

UNIVERSITY ALLIANCE RUHR



Ruhr Fellowship Program

June 7 - July 30, 2021





Gelsenkirchen: Grimberg "sickle bridge" over the Rhine-Herne canal

Dear RuhrFellows,

Welcome to our Virtual Ruhr Fellowship Program 2021.

The Corona pandemic not only dominates our everyday lives, but is also the subject of research in a wide range of disciplines. Universities and colleges around the world are adjusting to the new normal, however the future of higher education remains digital: a recent survey says that scientists want to use online conferencing even after the pandemic. Exceptional times require exceptional measures. That is why the Ruhr Fellowship Program 2021 is a virtual fellowship program. We are happy that so many talented students from our partner universities in the U.S. expressed interest in our program, despite the challenging circumstances.

In a program that combines a two-week summer school and a six-week internship, you will have the opportunity to improve your German language skills, get to know the universities of the University Alliance Ruhr, participate in exciting excursions, and acquire new skills during the entrepreneurship bootcamp and the internships in German companies. You will get to know the Ruhr area as an innovative environment for living, studying and working. For the internship part of this year's program, we are proud to partner with the [Auslandsgesellschaft.de](https://www.auslandsgesellschaft.de) e.V., Business Metropole Ruhr, the City of Dortmund, the EmscherGenossenschaft, the Technical University of Dortmund, the University of Duisburg-Essen, and the sustainable development collective World of [Walas](https://www.wal.de).

The Ruhr Fellowship Program is organized by the University Alliance Ruhr, in cooperation with local business development program Wirtschaftsförderung Dortmund which has brought students from renowned U.S. universities to the Ruhr area since 2012. All Ruhr Fellows are closely integrated into the alumni program of the Liaison Office of the UA Ruhr in New York.

We are excited to have you on board for our Virtual Ruhr Fellowship Program 2021 and hope you will gain many new insights, transatlantic connections, and valuable experiences.

Wishing you a successful and engaging Summer 2021,

Prof. Dr. Barbara Buchenau
Vice President for Social Responsibility,
Diversity & International Affairs
University of Duisburg-Essen





RUHR
UNIVERSITÄT
BOCHUM **RUB**

© Ruhr-Universität Bochum

tu technische universität
dortmund

© TU Dortmund

UNIVERSITÄT
DUISBURG
ESSEN

Open-Minded

© Universität Duisburg-Essen

University Alliance Ruhr

The academic hub for research, teaching, studying, and networking in Germany's vibrant Ruhr area

The University Alliance Ruhr is an alliance between Ruhr University Bochum, TU Dortmund University, and the University of Duisburg-Essen, the three largest universities in Germany's thriving Ruhr area. Each of our institutions has a strong tradition of breaking down walls between disciplines. We believe in the benefits of collaboration on all levels of scholarship and research, which is one of the reasons we came together in this unique university alliance.

More than 120,000 students, of which 19,000 are international, as well as over 14,000 researchers study and work within the UA Ruhr universities.

Together, the three universities have 850 partnerships with universities in over 130 countries, which provides our students and researchers with virtually unlimited possibilities for exchange and resources for development. To support our already strong global network of international exchange and collaboration, UA Ruhr has also created academic liaison offices for North America and Russia.

The Ruhr area is not only Germany's largest academic hub, but also an epicenter of innovation that fosters close interaction between academia and the private sector – and our alliance provides students and researchers from around the world with an open gateway to our region.

We invite you to learn more about the UA Ruhr alliance and our universities, and we look forward to welcoming you in the Ruhr area soon!





Bottrop: Haniel mining waste tip with "TOTEMS" by Agustin Ibartola

Program Focus Topics

Innovation and Entrepreneurial Mindset

We will find out what it takes to be an entrepreneur and how you can discover, assess and further develop your strengths. We will learn how to define a problem, work on live case models, practice pitching and develop business models. Throughout this course, we will connect with entrepreneurs and discuss with them what it takes to translate your idea into a business and reach global impact.

Business Communication

Within an organization and when interacting with supply chains and clients, effective communication is essential to the sustainability of a business. We will be discussing the skills and strategies to ensure everyone is consistently working toward common goals and that critical in-

formation is shared to make those goals attainable. We will also cover communication boundaries, such as geographic, cultural, and technological.

