Masthead

Publisher:
University of Bonn
Regina-Pacis-Weg 3
53113 Bonn

Editorial staff:
Prof. Dr. Andreas Archut (responsible), Katja Dynewski-Zeimet,
Jonas Fehres, Jasmin Leuchtenberg, Dr. Anke Peters, Sabine
Schäper, Gregor Hübl, Tanja Kühn-Söndgen

Design:
Bosse und Meinhard, Wissen und Kommunikation, Bonn

Photo credits:
Valker Lannert: Title; 8, 13, 14, 16, 17, 20, 21, 28,
29, 32/33, 36, 38, 39, 40/41, 51(2), 53, 57(2), 61,
62, 64, 65, 67
Hofmann Juergen: xx
Gregor Hübl: 8, 43, 44, 58, 64
Barbara Frommann: 10, 12, 22(2), 26, 33, 37
University of Bonn: 18, 32
Marc Thürbach: 19
Patrick Racca, Arithmeum: 19
Sven Düoring: 20
Mariele Evers: 21
AIS, University of Bonn: 22/23, 34
KWI: 23
Peter Sondermann: 24
piranka/istock: 25
Bernadett Yehdou: 27, 30, 37, 58
enacom Uni Bonn: 33
Sandra Schürger: 34

Youtube Chanel NUK: 35
Meike Böschmeyer: 39
Oestergaard_Daimler and Benz Foundation: 39
Meinhard/Bosse und Meinhard: 42, 50, 56
Sergey Novikov/colourbox: 43
ZEF/University of Bonn: 45
magnacharta.org: 47
LordRunar: 48
International Office/University of Bonn: 49
International Choir/University of Bonn: 49
colourbox: 52, 62
Kzenon/colourbox: 54
Alena Ozerova: 55
Perig Morisse: 60
INTRODUCTION BY THE RECTOR 6

THE UNIVERSITY 8
2021 saw the Rectorate launch its new term of office on a foundation of gender parity 9
Michael Hoch named “Rector of the year” again 10
Re-election of Provost Holger Gottschalk, key positions filled 11
United against COVID-19 12
Help for the victims of the Rhineland flood 13
Networked collaboration project for the development of a common University digital strategy 14
Keynote speech from Max-Planck President Martin Stratmann 15
University Development Plan 2021–2026 15

RESEARCH 16
EXCELLENCE STRATEGY 17
“WE invest in people”: Appointments to High Profile Professorships 17
The University of Bonn Scientific Advisory Board measured progress in the Excellence Strategy 18
INDIVIDUAL CONTRIBUTIONS AND AWARDS 19
Prof. Dr. Maritz Schulanick awarded a Leibniz prize 19
The NRW Innovation Prize awarded to Prof. Dr. Bernhard Korte in recognition of his life’s work 19
Ulf-G. Meißner awarded an ERC Advanced Grant 20
ERC Proof of Concept Grant and Patent Prize 20
A new UNESCO chair 21
THIRD-PARTY FUNDED PROJECTS 22
New Collaborative Research Centers at the University of Bonn 22
BMBF funding for a Franco-German robotics project 22
Academic communication as a subject of research 23

ARTIFICIAL INTELLIGENCE 24
A clearer view of space with AI 24
How is AI changing academia? 24
Certification project 25
Transdisciplinary university training in AI 25
EARLY-CAREER RESEARCHERS 26
Early career prize and funding for the developmental biologist Elvira Mass 26
A new Emmy Noether research group 26
Admission to the Heisenberg Program 26
Human Resource Development: Postdoc Day 2021 27
Santander International Exchange Grants 28
One Hour—One Job—One Perspective 28
Falling Walls Lab Rhineland 29
Doctorate plus 29
ORGANIZATION 30
Establishment of the Animal Welfare Unit 30
TRANSFER 31
“WE create impact”: enaCom extends its provision in the area of academic transfer 31
Innovation scouting 31
New location for enaCom and DigitalHub 32
Start-up Summer School 32
The first Ideas Competition 33
A project for the development of medical software 33
Launch of the Robots in Everyday Life transfer center 34
Campus Transfer Management GmbH 35
Two start-up teams win the NUK Business plan competition 35

TEACHING AND LEARNING 36
Studying during challenging times 37
Online self-assessments 37
Graduation on the move 38
Virtual collaboration project 38
Future-oriented teaching: vielfältig.nachhaltig.digical from the Strategic Fund 39

DEF/Parcours for new members of the teaching staff 39
The “Curriculum 4.0.nrw” and “digifellows” grant programs 39
New digital services 40
Teaching Prize 2021 40
INTERNATIONAL AFFAIRS 42
International Day 2021 43
Presentation of Horizon Europe and the EU Project Office 43
Meeting of the Bonn University Ambassadors 44
Establishment of a multilateral global network 44
Two new global centers in Africa 45
Appointment of distinguished professors emeriti 46
Conclusion of the first strategic university partnership in Africa 46
Franco-German sustainability dialog 2.0 46
DAAD visiting professors for the internationalization of universities 47
The University of Bonn signs the Magna Charta Universitatum 47
New partner for the European University of Brain and Technology (Neurotech+) 48
University of Bonn awarded the Erasmus Charter for Higher Education 48
The first digital trade fairs for international students 49
The International Choir celebrates its ten year anniversary 49
EQUAL OPPORTUNITY AND DIVERSITY 50
A new Vice Rectorate for Equal Opportunity and Diversity and the Equal Opportunity and Diversity Unit 51
A University-wide project for increased diversity 51
Funding for over 30 excellent researchers 52
New Gender Equality Plan 52
New measures and programs 53
Permanent certification as a family-friendly university 54
Exchange forum for University members with care responsibilities 54
Students with children network 55
SUSTAINABILITY 56
A new Vice Rectorate for Sustainability and the Sustainability Unit 57
Launch of the University of Bonn “Green Office” 57
Promulgation of the University of Bonn sustainability mission statement 58
The first sustainability action month 58
University of Bonn joins a sustainability network 59
Collaboration with the NRW Consumers’ Center 59
An ambitious vision for sustainable construction 59
ADMINISTRATION 60
Proactive administration: focusing on the needs of researchers 61
The NRW University Agreement 2026 62
A University-wide employee survey 62
The digitalization of administrative processes 63
Introducing the new e-invoice service 63
The University of Bonn Foundation (Universitätsgesellschaft Bonn) passes on the baton to the next generation 64
CONSTRUCTION PROJECTS 64
Replacement chemistry building 64
New facilities for the detector physics unit 65
Research buildings AVZ I and II 66
Restoration of the Lennehaus 66
Relocating the Academic Museum of Art 66
KEY FIGURES 68
INTRODUCTION BY THE RECTOR

It was on October 4 of last year that the University of Bonn greeted over 1,000 first-year students from all over the world together with a further 1,000 spectators via livestream, at the first semester welcome event held in the main auditorium and the Arkadenhof courtyard of the University Main Building. A little under two weeks later on October 18, we were able to celebrate the annual opening of the academic year in traditional fashion for the first time since its pandemic-induced suspension. We were pleased to be able to welcome several hundred guests to the University Main Building, which has served as the heart of our University for the last 200 years and which is set to remain so in the future. In a keynote speech, Martin Stratmann, President of the Max Planck Society (MPG) focused on the truly ideal cooperation between the University and the various institutes of the MPG. At both events, the participants’ pleasure at returning to normal social interaction was tangible, and the privilege of providing the framework for this encounter was one of the highlights of the reporting year. Despite such high points, the past year still presented us with considerable challenges, dominated as it was, by the need to respond to the exigencies of the continuing pandemic.

Many months of the teaching conducted in 2021 was performed in digital or hybrid form. That we were able to realize this rapid changeover was due in no small measure to the close and trusting cooperation between all University bodies. As such, I should like to take this opportunity to extend my thanks to all those involved. We all—students, researchers, teachers and support staff alike—have learned much and grown in experience during this volatile situation, above all regarding the strengths and weaknesses of remote teaching and the best approach to providing it. To further the response, the University also defended its fourth place on the best-performing of German universities in terms of gender equality.

Although international academic mobility remained subject to pandemic restrictions, we continued to extend our international networks under the aegis of our guiding principle “WE foster networks.” One of our many successes in this area included the acquisition of the University of Ghana as a new strategic partner.

The new Vice Rectorate for Sustainability and its staff have worked hard on a number of fronts to advance the cause of sustainability, implementing strategies towards its integration in all areas of University operations. A number of sustainability action months generated a great deal of positive feedback; the integration of the University in international sustainability networks was advanced by accession to “DG HochN” and “ISCN.”

Rheinische Friedrich-Wilhelms-Universität Bonn

INTRODUCTION BY THE RECTOR

Argelander Excellence chairs reflects the first of our three guiding principles “WE invest in people.” These new staff members will make a valuable contribution to strengthening our faculties—themselves currently experiencing a period of dynamic development—and our TRAs, which have continued their pioneering work as spaces of cross-faculty, interdisciplinary innovation and exploration.

The principles of equal opportunity and diversity underpin all University operations, and this consideration was recognized by the establishment of a new Vice Rectorate for Equal Opportunity and Diversity and the supporting Equal Opportunity and Diversity Unit to champion further progress in this area. One sign of this progress made since 2018 was the increase recorded in the proportion of women professors employed at the University, which rose from 19 to 23.4 percent. During 2020 and 2021, 44 percent of all professorial appointments were awarded to women applicants. Indeed, the CEWS University Ranking 2021 placed the University of Bonn amongst the best-performing German universities in terms of gender parity.

A further success was registered in the area of digitalizing research, teaching and university operations, all supervised by the Digital Science Center (DiCe). Exciting progress was also made in knowledge transfer; our enaCom transfer center was able to improve the networking of academia with industry and wider society. True to our third guiding principle “WE create impact,” the University took steps to ensure that our research findings are translated into tangible benefits for society.

Not content to rest on our laurels, we view the successes of the past year outlined in this publication as the basis of and inspiration for continued advances and we are committed to maintaining the University of Bonn at the forefront of international academic endeavor. We are confident that we have established the ideal concept as a foundation for success: “WE invest in people. WE foster networks. WE create impact.” As such, I look to the future with assurance and resolve. I am convinced that we will succeed in further enhancing Bonn as a University of Excellence and a global academic player.

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

The publication of the current Annual Report of the Rectorate of the University of Bonn is a further milestone in our commitment to transparency. It was on October 4 of last year that the University of Bonn greeted over 1,000 first-year students from all over the world together with a further 1,000 spectators via livestream, at the first semester welcome event held in the main auditorium and the Arkadenhof courtyard of the University Main Building. A little under two weeks later on October 18, we were able to celebrate the annual opening of the academic year in traditional fashion for the first time since its pandemic-induced suspension. We were pleased to be able to welcome several hundred guests to the University Main Building, which has served as the heart of our University for the last 200 years and which is set to remain so in the future. In a keynote speech, Martin Stratmann, President of the Max Planck Society (MPG) focused on the truly ideal cooperation between the University and the various institutes of the MPG. At both events, the participants’ pleasure at returning to normal social interaction was tangible, and the privilege of providing the framework for this encounter was one of the highlights of the reporting year. Despite such high points, the past year still presented us with considerable challenges, dominated as it was, by the need to respond to the exigencies of the continuing pandemic.

Many months of the teaching conducted in 2021 was performed in digital or hybrid form. That we were able to realize this rapid changeover was due in no small measure to the close and trusting cooperation between all University bodies. As such, I should like to take this opportunity to extend my thanks to all those involved. We all—students, researchers, teachers and support staff alike—have learned much and grown in experience during this volatile situation, above all regarding the strengths and weaknesses of remote teaching and the best approach to providing it. To further the response, the University also defended its fourth place on the best-performing of German universities in terms of gender equality.

