



### DEAR READERS, DEAR MEMBERS OF THE UNIVERSITY ALLIANCE RUHR,

What an eventful year 2024 has been! There wasn't a month without at least one highlight for the University Alliance Ruhr: The German Science and Humanities Council visited the University Alliance and was impressed by the Ruhr area as a dynamic region with a strong focus on science and culture; we submitted a total of four full proposals for the Excellence Strategy and were extremely successful in acquiring Collaborative Research Centres. A total of seven CRCs at our universities have been extended and members of two competence fields jointly acquired the CRC 391 "Spatio-temporal Statistics for the Transition of Energy and Transport" — a first for the UA Ruhr! In addition, the new Research Atlas of the German Research Foundation (DFG) shows that the UA Ruhr universities jointly raised over 500 million euros in third-party funding in the years 2020-2022, with a strong increase in the natural sciences.

Not only are we continuously strengthening our collaboration in research, we are also pooling our strengths in higher-level structures: This year saw the launch of both the International Advisory Board and the Council for Ethics and Responsibility. We are proud of these developments, as they are powerful indicators of our active cooperation.

There were also personnel changes this year: Both TU Dortmund University and the University of Duisburg-Essen appointed new chancellors. We wish the new incumbents Markus Neuhaus and Ulf Richter all the best as they take up their new roles at their respective universities and within the UA Ruhr.

Next year brings yet more landmark events: We will open our third UA Ruhr liaison office in São Paulo, which will consolidate the international presence of the UA Ruhr and offer numerous opportunities for academic, economic and cultural cooperation in the Latin and South American region. In addition, MERCUR will be integrated into the UA Ruhr in order to continue to promote cooperation between our universities even after the departure of the Stiftung Mercator. The FISU World University Games, which will take place in the Rhine-Ruhr region in July 2025, will be a particular highlight for the entire Ruhr region. We are looking forward to welcoming some 8,500 top student athletes from up to 150 countries to one of the largest multi-sport events in the world. And finally, we hope that our proposed clusters will be successful in the Excellence Strategy so that we can submit a UA Ruhr University Consortia of Excellence application on this basis.

As always, we would like to take this opportunity to thank all of you who make our mission statement "three universities, one community, endless opportunities" come alive. Do continue to help the University Alliance Ruhr grow in the coming year with your commitment, your knowledge, your curiosity and your creative ideas.

We hope you enjoy reading this issue and wish you a Happy New Year 2025!

Prof Dr Rarhara Alhert

Touted Jaye
Prof. Dr. Manfred Bayer

Prof. Dr. h.c. Martin Paul

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**UA RUHR IN THE EXCELLENCE STRATEGY** 

# ONE BIG STEP CLOSER TO EXCELLENCE

The UA Ruhr has reached the second round of the Excellence Strategy competition with a united front: Researchers from Ruhr University Bochum, TU Dortmund University and the University of Duisburg-Essen are involved in a total of four research projects that submitted a full application as a Cluster of Excellence in August.

On February 2, the German Research Foundation and the German Science and Humanities Council announced that 41 of the 143 outlines for Clusters of Excellence submitted nationwide had been admitted to the second application phase of the Excellence Strategy. The universities had until mid-August to submit full proposals for these research projects as well as for the extension of a total of 57 previously funded clusters. The seven-year funding period runs from 2026 to 2032.

Ruhr University Bochum submitted renewal proposals for the two Clusters of Excellence "Ruhr Explores Solvation – RESOLV", together with TU Dortmund University, and "Securing the Digital Society – CASA". The University of Duisburg-Essen submitted its application for "REASONS: River Ecosystems in the Anthropocene – sustainable scientific SOlutioNS", in which researchers from Bochum are also involved. TU Dortmund University is co-applicant of the new proposal "Color Meets Flavor" in the field of particle physics, in collaboration with the universities of Bonn and Siegen.

#### Good prospects for the UA Ruhr

The decision on continued funding will be made on May 22, 2025 and will have a major impact on all three universities in the University Alliance Ruhr. The prospects are good, as the top scientists benefit with their cluster applications from the excellent cooperation and structures within the UA Ruhr and the support of the state of NRW as part of the Research Alliance Ruhr, which was founded in 2022. "Together, we at the University Alliance Ruhr have a good chance succeeding in the Excellence Strategy in order to ultimately compete as an University Consortia of Excellence in 2025," as the rectors unanimously conclude.



### THE EXISTING CLUSTERS: RESOLV AND CASA

In RESOLV, scientists from Ruhr University Bochum and TU Dortmund University, together with colleagues from the University of Duisburg-Essen, are researching the role of solvents in chemical reactions. This is the third time that the Cluster of Excellence, which was established in 2012, is taking part. CASA has been funded at Ruhr University Bochum as part of the Excellence Strategy since 2019. CASA researches innovative and holistic IT security solutions that contribute to the protection and resilience of our digital society.

### THE NEW CLUSTER INITIATIVES: REASONS AND "COLOR MEETS FLAVOR"

REASONS focuses on bodies of water in a man-made environment. Rising temperatures, antibiotic residues, droughts and floods: Rivers around the world are under pressure. In order to make them fit for the future, researchers in the REASONS Cluster of Excellence are developing a new, sustainable approach to water management. In the new project "Color meets Flavor", physicists at the TU in cooperation with the universities of Bonn and Siegen plan to search for new phenomena in the interaction of elementary particles.

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RESEARCH ALLIANCE RUHF

ANOTHER SUCCESSFUL YEAR FOR THE RESEARCH ALLIANCE RUHR: 27 PROFESSORS ALREADY APPOINTED

By the end of 2024, the Research Alliance is looking back on numerous successful new appointments. Since its start in 2022, 27 international top scientists have chosen a future in the Ruhr area, opting for one of the four Research Centers or the College. Key criteria for new professorships are proven research excellence and the potential for interdisciplinary collaboration.

#### RESEARCH CENTER

#### ONE HEALTH RUHR - FROM MOLECULES TO SYSTEMS

- Prof. Dr. Helen Blank, Predictive Cognition, prev. University Medical Center Hamburg-Eppendorf (UKE)
- Prof. Dr. Dana Branzei, Humboldt Professor for Biological and Genomic Treatment Approaches, AIRC Institute of Molecular Oncology, Mailand (start: April 2025)
- Prof. Dr. Lucia Melloni, Predictive Brain, prev. MPI for Empirical Aesthetics
- Prof. Dr. Alexander Probst, Environmental Metagenomics
- Prof. Dr. Ralf Schäfer, Ecotoxicology, prev. University of Kaiserslautern-Landau
- Prof. Dr. Dirk Scheele, Social Cognitive Neuroscience
- Prof. Dr. Caspar Schwiedrzik, Cognitive Neurobiology, prev. MPI for Multidisciplinary Sciences
- Prof. Dr. Kathrin Thedieck, Metabolism, Senescene & Autophagy, prev. University of Innsbruck
- Dr. Amelie Heuer-Jungemann, Hybrid Bionanosystems, prev. MPI of Biochemistry (start: Jan 2025)

