

What is the first thing that occurs to you when you hear the word "Perspective(s)"? Spontaneous associations might be: Looking through a camera lens or the view from the top of a mountain? A little more abstract: a perspective from a certain location, a subjective standpoint, temporary, time-dependent perception? Perhaps also: The diverse standpoints of different people?

Within this diversity of perspectives, science seeks more "objective" standpoints or even "the truth", knowing full well that to seek is not necessarily to find. Science wants to document, describe and understand the world; it dares to predict the future and contributes – precisely through the diversity of scientific perspectives – to keeping the present open for the future. Research, teaching and third mission at Goethe University are shaped, as you will see when reading this yearbook, by a broad spectrum of perspectives. This makes it an appealing and stimulating place for exchange and the generation of new knowledge for students, teaching staff, researchers, partners and friends. Every single member of the University introduces - consciously or unconsciously – his or her own perspectives into the University through his or her personality, experiences and attitudes. We are united here in our academic aspirations inasmuch that we strive for well-founded arguments and justification on the basis of shared rules and do not just exchange opinions. Our principle is: The unconstrained constraint of the better argument.

For Goethe University, this exchange is not a purely intramural mission. It is far more the case that we also profit from the perspectives of our university and non-university partners — in particular the Rhine-Main Universities, but also

partners from throughout the whole of Hesse and beyond. Within the scope of practised third mission, we profit from a continuous dialogue with society and are building more and more bridges with it. In so doing, we are continuously broadening our perspectives — ones which can inspire and motivate us in our academic work.

This is how renowned scientific achievements evolve — in 2017 particularly evident through the launch of new research projects and partnerships as well as new degree programmes. We would like to present some of them to you in this yearbook. With it I would like to invite you on a journey through 2017. You will see that the past is not dead and gone, since common perspectives for the future can always be found between the lines.

I Wolf

Yours sincerely, Professor Birgitta Wolff President





### »CREATING PERSPECTIVES TOGETHER«

### **FOUNDATION UNIVERSITY**

G for Goethe University – A stocktaking exercise 8
Exile at Goethe University 11

### STUDIES & TEACHING

The high flyers 14
Giving old things a new future 15

### RESEARCH

Riedberg Geozentrum – El Dorado of geosciences 18

Tenure track – Appointment on probation 19

#### INTERNATIONALISATION

Double degree: The binational university qualification 22
We asked Dr. Rebekka Göhring 23

### THIRD MISSION

Johanna Quandt Centre 26
We asked Professor Manfred Schubert-Zsilavecz 27

### THE UNIVERSITY EXPERIENCE

Lively campus 28

### **FACTS & FIGURES**

Funds for structured programmes 34

Students 37

Third-party funding 38

University budget 39

Foreword 3

Legal notice 40

With over 48,000 students, 136 study programmes and 572 professors in the 2017/2018 winter semester, Goethe University is the largest university in Hesse; nationwide it occupies third place after Munich and Cologne.

According to the Shanghai Ranking, in 2017 Goethe University was in the group of 101 to 150 best rated universities worldwide and numbers amongst Germany's seven best universities.

In 2017 too, Goethe University was able to register an upward trend in its acquisition of external funding. With around € 197 million, it remains at a very high level.

As renowned research universities, Goethe University Frankfurt am Main, Johannes Gutenberg University Mainz and TU Darmstadt are pooling their expertise within the alliance of Rhine-Main Universities (RMU) in 25 collaborative research groups and platforms.

With 610 'Deutschlandstipendium' scholarships, Goethe University once again achieved one of the best results nationwide. About 360 sponsors contributed € 1.098 million to this purpose.

FOUNDATION UNIVERSITY

## G FOR GOFTHE UNIVERSITY — A STOCKTAKING EXERCISE

Frankfurt is a place that fits no ordinary mould. Recently chosen as one of the seven best cities in the world to live in, it is becoming more and more appealing for students too, although it is not a typical student town. Goethe University too fits no ordinary mould. Anyone opting to study or conduct research here does so consciously: Goethe University is a university open to the world and with a bold, vibrant and critical culture of debate. It values diversity and – as a citizens' university – its grassroots relationship with the "outside world". It is a research-oriented institution that offers world-class teaching in many areas, an excellent and adventurous research landscape of global renown. Goethe University ploughs its own furrow and always has – but not on its own. Through partnerships, ideas evolve that shape the future and open up perspectives.

The alliance of Rhine-Main Universities (RMU) is a good example. With over 100,000 students and 1,440 professors, Goethe University, Johannes Gutenberg University Mainz and TU Darmstadt have been working together since 2015 in research, studies and teaching. The 25 collaborative research groups and platforms as well as first jointly run degree programmes are a mark of sustainable development in this region of knowledge: An alliance with outstanding potential and perspectives - for students as well as researchers. Close networking and ongoing exchange are essential contributors to scientific progress, creating value added in research, teaching, a sharing of knowledge as well as in administration and services. These acclaimed research universities retain their independence at the same time and are in turn also active in other networks, ultimately creating a proactively managed network of networks.

### SUBSTANTIAL PERSPECTIVES FOR RESEARCH

Both the creative scientific autonomy of excellent research performed by individuals as well as fruitful exchange between different personalities, ideas and subject-specific perspectives produce trailblazing research. Research at Goethe University covers a wide spectrum of themes, facilitating a top-class scientific performance at international level in many fields and disciplines which impacts on the University's constantly developing research profile.

For example, Goethe University took part again in the Excellence Strategy competition of the national and regional governments. The Cluster of Excellence "Cardiopulmonary System" was invited to submit a full proposal. With fresh ideas, the University's researchers are now unleashing other sources of funding for the proposals not taken into consideration in the competition, partly in close dialogue with the state, sponsors, friends and benefactors. In this context, Goethe University is, of course, far more than just its activities

within the Excellence Strategy. Through outstanding research achievements it has shown evidence of increasing strength and substance over the past years — and continues to be impressively successful: In 2017 it managed to raise its external funding from an already high level by a further 7 % to € 196.7 million, the highest amount so far.

Goethe University was successful in the international competition for research funding at EU level with 79 projects alone in the current Framework Programmes, of which it was coordinator in seven collaborative research projects and two Innovative Training Networks

Amongst the most important milestones in the funding of leading-edge research in Germany and Hesse number the approval of two further Research Units of the German Research Foundation focussed on topics relevant to society, such as the global freshwater system and the effects of regulation in the financial system, the award of a further funding phase for the LOEWE Centre for Translational Medicine and Pharmacology, which is planned to become an independent Fraunhofer institute when this funding ends, and a new research building. With the award of the Leibniz Prize, economist Professor Nicola Fuchs-Schündeln is the latest in a long and successful series of laureates of Germany's most important scientific accolade.

The projects and figures (which can also be found at the end of this yearbook) show that Goethe University's



Virtual reality at the service of cognitive psychology – Research diversity in Frankfurt

research performance has further improved both in collaborative as well as individual projects. The expansion of structural research support, e.g. through the Research Service Centre and the Research Council, seems to be making an impact here. Goethe University will continue to work on this, even if it is not possible due to the restricted level of basic funding to raise further external funding ad infinitum. External funding is conditional on basic funding.

### STUDENT GUIDANCE

Hesse's largest university currently has around 48,000 students, of which over 5,800 were new to Goethe University in the 2017/2018 winter semester. Far over half of all students are female, about 7,400 come from abroad. Of the first 35 participants who completed the Academic Welcome Programme for Highly Qualified Refugees, 30 managed the transition to a degree programme, about 50 % at Goethe University.

With this enormous increase in students, the University is accomplishing a tremendous feat of strength. In administration. In teaching. "Small subjects" such as classical

archaeology are pushed to the limit as are large ones like economics. It is only thanks to the fact that the University is increasingly successful at raising external funding that student supervision remains excellent whilst its basic funding by the state remains unchanged.

Goethe University is at the same time further developing teaching and course content: Building on research-based learning as a didactic concept, more and more faculties are aligning their curricula with vocational requirements. This opens up new perspectives for students and contextualises the acquisition of knowledge in many new ways – yet

Foundation University





without neglecting academic standards. Practical experience gained against a backdrop of scientific theory makes entering a career much easier. This is why the University intends to embed practice-oriented components in its individual study regulations. At the same time, digitalisation is changing the face of teaching and studies. Goethe University is making good use of this opportunity.