Although international academic mobility remained subject to pandemic restrictions, we continued to extend our international networks under the aegis of our guiding principle “WE foster networks.” One of our many successes in this area included the acquisition of the University of Ghana as a new strategic partner.

The new Vice Rectorate for Sustainability and its staff have worked hard on a number of fronts to advance the cause of sustainability, implementing strategies towards its integration in all areas of University operations. A number of sustainability action months generated a great deal of positive feedback; the integration of the University in international sustainability networks was advanced by accession to “DG HochN” and “ISCN.”

Rheinische Friedrich-Wilhelms-Universität Bonn

INTRODUCTION BY THE RECTOR

Argelander Excellence chairs reflects the first of our three guiding principles “WE invest in people.” These new staff members will make a valuable contribution to strengthening our faculties—themselves currently experiencing a period of dynamic development—and our TRAs, which have continued their pioneering work as spaces of cross-faculty, interdisciplinary innovation and exploration.

The principles of equal opportunity and diversity underpin all University operations, and this consideration was recognized by the establishment of a new Vice Rectorate for Equal Opportunity and Diversity and the supporting Equal Opportunity and Diversity Unit to champion further progress in this area. One sign of this progress made since 2018 was the increase recorded in the proportion of women professors employed at the University, which rose from 19 to 23.4 percent. During 2020 and 2021, 44 percent of all professorial appointments were awarded to women applicants. Indeed, the CEWS University Ranking 2021 placed the University of Bonn amongst the best-performing German universities in terms of gender parity.

A further success was registered in the area of digitalizing research, teaching and university operations, all supervised by the Digital Science Center (DiCe). Exciting progress was also made in knowledge transfer; our enaCom transfer center was able to improve the networking of academia with industry and wider society. True to our third guiding principle “WE create impact,” the University took steps to ensure that our research findings are translated into tangible benefits for society.

Not content to rest on our laurels, we view the successes of the past year outlined in this publication as the basis of and inspiration for continued advances and we are committed to maintaining the University of Bonn at the forefront of international academic endeavor. We are confident that we have established the ideal concept as a foundation for success: “WE invest in people. WE foster networks. WE create impact.” As such, I look to the future with assurance and resolve. I am convinced that we will succeed in further enhancing Bonn as a University of Excellence and a global academic player.

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

2021 saw the Rectorate launch its new term of office on a foundation of gender parity

Although the Rector’s first term of office ended after six eventful years in early 2021, the University of Bonn is set to enjoy continuity of leadership. Called upon by the Senate and University Council to run for a fresh term of office, Prof. Dr. Dr. h.c. Michael Hoch was re-elected by the University Electoral Assembly in the fall of 2020. Starting his new term of office in May 2021, the new and old Rector set himself ambitious goals, to be realized with a newly constituted Rectorate. March 2021 saw the University Electoral Assembly elect six Vice Rectors—four women and two men.

The exigencies of the pandemic meant that these decisions of the University Electoral Assembly—made up of the members of the Senate and University Council—were reached following an online meeting and by making use of postal voting. The Rectorate has been expanded by the addition of two further areas of responsibility, which necessitated a reorganization of its administrative structure. The election saw the University of Bonn Rectorate establish gender parity in its senior management team for the first time, becoming only the second German University of Excellence to have an equal number of men and women on its governing board.

The election returned the following results:

- Vice Rector for Digitalization and Information Management: Prof. Dr. Maren Bennewitz, Professor of Humanoid Robotics, Institute for Computer Science
- Vice Rector for Equal Opportunity and Diversity: Prof. Dr. Irmgard Förster, Professor of Immunology and Environment, Life and Medical Sciences (LIMES) Institute
- Vice Rector for International Affairs: Prof. Dr. Birgit Münch, Professor of Art History, Department of Art History
- Vice Rector for Teaching, Learning and University Development: Prof. Dr. Klaus Sandmann, Professor of Financial Market Economics, Institute of Finance and Statistics
- Vice Rector for Sustainability: Prof. Dr. Annette Scheersoi, Professor of Biology Didactics, Nees Institute for Biodiversity of Plants
- Vice Rector for Research and Early-Career Researchers: Prof. Dr. Andreas Zimmer, Professor of Molecular Psychiatry, Institute of Molecular Psychiatry

All the Vice Rectors perform their role in addition to their academic duties; together with the Rector and the Provost Holger Gottschalk, they work jointly to form the Rectorate. Rector Michael Hoch and the Vice Rectors Maren Bennewitz, Klaus Sandmann and Andreas Zimmer began their second terms of office in May.
Michael Hoch named “Rector of the year” again

Rector Prof. Dr. h. c. Michael Hoch was named “Rector/President of the Year” by the German Association of University Professors and Lecturers (DHV) for the second time last year in recognition of his exemplary performance in office. Selected through an online survey of the 33,000 members of the DHV, Professor Hoch was awarded the highest grade of 1.51, which exceeded the 1.55 awarded to him by Bonn-based DHV members the previous year. More than two-thirds of those surveyed saw him as the “ideal person” to fill his office. Prof. Hoch intends to donate the €10,000 prize money to a project to be carried out jointly with students.

Re-election of Provost Holger Gottschalk, key positions filled

Last November saw the University Electoral Assembly return Provost Holger Gottschalk for a further six-year term of office, beginning on January 1, 2023. Holger Gottschalk has been in post since 2017 and was invited to run again by the University Council and Senate in the summer. The Provost will start his second term with fresh blood in his management team—four vacant positions with responsibilities in key areas were filled in 2021/2022. Good administration needs a good management team!

Kristina Friske, for many years the Deputy Provost at the University of Bonn, departed her role at the end of 2021 to take up her well-earned retirement. She was succeeded in February 2022 by the previous Director of Research and Innovation Services, Dr. Holger Impelkoven. A University of Bonn alumnus with a D.Phil in history, Dr. Impelkoven brings extensive experience of the University’s administration to his new post. Having started as a head of an administrative section, he rose to become Deputy Director of the International Office before assuming his previous post as Director of Research and Innovation Services. He has been a key figure in the design and realization of the University Excellence Strategy.

The open position as Director of Human Resources (Division 3) was also filled on March 1, 2022 by Miriam Dierker, the previous head of Appointments and Onboarding. Bringing considerable experience in academic management, Miriam Dierker has a long association with the University of Bonn. After studying Anthropology of the Americas, Geography and Spanish in Bonn, she worked for the Humboldt Foundation as a funding awards assessor, before returning to her Alma Mater in 2012 to take up a position as research coordinator with responsibility for foundations and humanities. Her responsibilities in Research and Innovation Services included supporting the needs of the Humboldt professorships and coordinating the projects launched by the University administration within the scope of the Excellence Initiative. In October 2018, she was appointed to establish and head the newly-created Appointments and Onboarding section.

September 1, 2021 saw Dr. Katharina Fuchs-Bodde appointed as the Director of the International Office. After taking degrees at the Universities of Göttingen and Jena, followed by a doctorate in psychology, Dr. Fuchs-Bodde started a long career in a number of positions in university and research management. Before moving to the University of Bonn, she held posts as general manager of the Graduate Academy at the University of Heidelberg, a research manager at the European Science Foundation, managed the Europe department at the Alexander von Humboldt Foundation and worked as team leader at the German Research Foundation in Bonn.

Dr. Wibke Petras was appointed to head the Division of Teaching and Academic Planning on May 1, 2021. Holding a doctoral degree in philosophy and bringing considerable experience in University management with a specialization in teaching and learning, Dr. Petras worked for the Vice-Rector for Teaching and Studies for nine years in a number of posts at the University of Cologne, including as a personal assistant, project manager and head of quality management in teaching and learning. Prior to her appointment at the University of Bonn, Dr. Petras was the Director of Teaching and Learning at the Hochschule für Musik und Tanz in Cologne.
United against COVID-19

After a year dominated by the COVID-19 pandemic, the University began 2021 under a renewed lockdown. The dynamic nature of the situation required repeated, rapid and often short-term responses on the part of the University management to ensure that University operations were maintained in compliance with the changing legal situation. Whilst the Rectorate made certain a steady flow of information was provided and took steps to secure good communication within the University, the main focus of activities was the work of two task forces, “Teaching,” set up to ensure that teaching, learning and examinations could continue under the changed regulatory framework, and “Operations,” set up to deal with a range of questions affecting the operation of the University under pandemic conditions.

Whereas our efforts in 2020 focused on the necessity of continuing University operations under lockdown conditions, the priorities of 2021 shifted to the implementation of a testing and vaccination strategy. Accordingly, the Rectorate concentrated its energies on establishing a testing infrastructure and a vaccination program for employees and students. Working in close cooperation with an external service provider, the University moved swiftly to establish a rapid antigen testing service and a self-testing service for University staff provided by the MKW. The Staff Physicians Office rapidly provided a vaccination service, which experienced high levels of take-up both for the initial roll-out and the subsequent booster campaign. Combined with a range of further externally-provided services, the University vaccination campaign meant that we played a full part in the wider response to the pandemic situation.

Help for the victims of the Rhineland flood

The COVID-19 pandemic was not the only serious challenge facing the University in 2021; a catastrophic flood in mid-July also demanded a response. With heavy rainfall causing major and unprecedented damage in many areas of the Rhineland-Palatinate and North Rhine-Westphalia, a number of our University members lost homes and possessions, whilst others even lost relatives. 79 students and 101 employees of the University responded to the appeal by our Rector to come forward if they needed help. Many students were prevented from sitting their examinations and a number required financial and psycho-social support. A team of administrators investigated every report, assessed needs and directed applicants to sources of help and assistance. Those affected by the flooding and others going to their aid were granted special leave from their duties and were able to make use of an assistance website matching those needing help to those willing to provide it. The University also made vehicles and equipment available for use in the flood relief efforts. Launching its “WE help” campaign, the University management established an instrument for the rapid collection and disbursement of donations. University employees were given the option of donating money through having it deducted directly from their pay. In this way, the University was able to raise some €60,000 within a short period of time, which was distributed as quickly and fairly as possible and in accordance with guidelines approved by the Rectorate to effect immediate relief. We were also able to render assistance to our neighbor institution Hochschule Bonn-Rhein-Sieg, University of Applied Sciences, whose Rheinbach campus had been put out of action by flooding. Responding to its acute need, the University of Bonn allowed the Hochschule Bonn-Rhein-Sieg the use of its teaching and research facilities.
Networked collaboration project for the development of a common University digital strategy

The Digital Science Center (DiCe) is a central organizational unit of the University of Bonn. It is tasked with the development, continual improvement and implementation of a comprehensive digital strategy for the University. Its activities in 2021 continued the established focus of providing support and networking assistance to project and development work. The Faculties of Catholic Theology, Protestant Theology, Agriculture, Arts and Medicine all took advantage of workshops organized by DiCe to develop ideas for their digital strategy. An important advancement in this regard was the appointment of full-time digitalization managers in four faculties. Their role is to create the structures needed for the implementation of the digital strategies and provide advice and support to the projects set up under their aegis in parallel to DiCe’s overarching development work. The stated aim of DiCe’s work in this area is to consolidate each faculty’s approach into an integrated whole and the appointment of further digitalization managers in the other faculties. A total of seven of the digitalization projects supported by DiCe have got underway. Many key positions within them have been filled; some €4.14 million of third-party financing has been secured for the “Virtual Collaboration” and “Bonn Transdisciplinary Artificial Intelligence Education” projects. The establishment and extension of cross-area exchange formats (workshops and fora) has facilitated the networking of those involved in the various projects and other parties with an interest in digitalization at the University of Bonn.