Innovation/Technology

As technological change continues to accelerate and market demand changes, innovation is critical to a business's success. How does an organization decide what technologies to concentrate on, what products and services are ripe for innovation, and how change will be received by the market? What are the aspects of the German and American markets that drive innovation, and how do companies adapt to different demands when serving different markets?

Ethics/Diversity

The long and continuing history of relationships across cultures is an important context for all business considerations. When managing a diverse workforce and presenting products and services to a broad market, ethical practices not only ensure a business is perceived as a community partner but also provide a more stable foundation for long term sustainability. We will discuss best practices and personal experiences as perspectives have evolved in Germany and the U.S.

Organizational Management

As businesses grow, the complexity of operations requires careful and intentional guidance in order to compete effectively. Managers can implement various strategies to address challenges as they arise, but a culture of continuous improvement

can position a company to respond nimbly to issues that may not yet be visible. We will consider how company leaders balance risk and opportunity in changing environments and multinational markets.

Labor Laws/Labor Relations

Labor laws continue to develop in both Germany and the U.S. as employers, employees, and governments coordinate toward safe and successful workplaces. Collective bargaining organizations (unions) can play a major role in representing the needs of workers. Companies often work with advisors to ensure they have the best understanding of their obligations and what may be subject to change. We will discuss the current state of labor relations as well as development worth paying attention to.



Program

WEEK 1 Monday – June 7, 2021

WELCOME REMARKS

Prorector Barbara Buchenau will welcome the Ruhr Fellows 2021 to the Summer School 2021. Live welcome remarks and introduction of the Ruhr Fellows by Florian Vollweiler-Nelles.

Session Type Welcome
Time **10:00am - 10:45am (EDT) | 4:00pm - 4:45pm (CEST)**

GET TO KNOW

Get to know in breakout rooms. Speed dating and Quiz.

Session Type Get to Know
Time **10:45am - 11:45am (EDT) | 4:45pm - 5:45pm (CEST)**

FOOD FOR THOUGHT: MEAL PREP AND PHOTOGRAPHS

The Ruhr Fellows are encouraged to prepare their favorite lunch during this work block.

Session Type Get to Know
Time **12:15am - 1:00pm (EDT) | 6:15pm - 7:00pm (CEST)**

FOOD FOR THOUGHT: OPENING LUNCH WITH THE GERMAN TRANSATLANTIC RUHR FELLOW ALUMNI 2019 AND 2020

Virtual meeting and networking event with the German Transatlantic Ruhr Fellow Alumni 2019 and 2020.

Session Type Discussion and Networking
Time **1:00pm - 1:30pm (EDT) | 7:00pm - 7:30pm (CEST)**

CONCERT THREEPWOOD 'N STRINGS

Virtual meeting and networking event with the German Transatlantic Ruhr Fellow Alumni 2019 and 2020. Possible pub quiz or other activities.
Possible Music Guest (see last page)

Session Type Concert
Time **1:30pm - 2:00pm (EDT) | 7:30pm - 8:00pm (CEST)**

WEEK 1 Tuesday – June 8, 2021

GERMAN LANGUAGE COURSE (BEGINNER | ADVANCED)

The Ruhr Fellows will be divided into two classes depending on their current language proficiency.

Session Type Seminar
Time **10:00am - 11:30am (EDT) | 4:00pm - 5:30pm (CEST)**

TALK NETZ / CENIDE (CENTRE FOR NANOINTEGRATION)

Visit to one of UDE's research focus on Nanoengineering. Presentation by Tobias Teckentrup (Cenide).

Session Type Virtual Tour, Presentation and Discussion
Time **12:00pm - 1:15pm (EDT) | 6:00pm - 7:15pm (CEST)**
Leads UDE NETZ/CENIDE Faculty

WEEK 1 Wednesday – June 9, 2021

GERMAN LANGUAGE COURSE (BEGINNER | ADVANCED)

Session Type Seminar
Time **10:00am - 11:30am (EDT) | 4:00pm - 5:30pm (CEST)**

TALK URBAN PUBLIC HEALTH

Information, Discussion and Q&A regarding UDE's research focus on Urban Public Health.

Presentation by Julita Skodra (Universitätsklinikum Essen)
Session Type Discussion / Live Q&A
Time **12:00pm - 1:30pm (EDT) | 6:00pm - 7:30pm (CEST)**

FELLOWS ALUMNI SERIES MATTHEW PASQUINI

An interactive, informal chat and Live Q&A with Ruhr Fellow Alumni.