#### DIVERSITY AND FOUALITY

For Goethe University, diversity is not just a buzzword but a fundamental part of its academic identity. Fostering this diversity and making it visible is self-ordained: Through the new initiative "Goethe University = A Place of Opportunity" the University wants to further improve conditions so that the individual potential of its members can unfold and accrue. Part of this is counteracting

all kinds of discrimination. With its "Gender Equality and Diversity Action Plan 2017–2022", Goethe University is fast-tracking its gender equality and diversity policies. It is all about creating a university culture based on equal opportunity: By improving academic infrastructures, for example, or through family-friendly career concepts. This too raises the quality of research and teaching to the benefit of a superior academic landscape.

#### A UNIVERSITY OPEN TO THE WORLD

As a foundation university, Goethe University sets its own priorities here. It is a critical university and yet one which is at the same time firmly anchored in society. Its trademark is diversity: Economics students attend lectures on how behavioural science is used in marketing, whilst in the building opposite students of political

sciences discuss Adorno and justice. Distinguished archaeologists discover rare looms in distant Iraq, whilst prominent cancer researchers revolutionise both science as well as clinical therapy with their insights. Each discipline, each face, each story in itself casts a different perspective on the University. What remains important is the common denominator: A shared commitment to the unconstrained constraint of the better argument.

Foundation University

She arrived with just hand luggage. Latife Akyüz left Turkey from one day to the next. Her life was in danger. Why? In January 2016 the sociologist signed the "Academics for Peace" appeal, protesting together with about 2,000 other scholars against the bombardment of Kurdish territories in eastern Turkey. She was immediately declared a terrorist: "We came under enormous pressure from Turkey's AKP government," says Latife Akyüz. "But as a social scientist I have to play my part in social processes."

Akyüz was working as assistant professor at the university in Düzce, a small town about 200 kilometres east of Istanbul. "A very conservative university, quite different to the university in Ankara where I studied and did my doctorate. I was the only academic in Düzce who signed the petition and that's why the reaction there was very harsh," says Akyüz.

That her university instigated disciplinary measures did not really surprise her. But she had not expected scholars throughout the whole of Turkey to be summarily dismissed and literally cast out. Akyüz received threats from radical groups. She fled to Istanbul – at first. It was there that she heard about the Philipp Schwartz fellowships offered by the Alexander von Humboldt Foundation. These fellowships enable threatened researchers to gain a foothold at a German university for a period of two years. This is conditional on a mentor assuming responsibility for the researcher and his or her integration in the university's research programme. Latife Akyüz got in touch with Kira Kosnick,

SOCIETY ON THE MOVE

**EXILE AT GOETHE** 

UNIVERSITY

sociology professor in Frankfurt, who was willing to act as mentor: "Social scientists who had to flee from Germany left a deep impression on me during my studies. When I heard about the developments in Turkey, I wanted to do my bit. Goethe University helped me greatly in this. Now I've got a colleague who can teach me a lot."

Three refugee academics from Turkey are currently conducting research in Frankfurt with the help of a Philipp Schwartz fellowship. Goethe University has a particularly special relationship to this initiative: Philipp Schwartz taught there from 1927 to 1933 as professor for pathology. After the Nazis seized power, he was summarily removed from office and obliged to flee to Switzerland. Whilst in exile in Zurich he helped about 1,500 persecuted scholars to flee and start a new career abroad —many of them in Turkey.

Latife Akyüz is now at the Institute of Sociology where she can continue her work as gender and ethnicity researcher. She has no hope of being able to return to Turkey in the foreseeable future. However, Akyüz finds there is something quite positive about so many academics being in exile: "There are exiled Turks at almost every German university now who will definitely stand up for a democratic Turkey governed by rule of law. The 'Academics for Peace' movement is starting to rally here too."

Turkish sociologist **Latife Akyüz** is working at Goethe University with the help of a Philipp Schwartz fellowship. This initiative of the Alexander von Humboldt Foundation supports scholars who are no longer free to pursue their research work in their home countries and are threatened by war or persecution.



In the 2017/2018 winter semester, Goethe University welcomed 48,107 students, of which 10,442 first-semester students and 7,661 international students from 136 countries.

Six study programmes were newly accredited, including a continuing education Masters programme in Digital Transformation Management (MBA) as well as a cross-university B.Sc. programme in Medical Technology.

Of the first **35 participants** who completed the Academic Welcome Programme for Highly Qualified Refugees, **30 managed the transition to a degree programme**, about half of them at Goethe University.

According to the Global University Employability Ranking 2017, Goethe University numbers amongst the top 50 universities worldwide whose graduates are the most popular amongst employers — and occupies third place amongst all German universities after TU Munich and LMU Munich.

Each semester, the University of the Third Age organises over 120 talks, seminars and lecture series from all fields for mature students. About 3,600 students enrol each semester.

STUDIES & TEACHING

## STUDENT EXPERIMENT ON THE INTERNATIONAL SPACE STATION THE HIGH FLYERS

Young geoscientists and physicists from Goethe University have won a competition run by the German Aerospace Centre. In 2018 they will send an experiment they developed themselves to the International Space Station (ISS). If it is successful, an important riddle might finally be solved: How planets evolve.

hallenging tasks require special preparation: The prototype of the experiment kit needs redesigning. "Our device works with batteries that recharge themselves at the same time," explains Dominik Spahr. "This type of power supply might cause problems." Spahr is sitting in a lab at the Geozentrum together with project manager Tamara Koch. They ponder. There is a lot of highly sensitive equipment on the ISS. Nothing must go wrong. "We just solve one problem only to get two more instead," grins Tamara Koch. Time is short.

Since the group found out that it can put its idea into practice, the project members have met up on a regular basis and are now working on the test setup. They need to buy components, write a computer programme and solve problems – such as the one with the power supply. The size specifications alone demand a lot of imagination. The whole experiment must fit in a box  $10\times10\times15$  centimetres in size, weigh no more than 2.5 kilograms and manage on a maximum voltage of 5V DC.

### EXPERIMENT TO TEST LIGHTNING THEORY

The test setup is called EXCISS. It examines how what are known as chondrules developed. These are the basic building blocks from which the planets could later have formed. Up until today this has remained unexplained. The young



researchers are investigating whether lightning in the early solar system was able to heat up dust particles to such a high temperature that they fused to form chondrules: "We want to make dust particles collide and use lightning bolts to let them melt under the same conditions as prevailed in the solar nebula," explains Tamara Koch. Zero gravity in space provides for realistic conditions.

The heart of the EXCISS kit is a small glass sphere, the lightning chamber. It is filled with pulverised olivine, a magnesium silicate that was also already present in the nebulae of the early solar system. The intention then is for small sparks to flash through the glass sphere on the ISS, filmed by a tiny high-resolution camera. "The individual components aren't really that complex," says geoscientist Dominik Spahr.

### A BIT OF EXCISS IN EVERYONE

"Such a project is a once-in-a-lifetime experience," says Professor Frank Brenker, who is supervising the project together with his colleague, Professor Björn Winkler. The astromineralogist was the driving force behind the group's participation in the competition: "Having their own experiment on the ISS is every student's dream and at the same time a jump in the deep end." If the EXCISS mission is successful, it will bring the Frankfurt team a lot of publicity and scientific acclaim.

### SMALL SUBJECT, UNIVERSAL PERSPECTIVES GIVING OLD THINGS A NFW FUTURE



igging around in mysterious burial chambers and wear-Jing a hat like Indiana Jones – that is the cliché many people associate with the archaeologist's job. Anja Klöckner laughs: "We're noticing that the image with which archaeology is presented in the media is influencing students' choice of degree programme. This means that many first-semester students don't even know exactly all the things that archaeology can be," says Klöckner, Professor for Classical Archaeology. A down-to-earth lady. "They come here and say 'I think the pyramids in Egypt are really great'. Classical archaeology has nothing whatsoever to do with Egyptology."

Anja Klöckner knows all her students by name. She is a likeable person who sets great store by a family atmosphere. During Orientation Week she offers all first-semester students individual guidance. In fact, this is even compulsory and earns points. "Archaeology is an adventure, yes, but it's hard work too that demands patience, perseverance and considerable discipline. Analysing broken bits, for example, is a lot of desk work. Students need to know that."

Classical archaeology is referred to as a "small subject": In Germany there are only a few departments and staff nationwide. Many students avoid "small subjects" and decide in favour of mass subjects: Business administration, law, medicine, mechanical engineering. "Students nowadays are anxious about the future," says Klöckner. Cultural studies are in general not suitable for a plannable career with a top salary. But she would never advise against it: "It depends on an individual's personal motivation and goals in life."