Keynote speech from Max-Planck President Martin Stratmann

This year’s ceremonial opening of the 2021/2022 academic year in October 2021 focused on the topics “Excellence in Science” and “Climate Change and Disaster Preparedness.” In an emphatic keynote address, Prof. Dr. Martin Stratmann, President of the Max Planck Society, embarked on a tour d’horizon spanning the successful cooperation between his organization and the University of Bonn, the significance to Germany’s status as a center of academic endeavor of foundational research and the challenges posed to the innovative power of German academia. Stratmann opened his address with an account of the close ties that the University of Bonn and the Max Planck Society have had for decades: “just think about the Max Planck Institute for Radio Astronomy, for example, which emerged from the University’s Institute for Astronomy, or the Hausdorff Center for Mathematics. Both are examples of ideal cooperation.” Four Nobel Prizes in the last two years and the Fields Medal for Bonn mathematician Peter Scholze were advanced as proof of the international standing of German academia. Stratmann explained this success with reference to the prioritization by German universities and other research institutions such as the Max Planck Society, of establishing the foundations necessary for conducting foundational research. “We are witnessing the dawn of the Anthropocene epoch, bringing both a whole new set of challenges and potential solutions; there is still a lot of foundational research to be conducted, including in the humanities,” he said. Policymakers and the general public alike expect a lot from academia in this regard. Stratmann stressed the need to keep on communicating and explaining our assumptions.

University Development Plan 2021–2026

The Rectorate moved in 2021 to draw up a new University Development Plan covering the period 2021 to 2026 and outlining the further development of Bonn as a University of Excellence. The high-level research conducted at the University of Bonn has established it as one of Europe’s leading universities. With six Clusters of Excellence, Bonn is the most successful of the 11 German Universities of Excellence. A central factor in our recent success was the future strategy adopted by the University expressed in the mission statement “WE invest in people, WE foster networks, WE create impact.” This triad serves as our profile and vision statement as outlined in the University Development Plan.
**EXCELLENCE STRATEGY**

**“WE invest in people”: Appointments to High Profile Professorships**

The establishment of excellent professorships is a central pillar of the University of Bonn Excellence Strategy, to strengthen the Transdisciplinary Research Areas (TRA) and faculties. TRAs are conceived of as spaces of enhanced creativity established to work across faculty boundaries with the aim of pioneering innovative new fields of research. The Hertz and Schlegel Chairs together with the Argelander tenure track professorships represent new and different forms of academic organization which take different approaches to the shared long-term goal of establishing the University of Bonn at the cutting-edge of international academia.

Appointments to the first Hertz Chairs and Argelander professorships were made in 2021: one of the leading researchers into medical ethics, Prof. Dr. Christiane Woopen has become the first holder of a Hertz Chair. Focusing within her research, teaching and consulting on life and the conditions requisite to its successful development, she now works within the framework of the Individuals, Institutions and Societies TRA, on the four dynamics of technologization, economization, ecologization and globalization, and their ethical implications.

The appointment by the Mathematics, Modeling and Simulation of Complex Systems TRA of the microeconomist Prof. Dr. Florian Brandl established him as the first holder of an Argelander tenure track professorship. The work of the Building Blocks of Matter and Fundamental Interactions TRA into biohybrid research will be augmented through the appointment of Prof. Dr. Patrycja Kleb and Prof. Dr. Alena Khmelinskaia to Argelander professorships.

A further aspect in the University of Bonn Excellence Strategy is the establishment of Schlegel Chairs. Designed as an instrument with which to attract and retain excellent researchers at the University of Bonn, the chairs are designed to strengthen the research profile of the University into areas with particular potential, improve networks and establish interfaces between the faculties and the TRAs. 2021 also saw a number of appointments made to the new Schlegel Chairs. Prof. Dr. Klaus von Stosch and Prof. Dr. Matin Qaim, appointed to Schlegel Chairs in the Faculty of Catholic Theology and the Faculty of Agriculture respectively are indicative of the high-quality candidates which this new type of professorial chair aims to attract. Further appointments are foreseen for 2022.
Much has happened in the world of academic research since the University attained the status of a University of Excellence in 2019. Working last fall to keep abreast of developments in the University Excellence Strategy, our Scientific Advisory Board, staffed by external international researchers, acts in an advisory capacity to provide the university management with recommendations regarding important questions raised within the scope of the Excellence Strategy. Meeting in Bonn for the second time, the body conducted discussions with the Transdisciplinary Research Areas, Clusters of Excellence and the faculties. The board noted the progress made by the University in these areas and the further plans made by the TRAs to ensure its continuance. One positive step in this direction was the board’s decision to continue the Clusters of Excellence to find out about their progress. The Deans also presented the strategic plan of each faculty.

### The University of Bonn Scientific Advisory Board measured progress in the Excellence Strategy

The members of the advisory board listened to reports from the speakers from the Clusters of Excellence to find out about their progress. The Deans also presented the strategic plan of each faculty.

### The Scientific Advisory Board (SAB) of the University of Bonn

The Scientific Advisory Board is staffed by:
- Prof. Dr. Reuven Amitai from the Hebrew University of Jerusalem (Israel),
- Prof. Dr. W. Th. Frank den Hollander from Leiden University (Netherlands),
- Prof. Dr. Véronique Perdereau from the Institute of Intelligent Systems and Robotics at Sorbonne University Paris (France),
- Prof. Dr. Rudi Balling from the University of Luxembourg (Luxembourg),
- Prof. Dr. Petra Ritter from Charité – Universitätsmedizin Berlin (Germany),
- Prof. Dr. Dr. h. c. Wolfgang Schön from the Max Planck Institute for Tax Law and Public Finance, Munich (Germany) and
- Prof. Dr. Sigrid Peyerimhoff from the University of Bonn (Germany).

### INDIVIDUAL CONTRIBUTIONS AND AWARDS

#### Prof. Dr. Moritz Schularick

awarded a Leibniz Prize

December 2021 saw the award by the German Research Foundation (DFG) of the Gottfried Wilhelm Leibniz Prize to Prof. Dr. Moritz Schularick, director of MacroFinance Lab and member of the ECONtribute Cluster of Excellence at the University of Bonn. Worth €2.5 million, the prize was conferred in recognition of Prof. Schularick’s excellent research in the area of Economics, in particular his success in combining micro economics and economic history to provide explanations for the causes of financial crises and the historical distribution of wealth. Whilst the credit crunch of 2008 essentially took economists by surprise, Schularick was able to demonstrate promptly that financial crises regularly follow periods of strong growth in the availability of credit. In so doing, he was able to develop a more fundamental understanding of crisis dynamics that can help predict and mitigate future financial crises. Prof. Schularick has recently begun to study the causes of social inequality. His analysis of the development of returns from capital and real estate demonstrate how resource imbalances are a significant driver of social inequality.

#### The NRW Innovation Prize awarded to Prof. Dr. Bernhard Korte

The NRW Innovation Prize has been given the NRW Innovation Prize in recognition of his life’s work. As an outstanding researcher and pioneer of technology transfer, Prof. Korte has been known for his contributions to computer chip design. Before awarding the prize, the State Minister for Science and Research, Prof. Dr. Andreas Pinkwart noted that Prof. Korte’s findings have been put to a number of uses over past decades, including to the benefit of a range of commercial organizations. Focusing on his work on the combinatorial optimization of highly complex problems Prof. Korte has set international standards for chip design. The BonnTools software developed under his direction enables computer chip makers to optimize the layout of their products, making them as energy-saving, small and as fast as possible. Today, hardly any microprocessor in the world does not incorporate the know-how developed at his research institute at the University of Bonn.

#### Prof. Dr. Bernhard Korte

The NRW Innovation Prize awarded to Prof. Dr. Bernhard Korte in recognition of his life’s work

Prof. Dr. Bernhard Korte has been given the NRW Innovation Prize in recognition of his life’s work. As an outstanding researcher and pioneer of technology transfer, Prof. Korte succeeded in transferring the findings of his cutting-edge foundational research in the field of discrete mathematics into a practical application in the design of chips and microprocessors for supercomputers. Before awarding the prize, the State Minister for Science and Research, Prof. Dr. Andreas Pinkwart noted that Prof. Korte’s findings have been put to a number of uses over past decades, including to the benefit of a range of commercial organizations. Focusing on his work on the combinatorial optimization of highly complex problems Prof. Korte has set international standards for chip design. The BonnTools software developed under his direction enables computer chip makers to optimize the layout of their products, making them as energy-saving, small and as fast as possible. Today, hardly any microprocessor in the world does not incorporate the know-how developed at his research institute at the University of Bonn.
Ulf-G. Meißner awarded an ERC Advanced Grant

What happens when “strange” quarks are inserted into atomic nuclei? What habitable universes are theoretically possible? These and other questions currently exercise Prof. Dr. Ulf-G. Meißner from the Helmholtz Institute for Radiation and Nuclear Physics at the University of Bonn, who has been awarded an Advanced Grant from the European Research Council (ERC) of €2.3 million to conduct a joint project in collaboration with Forschungszentrum Jülich to address these questions.

ERC Proof of Concept Grant and Patent Prize

Last year, the University of Bonn biotechnologist Prof. Dr. Volker Busskamp was awarded an ERC Proof of Concept Grant worth €150,000.00. ERC Proof of concept grants enable researchers to transfer their findings into commercially-viable applications. Volker Busskamp and his team at the Ophthalmic Clinic, University Hospital Bonn are currently working on an approach to improving our understanding and treatment of retinal degeneration and blindness. Damaged retinas are unable to regenerate; Prof. Busskamp is currently leading research into combinations of transcription factors so as to be able to extract photoreceptors from human stem cells which can be used in cell therapies. He was given the Patent Prize in 2021 by the Deutsche Ophthalmologische Gesellschaft for his work in this area.

A new UNESCO chair

The United Nations Educational, Scientific and Cultural Organization UNESCO entered a collaboration with the University of Bonn to establish the UNESCO Chair in Human Water Systems conferred upon the Bonn geographer Prof. Dr. Marielle Evers. 14 UNESCO Chairs in Germany contribute to the implementation of the Global Sustainability Agenda, working to strengthen partnerships with universities, research institutions and other stakeholders in countries of the Global South, Germany and across Europe. UNESCO Chairs are not new professorships, but are awarded to recognize the work of researchers in performing tasks with a high social relevance.
New Collaborative Research Centers at the University of Bonn

The German Research Foundation moved in 2021 to establish two new Collaborative Research Centers (SFB) at the University of Bonn. The researchers of Regional Climate Change: the Role of Land Use and Water Management SFB 1502 have been tasked with investigating the hypothesis that human-induced land use change and intensified water management also influence regional climate. Prof. Dr. Jürgen Kusche has been appointed as speaker of SFB 1502.

The teams of the transregional Brown and Beige Fat Organ Crosstalk, Signaling and Energetics (BAenergy) SFB 333 focus on a range of adipose tissues and their role in metabolic diseases. A joint project between researchers from the University of Bonn, the University Hospital Bonn, the Medical Center Hamburg-Eppendorf, the Technical University of Munich (TUM) and Helmholtz Zentrum München, is represented by its speaker Prof. Dr. Alexander Pfeifer. Their innovative research has each been awarded a four-year multi-million funding package starting on January 1, 2022.