#### RESEARCH CENTER

#### CHEMICAL SCIENCES AND SUSTAINABILITY

- Prof. Dr. Jörg Behler, Theoretical Chemistry II, prev. University of Göttingen
- Prof. Dr. Simon Ebbinghaus, Biophysical Chemistry, prev. Technische Universität Braunschweig
- Prof. Dr. Edvardas Narevicius, Humboldt Professor for Ultracold Reactions, prev. Weizmann Institute of Science, Israel
- Prof. Dr. Clara Saraceno, Photonics and Ultrafast Laser Spectroscopy
- Prof. Dr. Igor Schapiro, Theoretical Biophysics, prev. Fritz Haber Center for Molecular Dynamics, Israel
- Prof. Dr. Xijie Wang, Ultrafast Electron Diffraction, prev. Stanford University, USA

#### RESEARCH CENTER

#### TRUSTWORTHY DATA SCIENCE AND SECURITY

- Prof. Dr. Ivan Habernal, Fairness and Transparency, prev. Paderborn University
- Prof. Dr. Nils Köbis, Human Understanding of Machines and Algorithms, prev. MPI for Human Development
- · Prof. Dr. Alexander Marx, Causality, prev. ETH Zurich
- Prof. Dr. Daniel Neider, Verification and Formal Guarantees of Machine Learning, prev. MPI for Software Systems
- Prof. Dr. Jatinder Singh, Compliant and Accountable Systems, prev. University of Cambridge
- Prof. Dr. Muhammad Bilal Zafar, Computing and Society, prev. MPI for Software Systems and Amazon Web Services (AWS)

#### RESEARCH CENTER

#### FUTURE ENERGY MATERIALS AND SYSTEMS

- Prof. Dr. Silvana Botti, Computational Design of Functional Interfaces, prev. Friedrich-Schiller-University Jena
- Prof. Dr. Anna Isaeva, Quantum Materials, prev. University of Amsterdam
- Prof. Dr. Christian Liebscher, Advanced Transmission Electron Microscopy (TEM), prev. MPI for Sustainable Materials
- Prof. Dr. Miguel A. L. Marques, Al for Integrated Materials Science, prev. Martin Luther University Halle-Wittenberg
- Prof. Dr. Gabi Schierning, Applied Quantum Materials, prev. Bielefeld University

#### COLLEGE FOR SOCIAL SCIENCES AND HUMANITIES

 Prof. Dr. Tahani Nadim, Curating Digital Objects of Cultural Knowledge and Memory, prev. HU Berlin



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RESEARCH ALLIANCE RUHR

# RESEARCH CENTER ONE HEALTH RUHR

More than 14 new professorships, groundbreaking research, and a unique interdisciplinary approach - this is the vision of the Research Center One Health Ruhr. At the ceremonial opening on November 4, 2024, in the Oktogon at Zeche Zollverein, science and politics celebrated a successful launch. Around 200 guests gathered to honor the achievements to date and gain insight into the promising future of this research hub.

The Research Center One Health Ruhr is dedicated to exploring critical questions at the intersection of environment, health, and society. Its focus lies on understanding how environmental changes, such as pollutants in water, influence cancer development, or how intact ecosystems can promote mental health. The goal is to develop a holistic approach that provides sustainable solutions for physical and mental health - both for the Ruhr region and global challenges.

This interdisciplinary path is being forged by the three founding directors, Prof. Dirk Schadendorf, Prof. Bernd Sures, and Prof. Onur Güntürkün, along with Managing Director Dr. Sara Letzner, supported by a team of internationally renowned scientists. Of the 14 planned professorships, eight have already been successfully filled:

- > Prof. Dr. Ralf Schäfer
- > Prof. Dr. Alexander Probst
- > Prof. Dr. Kathrin Thedieck
- > Dr. Amelie Heuer-Jungemann
- > Prof. Dr. Dirk Scheele
- > Prof. Dr. Helen Blank
- > Prof. Dr. Caspar Schwiedrzik
- > Prof. Dr. Lucia Melloni

Additional professorships in the center's three research focus areas - aquatic ecology, molecular oncology, and cognitive neuroscience - will be filled in the coming years.

#### Voices on the Opening

"Health research benefits people more directly than any other field of research. The One Health Ruhr approach - combining forces and focusing on interdisciplinary research -strengthens North Rhine-Westphalia as a research location and sets new standards in international comparison."

Hendrik Wüst, Minister President of North Rhine-Westphalia

"Coal mining brought prosperity to the people of the Ruhr region and all of Germany. Today, research and science as key resources are creating quality jobs, prosperity, and social security."

Ina Brandes, Minister of Culture and Science of North Rhine-Westphalia





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RESEARCH ALLIANCE RUHR

### RESEARCH CENTER CHEMICAL SCIENCES AND SUSTAINABILITY

The Research Center Chemical Sciences and Sustainability investigates chemical reactions, processes and products at the molecular level with the aim of developing environmentally friendly and economically competitive solutions for chemistry, building materials and pharmaceuticals. The researchers want to find out how chemical reactions can be optimized and made more sustainable.

In 2023, the Center appointed a pioneer of ultrafast laser science (photonics). Clara Saraceno's team at the Ruhr University Bochum will continue to advance the technology of ultrafast laser sources to achieve a better understanding of chemical, biological and physical processes. This opens up new possibilities for imaging and tracking solvation processes, thus enabling advances in nanotechnology, biomedical research and environmental monitoring.

Igor Schapiro, formerly of the Hebrew University of Jerusalem, began his appointment at the TU Dortmund University in the field of theoretical biophysics in October. The focus of his work is on the application and development of computational tools to unravel chemical reactions of organic molecules and complex biomolecules. Especially the simulation of light-activated processes and so-called "molecular switches" in an aqueous environment is particularly challenging.

All professors appointed by the Center are also members of the Cluster of Excellence RESOLV (Ruhr Explores SOLVation) and therefore participated in the renewal application. The proposal was finalized in several workshops and submitted in August of this year.

The Center is planning an automated high-throughput model laboratory for chemical synthesis and analysis at the Evonik site in Herne as part of a joint project with the Ruhr University Bochum, TU Dortmund University and Evonik. This transfer lab will combine the innovative power of top university research with the market, product and technology expertise of the chemical industry and will be geared towards the development of solutions for a green transformation of the chemical industry.

In addition, numerous experts were invited to give scientific lectures on the Center's main topics. The focus was particularly on the research field of "Sustainable Concrete", which saw international pioneers from research and industry visit to report on the latest developments. A particular highlight was the Cecam Flagship Workshop "Machine Learning Potentials: From Interfaces to Solution", which CSaS Professor Jörg Behler co-organized in August. Experts on the development of machine learning potentials from all over the world came together in Bochum to discuss the challenges of simulating solutions and solid-liquid interfaces with machine learning.



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**RESEARCH ALLIANCE RUHR** 

### RESEARCH CENTER FUTURE ENERGY MATERIALS AND SYSTEMS

In the current year, the Research Centre Future Energy Materials and Systems (RC FEMS) has been strengthened by the appointment of two outstanding national and international professors. Professor Christian Liebscher is strengthening the RC FEMS in Bochum with his extensive experience in modern transmission electron microscopy. At TU Dortmund University, Prof. Anna Isaeva will enrich the RC FEMS in the field of quantum materials.

