—the University's partner in the *Nachhaltige Ernährung im Studienalltag* ("sustainable everyday eating for students") initiative—as well as various student initiatives and Team N.

University retains "Fairtrade University" status

At the end of 2022, Fairtrade Germany recertified the University of Bonn as a "Fairtrade University" for a further two years, a status it was first granted in November 2020. Work to retain the award, which is presented by *TransFair e.V.* (Fairtrade Germany), was carried out over the past two years. Both the impetus for submitting the initial application two years ago and the work done to promote and develop fair trade came primarily from students at the University, who put their

heart and soul into their efforts. As well as getting more fair-trade food into the *Studierendenwerk* canteens, the students also wanted University Sports to commit to only buying and using fair-trade balls in the future. This it has since done, meaning that "fair play" is now ensured in both senses of the word.

Science Night devoted to sustainability

nach(haltig)geforscht ("Sustainability Investigated") was the title given to the 13th Bonn Science Night, which was held in the city center in May 2022. Some key players from the region, including the University of Bonn, other universities, research institutions and scientific establishments, demonstrated just how diverse sustainability research can be. As a University of Excellence, the University of Bonn boasts a strong setup in many areas of sustainability research. This includes PhenRob, Germany's only Cluster of Excellence in the agricultural sciences, the Collaborative Research Centers 1502 "DETECT" and Transregio 228 "Future Rural Africa," and the Center for Development Research. Meanwhile, the University's Sustainable Futures Transdisciplinary Research Area connects and supports researchers so that they can work together on institutional innovations for sustainability that are driven by science and technology.

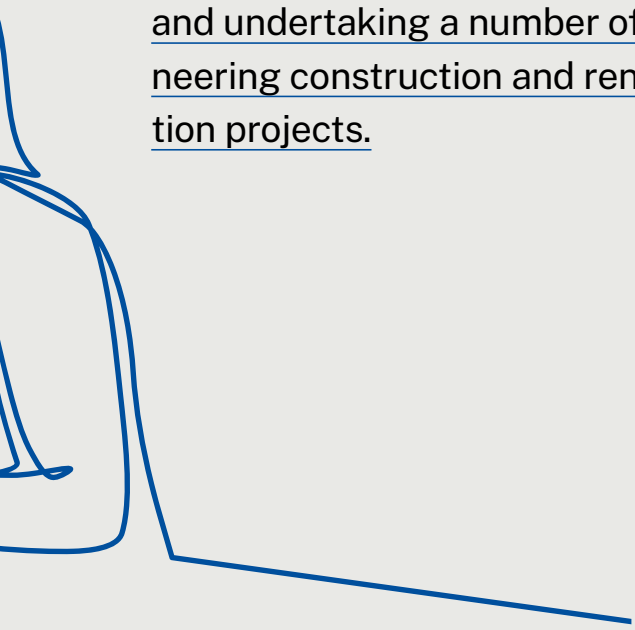


- Breathtaking science on show at the 13th Bonn Science Night



Administration





The central administration ensures a firm foundation for the University of Bonn's outstanding development. It had several priorities for 2022: continuing the development of the "service concept 2.0," putting an Energy Strategy successfully in place, and undertaking a number of pioneering construction and renovation projects.

Key positions and changes to the organizational structure

Dr. Holger Impekoven, former Director of Research and Innovation Services, assumed the role of Vice Provost in February 2022. A University of Bonn alumnus with a doctorate in history, Dr. Impekoven brings many years' experience in management at the University, having already held various managerial roles in its administration. He started out as head of an administrative section before going on to become Deputy Director of the International Office and finally Director of Research and Innovation Services. He has played a key role in supporting and helping to shape the University of Bonn's Excellence Strategy.