Archaeology – the "study of old things" – is an intercultural, international and interdisciplinary science. That is why there is not just one type of archaeology as a university subject but several different ones that specialise in specific epochs, cultural areas or sources. "If you study classical archaeology, the perspectives are so broad that there are many different avenues: For example, art history,

media theory, settlement geography, economic history, history of religion. This means a wide range of job opportunities for graduates."

Her broad and varied teaching portfolio is not standard routine. Klöckner teaches critical thinking. That takes time. Each double lesson requires one or two days of preparation. She aspires to good service and timely feedback. "Our students learn network thinking and how to systematise. In combination with international experience gained from excavations and excursions, that increases their prospects in the job market tremendously." The more broad-based a background they have, the better the prospects for students of small subjects are.

However, Anja Klöckner knows that her students are primarily concerned with research rather than career options. It is important, she says, to offer perspectives and opportunities for research in small subjects too: "Academic diversity is a university's deciding feature, regardless of a subject's economic value. If we take university seriously then we must take small subjects seriously too." The wide-ranging perspectives offered by Goethe University convinced Anja Klöckner to move from Giessen where she previously taught. She took on the Chair for Classical Archaeology in the 2016 summer semester. The only one for this subject in the department.

Fascinated by the ancient world: Anja Klöckner is Professor for of Goethe University. Having studied and earned her doctoral degree at the University of Bonn and LMU Munich, she completed her aestheticisation as well as Greek votive reliefs and acculturation

With three Clusters of Excellence, 25 ongoing collaborative research projects and participation in 20 Innovative Training Networks (ITNs), in 2017 Goethe University remained one of the ten strongest research universities in Germany.

In 2017, Goethe University raised around € 197 million in external funds, including LOEWE funding and donations.

The University Library made available 10.08 million media items, of which **7.06 million were printed books and journals**. This was much appreciated by its **2.34 million visitors** who have **3,876 study spaces** at their disposal.

Goethe University's Open Access Strategy facilitates the online publication of research results. Publication fees for open access journals are covered by the University Library's OA Publication Fund.

In 2017, researchers from Goethe University registered 39 new inventions, of which about half were in medicine (Faculty of Medical Science), a further third in the field of life sciences (Faculty of Biochemistry, Chemistry & Pharmacy and Faculty of Biological Sciences) and the remainder from the Faculty of Computer Science & Mathematics and the Faculty of Physics. Priority patent applications were filed for nine inventions in Germany and a further 47 national patent applications were filed in other countries.

RESEARCH

### RIEDBERG GEOZENTRUM – EL DORADO OF GEOSCIENCES THE CLOUD HUNTER

Climate change, natural disasters, an increasing shortage of raw materials – researchers from the Faculty of Geosciences and Geography are producing answers to the global challenges facing mankind. They sketch scenarios of how the environment will develop in future and demonstrate how unwanted changes can be lessened or prevented. Researcher and climatologist Joachim Curtius is one of the outstanding personalities working at the *Geozentrum*.

cientist of the Year 2017. An honour that Joachim Ourtius found very stirring: "In science, being cited is what counts. Two articles in Nature on one day made us very proud, of course. But this award from the Kassel Foundation was something really special. It acknowledges my work in all its breadth and depth." Curtius is Professor for Experimental Atmospheric Research in the Department of Atmospheric and Environmental Sciences at the Geozentrum on Riedberg Campus. His research work centres on a highly topical scientific field: Global climate change. A subject that is very close to his heart and one which he is happy to give his public support. "If the president of the USA denies that climate change is an issue, then we must do something about it," he says, in a calm and considered manner, "Researchers agree that climate change is scientifically proven. We aren't politicians, but our know-how could contribute to political decisions being made for the good of all."

Research on climate and weather always directly benefits society. Curtius' speciality is clouds: "Clouds influence the Earth's energy balance to a major degree.



Professor Joachim Curtius studied physics in Heidelberg. After his doctorate and a post-doctoral degree at the NOAA (Boulder, Colorado, USA), he moved to Johannes Gutenberg University Mainz where he continued his research work. Curtius has been Professor for Experimental Atmospheric Research at Goethe University since 2007. He is coordinator of several national and international collaborative research projects.

They are crucial for water supply and hence for agriculture. We're studying the impact of climate change on clouds and to what extent we humans might influence clouds through additional condensation nuclei."

To conduct measurements in the atmosphere, Joachim Curtius uses HALO, a research aeroplane, and the Taunus Observatory of Goethe University on *Kleiner Feldberg*, a nearby mountain. In the framework of the CLOUD experiment at CERN, he is investigating how manmade and natural trace gases as well as cosmic radiation influence cloud formation and thus also the climate. His findings have met with worldwide acclaim.

In actual fact, Joachim Curtius originally wanted to study medicine. Or architecture. He thought about it for a long time. Today he is happy that he chose physics. Research allows him a tremendously varied and interesting profession, he says. That the number of students at the Faculty of Geosciences and Geography has seen a significant upsurge over the last ten years does not surprise him: "Young people today have a very keen sense of the threats we're currently facing. It's a matter of their own existence and future and they want to play a role in shaping them. This they can do very well through education and training in the field of geosciences." The *Geozentrum* at Goethe University provides an excellent environment for research and study and is considered an El Dorado for geoscientists. Thanks also to outstanding researchers such as Joachim Curtius. the cloud hunter.

he already had an offer for a professorship in the Netherlands under her belt. Simone Wies was intent on going. Get away from her uncertain job as assistant professor in Frankfurt. Her life and career as an economist should finally become plannable. And then things turned out very differently: "In a joint effort, the President, the Dean and the Marketing Department pulled out all the stops for me," says Wies with a smile. "They created a new tenure track professorship and offered me it. That convinced me to stay at Goethe University."

#### PLANNABLE CAREER PATHS

Tenure track means a more secure academic career. It is an appointment 'on probation' with the perspective of greater personal development. A scholar who manages to convince the evaluators in the intermediate and final stages of the tenure procedure is appointed to a professorship for life, accompanied by promotion to the next higher salary bracket. The path via habilitation traditional in Germany does not apply in such cases. "This is even more important for women than for men," says Simone Wies. "We invest a lot of time and energy in an academic career without knowing how - and above all where - we can move ahead in the long term. That's an untenable situation for anyone still wanting to start a family." Tenure track professorships are thus also a way to actively support women. Many female academics leave the system because they do not have the financial security necessary to start a family. Highly qualified early career researchers are lost as a result.

### ONG-TERM SUPPORT FOR EARLY CAREER ESEARCHERS

Outstanding economists like Simone Wies are particularly sought-after. Out of eight professors in the Marketing Department she is the only woman. At the SAFE Research Centre too. It is not really a problem, she finds, but people were still often surprised. No one expects to find a young woman here. "Just as in the past, today it's still mostly white older men who work in finance," says Simone Wies. She is often taken for a student. Yet anyone who experiences her as a professor is soon proven wrong: Simone Wies is a marketing expert with a convincing and very professional manner. She knows what she is talking about. She gesticulates in a subtle and disarming way to underline what she is saying. Simone Wies speaks fluent American English – standard in the world of economics.

Goethe University has invited applications for tenure track professorships since 2007. Over 50 so far. There were 16 new ones in 2017 alone – across all faculties. That some colleagues who have pursued the classic habilitation route look down their noses at this career path is – in Simone Wies' opinion – anachronistic: "At universities strong in research you are measured against how many articles you publish and not on the basis of a habilitation thesis." What is more, this career option makes Goethe University an attractive employer. At international level, tenure track is already a long-established procedure.



Together with partner universities abroad, Goethe University offers four double degree programmes.

Trainee teachers can in future gather practical experience at one of **140 German schools abroad.** Goethe University works together with the World Association of German Schools Abroad (WDA – Weltverband Deutscher Auslandsschulen).

Goethe University maintains strategic partnerships with seven outstanding research universities on three continents, each located in a major economic hub.

More than every third appointed professor is from abroad. That means **nine out of 25 appointments** in 2017.

Goethe Welcome Centre (GWC) took care of **578 international researchers** (including 312 new arrivals) as well as **89 international doctoral candidates** without an employment contract.

INTERNATIONALISATION

# DOUBLE DEGREE: THE BINATIONAL UNIVERSITY QUALIFICATION TWO ARE BETTER THAN ONF

First Frankfurt, then Venice: With an additional qualification from a second university graduates are well on the way to an international career. Cecilia Poletto is absolutely convinced of that. That is why the linguistics professor pulled out all the stops to set up two double degree programmes at her faculty: "In linguistics, working at international level is normal. If you're willing to work then you can really make a career for yourself. There are excellent opportunities to do so."