The first RC FEMS Retreat was a milestone in 2024, bringing together 40 dedicated participants for an intensive 2.5-day program focused on fostering scientific collaboration and the strategic future of RC FEMS. The retreat began with the introduction of the Scientific Board and the five newly appointed professors, who presented their background and latest research developments and outlined possible ways for collaboration within the RC FEMS. The subsequent poster sessions provided a platform for participants to present their expertise and engage in in-depth discussions. The concluding strategic workshop generated a wealth of new ideas for future research directions and initiatives. The retreat thus successfully combined scientific exchange with strategic planning and strengthening team cohesion.

Our new professors presented their research this year in many different ways and places. Prof. Christian Liebscher and an international research team published the first results on the formation of icosahedral grain boundary phases in the renowned journal Science. These results further develop the basis for tailoring the properties of materials. Prof. Silvana Botti and Prof. Miguel Marques further developed the international standard OPTIMADE, which enables the comprehensive use and exchange of data on materials. Finally, Prof. Gabi Schierning opened the Pint of Science Festival in Duisburg with a lecture on the current state of the energy transition and future material requirements, thus making the link to communication with the general public.



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RESEARCH ALLIANCE RUHR

### RESEARCH CENTER TRUSTWORTHY DATA SCIENCE AND SECURITY

The year 2024 was a year full of exciting developments for the Research Center Trustworthy Data Science and Security (RC TRUST). A particular highlight was the visit of Parliamentary State Secretary Josef Hovenjürgen in June, during which he was able to see first-hand in Dortmund the results and innovations of our work.

Within the center and the university alliance, interdisciplinarity is promoted through numerous scientific measures. This includes, among other things, a dedicated graduate school where PhD students from the fields of computer science, statistics, cybersecurity, and psychology regularly come together to discuss their research findings and generate new ideas. Additionally, scientific speed-dating formats were organized again this year, allowing professors from the center and universities to exchange ideas. This led to a total of 13 new research projects, which are being supported financially on their way to third-party funding applications.

On the international level, networks were also further expanded. A delegation traveled to the UA-Ruhr Liaison Office in New York to establish valuable contacts with renowned North American scientists. Moreover, as part of the AI Colloquium, high-ranking international experts were regularly invited. For PhD students, interdisciplinary international exchange was facilitated through cooperation with the CASA Excellence Cluster and the SecHuman Graduate School in the form of two Summer Schools, a conference, and a workshop. International initiatives were supported by programs such as the DAAD Scholarship Program, the Research Explorer Ruhr, and the Ruhr Fellowship Program, which enabled early connections to be made with international early-career researchers.

Supporting young scientists remains a central focus of the center. This year, seven postdocs and two junior research groups were established to provide support, as well as an extraordinary W1 professorship to drive the further development of the research structures. Furthermore, members of RC TRUST are actively involved in ensuring the continuation of the NRW Graduate School DataNinja. Another important step was the drafting of a proposal for the state of NRW on the topic of "AI in Education," an area that will play a central role in the future research of RC TRUST.



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RESEARCH ALLIANCE RUHR

### COLLEGE FOR SOCIAL SCIENCES AND HUMANITIES

In 2024, the College gained sociologist of science Tahani Nadim as research professor and welcomed 18 renowned international Senior Fellows. Through tandem partnerships, academic events and the new PostdocLab programme, the College promoted international and interdisciplinary exchange within the UA Ruhr.

With Tahani Nadim, the College for Social Sciences and Humanities has gained a versed sociologist of science for the research professorship 'Curating Digital Objects of Cultural Knowledge and Memory' in the field of digital humanities. Nadim, who completed her studies and her doctorate at Goldsmiths' College, University of London, came to Berlin in 2013. Until recently, she co-lead the research centre 'Humanities of Nature' at the Museum für Naturkunde as part of a joint appointment at Humboldt-Universität zu Berlin. As research professor, she will investigate how digital technologies and curating practices affect memory cultures from an interdisciplinary perspective. In the focus area 'Civic Digitization', she will promote the exchange with practitioners in the digitisation of collections from local and marginalised contexts. A second focus is on human-environment relationships in so-cio-ecological transformation.

The first group of ten international Senior Fellows started their research fellowships at the College in March, superseded by the second cohort in September. The accomplished researchers from universities in Australia, Brazil, Canada, Israel, Mozambique, Nigeria, Poland, South Africa, Turkey, the UK, and the USA represent a wide range of disciplines within the social sciences and humanities. Their cooperation with tandem partners from the UA Ruhr resulted in numerous events and publications — among them a policy brief on 'Social Innovation Digital Ecosystems' and articles in pertinent journals on topics such as bureaucratic burden at universities, or clashing principles in development cooperation. More are forthcoming.

29 thematically diverse academic events took place at the College, nearly all of which included international speakers. To name just two highlights: feminist foreign and development policy was at the centre of a public panel discussion with experts from politics and academia in June; and the international workshop 'Decolonial Ecology' elucidated the entanglement of ecological concepts and coloniality.

With its new funding programme PostdocLab, the College promotes cross-university collaboration of postdoctoral researchers within the UA Ruhr. Three working groups receive funding for one and a half years from October 2024 to realise ambitious research projects on AI in science communication, conflicts over the use of urban space, and civic education.

For the three open-topic junior professorships, excellent candidates have been selected, who will prospectively take up their positions in the summer term 2025 and establish thematically independent research groups.

The College's website www.college-uaruhr.de has been online since March, providing detailed information about research activities and events. Issued four times per year, a newsletter offers insights into recent developments at the College.

"Preserving memories and having access to them is essential for people's sense of self, for their right to self-determination and democratic participation."

Prof. Tahani Nadim



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**NEW COMMITTEE FORMED** 

# THE INTERNATIONAL ADVISORY BOARD

The International Advisory Board of the UA Ruhr was established in April. The new body advises the UA Ruhr on its long-term strategic planning. In October, the members met in person for the first time and were visitors to the Ruhr region.

The members of the International Advisory Board are six renowned and experienced experts from Europe, Asia and North America. They are scientists and science managers who hold or have held prominent positions at their respective universities and research institutions. Their role is to advise on new and existing directions for the UA Ruhr as well as on international benchmarking. More specifically, the Board advises on the positioning of the UA Ruhr within the framework of the Excellence Strategy and provides vital impulses from different university systems and areas of experience.

In April, the new board elected Professor Martin Stratmann, former president of the Max Planck Society, as its first chairman. "The Ruhr region is already a powerhouse of science and innovation. By uniting the three Ruhr universities in a long-term research alliance, these strengths will become even more visible on the world stage and the location will become even more attractive – with significant knock-on effects for the entire region," he said.

At the October meeting, the guests discussed the future direction of the UA Ruhr with the rectors of the Ruhr University Bochum, TU Dortmund University and the University of Duisburg-Essen and were impressed by the progress to date. The animated discussions were interspersed with visits to the Research Center for the Engineering of Smart Product-Service Systems (ZESS) at Mark 51°7. The former Opel site exemplifies the successful transformation of the Ruhr region from an industrial landscape to a science and research hotspot..



"With its high density of universities and non-university research institutions, the Ruhr region has great potential to grow into a European hotspot for science and innovation. The UA Ruhr is committed to its social responsibility to help shape the transition to a sustainable economy in the region," said Professor Louise Fresco, member of the International Advisory Board and former President of Wageningen University and Research, during her visit to the Ruhr region.

pulses on our path towards an even stronger internationalization of the University Alliance Ruhr."