Miriam Dierker was appointed as the new Director of Division 3—Human Resources with effect from March 1, 2022. She too has considerable experience in academic management and a long association with the University of Bonn, where she studied anthropology of the Americas, Geography and Spanish. Miriam Dierker then went on to work for the Humboldt Foundation as a funding awards assessor, before returning to her alma mater in 2012 as a research coordinator for foundations and the humanities. Within Research and Innovation Services, her responsibilities initially included supporting the needs of the Humboldt Professorships and coordinating the projects launched by the University administration as part of the Excellence Initiative. She was tasked with setting up the new Appointments and Onboarding section in October 2018 and has headed it ever since.

Another vacancy filled in 2022 was that of Director of Division 7—Research and Innovation Services, with the new incumbent set to start in 2023. Until then, the division will be led by Dr. Ulrike Pag and Mirco Theiner on an interim basis.

The Student Registry will in future come under Division 9—Teaching and Academic Planning, where the student center is currently being developed. This means the following changes with effect from January 1, 2023: Division 9, led by Dr. Wibke Petras, will be renamed “Division 9—Studying, Teaching, Academic Planning” and will consist of three sections and one unit. These will be Section 9.1—Academic Planning and Capacity Matters, Section 9.2—Central Study Advisory, Counseling and Career Services, Section 9.3—Student Registry, and the Teaching and Learning Quality Management Unit.

The “service concept 2.0”

As part of our efforts to implement the “Proactive Administration” measure from our Excellence Strategy, we have devised the “service concept 2.0,” which is being rolled out to all divisions in the central administration via strategy days and strategy workshops. Our main aim is to provide our researchers and teachers with the best possible support in line with their needs and to relieve the administrative burden on them, and the service concept will play a major part in this by establishing and expanding the support that we offer on four service levels. A new “service portal” is currently being set up that will replace our current intranet as early as the end of 2023. It will facilitate online self-support that will be accessible round the clock as well as being easy and convenient to use and—needless to say—available in German and English. A front- and back-end support structure is also being created in every division so that

all inquiries and orders are fielded centrally and either processed from there or passed on to the administrators responsible. Complex issues that affect multiple divisions will be handled by specialists working in agile, matrix-based teams. This is all part of our efforts to keep on optimizing our administrative services, as is the satisfaction survey that we conducted in late 2022 and that has given us some invaluable feedback from a whole host of researchers and staff working in the decentralized administration teams. Their responses are being used to identify action areas in which we will be implementing tangible measures promptly to ensure that the effects of our improvements are already clear across the board when the satisfaction survey is next run—and a repeat evaluation can be carried out.

Visits from ministries

Dr. Dirk Günnewig, new State Secretary in the Ministry of Finance of the state of North Rhine-Westphalia, visited the University of Bonn on February 1, 2022. Following a brief introduction to the University, the State Secretary held strategic discussions with the Rectorate that focused on the issues of sustainability and the future. Their in-depth conversations were expanded on with presentations by the Innovation and Technology for Sustainable Futures Transdisciplinary Research Area and the Bonn Alliance for Sustainability Research. Students also took part in the event, showcasing a range of projects relating to sustainability at the University. The State Secretary and Rectorate then visited the site of the former children’s hospital, which is set to play a key role in the University’s continued development in the future as its “innovation campus” focusing on sustainability, security and global change.

Ina Brandes, the new Minister for Culture and Science of the state of North Rhine-Westphalia, honored the University of Bonn with her presence on August 9, 2022, not long after she had taken office. In fact, the University of Bonn was the first higher-education institution that the minister had visited in her new role. Her meetings with the Rectorate and researchers centered around progress made on the Excellence Strategy and insights into excellent research, teaching and transfer to society as well as the innovative Transdisciplinary

Research Areas at the University of Bonn. Minister Brandes had this to say at the end of her visit: “As Germany’s most successful university in the Excellence Strategy, the University of Bonn is a leading light in top-level research—both within North Rhine-Westphalia and much further afield. It is home to some exceptional researchers working on the big questions of our time, such as the energy crisis, COVID-19 and the state of global nutrition. Its findings are groundbreaking.”