#### **ACROSS BORDERS**

A double degree programme is indeed a premium kind of course. It teaches expertise that recruiters consider important: Language skills, intercultural experience and flexibility. "What characterises a good double degree programme is that students not only get to know the partner country but also its science and research as well as its way of thinking." Cecilia Poletto, an Italian, speaks from personal experience. As a young woman she studied German and English for a year at Goethe University. That was back in the mid 1980s. It left a lasting impact on her. Her hobby is German dialects. In 2011 Cecilia Poletto felt the call of the Main again and took over the Chair for Romance Linguistics at the Arts Faculty. She also holds a chair at the University of Padua. She lives with her family in Venice. Borders, she finds, are nowadays no more than a psychological barrier: "Europe is a shared cultural space of long-established peoples. It's a reality. We need

only to cultivate our languages then we will understand Europe better. You don't wage war against people who sat next to you at university for six months."

Developing the international double degree Masters programmes was indeed a feat of strength, says Poletto. It took three years, for example, to align the curricula with those in Venice and vice versa. A thousand little things needed organising. The project had to pass through numerous committees. Poletto was able to convince everyone with her expertise and Italian charm: "We found creative solutions. And I had a lot of support both from the President here in Frankfurt and the professor in charge in Venice. He's Austrian and understands the German setup."

### **HOME AND AWAY:**

### WITH A DOUBLE DEGREE BOTH SIDES PROFIT

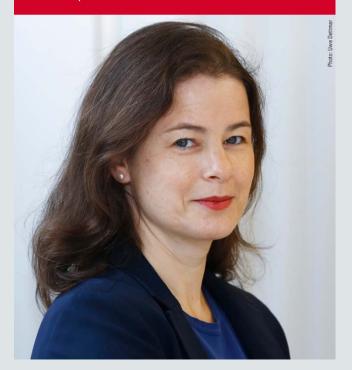
Double degree Masters students spend two semesters at Goethe University and two at the partner university in Venice. Exam and course achievements are recognised by both universities. Students earn two qualifications. Such programmes are also a good thing for the universities themselves. Cecilia Poletto is convinced: "If a university wants to survive in the global competition then it must become international." By working together with partner institutions abroad, a university can expand its course portfolio and gain in international prestige as a result.



Internationalisation

## »INTERNATIONALISATION CALLS FOR RADICAL CULTURAL CHANGE«

**Dr. Rebekka Göhring,** who as head of the International Office and the Student Service Centre at Goethe University sees further potential for internationalisation in university administration.



# In a nationwide comparison, Goethe University has a high percentage of international students, researchers and teaching staff. How does that affect your work?

First of all, we feel that the high percentage of international students makes a very enriching and important contribution to diversity within the student body. Yet at the same time our international students have special requirements and we need to support them in a targeted way. Some examples of how we do this at the International Office are our Internationaler Studientreff, where students come together for various activities, our International Career Service and our Buddy Programme. It's particularly pleasing to see how many students champion these programmes as volunteers.

With the Goethe Welcome Centre, the International Office additionally offers extensive services for our scholars from abroad. These range from help with finding accommodation and a broad spectrum of social activities to clarifying any legal issues connected with their stay in Frankfurt.

## What is referred to as an "internationalisation mainstreaming process" has been launched at Goethe University. What does that mean?

Internationalisation mainstreaming means in the first instance that internationalisation is a cross-cutting topic that is taken into consideration in all areas from the very outset. For our work at the Student Service Centre, for example, this means that all issues related to internationalisation are a fixed component when we develop new services. For example, in the department responsible for

applications and admissions for our over 230 study programmes we have formed a separate group that looks after all Masters and international students in this respect. This helps us to better accommodate this target group's special requirements. We are also busy developing international study programmes: The Student Administration and Examination Office is right now in the process of drawing up guidelines for international study programmes in cooperation with our partners.

### What perspectives does the internationalisation of administration create?

For me, "internationalisation of administration" stands for a radical cultural change. It's a matter here of far more than just the apparent mobility of administrative staff or always providing bilingual services. Both are essential. It is rather the case that the successful internationalisation of administration means that we manage to develop a general, intercultural self-understanding. We should allow ourselves to take inspiration from elsewhere: How do other universities deal with similar issues in a global setting? That's how new, high-quality solutions and an inner stance evolve that make sure our international students and foreign scholars feel entirely at home here with us in Frankfurt and remain attached to the University and well-disposed towards it after the end of their stay too.

»Goethe University is a citizens' university founded and financed by benefactors. Its great strength lies in the way it unites the benefactor idea with the concept of a university that is open towards society. Yesterday, today and in the future.«

JULIA HEREAUS-RINNERT

Board of the Association of Friends and
Benefactors of Goethe University



The team led by physician Professor Peter Bader has developed an innovative cell therapy for patients suffering from life-threatening complications following a stem cell transplant. For the first time, the patented cell preparation has been licensed out to an external partner in cooperation with the blood donor service of the German Red Cross and with the support of Innovectis, the University's own technology transfer agency. Treatment with Obnitix®, the new drug already approved for Germany, can save lives and alleviate suffering.

The patent portfolio for 2017 of Innovectis, the University's own technology transfer agency, comprised a total of 142 patents and patent applications. 14 technologies developed by researchers at Goethe University were commercialised and generated revenue to the tune of € 1.63 million.

By the end of 2017, **65 start-up enterprises** had already moved into the TechQuartier incubator and created over **250 jobs**. Here, university members with good ideas in the area of financial technology can find office space, contacts to banks as well as investors.

The UNIBATOR service is supporting 12 start-up teams that can call on a network of 49 mentors.

In 2017, GoetheLab, the central laboratory for schools, opened on Riedberg Campus. This was made possible through a **donation of € 300,000** by Chinese benefactor and Goethe <u>University</u> alumnus Yi Shi.

THIRD MISSION

Zb
Third Missio

JOHANNA QUANDT CENTRE FOR

## SAVING LIVES THROUGH STEM CELL TRANSPLANTS

he little patient's second life begins with a small bag. It hangs on the infusion stand like a children's portion of pale-pink strawberry puree and drips into his blood stream. A remarkably unspectacular event, yet a stem cell transplant can be life-saving. For seriously ill children it is often their only hope. "In recent years, we have been able to drastically reduce the mortality rate of patients with leukaemia or other blood or immune diseases. Today, most of the children and adolescents who have received a transplant survive," says Professor Peter Bader. A highly dedicated paediatrician, Bader is in charge of the Paediatric Centre for Stem Cell Transplantation and Cell Therapy at University Hospital Frankfurt. About 50 children are given a transplant here each year. Bader and his team are now in a position to help up to 70 young patients - thanks to the Johanna Quandt Centre, the new building named after its benefactor.

### LEADERS EUROPE-WIDE IN PAEDIATRIC STEM CELL THERAPY

Research labs, clinical studies unit, day clinic, transplantation ward: The new centre combines everything under one roof. Light, modern and as sterile as possible. Fast help thanks to short routes that also facilitate close cooperation between researchers and physicians. New experimental stem cell transplantation and cell therapies can be developed and directly incorporated into clinical practice. The team in Frankfurt is leading in this field. It is the only centre in Germany to have developed a cell-based immune therapy and had it approved. Bader and his team of researchers make "cancer drugs" from immune cells genetically modified in the lab.



The Johanna Quandt Centre offers scientists, physicians and patients optimum conditions for the clinical trial stage of the new therapies.

### CO-FINANCE FROM NATIONAL AND REGIONAL GOVERN-MENTS AND PRIVATE BENEFACTOR

The new building along with research equipment and furnishings cost about  $\mathop{\,{\in}}\nolimits 21$  million. The national and regional governments each contributed  $\mathop{\,{\in}}\nolimits 7.6$  million. For entrepreneur Johanna Quandt, who has since passed away, it was particularly important that the research work undertaken at the centre should also directly benefit children. Her donation of  $\mathop{\,{\in}}\nolimits 5.6$  million made it possible to set up the transplantation ward.

"Without third-party funding and above all the donations by the Quandt family, there would not be any paediatric stem cell therapy in Frankfurt," says Peter Bader, an experienced physician. His voice resounds with pride and

gratitude when he talks about the financial support given to his work. He considers himself a "soldier of fortune". Bader was able to co-design the new unit according to his own wishes and state-of-the art scientific standards. For over three years, he sat together every week with the architects and planners. "With this centre," Peter Bader says, "our dream has come true. Only with the right building, staff and equipment like we have here is it possible to offer such medical treatment." And in so doing allow even more children the chance for a second life.