#### **MEMBERS OF THE INTERNATIONAL ADVISORY BOARD:**

- > Prof. Dr. Martin Stratmann, former President of the Max Planck Society
- > Prof. Dr. Daniel Diermeier (USA), Chancellor (President) of Vanderbilt University, Nashville
- > Prof. Dr. Louise O. Fresco (Netherlands), former President of Wageningen University and Research
- > Prof. Dr. Makoto Gonokami (Japan), President RIKEN Institute, former President of the University of Tokyo
- > Prof. Dr. Susan M. Kauzlarich (USA), Distinguished Professor of Chemistry, University of California, Davis
- > Prof. Dr. Rocky Tuan (China), Vice-Chancellor (President) of the Chinese University of Hong Kong

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**CLUSTER OF EXCELLENCE RESOLV** 

### **SUCCESS STORIES OF TRANSFORMATION**

RESOLV demonstrates impressively how science and regional transformation can go hand in hand. At the BMWK annual conference "Shaping Regional Transformation", spokesperson Prof. Havenith presented the success story of RESOLV to Federal Minister Dr. Robert Habeck and several hundred guests from politics and industry. RESOLV has not only achieved excellence in fundamental research but has also played a key role in the regional transformation of the Ruhr area.

"We believed in our ideas when we entered the competition in 2012. Against expectations, we managed to secure one of only two chemistry excellence clusters in Germany for the Ruhr area," Prof. Havenith emphasized. "We took greater risks than others and introduced innovative research structures that foster international top-tier research." The RESOLV excellence cluster unites top-level research from three universities and three Max Planck Institutes under one roof.

The next step aims to accelerate the transfer from ideas to applications by fostering closer collaboration with the chemical industry in North Rhine-Westphalia (NRW). NRW is home to approximately 300 companies and around 90,000 jobs directly or indirectly associated with the chemical industry. "In a successful football team, good collaboration between offense and defense is crucial. Similarly, to tackle the societal challenges of our time, closer cooperation between science and industry is essential," said Prof. Havenith. This collaboration is key to transforming the Ruhr area into a forward-looking region in the aftermath of phasing out fossil energy and carbon sources.

#### **Building Networks**

As part of RESOLV's efforts to support young researchers, we aim to provide doctoral candidates with opportunities to connect with potential employers in both the chemical and optical industries. At the RESOLV "Day of Science" on November 13, companies introduced themselves to more than 100 young scientists from all three UAR universities. An exhibition and an evening dinner offered a

chance to establish personal connections and gain valuable career tips from industry experts. The participants learned firsthand about the companies' goals and received practical advice for future applications.

With these initiatives, RESOLV encourages a perspective beyond academia and contributes to the career development of young talent.

#### Looking Ahead: RESOLV 3.0

Solvation Science forms a crucial foundation for addressing

Three proposals

In August, the full proposal for the 2025–2032 funding period was submitted to the German Research Foundation (DFG). A decision is expected in May 2025. Since its founding in 2012, RESOLV has established Solvation Science as an interdisciplinary research field and created an internationally visible beacon of chemical excellence in the Ruhr area. RESOLV develops innovative techniques and methods to understand and control solvent-driven processes.

pressing scientific and societal challenges, such as transforming the production of basic chemicals away from fossil sources toward sustainable carbon and energy solutions.

Podium of the BMWK annual conference "Shaping Regional Transformation"

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GERMAN SCIENCE AND HUMANITIES COUNCIL

# SPRING MEETINGS OF THE GERMAN SCIENCE AND HUMANITIES COUNCIL IN THE RUHR REGION

For the first time in its history, the German Science and Humanities Council was hosted by a university alliance: In April, the committee held its spring meeting in Bochum and was welcomed by the management team of the University Alliance Ruhr (UA Ruhr) at the university reception in the venue Dortmunder U. Science Minister Ina Brandes praised the UA Ruhr in front of 130 guests as an example of successful cooperation in teaching, research and transfer. The reception of the state of NRW took place at Zeche Zollverein in Essen.

#### "The UA Ruhr is the best example of success through cooperation"

During their visit, the participants had the chance to witness first-hand the transformation of the Ruhr area from an industrial region to a scientific and cultural metropolis. The members experienced the many facets of the Ruhr region during their conference at the state reception at Zeche Zollverein in Essen, at the university reception at Dortmunder U and during a guided tour of the art collection at Ruhr University Bochum. The Ruhr presented itself as a dynamic region strongly influenced by science and culture.

Ina Brandes, Minister for Culture and Science of North Rhine-Westphalia and member of the Administrative Commission of the German Science and Humanities Council, welcomed the guests at the university reception: "The research landscape in the Ruhr region is unique in Europe: Five universities, 15 universities of applied sciences, four Max Planck Institutes, five Fraunhofer Institutes and four Leibniz Institutes are located here. Success is the result of cooperation. For this, the University Alliance Ruhr is the best example."

The "Flying Pictures" projected on the façade of Dortmunder U tower were a unique welcome to the committee: Renowned film producer Adolf Winkelmann, who comes from the Ruhr region, presented an exclusive slow-motion shot of an exploding water bottle with dancing molecules.

#### Warm welcome by the rectors

In their welcoming addresses, the rectors of TU Dortmund University, the University of Duisburg-Essen and Ruhr University Bochum highlighted the history, the status quo and their shared strategic vision of the UA Ruhr. "Founded in 2007 by our predecessors, the UA Ruhr is proud to look back on 17 years of cooperation. This has resulted, for example, in joint study opportunities for 110,000 students, a comprehensive program for the promotion of early career researchers and joint liaison offices abroad," outlined the rectors. During the joint exchange, the high-profile advisory committee had the chance to learn more about the dynamic cooperation within the UA Ruhr.



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COMPETENCE FIELD MATERIALS CHAIN

# FURTHER STRENGTHENING OF MATERIALS SCIENCE

With over 250 members, the Materials Chain is the largest profile focus of the UA Ruhr and can look back on successful activities in 2024.

#### 6th MCIC

The sixth Materials Chain International Conference, MCIC 2024, focused on the topic "Inorganic Functional Materials: Developments and Applications for Advanced Technologies" and gathered 12 renowned speakers from Europe, USA and China.

Due to their intrinsic properties, inorganic functional materials have shown the potential to improve advanced technologies in various fields. Even more in the context of a sustainable future, these materials play a key role in developing applications for green technologies, like efficient energy conversion and storage.

The MCIC 2024 provided a forum to discuss advancements in a wide range of topics related to catalysts for energy conversion, functionalization, high-throughput exploration and phase transitions for over 130 participants.



#### **RUHR Symposium**

On October 10, 2024, the University of Duisburg-Essen and the Center for Nanointegration Duisburg-Essen (CENIDE) hosted the RUHR Symposium for the tenth time. This year's highly topical subject in the focus of discussion was "Al for Functional Materials". Three sessions and two keynotes by experts from science and industry covered key topics such as data management, material processes and material informatics.



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COMPETENCE FIELD METROPOLITAN RESEARCH (KOMET)

# URBAN TRANSFORMATION IN METROPOLITAN REGIONS

KoMet bundles the complementary competencies of the three partner universities of the University Alliance Ruhr in inter- and transdisciplinary metropolitan research. The targeted networking with non-university research institutions and practitioners enables the strengths of the knowledge region to be used in teaching, research and transfer.