▼ Minister Ina Brandes visiting the
University of Bonn



Successful launch for the energy strategy

Energy was a key topic of public debate in 2022 (and very much still is). The war in Ukraine has revealed dependencies whose consequences are posing major challenges to society. The University of Bonn is tackling these challenges with a University-wide energy strategy, not least as it firmly believes that energy will remain a central issue in society—not only during the winter of 2022/23 but for years to come—and that it will retain a significant influence on the University's operations, including as part of its Sustainability Strategy. With its energy strategy, the University management is aiming to maintain its teaching, learning, research, technology and administration operations while also minimizing its energy consumption in compliance with the legal requirements and encouraging all its members to get involved. It is targeting a 20 percent cut in the multi-year average from the previous year.

Numerous measures have been implemented in order to achieve this. For instance, the tried-and-tested Research, Teaching and Operations task forces from the days of the pandemic were successfully repurposed as strategy teams for energy issues. An extensive energy monitoring audit identified the 40 University buildings that are responsible for 80 percent of its energy consumption, and suitable action was taken to reduce this in consultation with the people in charge of them. They include the University Main Building and the Bonn University and State Library (USL) as well as research buildings with extensive ventilation and air conditioning systems, large equipment and cryogenic freezers. All members of the University were encouraged to save on heating costs and

fuel by lowering room temperatures to 19 degrees Celsius with the aid of several thousand thermometers that were purchased and given out.

Potential for savings was also leveraged by extending the Christmas and New Year closure to two weeks, restricting operating hours to ten hours a day and five days a week, and lowering the night-time temperature settings on the heating systems. Even as early as the start of the year, it was becoming clear that the measures taken were having the desired results. A conclusive assessment will be able to be made at the end of the heating season.

A word of thanks from University management for support received during the pandemic and energy crisis

The past few months—indeed, the past few years now—have been an unprecedented challenge for all of us. Hot on the heels of the COVID-19 pandemic, which presented a great many difficulties for us and required us to keep on adapting quickly to changing circumstances, came the Russian invasion of Ukraine. This has raised tensions across Europe and the whole world, the impact of which we are feeling every single day.

The Rectorate would like to take this opportunity to thank you very much for all your hard work, dedication and flexibility during these times. All of you have done some fantastic crisis management while working seamlessly as a team. Through our joint efforts, we have ensured that the students and researchers who call our University home have been able to keep on learning, researching and teaching successfully even during challenging times.

During the COVID-19 pandemic, the Occupational Safety and Environmental Protection Unit led by Dr. Timo Röver took charge of crisis management and convened almost weekly task force meetings,

published circulars, provided University members with masks and tests, and coordinated testing facilities and vaccination drives for staff and students. Thank you to the whole task force team for your remarkable work!

For the past few months, Technical Services (Section 4.3) under Ferdinand Frechen has been responsible for energy management at the University and has been helping its members in all departments and institutes answer their questions about the energy saving measures. The monthly energy reports produced by the section already make it clear that the activities being undertaken by the institutes, departments and units have proven highly successful, as has cooperation with the staff involved from the administration side on technical and organizational matters. All in all, i.e. taking all energy sources (district heating, electricity, gas) into consideration, the 20 percent target appears to be achievable, with the very good reduction in district heating use offsetting the more modest electricity savings. If all members of the University continue to lend their wholehearted support to the processes, these good results will be maintained over the long term.

Thank you very much to Section 4.3 and to all members of the University for your support!

Properties

Premises that are of good quality and suit their requirements are vital for successful research and teaching at a university. Since construction and renovation projects are long-term in nature, far-sighted strategic planning is key, and the University liaises closely with its contacts at city and state level in this regard.

“Working together for our Palace”: temporary space in the city center

The University of Bonn’s baroque Main Building will undergo extensive renovation for at least 10 years from 2024 onward, requiring it to be vacated completely. The work will have a direct impact on several thousand students and hundreds of staff, who will need to be relocated. This move will also bring major changes to downtown Bonn. Whilst the “whether” part of the question had already been answered, the year 2022 was all about tackling the “how.”