Session Type WebTalk
Time **2:00pm - 3:00pm (EDT) | 8:00pm - 9:00pm (CEST)**



Program (continued)

WEEK 1 Thursday – June 10, 2021

TALK
THE RUHR - HOW IT ALL
STARTED, HOW IT CHANGED AND
WHY IT IS IMPORTANT

Presentation by Dr. Lutz Budraß (Ruhr-Universität Bochum)

Session Type Presentation and Discussion
Time **10:30am - 12:00pm (EDT) | 4:30pm - 6:00pm (CEST)**

GERMAN LANGUAGE COURSE
(BEGINNER | ADVANCED)

Session Type Seminar
Time **12:00pm - 1:30pm (EDT) | 6:00pm - 7:30pm (CEST)**
Leads Language Instructors

WEEK 1 Friday – June 11, 2021

TALK
FROM THE GARDEN CITY TO THE
SMART CITY: ON THE GLOBAL
DIFFUSION OF URBAN MODELS
AND POLICIES

Insight into research focus Urban Systems, Q&A, Discussion.
Presentation by Prof. Dr. Jens Gurr (UDE).

Session Type Discussion / Live Q&A
Time **11:00am - 12:30pm (EDT) | 5:00pm - 6:30pm (CEST)**

PRESENTATION
WILO COMPANY

You will get the opportunity to get in touch with key players/companies of the Ruhr Area. The presentation will be held like a TED-Talk. You are encouraged to enter a discussion with the representatives afterwards.

<https://wilo.com/en/>

Session Type Discussion / Live Q&A
Time **12:30pm - 1:30pm (EDT) | 6:30pm - 7:30pm (CEST)**

WEEK 2 Monday – June 14, 2021

GERMAN LANGUAGE COURSE
(BEGINNER | ADVANCED)

Session Type Seminar
Time **10:00am - 11:30am (EDT) | 4:00pm - 5:30pm (CEST)**

CENTER FOR ENTREPRENEURSHIP
& TRANSFER (CET) –
LIVE-CASE CHALLENGE &
WORKSHOP DESIGN THINKING I

As part of this year's Summer School, the Ruhr Fellows will work on a live case to test their knowledge. The idea pitching will be held at the end of the final week.

<https://cet.tu-dortmund.de/>

Session Type Workshop
Time **1:00pm - 2:00pm (EDT) | 7:00pm - 8:00pm (CEST)**

CET – LIVE-CASE CHALLENGE &
WORKSHOP DESIGN THINKING I -
WORKBLOCK

As part of this year's Summer School, the Ruhr Fellows will acquire key competences for the upcoming internships.

Session Type Workshop
Time **2:30pm - 4:00pm (EDT) | 8:30pm - 10:00pm (CEST)**

WEEK 2 Tuesday – June 15, 2021

GERMAN LANGUAGE COURSE
(BEGINNER | ADVANCED)

Session Type Seminar
Time **10:00am - 11:30am (EDT) | 4:00pm - 5:30pm (CEST)**

CET – WORKSHOP
DESIGN THINKING II

Session Type Workshop
Time **12:00pm - 1:00pm (EDT) | 6:00pm - 7:00pm (CEST)**

START UP LIVE CASE
WORK BLOCK

Ruhr Fellows will be given individual Zoom rooms (other application possible) to work on their presentation

Session Type Work Block
Time **1:30pm - 3:00pm (EDT) | 7:30pm - 9:00pm (CEST)**

WEEK 2 Wednesday – June 16, 2021

LWL HERNE – VIRTUAL TOUR

Virtual tour to LWL Herne Museum of Archeology

Session Type Virtual Tour
Time **7:45am - 8:45am (EDT) | 1:45pm - 2:45pm (CEST)**

PRESENTATION RUHRVERBAND

The Ruhr Fellows will get the opportunity to get in touch with key players / companies of the Ruhr area. The presentation will be held by Markus Rüdell, press officer and head of corporate communications.