Cooperation with regional practitioners was further expanded in 2024: The Memorandum of Understanding was renewed with the Ruhr Regional Association (RVR) and agreements were reached on new formats for collaboration. Cooperation with the Emschergenossenschaft (EG) led to the launch of the DFG-funded project "Temporality and Strategic Planning - The Timing of Strategy Changes Exemplified by the Emscher Restoration Project" (TEMPUS), and the EG-funded study on potential areas for development impulses along the Emscher was carried forward with a comparison of good practices in old-industrial regions in six countries in Europe and North America.

One of the three event highlights of the year was the conference "Urban Transformation Ruhr: Challenges and Perspectives". The event, which was conceived jointly with the Urban Futures working group of the German Geographical Society (DGfG) and supported by GEBAG, reflected on narratives, strategies, governance processes and projects for shaping transformation processes

in the Ruhr region. Among other things, the focus was on Duisburg-Hochfeld as a potential model area for the cooperative design of transformation processes in arrival areas characterized by poverty.

With the Transformation Talks 2.0, which were once again organized by the KoMet Graduate Network and the NRW Young Professionals' Forum of the Academy for Territorial Development in the Leibniz Association (ARL), an important exchange forum for young practitioners, young scientists and committed citizens was established. The central question this time was: "Shaping urban change - where is the problem?"

The KoMet Day 2024 focused on the joint publication by KoMet researchers entitled "The Ruhr Region - A Metropolis in Transformation", which is intended to be published in 2025. The authors

presented their contributions for discussion in pitches. The focus was on narratives, dimensions and dynamics of change as well as planning and governance aimed at shaping the future on the basis of adaptive strategies. The KoMet Day was rounded off with the awarding of the KoMet Prize, sponsored by the EG, for the best master's and doctoral thesis in metropolitan research.



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**NEW COMMITTEE FORMED** 

### THE UA RUHR COUNCIL FOR ETHICS AND RESPONSIBILITY

The UA Ruhr Council for Ethics and Responsibility was established in October. As a result, the UA Ruhr is thus further strengthening its cooperation and bundling its synergies in a new area.

The nine-member council will be conducting relevant discussions on values in science and research within the UA Ruhr. These may include, for example, science and technology assessment such as the civil clause, university activities in the public sphere in view of the neutrality requirement and questions about the limits of individual freedom in the academic community.

The council covers a broad and diverse range of subjects and expertise and is intended to provide a variety of approaches and perspectives to the issues. Its members are the following professors from the University Alliance Ruhr:

- > Ulf Dittmer, University of Duisburg-Essen, Medicine
- > Stefan Huster, Ruhr University Bochum, Law
- > Katja Ickstadt, TU Dortmund University, Computer Science/Statistics
- > Elsa Kirchner, University of Duisburg-Essen, Medical Engineering
- > Nicole Krämer, University of Duisburg-Essen, Social Psychology
- > Karola Marky, Ruhr University Bochum, IT Security
- > Christian Neuhäuser, TU Dortmund University, Philosophy
- > Wolfgang Rhode, TU Dortmund University, Experimental Physics / Astroparticle Physics
- > Eva Weber-Guskar, Ruhr University Bochum, Practical Philosophy / Al

The role of the Council for Ethics and Responsibility is to discuss overarching issues and reflect on basic principles that local ethics committees can draw upon when evaluating individual research projects. The goal is to establish common guidelines for ethical action in challenging and complex times, both for the individual institutions and as a group.



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COMPETENCE FIELD "ENERGY-SYSTEM-TRANSFORMATION (EST)".

# THE ENERGY SYSTEM: ECONOMICAL, RELIABLE, CLIMATE-NEUTRAL

The target scenarios for a future energy supply show that climate neutrality is achievable. However, economic efficiency and reliability are questions of the transformation path on which we have already traveled a considerable distance. This transformation is characterized by political decisions, the regulatory framework, and technological progress. The goal would not have been achievable with technologies from just a few years ago. However, further innovations are needed to achieve it economically while at the same time ensuring acceptance. Digitalization also plays a decisive role in reliably coordinating technical systems and markets. The competence field addresses all of these issues through research in interdisciplinary projects and public expertise in various events.

Outstanding project examples include the DFG Transregio TRR 391 "Spatio-temporal Statistics for the Transition of Energy and Transport", which involved EST members from all three universities of the University Alliance Ruhr, as well as the disciplines of economics, electrical engineering, mechanical engineering, computer science, and mathematics under the leadership of statistics. A new professorship will underpin the topic of Data Science for Energy and Environment.

The DFG Priority Programme 2403 'Carnot Batteries: Inverse Design from Markets to Molecules' has gained further momentum in 2024 under the leadership of the University of Duisburg-Essen. Other members of the field of competence are on the coordination team and several projects have been successfully applied for for the University Alliance Ruhr. Activities such as Spring School and workshops involving international Mercator Fellows have increased international visibility.

The 13th International Ruhr Energy Conference (INREC) took place in Essen in August 2024. One focus was the topic of uncertainty in the energy sector - on markets, in systems, and in decision-making.

Another highlight was the HY.Summit.Rhein.Ruhr in Essen on the topic of hydrogen, organized by the economic development agencies in the Ruhr region with active contributions from many EST members.

This year's activities impressively demonstrate how the EST field of competence has successfully established itself in jointly coordinated research projects and at high-profile events. In EST, it is a joint pleasure to master the various challenges for a future sustainable, economical and secure energy system with all its facets.







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COMPETENCE FIELD EMPIRICAL ECONOMIC RESEARCH

# CONTINUED JOINT SUCCESS AT CRC AND RTG

The competence field Empirical Economic Research of the UA Ruhr looks back on a successful year 2024, characterized by significant research projects, successful events, and the promotion of early-career researchers.

A standout event was the approval of the new Collaborative Research Center/Transregio (TRR) 391 "Spatio-temporal Statistics for the Transition of Energy and Transport." This project is a cooperation between the TU Dortmund University, Ruhr University Bochum, and other partners. The goal is to establish a leading research center that develops statistical methods for processing spatio-temporal data from energy and transport. The successful acquisition of this Transregio underscores the excellent research performance of the UA Ruhr.

The joint master's program "Econometrics" of the UA Ruhr celebrated its 5th anniversary. Since its introduction, has attracted numerous students and prepared them successfully for careers in research and practice. For the anniversary, an international conference is planned for next year to honor achievements and discuss future developments.

Following the successful extension of the DFG Research Training Group "Regional Disparities and Economic Policy" last year, the second funding period began in April and will run until October 2028. In the first funding period, ten doctoral candidates successfully completed their degrees, and three others are awaiting their defense. Currently, 26 doctoral candidates are part of the program, including seven who started in October 2024. The program offers an interdisciplinary research environment and promotes early-career researchers.

Additionally, the new DFG Research Training Group "Cross-Border Labour Markets" started in April with 13 doctoral candidates and three postdocs. Furthermore, the 4th "CReAM/RWI Workshop on the Economics of Migration" intensified scientific exchange.

The "Ruhr Graduate School in Economics" continued its support for early-career researchers and has now become part of the Research Academy Ruhr. A highlight was the 17th RGS Doctoral Conference on February 27 and 28, 2024, in Essen. The conference enabled early-career researchers to present their work and exchange ideas with renowned scholars.