## THIRD MISSION WE ASKED ...

**Professor Manfred Schubert-Zsilavecz**, who as Vice-President for Third Mission believes the potential offered by this university strategy is still far from exhausted



## »INSTITUTIONALISING THE FOUNDATION UNIVERSITY IDEA THROUGH THIRD MISSION«

The Third Mission Strategy has become a permanent fixture in Goethe University's development policy. What have you achieved?

With third mission as the third pillar alongside research and teaching, we have given some structure to the activities underway at our citizens' and foundation university. What I mean by that is the University's integration in society, which should be understood as a reciprocal relationship. The University makes an impact on the region. And conversely the local population actively supports its university. With third mission we can bundle all available strengths: Private university funding, for example, the Deutschlandstipendium scholarship and alumni activities, but also the Unibator platform for start-up enterprises or the TechQuartier that brings together business and science.

## How will the significance of third mission change following the University's disappointing result in the Excellence Strategy?

We are quite clearly the losers in this competition, but that doesn't mean we've become a poorer university. We need to optimise processes and be more critical of ourselves. Through third mission we can further develop and refine our profile as a foundation university. Let me give you an example: The Else Kröner-Fresenius Foundation and the Schwiete Foundation made it possible through their funding to keep Professor Ivan Dikic – one of our best cancer researchers – in Frankfurt. With such investment we can make Frankfurt an internationally important place for cancer research. Foundations will become even more significant for our University.

## What role do private university funding and the Association of Friends and Benefactors of Goethe University play?

It has been possible to develop very effective private university funding. The Association of Friends and Benefactors of Goethe University is now together with us under one roof. All third mission projects, the Summer Festival, the Children's University, the Alumni Lounges, the Spring Fête and much more besides, that is, all these things that enhance our visibility as a citizens' university, are not financed from public money. What is very important for us here is the Association's work: It supports the University by funding a large number of projects. Without it, many scientific projects, academic events or travel to important congresses would not be possible.

## Which potential not leveraged so far do you see in the Third Mission Strategy and what perspectives does it open up?

Just recently and for the very first time in the history of Goethe University, it has been possible with the help of an industrial partner to establish an own company in which the University has a share in the profits. To be precise, we're talking here about a highly effective immune drug. Here in our region we have the best expertise for such a spin-off in the pharmaceutical sector.



The Association of Friends and Benefactors of Goethe University raised around €1 million for the University in 2017, which it is using to support a large number of scientific projects, finance prizes for early career researchers and foster links between the University and local citizens and enterprises.

With 32 canteens, cafeterias and cafés at twelve university locations throughout the Rhine-Main region, Frankfurt Student Services (Studentenwerk Frankfurt am Main) supplies around 1.6 million meals a year for students and staff. It provides 2,887 rooms in 30 halls of residence.

The childcare centre on Westend Campus celebrated its **15th anniversary** in 2017. It looks after 75 children, mostly the offspring of university staff. Goethe University has childcare facilities at four locations.

The University offered its former members some private space to meet in the shape of three Alumni Lounges with over **500 visitors**.

The Citizens' University invited local residents to attend around **275 public lectures, readings and roundtables.** 

THE UNIVERSITY EXPERIENCE

LIVELY CAMPUS

## THE SOMEWHAT DIFFERENT UNIVERSITY

People are paramount: Goethe University is a colourful place with many faces. Around 54,000 people fill its four campuses with life.

Students, professors, scientific, administrative and technical staff. They all stand for a tolerant and liberal intellectualism that is open to the world.

The fitting picture for this in 2017 was the art project "Humans of Goethe". Inspired by New York photographic artist Brandon Stanton, young members of the university communities photographed students and staff of Goethe University and asked them about their values, goals, wishes. A kaleidoscope of faces and stories emerged. Life mottos, religious convictions, favourite places at Goethe University, research and teaching interests, but also everyday, strange and seemingly trivial things came to light

### A PHOTO PROJECT AS A SIGNAL FOR DIVERSITY, DIA-LOGUE AND TOLERANCE

The portraits and interviews make it obvious: Seemingly very different people by all means think and feel in a similar way. The photo project became a clear plea for openness, tolerance and dialogue. This is exactly what the organisers, backed by the inter-religious Café Abraham initiative of the university and student communities, were hoping for. After all, it is the "Humans of Goethe" that make the University a multifaceted place of learning, working and living through their personalities.

This climate of diversity is characteristic of Goethe University. And challenges it to fulfil the needs of its





Humans of Goethe – Photo art project in support of diversity and tolerance



The "Green Auditorium" will in future be at the disposal of students and lecturers as an open-air classroom. About 80 m2 of green space stretches between the Law Building, the Business Administration & Economics Building, the church-run hall of residence and the Auditorium Complex, enclosed by leafy green hornbeam hedges and 14 Japanese cherry trees: A burgeoning landscape as a signal for sustainable development in the world and for climate protection.

Green Auditorium: A signal for sustainable development and climate protection

students and staff. Right on the campus. Since the University is often a place of learning and teaching, research and work until deep into the night. That calls for support and demands quality of life.

#### HIGH REGARD LEADS TO HIGH OUTPUT

By being family-friendly, for example. The University's five own childcare centres foster the compatibility of study, career and family. 251 places in total are available. At Studierendenhaus on Bockenheim Campus there is additionally a non-university childcare centre for a further 45 children. With 135 places, Riederg Campus is home to the largest university childcare centre in Hesse; in 2017

the centre on Westend Campus celebrated what was already its 15th anniversary — playgrounds for academic offspring, where above all the sound of children laughing and squealing shape everyday life

#### GREEN AUDITORIUM - ROOM FOR THOUGHT

A playground of a somewhat different type is the "Green Auditorium". Opened in 2017, it offers an opportunity to spend some quality time in natural surroundings, right in the middle of Westend Campus. It is the first at a German university and was created in cooperation with the Federal Ministry for Economic Development and Cooperation as the project's material and non-material sponsor.

The University Experience





#### MUSICAL AMBASSADORS

Diversity united through music — the Collegium Musicum is Goethe University's musical business card. With its symphonic concerts, the orchestra and the choir have made a name for themselves beyond the University too. Culture lovers and music enthusiasts from throughout the entire region are regular quests.

Standards are high. The Collegium Musicum commemorated Georg Philipp Telemann, the famous Baroque composer, on the 250th anniversary of his death with nine cantatas. 13 concerts by a large ensemble in Frankfurt and the surrounding region as well as 11 chamber music performances and a radio broadcast

delighted the audience. The highlights in 2017: A promenade concert at Senckenberg Museum, the musical arrangement for the Hessian Culture Prize, open-air performances in Frankfurt City Forest and on Riedberg Campus as well as the first appearances of the newly formed Symphonic Wind Orchestra and the re-established Chamber Choir.

#### MUSIC UNITES

The Collegium Musicum comprises the Academic Orchestra, the Academic Choir and the Symphonic Wind Orchestra. Students of all faculties – but also alumni and staff of Goethe University – come together in their

free time to make music. The repertoire covers a range of symphonic oeuvres, but oratorios have also already been performed. There are weekly rehearsals – during the semester only – for the concerts, which then take place at the end of the semester at the University and external venues. Choir and orchestra have been directed since 2015 by the University's Musical Director Jan Schumacher. The Symphonic Wind Orchestra, established in 2016, is directed by Lisa Bodem. A passion for music along with the performances and concert tours create a sense of community that brings together a large number of people at the University – beyond faculty boundaries.



### FACTS & FIGURES

(in accordance with § 29 Paragraph 8, Hessen Higher Education Act)

### FUNDING OF STRUCTURED PROGRAMMES 2017

#### CLUSTERS OF EXCELLENCE

Macromolecular Complexes in Action • EXC 115 Spokesperson: Prof. Volker Dötsch (Faculty of Biochemistry, Chemistry and Pharmacy)

#### Cardiopulmonary System • EXC 147

Spokesperson: Prof. Werner Seeger (University of Gießen); Prof. Stefanie Dimmeler (Faculty of Medical Science).