<https://www.ruhrverband.de/en/home/>

Session Type Discussion / Live Q&A
Time **9:00am - 10:00am (EDT) | 3:00pm - 4:00pm (CEST)**

GERMAN LANGUAGE COURSE
(BEGINNER | ADVANCED)

Session Type Seminar
Time **10:00am - 11:30am (EDT) | 4:00pm - 5:30pm (CEST)**

Program (continued)

WEEK 2 Wednesday – June 16, 2021 *continued*

CET – WORKSHOP PITCHING & FINAL PRESENTATIONS I

Session Type Presenting / Idea Pitching
Time **12:30pm - 1:30pm (EDT) | 6:30pm - 7:30pm (CEST)**

CET – WORKSHOP PITCHING & FINAL PRESENTATIONS II

Session Type Presenting / Idea Pitching
Time **2:00pm - 3:30pm (EDT) | 8:00pm - 9:30pm (CEST)**

WEEK 2 Thursday – June 17, 2021

EXCURSION STATE PARLIAMENT DÜSSELDORF

The Ruhr Fellows will be introduced to the Ruhrkonferenz (<https://www.ruhr-konferenz.nrw/eng/welcome>) and will meet the USA-Parliamentary Group.

Session Type Virtual Talk / Discussion and Live Q&A
Time **10:00am - 12:00pm (EDT) | 4:00pm - 6:00pm (CEST)**

WEEK 2 Friday – June 18, 2021

FELLOWS ALUMNI SERIES ASHLEE ANDERSON AND JEB KING

An interactive, informal chat and live Q&A with Ruhr Fellow Alumni.

Session Type WebTalk
Time **10:00am - 11:00pm (EDT) | 4:00pm - 5:00pm (CEST)**

COOKING COMPETITION MEAL PREP AND PHOTOGRAPHS

The Ruhr Fellows are encouraged to prepare lunch during this work block. The theme of the challenge: Bavaria Blue – Pretzel with (wheat) beer! It is easy and vegetarian! The presentation of the food will be judged in an informal manner.

Session Type Work Block
Time **11:00am - 1:00pm (EDT) | 5:00am - 7:00pm (CEST)**

CLOSING LUNCH WITH THE TRANSATLANTIC RUHR FELLOWS 2019 AND 2020

Session Type Discussion and Networking
Time **1:00pm - 2:00pm (EDT) | 7:00pm - 8:00pm (CEST)**

CONCERT THREEWOOD 'N STRINGS

The Ruhr Fellows are encouraged to prepare lunch during this work block. The theme of the challenge: Bavaria Blue – Pretzel with (wheat) beer! It is easy and vegetarian! The presentation of the food will be judged in an informal manner.

Session Type Concert
Time **2:00pm - 2:30pm (EDT) | 8:00pm - 8:30pm (CEST)**

Thursday – July 8, 2021

HALF-TIME

Catch up with everybody. Talk in breakout rooms.

Session Type Discussion and Networking
Time **1:00pm - 2:00pm (EDT) | 7:00pm - 8:00pm (CEST)**

Friday – July 30, 2021

FAREWELL MEETING

It's never a "goody-bye", it's a "see you later". Evaluation.

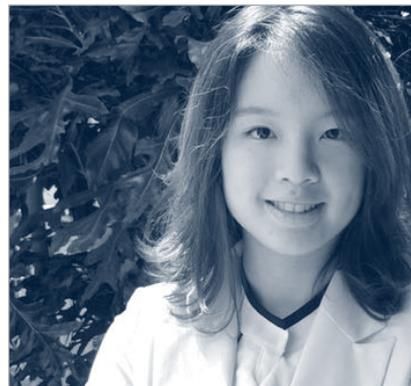
Session Type Discussion and Networking
Time **1:00pm - 2:00pm (EDT) | 7:00pm - 8:00pm (CEST)**



Camden Archambeau



Pablo Gomez-Garcia



Anrui Gu



Participants

Camden Archambeau

Camden is a rising junior at Harvard University concentrating in History with a secondary in European History, Politics and Society, and is pursuing a German language citation. Additionally, he is a cellist in the Harvard/New England Conservatory Dual Degree Program. Currently he is working as a research assistant with the Center for European Studies at Harvard reading German and Austrian archival material relating to the death penalty in the 19th century. After graduation, he would like to continue his studies and work abroad in Germany. In his free time, Camden enjoys reading, hiking, cycling, going to concerts, and watching sitcoms.