For the coming year, further events and projects are planned to intensify collaboration. The Econometrics Conference on the anniversary of the master's program promises to be a highlight. Additionally, further research projects will be initiated within the framework of TRR 391 and the Research Training Groups.





Partner institutions in CRC/TRR 391

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SUCCESSFUL ACQUISITION OF THIRD-PARTY FUNDS

### MULTIPLE SUCCESSES FOR THE UA RUHR IN THE AWARDING OF COL-LABORATIVE RESEARCH CENTRES AND RESEARCH TRAINING GROUPS

Twice a year, the German Research Foundation (DFG) announces which Collaborative Research Centers (CRCs) and Research Training Groups (RTGs) will be established or extended. The UA Ruhr universities were very successful in the two rounds in June and November: two new CRCs and one RTG were established and six existing CRCs were extended.

#### New joint projects

In May, the joint SFB/TRR 391 "Spatio-temporal Statistics for the Transition of Energy and Transport" was established by TU Dortmund University and Ruhr University Bochum. The spokesperson is Professor Roland Fried from the Faculty of Statistics at TU Dortmund University. The funding for just under four years amounts to around 10 million euros. All three partner universities are involved in the new CRC, with members recruited from the fields of empirical economic research and energy system transformation. This is the first time that members from two fields of expertise have worked together in such a large collaborative project on the modeling of data in the area of energy and mobility transition.

In future, junior researchers in the Ruhr region will be able to complete their doctorates at the interface of physics, chemistry and medicine and research the up-and-coming field of proton therapy: The DFG has decided to establish the Research Training Group 3043 "AMTEC-PRO" at TU Dortmund University and the University of Duisburg-Essen. Starting in October 2025, it will fund the RTG for an initial period of five years with a total of approx. six million euros. Professor Kevin Kröninger from the Department of Physics at TU Dortmund University is the spokesperson of the RTG.

The Collaborative Research Center 1683 "Interaction Methods for the Modular Reuse of Existing Structures" was newly established at Ruhr University Bochum. The spokesperson is Professor Peter Mark from the Faculty of Civil and Environmental Engineering. The aim of the project is to reuse the concrete elements of old buildings for new ones.



#### **Extended projects**

In addition, the following Collaborative Research Centres were extended in 2024:

- CRC 1439 "RESIST Multilevel Response to Stressor Increase and Release in Stream Ecosystems" (University of Duisburg-Essen and Ruhr University Bochum)
- CRC/TRR 196 "MARIE Mobile Material Characterization and Localization by Electromagnetic Sensing" (University of Duisburg-Essen and Ruhr University Bochum)
- > CRC/TRR 287 "Bulk Reaction" (Ruhr University Bochum and University of Magdeburg)
- > CRC 1242 "Non-Equilibrium Dynamics of Condensed Matter in the Time Domain" (University of Duisburg-Essen)
- > CRC/TRR 289 "Treatment Expectation" (University of Duisburg-Essen)
- CRC/TRR 188 Damage Controlled Forming Processes" (TU Dortmund University and RWTH Aachen University)

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# INSTITUTE FOR ADVANCED STUDY IN THE HUMANITIES ESSEN (KWI)

2024 again saw the successful acquisition of projects that strengthen and expand the excellent research taking place at KWI.

A new DFG project will analyse the significance and effect of social science research in the development of the Social and Solidarity Economy (SSE) in Greece. Another project, funded by the Hamburger Stiftung zur Förderung von Wissenschaft und Kultur, is preparing to publish an edition of the most important works of sociologist Lars Clausen from his Nachlass. The Fritz Thyssen Foundation is providing funds to continue the Thyssen@KWI-Fellowship for two more years. In October, the project "Cultures of the Cryosphere" got underway with an ERC Synergy Grant. For the next six years, Stefan Höhne and colleagues from four different sites will conduct research on cultural practices of artificial cooling.

At the Rhine Ruhr Center for Science Communication Research (RRC), funded by the Volkswagen Foundation, new hire Annette Schöneck made crucial progress in building the Living Handbook of

Science Communication and Science Studies. This online encyclopaedia, a central aspect of the transfer strategy of the RRC, will be launched next year. Sarah Tober is instrumental in the creation and implementation of the "Wissen über Wissenschaft" core curriculum.

In 2024, twelve researchers joined us with KWI International Fellowships, and two more Thyssen@ KWI Fellows came with funding from the Fritz Thyssen Foundation. KWI will also continue its cooperation with the Academy in Exile, which is now anchored at TU Dortmund University.

A wide variety of events took place at KWI over the course of the year. Along with conferences on (lacking) tact and the question "What Was Fascism Theory?", there was a workshop devoted to the possibilities of photographic critique. One podium discussion shed light on different forms of literary writing about climate change, while another explored literary discourse related to East Germany. In the fall, we kicked off our new annual theme, "Guilty Pleasures", with a discussion of conflicts over questions of taste in art and culture.







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RESEARCH ACADEMY RUHR

### NEW FORMATS, NEW COLLABORATIONS, MORE NETWORKING

Research Academy Ruhr has expanded its offerings and broadened its focus, particularly in the areas of international visibility and alternative career paths. At the heart of the new formats: Direct and open exchange of various target groups.

In 2024 internationalization was the focus in several respects: at the first Global Young Faculty Event experienced researchers discussed the importance of international research and shared tips and first-hand knowledge with researchers at various career stages. The keynote speech was given by Prof. Dr. Alexander Probst from Research Center One Health Ruhr. Also the participants of this year's Research Explorer Ruhr (RER) were involved, 20 - prospective - postdocs from 17 countries who familiarized themselves with the German research landscape and the Ruhr region in particular as part of the two-week summer academy. And at the first C-NET RNR Nachwuchsakademie 2024 Research Academy provided support as a cooperation partner.

The new series connecting.ruhr is likewise the result of a cooperation. The format was developed together with the Junger Initiativkreis Ruhr and is dedicated to career prospects in the business area Ruhr. At the kick-off event at Accenture's Innovation Hub, postdocs met young business representatives and discussed requirements and skills. They gained direct insights into companies and were informed about career steps into the business world.

The workshop and info session program for postdocs and the junior faculty has been further developed and the proportion of English-language offerings was increased. In addition, a large number of well-established events for career development within and outside academia took place: The Frühjahrs- resp. Herbstakademie prepared for starting or completing a doctorate; the Wirtschaftskolleg shed light on possible paths after the doctorate and the Research Career Day invited doctoral researchers to an exchange about research careers with established researchers at the University Alliance Ruhr. This year's Karriereforum focused on the professorship at a University of Applied Sciences.

A new line for female doctoral researchers was launched in the mentoring<sup>3</sup> program in autumn. The 50 successful applicants at the joint kick-off were looking forward to the upcoming matching processes and the interdisciplinary supporting program.

Finally, there was also a structural development in 2024: the established Ruhr Graduate School of Economics (RGS Econ) moved under the umbrella of Research Academy in the summer.





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# LIAISON OFFICE NORTH AMERICA

One highlight of 2024 was the 20th anniversary of the Liaison Office North America. To mark the occasion, a high-ranking UA Ruhr delegation traveled to New York. There, the rectors of the partner universities opened the new Future's Fellowship Program, which aims to strengthen the UA Ruhr's commitment to promoting top-level research cooperation between Germany and the USA. The program's first cohort of four Future's Fellows worked at key partner institutions.