All its bodies, from the Rectorate to the General Students’ Committee, have argued vehemently in favor of the University retaining its central location in their exchanges with the City of Bonn and the North Rhine-Westphalia state construction and real estate agency (*Bau- und Liegenschaftsbetrieb NRW*, or *BLB NRW*). To this end, temporary buildings equipped with lecture halls and communication spaces and situated as centrally as possible—ideally around the Hofgarten in Bonn—are to keep University life in a city-center location for the duration of the construction work. Among other things, this is designed to maintain student life in the city center as it is and thus help to preserve the green heart of Bonn as a safe place worth living in. The members of the Senate and University Council of the University of Bonn have voiced their

broad support for the plans in a joint resolution, and some locals have also expressed their solidarity with the University.

Two sites in Poppelsdorfer Allee and Rabinstraße have been leased as temporary accommodation for the humanities faculties and most of the administrative teams, which used to be housed in the University Main Building. However, these buildings—which were formerly owned by an insurance company—do not have any lecture halls and do not provide enough seminar rooms for teaching. Although the requirements were narrowed down and a package of possible elements put together for solving the space problem over the course of the year, a conclusive deal has not (yet) been sealed. Agreements over the future of teaching in central Bonn are now expected to be reached at some point in 2023.

Construction begins on new laboratory and seminar building

At the turn of the year, *Bau- und Liegenschaftsbetrieb NRW (BLB NRW)* started work on construction of a new “Rotation Building” in the southwestern corner of the Poppelsdorf Campus, which is to serve as temporary accommodation for various departmental buildings at the University of Bonn that are in need of renovation. To this end, the Rotation Building will be equipped with laboratories as well as meeting rooms, workspaces and offices for several hundred members of the University. These alternative premises are needed so that the existing departmental buildings can be freed up for their upcoming renovation. The final building will have some 8,300 square meters of usable space spread across four floors plus a fully usable basement and a plant room in a recess on the roof. As well as being accessible as a sheltered outdoor area, the rebuilt inner courtyard will be level with the basement and will flood it with natural light.





- ▲ This is what the new “Rotation Building” in the southwest corner of the Poppelsdorf Campus is set to look like



- ▲ Shell of the “Rotation Building” — the new temporary accommodation on the Poppelsdorf Campus is shooting up rapidly

New Pharmaceutical Institute building on the Endenich Campus

The competition to find a contractor for the new Pharmaceutical Institute building on the Endenich Campus came to a successful conclusion in April. The North Rhine-Westphalia state construction and real estate agency (*Bau- und Liegenschaftsbetrieb NRW*) signed a contract with the winning bidder, K9 Architekten. A 14-strong panel assessed a total of 13 designs from some high-profile architecture firms and made a clear recommendation to the client to go with the design that they had ranked in first place. Among other things, the panel praised its nuanced interpretation from an urban planning perspective and its strong sense of a campus community. The design makes it clear how the building will integrate seamlessly into the site's topography in the future. The bar-shaped

newbuild will open out onto the boulevard on three floors and to the existing building on four and will be accessible on two levels. The design links the building to the open spaces around it in an extremely successful way, thus creating a space where people will want to come and spend time. The new building will span some 15,000 square meters and will house laboratories, practical training rooms, offices, lecture halls, seminar rooms and a cafeteria for around 400 students and 130 staff.

Athena and Zeus find temporary lodgings in Römerstraße

The complete refurbishment of the University of Bonn's Academic Museum of Art has forced its collection of antiquities to relocate to Römerstraße 164 for the time being. After 140 years, the new temporary home of the gods from Athena to Zeus



will stand in for the building in the Hofgarten, which was designed by Karl Friedrich Schinkel and constructed in 1824, until the latter emerges resplendent in its new look. Until then, the museum and the Classical Archaeology section together with its library, archives, offices and restoration workshop—including some 2,700 plaster casts and over 25,000 original ancient artifacts—will need to move elsewhere. During the renovation work, the building at Römerstraße 164 will display the original collection—complete with clay vessels, terracotta pieces, artworks made from stone, metal and organic materials, and part of the coin collection—in a space covering some 450 square meters. It will be joined by around 50 plaster casts of ancient sculptures. A small yet informative selection from the collection of plaster casts has also been moved to the temporary accommodation.