Pablo Gomez-Garcia

Pablo is a junior at Harvard University in Cambridge, Massachusetts majoring in History and Literature and minoring in Economics. His previous employments had to do with government and its intersections with business when he served as a Page in the Virginia House of Delegates and as a legislative aide directly after for a Delegate. He also worked in Germany as an aide to a Delegate and as an analyst. In addition to the fields of history, politics, and economics he loves to improve his language skills in different languages and to play soccer. In the program he wants to expand his understanding of Europe, transatlantic relations, and learn many skills that he can take back with him to the United States.

Anrui Gu

Anrui is a rising junior at the University of California, Berkeley, majoring in Computer Science. She is from Beijing, China, and has worked as a research assistant on teams studying climate investment risks and global urban development. At school, she has been involved in Computer Science education outreach, student government, and theatre, and she also facilitates diplomatic and industry conversations between Asia and America. Her hobbies are science fiction, martial arts, and singing songs from German musicals. In the program, she wants to grow her understanding of German culture and global affairs.



Kashish Kalra



Nicholas LoPresti



Hailey Parikh

Participants (continued)

Kashish Kalra

Kashish is a pre-junior at the University of Cincinnati, majoring in Industrial Design with a focus on Medical Devices and Human Factors. Her minor is Computer Science. She is from a small but urban town in India and is curious about changing the systematic design of things. She has completed three internships and a short-term study abroad where she worked on improving patient experience and developing a single insertion breast cancer biopsy device. She has also been a part of the Undergraduate Student Senate, the Student Activities Board, and an ambassador to the design program at UC. Besides her passion for design and healthcare, she likes to go swimming, traveling, listening to true crime podcasts and dancing.

Nicholas LoPresti

Nicholas is a junior at Rutgers University in New Brunswick, majoring in Supply Chain Management. His goal is to make the world a more sustainable place through his contributions to supply chain management. After college, he wants to extend his education into the world by seeking job opportunities globally, focusing on booming industrial centers similar to the Ruhr Valley. In the program he wants to work with the universities and companies in the valley and wholly dive into the German culture to gain a better perspective of how business is conducted in different countries. He plays Division 1 ice hockey at Rutgers University, enjoys lacrosse, music as well as photography and is interested in architecture.

Hailey Parikh

Hailey is a junior at Rutgers, the State University of New Jersey, majoring in Physics and German Studies. Currently she is working on detecting whether there exists a correlation between high energy jet shape variables at lower collision energies similar to RHIC in order to probe Quark Gluon Plasma (QGP) for her job as a research assistant. Her long-term dream is to pursue a doctoral degree in experimental high energy physics at a top tier research institute in Germany. Her motivation for the program is that culture can be used as a way of communicating the universality of scientific facts across a language barrier. Next to her academic work she likes hiking, cricket, hockey, cooking and reading and is interested in classic literature and dance.



Katherine Ross



Brandon Tang



Ammara Vaid

Participants (continued)

Katherine Ross

Katherine is a rising senior at Princeton University, majoring in Economics and pursuing minors in Environmental Studies, Cognitive Science, and German Language and Culture. She has worked in retail and in recreational athletics, which have allowed her to develop interpersonal and customer service skills. Furthermore, she is an experienced leader as a varsity athlete, student leader at Davis International Center and member of a committee chair. Her dream is to work in the Ruhr region because of its industry. Her interests are cooking, running, rowing and reading. In the program she wants to improve her language skills and discover the Ruhr area.

Brandon Tang

Brandon is a rising senior at Yale University majoring in Molecular, Cellular and Developmental Biology, and he is interested in world history, biotechnology and medicine. He is from Hong Kong, but has spent time in diverse parts of the world. He is conducting research on the epigenetics of atherosclerosis development in vascular smooth muscle at the Greif Lab, while also overseeing the Yale Emergency Medical Service and volunteering as an EMT. His future goals are to create new tools to improve surgical outcomes and work as a researcher or doctor. In the program, he wants to get exposed to new industries, while also being able to consolidate his language skills and satisfy his curiosity for other cultures and languages.

Ammara Vaid

Ammara is a rising junior at Harvard University, in Cambridge, Massachusetts, majoring in Applied Mathematics with Engineering. She is from Durban, South Africa and worked as a research assistant on a research topic entitled "Designing with Darkness". The focus of the research was to consider urban design in Bahrain with darkness or the night as the primary design element. Her previous studies were in the field of Process Design, Chemistry (Organic and Inorganic), Physics (Mechanics) and Cellular Biology at the University of Cape Town, South Africa. In the program she wants to explore new places and learn from new people. She likes painting, photography, yoga, poetry and stress-induced baking.