The Formation of Normative Orders • EXC 243
Spokesperson: Prof. Rainer Forst (Faculty of Social
Sciences): Prof. Klaus Günther (Faculty of Law)

### COLLABORATIVE RESEARCH CENTRES OF THE GERMAN RESEARCH FOUNDATION (DFG)

### Transport and Communication across Biological Membranes • SFB 807

Spokesperson: Prof. Robert Tampé, Institute of Biochemistry (Faculty of Biochemistry, Chemistry and Pharmacy)

Redox Regulation: Generator Systems and Functional Consequences • SFB 815 Spokesperson: Prof. Bernhard Brüne, Institute of Biochemistry I (Faculty of Medical Science)

### Endothelial Signalling and Vascular Repair • SFB 834

Spokesperson: Prof. Ingrid Fleming, Institute for Vascular Signalling (Faculty of Medical Science)

### Molecular Principles of RNA-based Regulation • SFB 902

Spokesperson: Prof. Harald Schwalbe, Institute of Organic Chemistry and Chemical Biology (Faculty of Biochemistry, Chemistry and Pharmacy)

Signalling by Fatty Acid Derivative and Sphingolipids in Health and Disease • SFB 1039 Spokesperson: Prof. Josef M. Pfeilschifter, Institute of General Pharmacology and Toxicology (Faculty of Medical Science)

#### Molecular and Cellular Mechanisms of Neural Homeostasis • SFB 1080

Spokesperson: Prof. Amparo Acker-Palmer, Institute of Cell Biology and Neuroscience (Faculty of Biological Sciences)

### Discourses of Weakness and Resource Regimes • SFB 1095

Spokesperson: Prof. Iwo Amelung, Institute of East Asian Studies (Faculty of Linguistics, Cultural and Civilization Studies, Art Studies)

### Molecular and Functional Characterization of Selective Autophagy • SFB 1177

Spokesperson: Prof. Ivan Dikic, Institute of Biochemistry II (Faculty of Medical Science)

Vascular Differentiation and Remodelling • TRR 23 Deputy spokesperson: Prof. Karl-Heinz Plate, Institute of Neurology (Edinger Institute) (Faculty of Medical Science)

### Condensed Matter Systems with Variable Many-Body Interactions • TRR 49

Spokesperson: Prof. Michael Lang, Institute of Physics (Faculty of Physics)

#### Strong-Interaction Matter under Extreme Conditions • TRR 211

Spokesperson: Prof. Dirk Rischke, Institute for Theoretical Physics (Faculty of Physics)

### COLLABORATIVE RESEARCH CENTRES WITH THE INVOLVEMENT OF GOETHE UNIVERSITY

Neurobiology of resilience to stress-related mental dysfunction: from understanding mechanisms to promoting prevention • SFB 1193 Coordinating university: University of Mainz (Spokesperson: Prof. Beat Lutz)

### RESEARCH UNITS OF THE GERMAN RESEARCH FOUNDATION (DFG)

### Justitia Amplificata: Amplified Justice – Concrete and Global • FOR 1206

Spokesperson: Prof. Rainer Forst, Institute of Political Science (Faculty of Social Sciences)

### Ice Nuclei Research UnIT (INUIT) • FOR 1525 Spokesperson: Prof. Joachim Curtius, Department of

Spokesperson: Prof. Joachim Curtius, Department of Atmospheric and Environmental Sciences (Faculty of Geosciences and Geography)

#### Relative Clauses • FOR 1783

Spokesperson: Prof. Thomas E. Zimmermann, Department of Linguistics (Faculty of Modern Languages)

### Intermolecular and Interatomic Coulombic Decay • FOR 1789

Spokesperson: Prof. Reinhard Dörner, Institute of Nuclear Physics (Faculty of Physics)

#### Mature T-Cell Lymphomas – Mechanisms of Perturbed Clonal T-Cell Homeostasis • FOR 1961 Spokesperson: Prof. Martin-Leo Hansmann, Senckenberg Institute of Pathology (Faculty of Medical Science)

### Selecting Personnel for Key Societal Roles • FOR 1664

Spokesperson: Prof. Andreas Fahrmeir, Department of History (Faculty of Philosophy and History)

#### Multiscale Dynamics of Gravity Waves • FOR 1898 Spokesperson: Prof. Ulrich Achatz, Department of Atmospheric and Environmental Sciences (Faculty of Geosciences and Geography)

Adaptation and persistence of the emerging pathogen Acinetobacter baumannii • FOR 2251 Spokesperson: Prof. Volker Müller, Institute of Molecular Biosciences (Faculty of Biological Sciences)

## Structures, Properties and Reactions of Carbonates at High Temperatures, and Pressures • FOR 2125

Spokesperson: Prof. Björn Winkler, Department of Geosciences (Mineralogy) (Faculty of Geosciences and Geography)

### Cell Plasticity in Colorectal Carcinogenesis • FOR 2438

Spokesperson: Prof. Florian Greten (Faculty of Medical Science, Georg Speyer House)

### PRIORITY PROGRAMMES OF THE GERMAN RESEARCH FOUNDATION (DFG)

### Atmospheric and Earth system research with the »High Altitude and Long Range Research Aircraft« (HALO) • SPP 1294

Coordinator: Prof. Joachim Curtius, Department of Atmospheric and Environmental Sciences (Faculty of Geosciences and Geography)

#### Algorithms for Big Data • SPP 1736

Coordinator: Prof. Ulrich Meyer, Institute of Computer Science (Faculty of Computer Science and Mathematics)

### Next Generation Optogenetics: Tool Development and Application • SPP 1926

Coordinator: Prof. Alexander Gottschalk, Institute of Biophysical Chemistry

(Faculty of Biochemistry, Chemistry and Pharmacy)

### RESEARCH TRAINING GROUPS OF THE GERMAN RESEARCH FOUNDATION (DFG)

Value and Equivalence. The Genesis and Transformation of Values from an Archaeological and Anthropological Perspective (Faculty of Philosophy and History and Faculty of Linguistics, Cultural and Civilization Studies, Art Studies) • GRK 1576

Spokesperson: Prof. Hans Peter Hahn (Faculty of Philosophy and History)

Theology as an Academic Discipline — A Historical and Systematical Analysis of the Formation of Reflexivity in Religious Traditions (Faculty of Protestant Theology and Faculty of Roman Catholic Theology) • GRK 1728

Spokesperson: Prof. Thomas Schmidt (Faculty of Roman Catholic Theology and Faculty of Philosophy and History)

Complex Scenarios of Light-Control (Faculty of Physics and Faculty of Biochemistry, Chemistry and Pharmacy) • GRK 1986

Spokesperson: Prof. Alexander Heckel, Institute of Organic Chemistry and Chemical Biology (Faculty of Biochemistry, Chemistry and Pharmacy)

Nominal Modification • GRK 2016 Spokesperson: Prof. Caroline Féry, Department of Linguistics (Faculty of Modern Languages)

Doing Transitions: The Formation of Transitions during the Life Course • GRK 2105
Spokesperson: Prof. Andreas Walther
(Faculty of Educational Sciences)

Configurations of Film • GRK 2279 Spokesperson: Prof. Vinzenz Hediger (Faculty of Modern Languages)

Resolution of Inflammatory Reactions: Mediators, Signalling and Intervention • GRK 2336 Spokesperson: Prof. Bernhard Brüne (Faculty of Medical Science)

Else Kröner-Fresenius Research Training Group Eicosanoid and sphingolipid signalling pathways in inflammation, cancer and vascular diseases (Faculty of Biochemistry, Chemistry and Pharmacy and Faculty of Medical Science)
Financed by the Else Kröner-Fresenius Foundation Spokesperson: Prof. Dieter Steinhilber (Faculty of Biochemistry, Chemistry and Pharmacy)

Graduate School
Translational Research Innovation – Pharma
(TRIP) (Faculty of Biochemistry, Chemistry and
Pharmacy and Faculty of Medical Science)
Financed by the Else Kröner-Fresenius Foundation
Spokesperson: Prof. Gerd Geisslinger
(Faculty of Medical Science)

## INTERNATIONAL MAX PLANCK RESEARCH SCHOOLS WITH THE INVOLVEMENT OF GOETHE UNIVERSITY

IMPRS for Neural Circuits
Spokesperson: Prof. Gilles Laurent
(Max Planck Institute for Brain Research)

IMPRS for Structure and Function of Biological Membranes

Spokesperson: Prof. Werner Kühlbrandt (Faculty of Biochemistry, Chemistry and Pharmacy, Max Planck Institute for Biophysics)

IMPRS for Heart and Lung Research Spokesperson: Prof. Thomas Braun (Max Planck Institute for Heart and Lung Research)

#### HELMHOLTZ GRADUATE SCHOOLS

Helmholtz Graduate School for Hadron and Ion Research (HGS-HIRe for FAIR) Spokesperson: Prof. Harald Appelshäuser, Institute of Nuclear Physics (Faculty of Physics) Collaborators: GSI Helmholtz Centre for Heavy Ion Research, Darmstadt, TU Darmstadt, University of Giessen, University of Heidelberg, Johannes Gutenberg University Mainz, Frankfurt Institute for Advanced Studies (FIAS)