BMBF funding for a Franco-German robotics project

The Federal Ministry of Education and Research (BMBF) has committed funding up to 2025 to maintain a cooperation agreement between the University of Bonn and Sorbonne University, Paris seeking to teach robot hands a level of dexterity approaching that of a human. This development would represent a decisive breakthrough in a number of robot applications such as the healthcare sector (geriatric care), agriculture (harvesting applications), industry (collaborative robotics) and the environmental sector (waste separation and recycling). Human hands currently are far more dexterous than their robot counterparts. The Learn2Grasp project seeks to teach a flexible robot hand, designed to resemble a human hand, to mimic a human-level ability to grasp items from chaotically filled containers. Internationally-recognized for their expertise in visual perception and scene modeling, the University of Bonn researchers also have experience in teleoperation and machine learning from human demonstrations. This specialization is supplemented by the expertise of the Sorbonne-based team in action learning and data-efficient exploration for robotics.

Academic communication as a subject of research

The Volkswagen Foundation has awarded up to €15 million of funding to four new research centers in Germany dedicated to research into science communication, with the aim of effecting sustainable advances in this area. One of these centers will be the Rhine-Ruhr Centre for Science Communication Research, in which the Forum Internationale Wissenschaft at the University of Bonn is involved through Prof. Dr. David Kaldewey. Other project partners are the Institute of Journalism at the Technical University of Dortmund, the Institute for Advanced Studies in the Humanities at the University of Duisburg-Essen and the Institute for Media Research and Development at Hochschule Bonn-Rhein-Sieg. The project aims to develop recommendations for the reorganization of the findings and structures of science communication research. The consortium will focus on the interdisciplinary field of science research in subdisciplines such as sociology, philosophy and the history of science, as well as specialist fields such as bibliometrics and data science. Working in conjunction with the Science Media Center (SMC) and the Science Press Conference (WPK), the project will develop infrastructures to facilitate exchange between research, journalism, politics and other target groups.
A clearer view of space with AI

In their search for distant galaxies, rapidly rotating neutron stars and black holes, radio astronomers are collecting an ever-increasing volume of data. In future, this flood of data is to be analyzed with the help of artificial intelligence. To this end, eight institutions in North Rhine-Westphalia have joined forces under the leadership of the Max Planck Institute for Radio Astronomy (MPIfR) to form the “NRW Cluster for Data-Intensive Radio Astronomy: Big Bang to Big Data.” In addition to the MPIfR, the University of Bonn and Hochschule Bonn-Rhein-Sieg, University of Applied Sciences are also involved in the project. The state of NRW has pledged up to €3 million in funding for the project.

How is AI changing academia?

The Volkswagen Foundation has awarded €1.4 million of funding over four years to a joint project run by the Universities of Bonn and Vienna and the Karlsruhe Institute of Technology (KIT) conducting research into the impact of artificial intelligence (AI) technologies on the natural and social sciences and humanities. According to the research team, as yet no interdisciplinary and comparative research has been conducted to examine the use of machine learning methods in any of the fields of academic research, from a computer science, historical or ethnographic perspective. Analyzing four research projects undertaken in the disciplines of film studies, sociology and geosciences, the project seeks to understand how research is conducted in different disciplines using AI methods, taking into account the potential, limits, risks and ambivalences of AI-based methods. The project brings together the expertise of media studies, the history of science and computer science to examine the use of data-intensive methods in current academic research.

Certification project

The interaction of philosophy, computer science and law is central to the achievement of certification for AI applications. The University of Bonn launched a project in 2021 to develop the procedures for establishing generally accepted standards for AI systems and their verification. To this end, a range of interlinked catalogs of requirements are currently being established to develop technical, legal and ethical-philosophical criteria. Responsibility for the ethical aspects of the subproject is held by the Center for Science & Thought (CST) at the Department of Philosophy at the University of Bonn. Organized within the framework of the KI.NRW skills program, the project is run in cooperation with the Fraunhofer Institute for Intelligent Analysis and Information Systems (IAIS), the German Federal Office for Information Security (BSI), the University of Cologne, RWTH Aachen University, the German Institute for Standardization (DIN) and a number of DAX 30 and other companies from various sectors.

Transdisciplinary university training in AI

A total of 40 individual and 14 collaborative projects at 81 universities nationwide were selected through open competition in June 2021 for funding by the Federal-State Artificial Intelligence in Higher Education initiative. The University of Bonn researcher Prof. Reinhardt Klein was awarded funding of some €2 million over four years for his project “Bonn Transdisciplinary Training in Artificial Intelligence (BNTrAinee).” The funds will be used to establish seven teaching posts for a course in AI software. The aim is to develop the teaching curricula and provide services for students and members of the teaching staff alike. The project was supervised by DiCe.
EARLY-CAREER RESEARCHERS

Early career prize and funding for the developmental biologist Elvira Mass

Human organ health would seem to be determined at the embryonic stage of life. Last year saw the award by the Paul Ehrlich Foundation of the Paul Ehrlich and Ludwig Darmstädter Early Career Researcher Prize to Prof. Dr. Elvira Mass from the LIMES Institute at the University of Bonn. She was granted €60,000 in recognition of her discovery. Prof. Mass was able to demonstrate the involvement of specialized immune cells from the yolk sac in organ development. The same cells made a life-long contribution to the maintenance of good health, and thereby had a role in determining the functioning of the organs. Limitation of the function of these cells can cause a range of diseases. Prof. Mass was also accepted into the “EMBO Young Investigator Program,” established to support European early-career researchers in the life sciences. Funded researchers receive financial support of €15,000, which can be augmented by up to €10,000 per year. In addition to direct financial support, Mass and her team will benefit from a range of training and mentoring opportunities over a period of four years. EMBO is an organization of more than 1,800 leading researchers with a mission to promote excellence in the life sciences in Europe and beyond.

A new Emmy Noether research group

The DFG-funded Emmy Noether Program helps highly-qualified early-career researchers to head their own research group over a period of six years to enable them to qualify for a professorship. Eight such groups are currently working in Bonn. The newest addition is the “Dissipative supramolecular systems” group led by Dr. Larissa von Krbe at the Kekulé Institute of Organic Chemistry and Biochemistry.

Admission to the Heisenberg Program

Privatdozent/Adjunct Professor Dr. Alexander Ivanov of the Mathematical Institute at the University of Bonn was accepted to the DFG Heisenberg Program in 2021. He will receive three years of funding with the option of extension. The Heisenberg program seeks to prepare researchers at an advanced stage of their career to continue their research and gather further teaching and supervision experience, thereby getting them ready for a management role in academia.

Human Resource Development: Postdoc Day 2021

In 2021, the annual University of Bonn Postdoc Day was dedicated to the theme of “Leadership in Academia.” It proved to be a popular event, attracting 120 participants. The event was opened by live-streamed interviews with the University of Bonn Rector, Provost and Dean Prof. Dr. Cornelia Richter. They reflected on the most important factors in academic leadership, the challenges met on the path to a professorship and the vital role played by academic networks in obtaining a chair. This was followed by sessions focusing on key aspects of “leadership” incorporating the findings of leadership research, ethics and the practicalities of securing research funding. A subsequent discussion between selected professors from various disciplines at the University of Bonn gave participants a view “behind the scenes” of their professorial management tasks. These insights—including both successes and failures—were an especially popular part of the event.
Santander International Exchange Grants

The University of Bonn has launched a new grant program to support doctoral researchers in building international networks and refining their academic profile. The Santander International Exchange Grants enable one to three-month research stays at one of the University of Bonn’s strategic university partners abroad (e.g. at the University of Melbourne or the Hebrew University of Jerusalem) or in one of its priority countries such as Japan, Ghana or the USA. However, the exchange is not one-sided: doctoral students from these priority regions can also apply for visiting status at the University of Bonn. The grants are financed by Santander Bank, which has counted the University of Bonn as a member of its “Santander Universities” alliance since 2018.

One Hour—One Job—One Perspective

A new lecture series invites doctoral students and postdocs from all disciplines to find out about the many career paths open to doctoral graduates outside of academia. The series involves a range of talks from persons—many of them University of Bonn alumni—who chose to pursue a career in business, various institutions of civil society or research management after their doctoral studies. The talks focus on a range of issues, including the nature of the daily routine in each career, entry requirements and options for development. Designed to supplement the “BFB Job Talks for Life Sciences” organized by the Bonn Biomedicine Forum, the series is organized jointly by Human Resource Development, the Bonn Graduate Center and the Alumni Network.

Falling Walls Lab Rhineland

In September 2021, the Bonn Graduate Center hosted the Falling Walls Lab Rhineland on behalf of the University of Bonn. As the nature of the COVID-19 pandemic ruled out the presence of spectators, the event was broadcast live on YouTube. Eight early-career researchers presented their innovative ideas to a jury of experts drawn from academia, industry and public life. Christoph Lotz (Leibniz Universität Hannover) qualified for the final, the Falling Walls Science Summit, with his outstanding contribution “Breaking the Wall of Space Research on Earth.” The Falling Walls Lab Rhineland is a joint project between RWTH Aachen University, the University of Cologne, Heinrich Heine University Düsseldorf, Forschungszentrum Jülich and the University of Bonn. The event is organized by the different institutions in annual rotation.

Doctorate plus

The interdisciplinary qualification program “Doctorate plus” has assumed a new career-oriented focus since summer semester 2021, superseding its previously modular structure. The new track structure seeks to take into account the diversity and openness of contemporary career opportunities for doctoral graduates. The program of workshops offers targeted training along three career pathways. Academia (research track) caters for doctoral students hoping to remain in academia or other research environments. “Research management” (research management track) prepares doctoral students to work at the interface of academia and administration as research managers, whilst “Non-university careers in business and society” (Business and organizations track) is tailored to doctoral students who wish to pursue a career in an organization or company outside the academic or research sectors. This specialist provision has replaced the old cross-module “Doctorate plus” certificate. “Doctorate plus” is offered as part of the Argelander Program for Early-Career Researchers and is open to all doctoral students at the University of Bonn.
Establishment of the Animal Welfare Unit

The promotion of animal welfare is a central constitutional objective of the Federal Republic of Germany. Seeking to advance the cause of animal welfare, the University of Bonn moved in September 2021 to establish a dedicated Animal Welfare Unit to coordinate the faculties that work with animals and act as a hub of expertise for all matters relating to animal welfare. The new unit is headed by full-time animal welfare office Johanne Charlott Krüger. The two qualified veterinarians conduct the work of the unit with the support of part-time animal welfare officers from the Faculty of Agriculture, the Faculty of Mathematics and Natural Sciences and the Faculty of Medicine.

The duties of animal welfare officers

As there are often no alternatives in many research programs to the use of live animals in a range of experiments, it is imperative that the welfare of these animals is accorded the highest-possible level of protection. Experiments involving live animals are subject to a range of German and EU legislation, above all the German Tierenschutzversuchstierverordnung. This legal framework ensures that a range of animal welfare principles are followed. One such is the 3R principle, according to which the use of animals in research should be replaced, reduced to a necessary minimum and subject to refined methodologies that prioritize animal welfare. Animal welfare officers provide advice and support to researchers working with animals, supplying information about changes to the regulatory framework, so as to ensure that the legal protections afforded to animals are enforced.