The Ruhr Fellowship Program and the Transatlantic Ruhr Fellowship Program continued their success with cohorts of 11 each.

The fellows' engagement in hands-on experiences highlighted the growing transatlantic dialogue in education and industry.

The Liaison Office's activities included participation in the Scholars at Risk General Assembly, organizing the kick-off of Entrepreneurship Education Week, hosting a two-day workshop on "Calibrated Trust in AI" in cooperation with the Research Center Trustworthy Data Science and Security as well as a one-day conference on "AI for Science and Public Good" emphasizing key focus areas such as academic freedom, entrepreneurship, and the responsible use of artificial intelligence. The Liaison Office also organized the UA Ruhr Science Symposium "On Memory" in collaboration with Rutgers University, which explored interdisciplinary insights into autobiographical memory.

During the year, the liaison office participated in high-profile events, including the GAIN conference in San Francisco, where the office hosted a workshop. Another important event was leading a lunch with German Ambassador to the United States Amb. Michaelis, on the topic of "Democracy and Diplomacy" in Washington, DC. These initiatives underscored the central role of science diplomacy in addressing global challenges, particularly with regard to research, transfer and democratic governance.

As we reflect on the successes of 2024, we are proud of UA Ruhr's continued contributions to global academic engagement, innovation and entrepreneurship. This year, the activities of the North America Liaison Office have continued to further the commitment to strengthening transatlantic relations and promoting academic freedom, scientific exchange and international collaboration for the next generation of researchers and innovators.







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### **UA RUHR PROJECT "DIGITAL HUMANITIES RUHR"**

As part of the "Freiraum" program, the Foundation for Innovation in Higher Education supports teaching projects that stand out for their innovative potential. The UA Ruhr has successfully acquired the "Digital Humanities Ruhr" project, which started in May and will run until March 2026.

Data management is also becoming an increasingly important key skill in the humanities. But what courses can universities offer to best prepare students for the demands of the workplace and academia? And how can digital humanities skills be integrated into the curriculum in a sustainable way?

This was the focus at the kick-off event of the Digital Humanities Ruhr project on May 13, 2024. The keynote speech was given by Professor Andrea Rapp, professor at the Department of German Studies – Computer Philology and Medieval Studies at TU Darmstadt.

The three UA Ruhr partners integrate the courses and materials into selected degree programs and contribute to a cross-disciplinary and cross-university program that can be taken by all UA Ruhr students as an elective course. In the future, student will be able to graduate from this program with a certificate. The partners are involved with different priority disciplines:





- > The University of Duisburg-Essen is dedicated to digital methods in German studies and philology, with a focus on the textual processing and evaluation of corpora, digital editions and archives. This includes corpus analysis, linguistic annotation and metadata management.
- > The Ruhr University Bochum's activities are geared towards the interdisciplinary teaching of basic digital skills, tools and methods for the humanities and social sciences, including the application of universal programming languages such as Python in studies and teaching.
- > TU Dortmund University focuses on the area of algorithmic literacy. Through interdisciplinary collaboration, students gain the skills necessary to examine, critically question and communicate the impact of algorithms on society.



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# LIASON OFFICE EASTERN EUROPE/CENTRAL ASIA (EECA)

In 2024, the focus was once again on supporting at-risk scientists in the context of the ongoing war in Ukraine.

Through the collaboration with the Zimin Foundation and the Nemtsov Foundation, effective projects could be realized again this year.

One highlight was the summer school for journalism, which took place in Prague and was organized together with the Charles University in Prague. This initiative offered participants a platform to acquire important skills and expand their networks.

In addition, the Fedor Stepun Program for at-risk scholars enabled eight postdoctoral researchers to begin their academic work at our universities. Working closely with their hosts, they were able to continue their research and make valuable contributions to their fields.

The Institute of German Studies at the Ruhr University Bochum, in close cooperation with the Germanists from the other UA Ruhr partner universities, together with the liaison office, has successfully submitted a funding application to the Ministry of Culture and Science of the State of North Rhine-Westphalia (MKW). This application was approved and forms the basis for the "DniPRON-rw" project, which will promote scientific cooperation between Germany and Ukraine.

In 2024, collaborations with partners in Central Asia, particularly Kazakhstan, have continued to grow in importance and have been successfully expanded.

The focus was on strengthening the contacts with the German-Kazakh University (DKU) and the East Kazakhstan Technical University (EKTU), both of which play a central role in German-Kazakh cooperation. In the course of several cooperation talks and a preparatory trip, important foundations were laid for joint projects and partnerships. One of the highlights was our participation in the opening of the German-Kazakh Institute for Science and Technology in September.

Recruiting international students remained the focus in 2024. In the run-up to the "MINTZukunft-Ruhr" project planned for 2025, a number of PASCH schools from the EECA region have been won as partners. Together with these schools, initial measures were launched to get pupils interested in studying STEM subjects at the UA Ruhr and prepare them for the transition to university.

In addition, the Studienbrücke program was expanded to include further countries this year. The inclusion of India, Kenya, Namibia and Taiwan as new partner countries opens up additional prospects for student recruitment. In the winter semester of 2024/2025, 33 graduates of Studienbrücke were able to begin their studies at the universities of the UA Ruhr.



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### JOINT EFFORTS TO BALANCE CAREER AND CARE RESPONSIBILITIES

TU Dortmund University, the University of Duisburg-Essen and Ruhr University Bochum have signed the "Compatibility of Work and Care" charter of the NRW state program of the same name. In doing so, the three partners demonstrate that they support their 17,000 employees as well as their 110,000 students in managing their care responsibilities.

As the number of women in the workforce increases and the age of retirement rises, more and more working men and women will have to take on caregiving responsibilities within their families. This is also a challenge for university employees. The universities are responding to the challenges of demographic change and the shortage of skilled workers by offering assistance and advice. The three UA Ruhr universities are aware of the social changes and wish to support employees in managing their work and care responsibilities.

The charter is a voluntary commitment that approx. 400 companies and institutions in the state of NRW have signed since its launch in early 2022. It aims to improve services for employees with care responsibilities and to facilitate networking with the local care infrastructure. The initiative is supported by the Ministry of Labor, Health and Social Affairs of the state of North Rhine-Westphalia, the state associations of long-term care insurance companies and the Association of Private Health Insurance Companies. The signed charter contains seven points on how to improve conditions for caregivers. This includes open communica

tion and raising awareness of the issue, especially among employees and senior staff. The charter also calls for ongoing dialog with works councils and the expansion and improvement of counseling services.

"We accept our social responsibility to support employees and students with caregiving responsibilities. As university leaders, we want to show that we take the issue of caregiving seriously and support our employees with flexible working hours, for example. We also want to raise awareness of our support services for all members of the university," said the rectors of the University Alliance Ruhr, explaining their joint motivation for signing the charter.

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## LAUNCH OF A THIRD LIAISON OFFICE IN THE LATIN AMERICA REGION

In addition to its liaison offices in North America and Eastern Europe/Central Asia, the University Alliance Ruhr will establish a third liaison office for the Latin America region in 2025.

As early as 2023, it was clear that all three partner universities of the UA Ruhr were in favour of setting up a third joint liaison office; the question that remained for 2024 was: Where? Expertise was bundled in the International Mapping Working Group under the leadership of the Vice Rectors for International Affairs. In a complex process, several target regions were analyzed from various strategic points of view.