Partner

We would like to thank our partner companies and organizations for their support in providing our students with the opportunity to gain valuable hands-on experience in a range of industries in the Tri-State area.



The Auslandsgesellschaft.de e.V. (Institute for International Relations North Rhine-Westphalia) was a civic initiative created in 1949 by a dedicated group of people. It was born out of the trauma of the Second World War and sustained by a desire for understanding. These roots shape its goals to this day: commitment to understanding between people based on humanity and tolerance. The institute builds bridges between people of different origin, between nations, social orders and cultures. It has around 750 members, many of whom work voluntarily to achieve the association's goals. There are four areas of activity: foreign institute, language courses, political education and international exchange as well as events on cultural or political topics.

www.auslandsgesellschaft.de

City of Dortmund
Economic Development
Agency



Welcome to Dortmund!

Like almost no other German city, Dortmund has seen enormous change in recent years. The former "steel city" developed into a modern and cosmopolitan metropolis, acquiring reputation all across Europe as an innovative location for technological development. Start-ups, spin-offs and technology companies in close proximity of TU Dortmund University grow in one of Europe's largest technology parks with more than 10,000 employees, more than 300 companies at the location Dortmund.

But the biggest city in the Ruhr Area also scores with a wide range of possibilities in the cultural and sporting sectors, with extensive greens and a high quality of life.

www.dortmund.de



The Emschergenossenschaft (Emscher Water Management Association) was founded on December 14, 1899, and was the first German water board. It later inspired the foundation of several other water boards, among them the Lippeverband, which was founded on January 18, 1926.

Our activities in the Emscher region can be traced back over 100 years. Drawing on the vast experience gained during this time, we are able to offer services for the specific needs of the people and the commercial development of the Emscher river catchment area. As a public corporation, the Emschergenossenschaft is supported by its members: cities, municipalities and mining and business partners.

www.eglv.de



The Business Metropole Ruhr GmbH (BMR) develops and markets the Ruhr metropolitan area as an economic region. It bundles the economic interests of the 53 towns and cities in the area. This includes implementing and continuously evolving an overall economic strategy for the Ruhr metropolitan area as well as promoting the image of the area as a high-performing and innovative region, both nationally and internationally. As the economic development agency for the region we advise, market and realise projects that promote the Ruhr metropolitan area as a place to do business. For that we are active in five different areas: internationalization and location marketing, site and investor service, project development in the lead markets, funding and innovations as well

www.business.ruhr

as structural policy issues. The goal is to enhance the competitiveness of the Ruhr region.



The Technische Universität Dortmund (TU Dortmund University) has a special profile with 17 faculties in natural and engineering sciences, social and cultural studies. The various disciplines are united by a common university spirit that is all about interdisciplinarity and cooperation. The teaching program includes about 80 degree programs, including wide-ranging teacher training for all school types. In research, TU Dortmund University is particularly strong in its four profile areas: (1) Materials, production technology and logistics, (2) chemical biology, drug research and process engineering, (3) data analysis, modeling and simulation, as well as (4) education, schooling and inclusion.

www.tu-dortmund.de/en



World of Walas believes that cities start with people. With new ideas for old buildings and sound business practice, we create places where people want to live, work, produce and participate. Finding that balance in ways that are economically, environmentally and socially sustainable is a unique challenge every time. We engage in all aspects of urban development, which means more than real estate and area development. Urban development brings the activities, wishes and interests of people and cities together for a vital and lively whole. We've proven this leads to multiple value development: economic, social, cultural, sustainable, ecological and financial.

www.worldofwalas.com



As a center of excellence, the Zentrum für Logistik und Verkehr (Center for Logistics and Traffic) (ZLV) dedicates itself to the interdisciplinary conception, management and transfer of scientific work from across the University in the areas of logistics, mobility and traffic. Further areas of interest include concepts for energy efficient transport, the application of operations research in companies, the integration of urban structures and traffic in land use planning, the creation of logistic systems for humanitarian aid as well as research into the development of long-term sustainable, economically conducive, socially acceptable and ecologically reliable innovations (sustainability research).

www.uni-due.de/zlv

University Alliance Ruhr
Universitätsallianz Ruhr

www.uaruhr.org