“WE create impact”: enaCom extends its provision in the area of academic transfer

The enaCom transfer center is the central service provider at the University of Bonn tasked with promoting academic transfer. enaCom organizes regular events at which students and researchers can develop and present their ideas, research work, inventions and potential business ideas. Its advisors provide a range of tailored, needs-based services to would-be entrepreneurs, enabling them to close knowledge gaps and network with other experts, thereby smoothing their path to the launch of their product. 2021 saw the extension of this service by the launch of “U BO GROW,” a €3.2 million state funding program for startups preparing for launch. This program supplements the funding already available through the EXIST Potentials program from the Federal Ministry of Education and Research (BMBF). The advisory team is currently being expanded and preparations are being made to make laboratory space available to start-up teams so that they can conduct experiments to validate ideas and develop prototypes without delay. This closes a gap in the university’s internal innovation process.

Innovation scouting

2021 saw the re-establishment of innovation scouting at the enaCom Transfer Center in order to assess the innovation potential of the findings generated in our TRAs and to facilitate their transfer into real-world applications. To this end, three innovation scout posts were established, each tasked with working with two TRAs. These scouts started with a review of existing transfer activities so as to optimize them. Working together with the TRAs, the scouts are currently focusing on the identification of potential cooperation partners in the area of policy making, industry and wider society with a view to establishing Bonn as a center of expertise in sustainability issues. The scouts also act as contact persons for regional stakeholders seeking to pose questions to units at the University, thereby integrating the University further within regional networks and making them more responsive to their needs.
New location for enaCom and DigitalHub

In addition to the space available for founders within the University at the Brühler Straße location, founders can now also network in the DigitalHub location at Bonn Central Train Station. Since summer 2021, the enaCom Transfer Center has also been represented there with its own team office, from where it provides a range of advice services and co-working spaces. The University of Bonn and its enaCom Transfer Center have made an important contribution to the realization of this Digital Hub in the center of our city. The unit is dedicated both to fostering conditions conducive to science entrepreneurship and to ensuring that the findings of cutting-edge research are translated into practical innovations.

Start-up Summer School

Set up your own business in five days—that was the challenge set by the Start-Up Summer School organized by the Transfer Center enaCom at the University of Bonn in September 2021. In addition to being offered a range of information and expert advice about launching a commercial start-up, participants spent a week developing their own business ideas. A group of students and staff drawn from a broad range of disciplines at the University of Bonn worked together on their start-up ideas under the watchful eye of consultants from the enaCom Transfer Center and two innovation coaches. After a pitching training session, the week finished with presentations of the business concepts developed.

The first Ideas Competition

The status of the University of Bonn as an innovation powerhouse was underlined by the first University of Bonn Ideas Competition, organized by the enaCom Transfer Center in the fall of 2021. Working under the strapline “Go for it!” a range of nominated teams were given the opportunity to pitch their ideas in front of an online audience on November 17, 2021. Three teams were able to convince the jury of the potential of their ideas; first place in the competition and thus winners of the enaCom prize went to “aimed analytics,” who had developed a modular analysis system that uses medical data to group patients for targeted treatment. The jury prize of the University of Bonn Foundation was won by the team “Raketenstart” for their “digital legal department.” The “LightningPose” software for the real-time recognition of human posture was awarded the Special Prize of the Digital Hub Bonn.

A project for the development of medical software

Digital models and algorithms already provide valuable support in the treatment of patients in hospitals and doctors’ practices. Seeking to accelerate this trend, the Faculty of Medicine and enaCom established the “Bonn Hub for Algorithmic Innovation in Medicine” (BoHAIMe) at University Hospital Bonn in order to bring digital innovations in medicine to market maturity more quickly and to facilitate spin-offs from universities. The state government is providing some €1.8 million in finance for the program. Building a bridge between science and industry, the project seeks to stimulate the market-oriented development of medical software.
Launch of the Robots in Everyday Life transfer center

Digitalization is not just an industrial phenomenon, but is set to play a part in all aspects of our lives. In the future, more and more service and assistance robots will provide support in a range of contexts, from the home, to social care, wider society and a range of difficult and dangerous tasks. A central challenge presented in this context is the interaction between humans and robots in everyday life. The BMBF-funded Robots in Everyday Life (RimA) competence center aims to promote efficient, scientific and technical exchange. The work of the RimA transfer center is led by the FZI Forschungszentrum Information with the participation of the Free University of Berlin, TÜV SÜD AG and the University of Bonn. The Bonn subproject “Benchmarking of assistance robots” focuses on benchmarks and competitions, but also makes important contributions to the modeling of human-robot interaction forms and the development of a knowledge platform.

Campus Transfer Management GmbH

Seeking to create the best-possible conditions for academic transfer, the enaCom transfer center continues to expand the structures set up to this end. Campus Transfer Management GmbH is working to establish itself as a leading player in the Rhineland academic scene and as a key actor in the transfer activities of the University of Bonn—from scouting to facilitating start-up funding in the bioeconomy. As the only university in NRW with a Faculty of Agriculture, it is important that the University helps shape the transformation of the Rhineland’s agricultural sector, and enables the region to profit from the expertise of the Innovation and Technology for Sustainable Futures Transdisciplinary Research Area. Founded as a limited company in October 2021, Campus Transfer Management GmbH is able to draw on the expertise of regional cooperation partners in the realization of science-based projects.

Two start-up teams win the NUK Business plan competition

The teams ClingTechBionics and RecaPen, both involving members of the University of Bonn and mentored by enaCom trainers, won the first and second prize in the Cologne NUK competition. Whilst both teams convinced the jury with their business plans and high level of subject expertise, RecaPen also won the audience’s award for the best pitch. ClingTechBionics markets a bionic high-tech suction cup that enables strong, reversible attachment even on rough, textured surfaces. Developed by a team of three medical doctors and an economist, the RecaPen performs reliable and affordable monitoring of skin blood flow during and after operations. The product will be commercially available after certification.
Studying during challenging times

The practice of online self-assessment (OSA) has a long tradition at the University of Bonn; the last decade has seen considerable investment in subject-specific study-orientation tests as an aid to applicants seeking to select the degree program that best suits their aptitudes and interests. Designed to be completed independent, the self-assessment tests were especially suited to the exigencies of the COVID-19 pandemic and were able to compensate for the impossibility of conducting in-person advice sessions during this period. 2021 saw the changeover in many subject-specific OSAs to a new test form to meet our standards for responsiveness, barrier-freedom and data security. At the same time, we took the opportunity to revise and improve many of the existing OSAs, focusing on analysis of the specific needs of each subject and the integration of OSA feedback in existing specialist and generic student advice and support services. The OSA team in the ZSB and the Center for Evaluation and Methodology (ZEM) at the University of Bonn work closely together with both students and our teaching and degree program management staff.

Online self-assessments

The year past saw students at the University of Bonn being forced to deal with not just one, but two crises: the COVID-19 pandemic and the Rhineland flood. As a result, the Central Study Advisory and Counseling Service (ZSB) at the University of Bonn experienced increased demand for psycho-social counseling and other forms of advice and support. The recourse to digital remote teaching made during the pandemic took its toll on Bonn students, resulting in social isolation, difficulties with motivation and self-organization and financial problems, for example due to the loss of part-time employment. This was compounded in individual cases by the impact of the flooding experienced across the region in July 2021. As the first port of call for students experiencing difficulty, the ZSB was often able to provide help and assistance to those affected in that exceptional period. In particular, students profited from the closely integrated network of advice and support services maintained at the University for situations such as this. The ZSB also works together closely with the faculties to provide the best possible service.
Graduation on the move

The Graduation Walk was an innovative pandemic-proof graduation ceremony through which the University of Bonn bid farewell to its class of 2021. Some 3,000 guests, including 900 gowned graduates attended the graduation ceremony in the Hofgarten throughout the course of the day, where they were entertained, photographed, filmed and drawn. The high point of the pre-set route was the presentation of their certificates by the Deans of the faculties. Students and their family and friends were also given the opportunity, some weeks before the ceremony, to write messages on the University Festival website, make individual graduation videos (“I did it!”) and send digital greeting cards.

Virtual collaboration project

The University of Bonn has been awarded a grant of more than €2.15 million from the Innovation in der Hochschullehre (Innovation in higher education teaching) foundation for the project “Virtual Collaboration (ViCo) – Learning together for the future.” The University will deploy these funds over the next three years to develop teaching and learning scenarios for collaborative digital working and learning. Students will be able to work together in three virtual spaces, in an independent, collaborative and constructive fashion to develop the requisite skills. A fourth virtual space supports teachers in integrating collaborative working practices into their teaching, thereby supporting their students through research-oriented education. In this way, ViCo fosters collaborative skills-development by teachers and students adapted to the digitally-networked world in which they live and work.

Future-oriented teaching: vielfältig.nachhaltig.digital from the Strategic fund

Seeking to develop its innovative teaching and learning profile in accordance with the University strategy, the University of Bonn allocates funding to projects on an annual basis following a competitive application procedure in various thematic categories. Working under the maxim vielfältig.nachhaltig.digital the University has undertaken to fund projects over the next 10 years, which make a contribution to strengthening the potential of individual students, raising awareness amongst the student body of the importance of sustainability issues and ensuring that the various degree program curricula focus on the acquisition of digital skills. 10 projects have been selected for the funding period 2021–2024.

DEiN Parcours for new members of the teaching staff

Run by the Bonn Center for Higher Education, the DEiN Parcours independent-study course supplemented by workshops provides an introduction to digital teaching for new members of the teaching staff. Open to teachers of all subjects, the participants learn the most important principles of university didactics and acquire an understanding of all the digital tools in use at the University of Bonn. The course can be taken in German or English and comprises seven learning phases. In summer semester 2021 and winter semester 2021/22, 15 teachers were able to familiarize themselves with the basics of higher education didactics and digital tools using the independent study course.

The “Curriculum 4.0.nrw” and “digiFellows” grant programs

Working in cooperation with DH.NRW, the state of NRW provides annual funding for digital teaching projects. Worth €80,000, the “Curriculum 4.0.nrw” grant program focuses on teaching skills. One such project was “Digital History” run by Prof. Dr. Carsten Burhop in the Department of History. Members of the University teaching staff can be awarded Innovation Fellowships in Digital University Teaching (“digiFellows”) which provide €50,000 for the development of digitally-supported teaching and examination formats, modules and degree course sections.

This grant program awarded funding to the “Collaborative-Digital Working in the Study of Texts” program run by Prof. Dr. Elke Brüggen from the Department of German and Comparative Literature and Culture and the “Clio’s Toolbox” project run by Dr. Lennart Gilhaus from the Department of History.
New digital services

Hybrid teaching enables lecturers to reach a wider audience than those present in lecture halls. 2021 saw the University of Bonn equip 54 of its lecture halls with high-end audio-visual technology to ensure high-quality broadcasts in order to advance this development as the central plank of the University response to the COVID-19 pandemic. Seeking to ease the transition to this new paradigm, the University management moved to provide both technical and didactic training to members of the teaching staff. The changeover to e-examinations also required a great logistical effort, and 124 computers were set up in the Campo Mensa in Poppelsdorf to turn it into a venue for socially-distanced e-examinations. This effort required the installation of 1400 meters of network cabling and 500 meters of power lines. Almost overnight, the customary hustle and bustle of the canteen was replaced by a concentrated silence. The STACK software run on eCampus uses a computer algebra system to enable the use of formulae, and was deployed to run examinations requiring complex mathematical calculations.

Teaching Prize 2021

Last year saw the award of the Teaching Prize 2021 to 14 of our University teachers, awarded in recognition of the excellence, innovation and creativity of their teaching. Awarding the prizes at a special ceremony, the Vice Rector for Teaching, Learning and University Development, Prof. Dr. Klaus Sandmann, thanked the prize winners for their passion and commitment to teaching. The teaching prizes were awarded on a cross-faculty basis; each faculty was awarded a number of prizes depending on student numbers and the size of the faculty. The prize winners were selected by the faculties on the basis of student course evaluations or student feedback to evaluation bodies.