- ◀ Artist's impression of the boulevard running alongside the new building being constructed for the Pharmaceutical Institute on the University of Bonn's Endenich Campus
- ◀ Originals and plaster casts from the collection of antiquities in their new home at Römerstraße 164

Facts, Figures and Data



36,994

Students including enrolled doctoral students

782,518

Thousands of euros in its provisional budget
(University budget plus Faculty of Medicine third-party funding)

7,596

Employees in total
(including third-party- and state-funded)**

Number of academic disciplines with various degrees

in the bachelor's segment	124
in the master's segment	102
State Examination degree programs	5
Degree programs culminating in a Church Degree	2
Magister degree programs (degree: Magister Theologiae)	2

Collaborative projects

Clusters of Excellence	6
Collaborative Research Centers	12
Research Groups	10
DFG-funded Research Training Groups	5
BMBF collaborative research projects	12
ERC projects	25

Key figures 2022

Students excluding enrolled doctoral students
Enrolled doctoral students
Students including enrolled doctoral students
of which international (excl. enrolled doctoral students)
of which international (incl. enrolled doctoral students)
Doctoral students*
of which international
Graduates
Doctorates
Habilitations

* Final data as per the official statistics on
doctoral students as of December 1, 2022

Finance volume in thousands of euros

Budget 2022

Final budget (University budget plus Faculty of Medicine third-party funding)

€782,518 thousand

of which final third-party funding (University budget and Faculty of Medicine)

€194,719 thousand

	Total	Male	Female	Other/not stated
	33,192	14,200	18,944	48
	3,802	1,880	1,921	1
	36,994	16,080	20,865	49
	4,480	1,936	2,544	0
	5,687	2,535	3,152	0
	6,468	2,962	3,506	0
	1,683	806	877	0
	4,825	1,978	2,847	0
	668	357	311	0
	33	21	12	0

Staffing

Staff (including third-party- and state-funded)**

Professors (incl. Faculty of Medicine)

Academic staff (incl. Faculty of Medicine)

Administrative and technical staff***

Apprentices and interns***

Full-time equivalents**

Professors (incl. Faculty of Medicine)

Academic staff (incl. Faculty of Medicine)

Administrative and technical staff***

Apprentices and interns***

FTEs, University professors

FTEs, University Hospital Bonn professors

FTEs, University academic staff

FTEs, University Hospital Bonn academic staff

** As of December 1, 2022; staffing data determined based on the Research Core Dataset (Kerndatensatz Forschung, KDSF)

*** Excluding Faculty of Medicine and University Hospital Bonn

Total	Male	Female	Other/not stated
7,596	3,844	3,751	1
658	483	175	-
4,948	2,557	2,390	1
1,921	760	1,161	-
69	44	25	-

Total	Male	Female	Other/not stated
6,147.51	3,281.50	2,865.51	0.50
608.54	445.99	162.55	-
3,826.66	2,067.59	1,758.57	0.50
1,646.06	724.92	921.14	-
66.25	43.00	23.25	-

465.67	338.00	127.67	0.00
142.87	107.99	34.88	0.00
2091.52	1242.38	848.64	0.50
1735.14	825.21	909.93	0.00

Masthead and image credits



Masthead

Rheinische Friedrich-Wilhelms-Universität Bonn
Regina-Pacis-Weg 3, 53113 Bonn, Germany
www.uni-bonn.de/en

Editorial staff:

Division 8—University Communications

Design:

kreativrudel GmbH & Co. KG
Adenauerallee 108, 53113 Bonn, Germany
www.kreativrudel.de

Printing:

University of Bonn Printing Service
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