Helmholtz Research School for Quark Matter Studies (H-QM) Spokesperson: Prof. Harald Appelshäuser, Institute of Nuclear Physics (Faculty of Physics) Collaborators: GSI Helmholtz Centre for Heavy Ion Research, Darmstadt, Frankfurt Institute for Advanced Studies (FIAS)

#### **EU FUNDING: ERC GRANTS**

ERC Starting Grant "Non-coding RNA in Vascular Ageing"

Dr. Reinier Boon (Faculty of Medical Science)

ERC Starting Grant: "a SMILE: analyse Soluble + Membrane complexes with Improved LILBID Experiments"

Ass. Prof. Nina Morgner (Faculty of Biochemistry, Chemistry and Pharmacy)

ERC Starting Grant: "MetaMeta: Metastability of proteins during tumour metastasis"
Dr. Martin Vabulas

(Faculty of Biochemistry, Chemistry and Pharmacy)

ERC Starting Grant: "PROSECMET: Function and production of secondary metabolites"
Prof. Helge B. Bode (Faculty of Biological Sciences)

ERC Consolidator Grant: "L-POP: Language-Processing by Overlapping Predictions: A Predictive Coding Approach"

Prof. Christian Fiebach (Faculty of Psychology and Sports Sciences)

ERC Consolidator Grant: "NAUTILUS: Neutron cAptUres consTraIning steLlar nUcleosynthesiS" Prof. Rene Reifarth (Faculty of Physics)

ERC Consolidator Grant "CORRODE: Corroding the social? An empirical evaluation of the relationship between unemployment and social stratification in OECD countries"

Prof. Markus Gangl (Faculty of Social Sciences)

ERC Advanced Grant "ACETOGENS –
Acetogenic bacteria: from basic physiology
via gene regulation to application in industrial
biotechnology"
Prof. Volker Müller (Faculty of Biological Sciences)

ERC Advanced Grant "Ub-BAC – Dissecting and targeting ubiquitin networks in the course of bacterial infections"

Prof. Ivan Dikic (Faculty of Medical Science)

ERC Advanced Grant "NEUROVESSEL: Cell-cell interactions at the neurovascular interface"
Prof. Amparo Acker-Palmer
(Faculty of Biological Sciences)

ERC Advanced Grant "AngioInc: Endothelial long non-coding RNAs"

Prof. Stefanie Dimmeler (Faculty of Medical Science)

ERC Synergy Grant: "BlackHoleCam: Imaging the Event Horizon of Black Holes"
Prof. Luciano Rezzolla (Faculty of Physics)

ERC Proof of Concept Grant: "SuperSART — Commercialization of an innovative tomographic reconstruction algorithm (Super-sampling SART) for various geometry setups"
Prof. Achilleas Franqakis (Faculty of Physics)

### EU FUNDING: INNOVATIVE TRAINING NETWORKS (ITN)

"SE2B: Solar Energy to Biomass – Optimisation of light energy conversion in plants and microalgae" Coordinator: Prof. Claudia Büchel (Faculty of Biological Sciences)

"CLOUD-MOTION: CLOUD Mobility, Training and Innovation Network"

Prof. Dr. Joachim Curtius (Faculty of Geosciences and Geography)

EU FUNDING: COLLABORATIVE RESEARCH "LSFM4LIFE: Production and characterization of endocrine cells derived from human pancreas organoids for the cell-based therapy of type 1 diabetes"

Coordinators: Prof. Ernst Stelzer und Dr. Francesco Pampaloni (Faculty of Biological Sciences)

"CoCA: Comorbid Conditions of Attention deficit/ hyperactivity disorder" Coordinator: Prof. Andreas Reif (Faculty of Medical Science)

"PARTISPACE: Spaces and Styles of Participation. Formal, non-formal and informal possibilities of young people's participation in European cities" Coordinator: Prof. Andreas Walther (Faculty of Educational Sciences)

"FemNAT-CD: Neurobiology and Treatment of Adolescent Female Conduct Disorder: The Central Role of Emotion Processing" Coordinator: Prof. Christine Freitag (Faculty of Medical Science)

"EUSCREEN: Implementation of cost-optimized childhood vision and hearing screening programmes in middle-income countries in Europe"

Coordinator: Dr. Maria Fronius (Faculty of Medical Science)

## LARGE-SCALE COLLABORATIVE PROJECTS OF THE GERMAN FEDERAL MINISTRY OF EDUCATION AND RESEARCH

#### Africa's Asian Options (AFRASO)

Project Managers: Prof. Arndt Graf (Faculty of Linguistics, Cultural and Civilization Studies, Art Studies) and Prof. Frank Schulze-Engler (Faculty of Modern Languages)

#### German Centre for Cardiovascular Disease (DZHK) Spokesperson (Rhine-Main): Prof. Andreas Zeiher (Faculty of Medical Science)

#### German Cancer Consortium (DKTK)

Spokesperson (Frankfurt/Mainz): Prof. Hubert Serve (Faculty of Medical Science)

#### Centre for the Digital Foundation of Research in the Humanities, Social, and Educational Sciences (CEDIFOR) Project Manager: Prof. Jost Gippert (Faculty of Linguistics, Cultural and Civilization Studies, Art Studies)

#### Centre for Islamic Studies (Zefis)

Project Manager: Prof. Bekim Agai (Faculty of Linguistics, Cultural and Civilization Studies, Art Studies)

#### LOEWE CENTRES

#### Helmholtz International Centre for the Facility for Antiproton and Ion Research (HIC for FAIR) Scientific Coordinator: Prof. René Reifarth (Faculty of Physics)

### Sustainable Architecture for Finance in Europe (SAFE)

Scientific Coordinator: Prof. Jan Pieter Krahnen (Faculty of Economics and Business Administration)

### Translational Medicine and Pharmacology (TMP)

Scientific Coordinator: Prof. Gerd Geisslinger (Faculty of Medical Science)

#### Cell and Gene Therapy (CGT)

Scientific Coordinators: Prof. Stefanie Dimmeler (Faculty of Medical Science), Prof. Hubert Serve (Faculty of Medical Science), Prof. Andreas Zeiher (Faculty of Medical Science)

#### LOEWE PRIORITY PROGRAMMES

#### Prehistoric Conflict Research – Bronze Age Fortifications between Taunus and Carpathian Mountains

Scientific Coordinator: Prof. Rüdiger Krause (Faculty of Linguistics, Cultural and Civilization Studies, Art Studies)

### Control and Design of Multifunctional Megasynthases (MegaSyn)

Scientific Coordinators: Prof. Martin Grininger (Faculty of Biochemistry, Chemistry and Pharmacy), Prof. Helge Bode (Faculty of Biological Sciences)

#### Religious Positioning: Modalities and Constellations in Jewish, Christian and Islamic Contexts (RelPos)

Scientific Coordinator: Prof. Christian Wiese (Faculty of Protestant Theology)

### PARTICIPATION IN LOEWE PRIORITY PROGRAMMES

SynChemBio: Innovative Synthesis Chemistry for the Selective Modulation of Biological Processes (Faculty of Biochemistry, Chemistry and Pharmacy)
Spokesperson: Prof. Eric Meggers,

Spokesperson: Prof. Eric Meggers, (University of Marburg) Deputy spokesperson: Prof. Harald Schwalbe (Faculty of Biochemistry, Chemistry and Pharmacy)

Medical RNomics: RNA-regulated Networks in Human Disease (Faculty of Medical Science) Spokesperson: Prof. Albrecht Bindereif (University of Giessen), GU partner: Prof. Stefanie Dimmeler (Faculty of Medical Science)

### JOINT TEACHING AND STUDY PROJECTS OF THE FEDERAL AND STATE GOVERNMENTS

### Pact for Quality in Teaching: A Good Start at University

Project Manager: Dr. Kerstin Schulmeyer-Ahl, Centre for Teaching and Quality Assurance

Quality Initiative for Teacher Training: LEVEL – Teacher Training Networks and Development Project Manager: Prof. Holger Horz, Academy of Educational Research and Teacher Training (ABL)

Only networks coordinated by Goethe University are listed. In total, the University participated in 20 ongoing ITNs in 2017.

Only collaborative research projects coordinated by Goethe University are listed. In total, the University participated in 27 ongoing projects in 2017.