The prize winners in 2021:

Faculty of Mathematics and Natural Sciences
- Prof. Dr. Herbert Dreiner (Department of Physics/Astronomy)
- Prof. Dr. Arne Lützen (Department of Chemistry)
- Dr. Toni Kühl (Department of Pharmacy)

Faculty of Medicine
- PD Dr. Stilla Frede (Faculty of Medicine, nomination by the Faculty of Mathematics and Natural Sciences for the Department of Molecular Biomedicine)
- Dr. med. Ambra Marx (psychosomatic medicine and psychotherapy)
- Dr. med. Gregor Massoth (anesthesia)

Faculty of Arts
- PD Dr. habil. Felix Selgert (Department of History)
- David Moroney, M.A. (Department of English, American, and Celtic Studies)
- Nora Jaeger, M.A. (Department of Art History)

Faculty of Law and Economics
- Peter Glaubach (Department of Law, Institute of Criminology)
- Prof. Dr. Hendrik Hakenes (Department of Economics, Institute for Finance and Statistics)

Faculty of Agriculture
- Dr. Ernst Tholen (Institute of Animal Sciences, animal breeding/genetics of domestic animals)

Faculty of Protestant Theology
- Mag. theol. Anja Block (Department of Old Testament Studies)

Bonn Center for Teacher Education (BZL)
- PD Dr. Udo Käser (diagnosis and funding)
Launched in 2021 as the successor to Horizon 2020, Horizon Europe, the European Union’s new Framework Program for Research and Innovation, was set up with the express aim of developing innovative responses to global challenges and promoting European competitiveness. It is scheduled to run until 2027. As part of its internationalization strategy, the University of Bonn has implemented a range of measures to promote the participation of its researchers in the new program, including the provision of administrative support in obtaining EU funding. A presentation held within the scope of the University of Bonn International Day outlined the nature of the program, its differences from its predecessor program Horizon 2020, and introduced the staff and services of the EU Project Office maintained at the University of Bonn. This was followed by detailed discussion.

Organized by the Vice Rectorate for International Affairs in October, International Day 2021 was dedicated to “Celebrating the Global in Pandemic Times” and sought to underscore the importance of international research and its significance in the global response to the current pandemic. The event was opened by Ina Lepel, alumna of the University of Bonn and now German Ambassador to Indonesia (formerly Ambassador to Japan) with a discussion of career opportunities in the German diplomatic service. In a workshop requiring prior application, 30 researchers learned about the newly-launched EU research funding program Horizon Europe. The ceremonial high point of the day was the presentation by representatives of the DAAD and the British, French and Spanish embassies, of the State Prizes and the DAAD Prize to outstanding students.
Meeting of the Bonn University Ambassadors

September 2021 saw Vice Rector Prof. Dr. Birgit Ulrike Münch host a virtual meeting with the Bonn University Ambassadors and the Organizers of the Alumni Network to find out more about each other and their work. Discussions focused on expanding the successful ambassadors program, extending existing academic relations, the activities of the ambassadors and opportunities for even closer international cooperation. Launched in 2019, the Bonn University Ambassadors Program ensures that the University of Bonn is represented abroad by 15 high-profile academics from Australia, Brazil, Ethiopia, France, Great Britain, Israel, Japan, Jordan, the Netherlands and the USA. As the first point of contact at their respective institutions, the ambassadors work to ensure the deepening of international relations and provide early-career researchers with information about the opportunities open to them at the University of Bonn.

Establishment of a multilateral global network

The successful conduct of a hybrid conference on the topic “Why Internationalization? Old and New Rationales in Diverse Education Systems” in October 2020, organized by the University of Bonn, the University of St Andrews, the Hebrew University of Jerusalem, Waseda University in Tokyo and Emory University in Atlanta, represented a further milestone on the path to the realization of a shared vision for multilateral collaboration between these institutions. The institutions involved plan not only to expand the network through the addition of new partners in Africa and Latin America, but to deepen the level of participation which it involves on the research, teaching and learning and administrative levels. Accorded responsibility for the area of “Leadership and Administration,” the University of Bonn is currently engaged in a number of activities, including the preparation of a workshop series focusing on the international dimension of the social responsibility of universities. The members of the network are also planning collaboration in the promotion of multilateral research projects, the building of networks with postgraduates and doctoral students and the establishment of a range of virtual and in-person staff exchange formats.

Two new global centers in Africa

The DAAD took the decision to launch a project to fund a total of eight new interdisciplinary “Global Centers,” set up to address a range of global challenges. The University of Bonn is involved in two of the projects: one focusing on the future of the African Savannas and another dedicated to developing a system for the early recognition and response to infections in West Africa. The projects have each been granted same €2.8 million of funding up to 2025 from the German Federal Foreign Office. The African Climate and Environment Center – Future African Savannas (AFAS) is to be established as a joint project between the Center for Development Research at the University of Bonn, the Université Félix Houphouët-Boigny (Ivory Coast), the University of Nairobi (Kenya) and the University of Cologne. Drawing on the experience and expertise of the Institute of Hygiene and Public Health and the Institute of Medical Microbiology, Immunology and Parasitology at the University Hospital Bonn, TU Berlin, Charité Berlin and the Kwame Nkrumah University of Science and Technology, the German-West African Centre for Global Health and Pandemic Prevention (G-WAC) is currently being established in Kumasis (Ghana). Both centers will adopt an interdisciplinary approach to the conduct of research and teaching, working closely with the relevant stakeholders in academia, government, industry and civil society to ensure the transfer of new findings into practice. Networked in this manner, they will work to make a contribution towards the development of global solutions to pressing global challenges.
Appointment of distinguished professors emeriti

Seeking to achieve the further internationalization of the research, teaching and learning conducted at the University of Bonn, the Rectorate moved in 2021 to appoint 15 retired leading international researchers as Distinguished Professors Emeriti. The visiting scholars are funded for a period of two years, during which they are invited to work at the University of Bonn to provide English-language teaching for students and to enable our TRAs to benefit from their expertise. Professor Maarten Jansen—an internationally-recognized expert on the history, culture and manuscript culture of the Mixtecs and Nuu Savi from the Oaxaca region in Mexico—was appointed as the first Distinguished Professor Emeritus in the Department of the Anthropology of the Americas in summer semester 2021. Prof. Jansen established his reputation by pioneering a new area of research, in close cooperation with the Mixtec researcher Gabina Aurora Pérez Jiménez and members of the authocode communities, focusing on Old Mexican visual culture and historical sources, their contemporary oral traditions, representation, social situation and the present-day rights of Mexico's indigenous groups.

Conclusion of the first strategic university partnership in Africa

The University of Bonn has maintained intensive contacts with the University of Ghana in the areas of life sciences, natural sciences and humanities for many years. Seeking to extend and intensify this collaboration, the University of Bonn moved in 2021 to upgrade the University of Ghana to the status of a strategic partner. Rector Prof. Dr. Dr. h. c. Michael Hoch and Vice-Chancellor Prof. Nana Aba Appiah Amfo signed a corresponding memorandum of understanding and reached further agreements to establish a student exchange program. Founded in 1948 as an affiliate of the University of London, the University of Ghana achieved independent status with Ghana's move to self-rule in 1957 and is the country's oldest and largest state university. With over 38,000 enrolled students, the University of Ghana is widely viewed as the premier university in the country and one of the leading African universities.

Franco-German sustainability dialog 2.0

Organized jointly by the ASKD Europa-Stiftung, the Franco-German University and the Ernst Robert Curtius Center at the University of Bonn, the first Franco-German sustainability dialog took place at the University of Bonn in October 2021 with around 100 participants from Germany and France. Three working groups were set up on equitable energy transition and sustainable mobility, on global health and on climate change biodiversity. A report on the discussions was presented at a public panel discussion held on the following day.

DAAD visiting professors for the internationalization of universities

The DAAD has committed to providing funding for four visiting professorships at the Forum International Wissenschaft (FIW) between 2021 and 2023, to conduct teaching and research into processes of internationalization in global comparison. The professorships succeeded in attracting cutting-edge researchers in this field: Patrício Langa (Eduardo Mondlane University, Mozambique), Carolina Guzmán Valenzuela (University of Tarapacá, Chile), Maheshvari Naidu (University of Kwa-Zulu Natal, South Africa) and Emma Sabzalieva (York University, Toronto, Canada & UNESCO International Institute for Higher Education). In taking up these posts they are not only making contributions to strengthening the quality of university and academia research conducted in Bonn, but the overall internationality of its teaching and further enhancing the networking of our students and researchers across the world.

The University of Bonn signs the Magna Charta Universitatum

Last year saw the Magna Charta Observatory in Bologna welcome the University of Bonn as a new signatory of the Magna Charta Universitatum. The Magna Charta Universitatum articulates the core values and identity of universities across Europe and the world, based on the principles of academic autonomy. Published in 1988 to mark the 900th jubilee of the University of Bologna, the oldest university in Europe, the charter now numbers almost a thousand universities from across the globe as signatories.
New partner for the European University of Brain and Technology (Neurotech\textsuperscript{EU})

The European University of Brain and Technology alliance has acquired a new partner. Meeting in Bonn in October, representatives of the participating universities inducted Georgia Tech–Lorraine, the international campus of the Georgia Institute of Technology, into the Neurotech\textsuperscript{EU} alliance. Neurotech\textsuperscript{EU} is one of a total of 41 European university alliances, co-funded by the EU Erasmus+ Programme, and was established with the aim of increasing European competitiveness in neurological research and its application and to provide specialist training in this area. Neurotech\textsuperscript{EU} is coordinated by Radboud University, Nijmegen (Netherlands). The existing consortium members are: the University of Bonn, the University of Oxford (UK), Karolinska Institutet (Sweden), the Miguel Hernández University of Elche (Spain), Boğaziçi University (Turkey), Iuliu Hațieganu University of Medicine and Pharmacy (Romania) and the University of Debrecen (Hungary).

University of Bonn awarded the Erasmus Charter for Higher Education

The University of Bonn will continue participating in the European Union’s Erasmus+ Programme for the next seven years. The University’s proposal, assessed as “excellent,” earned it the Erasmus Charter for Higher Education in 2021, which in turn ensures access to all grant programs in the next generation of the EU’s Erasmus+ Programme and annual third-party funding of €1.5–2 million. In the coming seven years, the Erasmus Programme will continue to provide an important foundation for international exchange, primarily for students, but also for teaching and administrative staff. The new program generation continues the previous grant programs. The promotion of excellence partnerships are of especial strategic significance for the University of Bonn; a first step to this end was its membership of the European University of Brain and Technology (Neurotech\textsuperscript{EU}). Cooperation with the global south is also set for expansion, to be funded by the “Mobility with Partner Countries” grant program.

The first digital trade fairs for international students

The ongoing COVID-19 pandemic caused the University of Bonn to move two planned fairs for students interested in studying abroad to an online format. Conducted with a holistically integrated app solution, the “Study and Internship Abroad” fair attracted some 530 participants, who gained valuable information regarding their options for going abroad during their studies through direct contact with advisors, and students who had themselves returned from partner institutions. Organized by the International Office, the two-day bilingual careers fair was aimed specifically at international students and graduates. Some 30 exhibitors presented their organizations and the services which they provide. Former exchange students supported staff with testimony of their experience. The livestream was accessed over 1,000 times.