The interests of the three universities in terms of content were examined, and the working group determined in which regions these interests could be effectively implemented. In addition to the institutional anchoring of the individual target regions in the universities, their respective research and educational landscape and compatibility with the objectives of the UA Ruhr were also examined. Finally, the future challenges for both the individual uni-

versities and the University Alliance as a whole were used as selection criteria and to define the responsibilities of a new office.

Latin America has proven to be an extremely promising and attractive region, particularly with regard to the recruitment of students and early career researchers as well as the recruitment and research potential in engineering and natural sciences.

In view of this, the university management of the partner universities unanimously decided to set up the Latin America Liaison Office. The aim is to pursue the following objectives:

- > expansion of academic cooperation, especially in the areas of research and development
- > access to emerging markets, especially in the areas of innovation and entrepreneurship
- cultural and academic exchange by increasing student and faculty mobility
- > strengthening of alumni networks

The Latin America Liaison Office will not only strengthen the international presence of the University Alliance Ruhr. It also offers numerous opportunities for academic, economic and cultural cooperation, from which both regions will considerably benefit. The Liaison Office will be located at the German Center for Research and Innovation São Paulo. Its inauguration is scheduled for June 2025.





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MERCATOR RESEARCH CENTER RUHR (MERCUR)

# A NEW BEGINNING FOR A PROVEN SUCCESS STORY

The Mercator Research Center Ruhr was founded in 2010 by the Mercator Foundation and the UA Ruhr universities to promote cooperation in research, teaching and transfer within the university network. The aim was not only to provide financial support, but also to strengthen the trust between the universities, build networks and thus continuously expand the cooperation between the partners.

In 2024, MERCUR funded a total of 14 UA Ruhr projects with more than 1.2 million euros, including 11 projects in the "MERCUR Sprint" funding line, which supported applications for larger collaborative projects of the German Research Foundation (DFG), and three projects in the "MERCUR Innovation" program, which focused on the framework conditions accompanying research in the Excellence Strategy competition. This line covered such diverse areas as the systematic recording of the diversity of researchers, the dissemination of philosophical research to the public and a new communication strategy for the UA Ruhr.

This year's approvals mark the end of MERCUR's 15-year funding period, which was financed by the Mercator Foundation. Since 2010, the UA Ruhr has approved over 340 mostly collaborative projects with a total volume of almost 60 million euros in strategically distinct funding lines. Many of the funded projects have led to successful follow-up projects, including numerous DFG-funded Collaborative Research Centers, Research Training Groups and Re-

search Units. The UA Ruhr professorships, which continued to support cutting-edge research, were a flagship project.

The last MERCUR Club took place on November 14th against the background of these 15 years of successful support of collaborative projects at the UA Ruhr. Together with Dr. Dietmar Goll, Professor Manfred Prenzel, former Chairman of the German Council of Science and Humanities, evaluated the strategic impact of MERCUR from the perspective of the foundation's activities and presented the assessment results. They agreed: "Overall, MERCUR is unique in the German higher education landscape and a trailblazer for the promotion of regional scientific cooperation."

In addition to selected scientists who reported on their MER-CUR-funded projects, the UA Ruhr rectors, Professor Barbara Albert, Professor Manfred Bayer and Professor Martin Paul, highlighted the importance of MERCUR for cooperation within the UA Ruhr in a panel discussion and announced that MERCUR will be integrated into the structures of the UA Ruhr from 2025: "Thanks to MERCUR, our universities have been able to continuously optimize critical research areas and specifically support excellent scientists in setting up cross-university projects in the Ruhr region. Based on our positive experience, we have decided to continue and expand the model on our own initiative from 2025."



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### **BRYCK STARTUP ALLIANCE**

As part of the German government's start-up strategy, the "Leuchtturmwett-bewerb Startup Factories" ("Startup Factories Lighthouse Competition") was launched to significantly increase the number and quality of knowledge-based spin-offs. The aim of the funding competition is to establish supraregional and internationally visible startup factories. Together with the RAG-Stiftung and the BRYCK start-up center, the UA Ruhr universities submitted an application for the "BRYCK Startup Alliance" and were awarded funding.

In June, Federal Minister of Economic Affairs Dr. Robert Habeck announced at the "25 Years of EXIST" congress in Berlin that the BRYCK Startup Alliance had been selected as one of 15 projects nationwide in a highly competitive process for the concept phase of the federal government's Startup Factories lighthouse competition. 125 universities and scientific institutions applied with 26 projects. In the concept phase, the participating partners will create the organizational and structural basis for exploiting the enormous scientific innovation potential, for establishing the BRYCK Startup Alliance and for operating it as entrepreneurs.

BRYCK contributes its expertise in business development, scaling start-ups and its network of leading industrial companies, experts and investors to the Factory. At least 50 percent of the funding will come from private sources. As a private sector partner, the RAG-Stiftung will provide up to 10 million euros for the five-year project phase of the BRYCK Startup Alliance. The project phase is scheduled to start in June 2025. At the end of the multi-stage competition, up to ten Startup Factories will be established throughout Germany in order to significantly increase the number and quality of knowledge-based spin-offs.



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### **SUCCESSFUL LAUNCH OF THE RUHR TEACHER TRAINING SCHOLARSHIP**

The program "Lehramtsstipendium Ruhr – Deine Region. Deine Chance." supports student teachers at the three UA Ruhr universities who are committed to educational equity. It enables scholarship holders to engage in depth with the issue of educational equity as part of their studies, thus preparing them for their future role as teachers at schools in disadvantaged areas. The entire teacher training program is geared to this issue, which has great relevance to the future; it offers a tailor-made study profile, many opportunities for practical experience and a wide range of supporting programs. The Ruhr Teacher Training Scholarship is supported by the Ministry of Education, the RAG Foundation, the Wübben Education Foundation and the universities of the UA Ruhr.

The first 70 scholarship holders of the Ruhr Teacher Training Scholarship were welcomed at the kick-off event in June by the Minister of Education Dorothee Feller and the three vice rectors for academic affairs, Professor Kornelia Freitag (Vice Rector for Academic Affairs at RUB), Professor Stefan Rumann (Vice Rector for Studies, Teaching and Education at UDE) and Professor Wiebke Möhring (Vice President for Academic Affairs at TU Dortmund University). "We must ensure that schools in disadvantaged areas do get the teachers they need — every single teacher counts. The scholarship provides a broad range of support to prepare students for an exciting and vital career in these very schools — and it contributes to fair educational opportunities for students," the Minister emphasized.

Ruhr University Bochum is coordinating the implementation of the program. Professor Kornelia Freitag explained the added value for the UA Ruhr and the impact on the Ruhr region: "The objectives of the scholarship program and the issue of equal opportunities in education are absolutely in line with the self-image of the Ruhr region universities. It offers us as the University Alliance Ruhr a great opportunity to jointly pursue vital goals in the training of future teachers in the Ruhr region and, at the same time, to have

an impact on the region. The program will have a positive rippling effect long after it's completed, helping to prepare even more students for teaching careers where they are most needed. We are very proud of our students who are stepping up to this challenge, and we are confident that they will go on to do excellent work in schools in disadvantaged areas in the Ruhr region. This will motivate other prospective teachers to follow the same path."



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# **PROSPEROUS** 2025

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