<sup>3</sup> Approved in 2016, start of funding = 01.01.2017

### Distribution of all students by faculty 2017 \*

	Students				of which female				of which international students						
Faculties	total **	of which undergra- duates	of which postgra- duates	of which teacher trainees	of which civil service ex. (non-tea- ching)	total **	of which undergra- duates	of which postgra- duates	of which teacher trainees	of which civil service ex. (non-tea- ching)	total **	of which undergra- duates	of which postgra- duates	of which teacher trainees	of which civil service ex. (non-tea- ching)
Law	4,724	0	105	0	4,341	2,759	0	59	0	2,558	720	0	98	0	468
Economics & Business Administration	5,567	3,945	1,314	0	0	2,482	1,746	610	0	0	1,269	617	490	0	0
Social Sciences	4,365	2,934	1,014	224	0	2,391	1,606	589	99	0	588	412	80	24	0
Educational Sciences	2,451	1,190	455	699	0	1,974	984	380	534	0	321	231	47	26	0
Psychology & Sports Sciences	2,008	945	484	331	0	1,176	543	320	109	0	143	81	16	23	0
Protestant Theology	554	95	19	97	0	341	60	15	74	0	39	12	3	2	0
Roman Catholic Theology	161	41	4	96	0	96	25	0	65	0	31	7	1	14	0
Philosophy & History	2,831	1,671	148	623	0	1,331	778	62	338	0	295	158	26	64	0
Linguistics, Culture & Civilization Studies, Art Studies	3,589	2,473	421	242	0	2,419	1,624	314	188	0	576	369	99	14	0
Modern Languages	5,484	2,504	622	1,885	0	4,162	1,915	480	1,444	0	929	379	110	280	0
Geosciences & Geography	1,785	1,072	399	230	0	816	452	200	132	0	129	58	29	23	0
Computer Science & Mathematics	5,304	2,957	475	1,770	0	2,438	963	126	1,320	0	882	578	109	161	0
Physics	1,610	1,064	242	109	0	501	359	56	45	0	224	122	30	19	0
Biochemistry, Chemistry & Pharmacy	2,009	530	304	124	715	1,116	229	143	67	514	267	60	57	14	70
Biological Sciences	1,396	647	319	200	0	886	401	214	142	0	236	69	71	14	0
Medical Science	3,927	0	291	0	3,451	2,415	0	89	0	2,205	693	0	222	0	420
Scholarships/no allocation	342	0	0	0	0	212	0	0	0	0	319	0	0	0	0
Total	48,107	22,068	6,616	6,630	8,507	27,515	11,685	3,657	4,557	5,277	7,661	3,153	1,488	678	958

<sup>\*</sup> for the winter semester 2016/17

<sup>\*\*</sup> students studying for a bachelor's degree, master's degree, civil service examination (incl. teaching), degree and master's degree programmes being phased out and other final qualifications

### EXTERNAL FUNDING

External funding by funding body 2017 in EUR millions

Faculties/other institutions	EXTERNAL FUNDING	Of which public rvenue						Of which private revenue				
		Total	Of which DFG	Of which EU	Of which fe- deral and state government	Other public revenue	Total	Of which industry and legally indepen- dent foundations	Of which con- tract research and services	Of which donations		
Law	2.9	2.0	0.9	0.3	0.8	0.0	0.8	0.5	0.1	0.2		
Economics & Business Administration	5.6	2.7	1.3	0.7	0.7	0.0	2.9	0.7	0.2	2.1		
Social Sciences	5.7	5.1	3.7	0.9	0.4	0.0	0.6	0.6	0.0	0.0		
Educational Sciences	4.5	2.7	0.8	0.0	1.9	0.0	1.7	1.6	0.0	0.1		
Psychology & Sports Sciences	5.6	2.5	0.6	0.0	1.9	0.0	3.1	0.2	2.8	0.1		
Protestant Theology	1.0	0.9	0.8	0.0	0.1	0.0	0.1	0.1	0.0	0.1		
Roman Catholic Theology	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Philosophy & History	7.8	6.9	6.4	0.1	0.5	0.0	0.8	0.5	0.0	0.4		
Linguistics, Culture & Civilization Studies, Art Studies	5.7	4.2	1.7	0.0	2.5	0.0	1.6	1.0	0.0	0.5		
Modern Languages	5.0	3.8	2.1	0.2	1.5	0.0	1.2	0.8	0.1	0.3		
Geosciences & Geography	8.9	8.0	2.9	3.6	1.6	0.0	0.8	0.3	0.3	0.3		
Computer Science & Mathematics	4.0	3.4	1.2	0.4	1.9	0.0	0.5	0.1	0.3	0.1		
Physics	10.1	9.5	4.0	0.9	4.7	0.0	0.6	0.1	0.3	0.3		
Biochemistry, Chemistry & Pharmacy	14.4	11.7	10.3	0.8	0.6	0.0	2.7	1.8	0.4	0.4		
Biological Sciences	10.4	9.4	5.7	2.2	1.5	0.0	1.0	0.2	0.0	0.8		
Medical Science	51.7	31.6	19.5	5.0	2.7	4.5	20.1	11.1	8.0	0.9		
All faculties	143.6	104.8	62.1	15.0	23.2	4.5	38.7	19.7	12.5	6.6		
Other institutions <sup>1</sup>	35.2	21.3	13.8	0.9	6.5	0.0	13.9	1.8	5.4	6.7		
Total external funding	178.7	126.1	75.9	15.9	29.8	4.5	52.6	21.5	17.9	13.3		
Total LOEWE funding	18.0	-	-	-	-	-	-	-	-	-		
TOTAL	178.7	126.1	75.9	15.9	29.8	4.5	52.6	21.5	17.9	13.3		

<sup>&</sup>lt;sup>1</sup> Including programme allowances (overheads) of EUR 12.8 million.

External funding by funding body and revenue from the LOEWE programme 2013 to 2017 in EUR millions

	2013	2014	2015	2016	2017
DFG	61.2	64.3	73.7	74.5	75.9
EU	13.7	11.7	14.5	8.6	15.9
Federal and state government	27.9	27.1	25.4	26.4	29.8
Other public revenue		1.3	2.6	3.4	4.5
Total public external funding	102.7	104.4	116.3	113.0	126.1
Industry funding and donations from legally independent foundations	19.1	20.2	19.0	20.6	21.5
Contract research and services	14.8	15.1	15.0	15.9	17.9
Donations	12.2	15.1	13.7	13.8	13.3
Total private external funding	46.1	50.4	47.6	50.3	52.6
External funding	148.8	154.9	163.8	163.3	178.7
LOEWE programme <sup>1</sup>	24.4	27.1	18.7	20.8	18.0
External funding and LOEWE programme	173.2	181.9	182.6	184.1	196.7

Revenue from the LOEWE programme does not count as external funding but is additional state funding awarded through a peer review process.

### UNIVERSITY BUDGET

39 Facts & Figures

Total budget of Goethe University 2012 to 2017 in EUR millions

	2013	2014	2015	2016	2017
Budget plan	334.7	341.4	356.0	347.7	347.4
of which consumables	327.4	333.5	344.4	340.0	339.3
of which QSL funding	19.2	19.2	20.0	19.2	18.2
of which investment-related <sup>1</sup>	7.3	7.9	11.6	7.7	8.1
Budget for innovation and structural development	1.3	1.2	1.0	0.6	0.6
Funds from Higher Education Pact 2020	28.0	28.0	28.0	42.2	40.7
Total state funds	364.0	370.6	385.0	390.4	388.7
External funding	148.8	154.9	163.8	163.3	178.7
of which public revenue	102.7	104.4	116.3	113.0	126.1
of which private revenue	46.1	50.4	47.6	50.3	52.6
LOEWE funding	24.4	27.1	18.7	20.8	18.0
Other proceeds	35.9	50.1	62.9	47.2	43.6
Total additional funds	209.1	232.0	245.5	231.3	240.3
Total budget in EUR millions	573.1	602.6	630.5	621.7	629.0

<sup>&</sup>lt;sup>1</sup> The figures for 2012 and 2015 include higher allocations for initial equipment.

### LEGAL NOTICE

### Publisher

The President of Goethe University, Frankfurt am Main

Concept, responsible according to the German Press Law

Dr. Olaf Kaltenborn

Editing, interviews, text

Heike Jüngst

Translation

Sharon Oranski

### Design

AS'C Arkadij Schewtschenko Communications, Frankfurt am Main

### Proofreading

Daniel McCosh

### Photography

Cover: Pitsch & Schau, »DN100 Stadtmöbel«, 2017, displayed in »Blickachsen 11« (2017) on Westend Campus, photograph courtesy of Stiftung Blickachsen gGmbH, Bad Homburg, and artists Inside front cover: Uwe Dettmar Back cover: Jürgen Lecher

### Printing

Laserline, Berlin

### Date of printing

18 May 2018

Printed in Germany