The International Choir celebrates its ten year anniversary

Founded to bring international students into contact with German students, the International Choir of the University of Bonn celebrated its tenth anniversary in 2021. Forced to move its rehearsals online by the onset of the COVID-19 pandemic, the choir decided to mark this birthday not with a large-scale concert, but a video project involving 120 current and former singers together with students from partner universities around the world. The biggest group of anniversary guests came from the Hebrew University Jerusalem choir, who have committed to a program of concert visits. The combined choir sang the Michael Jackson classic “The man in the mirror.” Practicing the piece in three joint online sessions, the singers then recorded their parts individually and the videos were edited together. The digital project was accompanied by a social media campaign.
A University-wide project for increased diversity

2021 saw Equal Opportunity and Diversity grant funding for the MitSprache program, conceived as a service learning project to promote the integration of recent migrants to Germany. The program, which started in 2015, was extended to all faculties of the University in 2021 and can be chosen as an export module from summer semester 2021. The Vice Rectorate for Equal Opportunity and Diversity set up this program to increase educational equity, migrant participation and the inclusion of young people with an international background.

May 1, 2021 marked not only the start of a new term of office for the Rectorate, but the launch of a new Vice Rectorate for Equal Opportunity and Diversity. Prof. Dr. Irmgard Förster, Professor of Immunology and Environment at the LIMES Institute, was appointed to head this important new body. Set up to realize our guiding principle “Diversity as an opportunity,” the newly founded Vice Rectorate for Equal Opportunity and Diversity will work to make the individuality of all members and affiliates of the University—regardless of ethnic origin, gender, (dis)ability, religion or worldview, age or sexual identity—visible in all areas of University operations and to promote and anchor this consideration across the structures of the University. The Vice Rectorate will work together with Equal Opportunity and Diversity towards the realization of this aim.

This unit works to support and advise the Rectorate in developing concepts and strategies to promote equal opportunity and diversity, build networks among the organizational units, researchers and lecturers at the University of Bonn and provide advice and support in planning and implementing activities in the field of equal opportunity.
Funding for over 30 excellent researchers

Rolled out across the University in the summer of 2019, the “Strengthening the Equal Opportunity Process” program (STEP) was just one consequence of the University of Bonn’s new status as a University of Excellence and the resulting new streams of funding. The Rectorate’s own program for the support of women researchers is coordinated by Equal Opportunity and Diversity and seeks to recruit and provide ongoing advice and support for excellent women researchers at all career levels. The STEP program is an organizational development tool designed to strengthen equal opportunity and diversity at the University of Bonn. It deploys a range of instruments to support women researchers in all faculties such as establishing temporary additional professorships and research positions open to women applicants and providing funds for additional research resources, as well as working to raise the profile and widen the professional network of women researchers. In 2021, more than 30 women researchers at the University of Bonn were awarded funding from various STEP grant programs.

New Gender Equality Plan

The University Senate moved on December 9, 2021, to adopt a new Gender Equality Plan for the years 2022 to 2026. The new plan laid down an overall framework in which to realize 38 individual plans submitted by the University administration, the central operating units, the central research units and the faculties. The document began with an inventory of the gender distribution in the various status groups before outlining measures and targets through which not only to promote gender equality but to improve the compatibility of family and career at the University of Bonn. The plan identifies the most urgent field of action as the need to increase the proportion of women professors (W1-W3) employed at the University of Bonn. At the end of 2020, this stood at 22%, with the proportion of women among newly appointed professors at 40%. The plan foresees an increase in the proportion of women professors at the University of Bonn to 30% by 2026. The average proportion of women students and graduates at the University has exceeded 50% for many years. The representation of women amongst the technical and support staff also exceeds 50%. The Gender Equality Plan established gender equality quotas for professorial appointments for the years 2022–2026.

New measures and programs

The fall of 2021 saw the Gender Equality Office launch a new program with the title #InvisibleNoMore—Successful academic communication. Aimed at women early-career researchers hoping to professionalize their PR and media skills and thereby raise the specialist and public profile of their research, this program runs individual training units focusing on the basics of academic communication, public relations and media relations. Courses focus on both traditional media and digital and social media. The first round of training started very successfully, attracting 10 applicants from various disciplines. The second round is scheduled to begin in November 2022.

Established in 2016, the Maria von Linden Program maintained by the Gender Equality Office was re-launched in 2021. Whilst the previous focus of the program was on providing support and financial assistance for women early-career researchers from the post-doc phase, the new program is working to concentrate and expand the generic training and coaching provided by the Gender Equality Office to women early-career researchers and its specialist training for equal opportunity officers.

Seeking to raise the profile of the gender studies research conducted at the University of Bonn, the Gender Equality Office awarded the Gender Studies Prize again in 2021. The prize seeks to reward excellent final theses and dissertations written in the area of gender studies or queer studies or deploying such an approach to other areas of study. The prize awards €500 to the best bachelor’s thesis, €700 for all other final theses and €1,000 for the best doctoral thesis. The judging panel is made up of University of Bonn researchers; a representative from the Gender Equality Office has an advisory vote. The Gender Studies Prize is set to be awarded at regular intervals in the coming years.
Permanent certification as a family-friendly university

The Office of Family Services provides advice and support to staff and students with family responsibilities and assists institutes in the implementation of specific measures, such as the installation of baby changing tables in University facilities. The University of Bonn has participated in the audit conducted by berufundfamilie Service GmbH three times since December 2011, and has been active in establishing structures that support the compatibility of academic research, study and the demands of a career with a family life. In autumn 2021, the University of Bonn received confirmation that its consistency in implementing the measures agreed in consultation with berufundfamilie Service GmbH and its success in establishing a sustainably family-friendly human resources policy meant that it was entitled to bear the title of “family-friendly university” on a permanent basis.

A new action plan to be implemented from 2022 focuses on optimizing the conditions of work and study, academic qualification and family; and efficient collaboration within the interdisciplinary issues. The Office of Family Services remains focused on improving the conditions of teaching and learning for those with childcare responsibilities and augmenting the University’s childcare facilities.

Exchange forum for University members with care responsibilities

The Office of Family Services is the first point of contact for all University of Bonn staff and students with responsibility for caring for family members. In 2021, the counseling services which it provides have become even more comprehensive and now also include close support in the search for a care home. Assistance is also provided in preparing for the assessment by the Medical Service of the Health Insurance Funds. In addition to the provision of individualized advice relating to care, the Office of Family Services also places great importance on networking between those affected. An important step to this end was the decision to revive the monthly peer support group meetings for University employees in online form. This provides a forum for personal exchange moderated by a professional, who provides guidance on the changing legal framework.

Students with children network

Last year saw the establishment of regular online networking meetings for students with children, a group which has been disproportionately affected by the pandemic. Convened once or twice a semester, the meetings provide students with childcare responsibilities with a support group and information about the latest developments in a range of areas such as maternity protection and studying abroad with children. The exchange not only benefits students; the Office of Family Services is able to use it to gauge needs and improve its provision.
A new Vice Rectorate for Sustainability and the Sustainability Unit

The importance accorded by the University of Bonn to the issue of sustainability was underscored in 2021 by the decision to establish a Vice Rectorate for Sustainability supported by a dedicated Sustainability Unit to integrate the requirements of sustainability in the University’s governance structures. Vice Rector Prof. Dr. Annette Scheersoi, her assistant Sina Mosen and Jennifer Sobotta, the head of the Sustainability Unit began their work as “Team N” in May 2021. Universities and other institutions of higher education carry a special form of responsibility in the sustainable transformation of society. As a center of innovation, the University of Bonn wants to enable future generations to shape a sustainable future for society and supports researchers seeking to solve urgent social questions.

Launch of the University of Bonn “Green Office”

October 2021 saw the University of Bonn celebrate the opening of its student-run Green Office. A student-run sustainability unit consisting of three student assistants working from office space in Genscherallee, the Green Office is tasked with promoting exchange between students, teachers and other employees in the area of sustainability and acting as an interface between the student body and the University management and administration. The office works to provide information and support to those working for a sustainable future and thereby seeks to shape the transformation processes underway at the University of Bonn.
The University of Bonn moved in 2021 to develop and adopt its mission statement for sustainability. Close collaboration between representatives of all status groups enabled them to pool their experience and expertise and agree on a raft of sustainability goals for the University of Bonn. The importance placed on a participatory approach within this process is reflected in the wording of the mission statement: “Working together for sustainability.” The sustainability mission statement acted as the foundation for the Bonn Program for Sustainable Transformation (BOOST), set up to act as the coordinating body for all action dedicated to the realization of sustainability at the University of Bonn. The University will use this framework to develop a comprehensive sustainability strategy which seeks to derive targets and measures from the sustainability mission statement. This process will be guided by the principles of participation, communication and transparency.

Seeking to realize the University of Bonn guiding principle “Working together for sustainability,” February 2021 saw the University of Bonn organize and run the first of four quarterly sustainability action months. University members and their families were invited to get involved in a range of activities. By taking a “whole institution” approach, the University seeks to realize sustainability in a participatory, interactive and transdisciplinary fashion.

University of Bonn joins a sustainability network

2021 saw the accession by the University of Bonn to two leading sustainability networks: whilst the “DG HochN policy hub for sustainability at German universities” brings together key actors in shaping the process of transforming Germany’s universities to meet higher standards of sustainability, the International Sustainable Campus Network (iscn) is a dialogue and action forum for the development of sustainability issues at institutions of higher education. These organizations strengthen ties between their members and enhance communication with national and international partners over the long term. Sharing information, ideas and best practices helps promote sustainability in teaching, research and administrative operations, thereby acting as a catalyst for a range of transformations at the University of Bonn.

Collaboration with the NRW Consumers’ Center

Participation and informal education for sustainable shopping and eating behaviors are the goals of the NEiS: Sustainable Nutrition in Everyday Student Life project. Established in 2021 as a joint project by the University of Bonn and the NRW Consumers’ Center, it provides a range of innovative and participatory services for students including the supply of information and advice to encourage and enable them to adopt low-waste and climate-friendly nutritional habits and play their part in realizing a sustainable University environment. NEiS is funded by the Ministry for Environment, Agriculture, Conservation and Consumer Protection of the State of North Rhine-Westphalia.

An ambitious vision for sustainable construction

Having set itself the goal of becoming climate-neutral by 2030, the University of Bonn took the first decisive steps to this end in 2021 with the launch of a project seeking to draw up a net zero road map. An initial assessment of the situation showed that in making the switch to district heating and sustainably generated electricity implemented in 2021, the University of Bonn was able to effect a 90 percent reduction in its CO₂ emissions. The climate policy goals of the state of NRW present additional opportunities for the development of a sustainable building stock.

The reporting year saw the introduction of the KfW40 energy standard for new buildings, whilst the previous KfW55 standard will continue to apply to the renovation of existing buildings. When planning new construction and renovation projects, the University has committed to examining the feasibility of renewable energy sources, implementing them wherever possible. A further priority is the establishment of green building facades and roofs and the use of plants in open spaces, roof terraces and other outdoor areas to promote biodiversity and achieve sustainable improvements in the urban ecosystem. Finally, the University moved to introduce a uniform waste separation system in order to promote environmentally conscious behavior in daily waste disposal.
Proactive administration: focusing on the needs of researchers

The second term of office of the Provost aims to continue his record in the development of proactive administration. Seeking to equip the central administration to meet the needs of the 21st century, the Provost has announced his intention of taking every opportunity to infuse it with the spirit of proactivity and agility, in order to keep the University at the forefront of international academic development. We are currently experiencing a deep cultural change in which modern university management is required to tailor its activities to the needs of its members. The internationalization of academia, the demands of sustainability, demographic change, the ongoing skills shortage and the opportunities and challenges associated with digitalization all require a lean, proactive and needs-driven administration fit to drive the sector forward. The principle of proactivity entails the anticipation of needs before their articulation. Grounded in the belief that excellent research and teaching are augmented by and benefit from proactive administrative processes, the University of Bonn has resolved to provide services and support at a level which would free up academics and enable them to concentrate on their core responsibilities of research and teaching. During the reporting period, the administration concentrated on anchoring the principles of proactivity and agility in the operations of all of its divisions. It was also tasked with implementing the measures set out by the Excellence Strategy. The first step to this end was the agreement at a number of workshops and meetings on the director’s level, of a common understanding of the principle of proactivity, which incorporated innovation, good communication, anticipation, creativity, transparency, efficiency and sustainability. An agile methodology was also deployed within group work to resolve a range of issues relating to the needs of researchers, and a specific program of measures was agreed. The next step in this process will involve a feedback survey to determine levels of satisfaction with the core processes of the administration.
The NRW University Agreement 2026

The NRW University Agreement 2026 between the universities in North Rhine-Westphalia and the State government has secured a fixed level of basic funding for the University of Bonn between 2022 and 2026. The agreement exempts the University from any state savings programs or spending freezes implemented during this period. The agreement also foresees that the state will cover all annual salary and wage adjustments and any cost increases in rents and leases. The University was awarded a three percent increase in material and investment funds amounting to approximately €1.2 million per annum. The funds provided for all NRW universities will increase by €40 million from 2023; the state will provide another €35 million to implement the E-Govern Act and the Online Access Act. In addition to the legal requirements of the NRW e-Government Act and the Online Access Act, the project was initiated in summer 2021 to satisfy the requirements and deadlines. In addition to the legal requirements and deadlines, this project also takes into account the University’s own requirements and thus forms a sound basis for the planning, initiation and implementation of IT and digitalization projects by the end of 2025.

A University-wide employee survey

Working on a commission from the Rectorate, Healthy Campus Bonn, the University health management team, initiated a university-wide employee survey in 2020, which was continued in 2021 in several waves under the title “Focusing on Us: Team—Work—Wellbeing.” Seeking to learn more about working conditions, teamwork and workplace well-being at the University of Bonn, the Healthy Campus Bonn team will share the findings of the report with the employees of the areas surveyed and experts from other areas of the University of Bonn and work with these stakeholders to develop a raft of needs-driven measures designed to go beyond classic workplace health promotion schemes. In so doing, the Rectorate hopes to achieve a lasting improvement in work processes, the office atmosphere and (interdepartmental) communication. Adopting a participatory approach, all employees were invited to help shape the process and develop measures.

The digitalization of administrative processes

2021 saw the University continue the rollout of the SAP system, started in 2020. A version update was implemented in May and the purchase of licenses for all employees including student assistants provided the basis for the introduction of the first self-service functions. Implementation of these functions began in 2021 and is slated for testing in a pilot operation in the spring of 2022. The full rollout is set for mid-2022. The result will be the complete digitalization of the entire travel expense procedure, from application to settlement. The development of further self-service functions for use in HR operations was continued in 2021; the financial reporting system was also consolidated in the reporting period, and additional shops were connected in the procurement module. The e-billing project started at the end of 2020 was successfully implemented in 2021. This involved digitalization of the processing of incoming invoices, which closed the gap in the digital procurement process, thereby avoiding media discontinuities. The phased rollout started in early 2022.

The “Development of a digitalization roadmap (implementation of E-EGovG and DZG)” project was initiated in summer 2021 to satisfy the legal requirements of the NRW e-Government Act and the Online Access Act. In addition to the legal requirements and deadlines, this project also takes into account the University’s own requirements and thus forms a sound basis for the planning, initiation and implementation of IT and digitalization projects by the end of 2022 or the end of 2025.

Introducing the new e-invoice service

A year after its launch, the new e-invoice service is finally up and running in the Faculty of Mathematics and Natural Sciences. Following a design and training phase, the new digital invoice processing system is now set for a phased rollout across the University on a faculty by faculty and organizational unit by organizational unit basis. A start will be made in the Faculty of Mathematics and Natural Sciences, where centrally incoming invoices are available in digital form. Specifically, this means that the mail room no longer distributes incoming invoices in paper form to the institutes and facilities, but passes them on to Finances (Division 5), where they are scanned centrally and all available master data is recorded for account assignment. Afterwards, all information on the invoice will be immediately accessible to all parties involved, thereby shortening the processing time. As a result, the majority of invoices no longer have to be processed in the institutes and facilities—thereby eliminating the time currently required for checking and approval—and those involved are no longer required to complete paper documentation (accompanying item entry sheets). The project team and Section 5.1 have set up a telephone hotline for questions arising from the changeover.
The University of Bonn Foundation (Universitätsgesellschaft Bonn) passes on the baton to the next generation

After 12 years of hard work and dedication in his role as founding Chair of the Executive Committee of the University of Bonn Foundation, Prof. Dr. Wolfgang Löwer handed over the reins to his successor, Prof. Dr. Rainer Hüttemann, in June 2021. Prof. Dr. Dagmar Wachten has also joined as a new member of the committee. The University of Bonn Foundation serves as an umbrella organization for various endowment funds, foundation trusts and collections, and, in this capacity, funds academic research and teaching at the University of Bonn. Prof. Löwer was involved in the establishment of the foundation, which has since developed well. All interested members of the public are invited to involve themselves with the University of Bonn through making a donation to the Foundation, which works to provide scholarships for students and early-career researchers.

New facilities for the detector physics unit

The detector physics research building was handed over to the University of Bonn by the Bau- und Liegenschaftsbetrieb NRW (BLB NRW) in July 2021 after six years of construction. The building provides the Physics Department with some 2,900 square meters of new research space for the development of detectors. This includes a shielded deep underground laboratory for low-radiation work, laser and chemistry laboratories, physics workrooms, a presentation room for 100 people and an assembly hall with a gantry crane. A crystal store and a clean room were also set up. The nature of the COVID-19 pandemic meant that only a select few could be invited to the opening ceremony in November; the high-profile attendance included Isabel Pfeiffer-Poensgen, the NRW Minister for Science and Research and Ulrich Schüller, Head of Department at the Federal Ministry of Education and Research.

Following a long lead time, 2021 finally saw the start of construction work on the replacement chemistry building at the Endenich Campus. Completion is planned for the end of 2023. Parts of the Chemistry Institute will move into the five-story building. The plans foresee some 1,650 square meters of laboratory space and 600 square meters of office space. The building work will free up areas of the existing building, thereby permitting its renovation. Work will be performed to satisfy changed fire protection and building regulations.
Research buildings AVZ I and II

Despite the pandemic, the juries adjudicating the designs for the planned research buildings (general-use buildings AVZ I and II) were able to meet in-person at the end of 2021. The plans and models were then released to the public in the Blue Grotto of the University Main Building. In planning the AVZ I replacement building—to be used by various natural science institutes—the building owner places great importance on considerations of sustainability and ecology. To this end, the call for tenders specified installations with which to establish green roof surfaces and facades and the use of sustainable building materials. With almost 7,000 square meters of usable space, the new AVZ II building for the Pharmaceutical Institute on the Endenich campus is set to provide laboratories and practical training rooms as well as offices, lecture halls, seminar rooms and a cafeteria. A sophisticated cooling and ventilation system is planned.

Restoration of the Lennéhaus

The urgently needed renovation of the birthplace of the Bonn-born garden artist Peter Joseph Lenné (1789–1866) in Konviktstraße began in May 2021 and is currently making good progress: work has already begun on the building interior, its roof, facade and the outdoor facilities. Completion is expected in 2023.

Relocating the Academic Museum of Art

November 2021 saw the Academic Museum of Art move to temporary quarters in Römerstraße, where it is set to remain for the next four years, during which time the current location of the museum in the Hofgarten is set to undergo refurbishment.

The move presented a considerable challenge: thousands of precious plaster, marble, pottery, bronze and glass artifacts had to be safely packed and transported to their new temporary location. A reduced number of objects will be on display on a smaller floor space over the next four years.
KEY FIGURES

FINANCE VOLUME, EUR IN THOUSANDS

Budget
(University budget plus Faculty of Medicine third-party funding)  773,521
of which third-party funding
(University budget incl. Faculty of Medicine)  176,670

NUMBER OF ACADEMIC DISCIPLINES WITH VARIOUS DEGREES (WS 2021/22)

in the bachelor’s segment  116
in the master’s segment  101
State Examination degree programs  5
Degree programs culminating in a Church Degree  2
Undergraduate Magister degree programs (degree: Magister Theologiae)  2

COLLABORATIVE PROJECTS

Clusters of Excellence  6
Collaborative Research Centers  12
Research Groups  8
DFG-funded Research Training Groups  5
BMBF collaborative research projects  14
ERC projects  19

PEOPLE AT THE UNIVERSITY OF BONN

STUDENTS (WS 2021/22)

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>33,412</td>
<td>14,376</td>
<td>19,003</td>
<td>33</td>
</tr>
<tr>
<td>of which international</td>
<td>4,514</td>
<td>1,927</td>
<td>2,587</td>
</tr>
</tbody>
</table>

Doctoral students *

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,893</td>
<td>3,268</td>
<td>3,625</td>
<td>0</td>
</tr>
<tr>
<td>of which international *</td>
<td>1,729</td>
<td>873</td>
<td>856</td>
</tr>
</tbody>
</table>

Graduates **

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,253</td>
<td>1,738</td>
<td>2,515</td>
<td>0</td>
</tr>
</tbody>
</table>

Doctorates **

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>587</td>
<td>308</td>
<td>279</td>
<td>0</td>
</tr>
</tbody>
</table>

Habilitations***

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>33</td>
<td>18</td>
<td>0</td>
</tr>
</tbody>
</table>

* as per the official statistics on doctoral students as of Dec 1, 2021 (not yet binding)
** Academic year 2019/20
*** Academic year 2020/21

STAFF (INCL. THIRD-PARTY AND STATE FUNDED)

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,400</td>
<td>3,810</td>
<td>3,589</td>
<td>1</td>
</tr>
</tbody>
</table>

Professors (incl. Faculty of Medicine)

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>636</td>
<td>475</td>
<td>161</td>
<td>0</td>
</tr>
</tbody>
</table>

Academic staff (incl. Faculty of Medicine)

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,799</td>
<td>2,536</td>
<td>2,262</td>
<td>1</td>
</tr>
</tbody>
</table>

Administrative and technical staff ¹

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,894</td>
<td>755</td>
<td>1,139</td>
<td>0</td>
</tr>
</tbody>
</table>

Apprentices and interns ¹

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>71</td>
<td>44</td>
<td>27</td>
<td>0</td>
</tr>
</tbody>
</table>

FULL-TIME EQUIVALENT

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,095.61</td>
<td>3,290.20</td>
<td>2,804.91</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Professors (incl. Faculty of Medicine)

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>596.40</td>
<td>446.22</td>
<td>150.18</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Academic staff (incl. Faculty of Medicine)

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,808.63</td>
<td>2,082.61</td>
<td>1,725.52</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Administrative and technical staff ¹

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,622.18</td>
<td>717.97</td>
<td>904.21</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Apprentices and interns ¹

<table>
<thead>
<tr>
<th>total</th>
<th>male</th>
<th>female</th>
<th>diverse</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.40</td>
<td>43.40</td>
<td>25.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

¹ excl. Faculty of Medicine and University Hospital Bonn