





trinational | european | global



More than 560 years of experience

Founded in 1457, the University of Freiburg enjoys an excellent reputation as a comprehensive university that transcends the confines of narrowly defined academic disciplines. It is a driving force in networking institutions of higher education and research and brings people and ideas all around the globe together.

The University

The University of Freiburg has received many awards for excellent research and teaching and is counted among the best of Germany's universities.

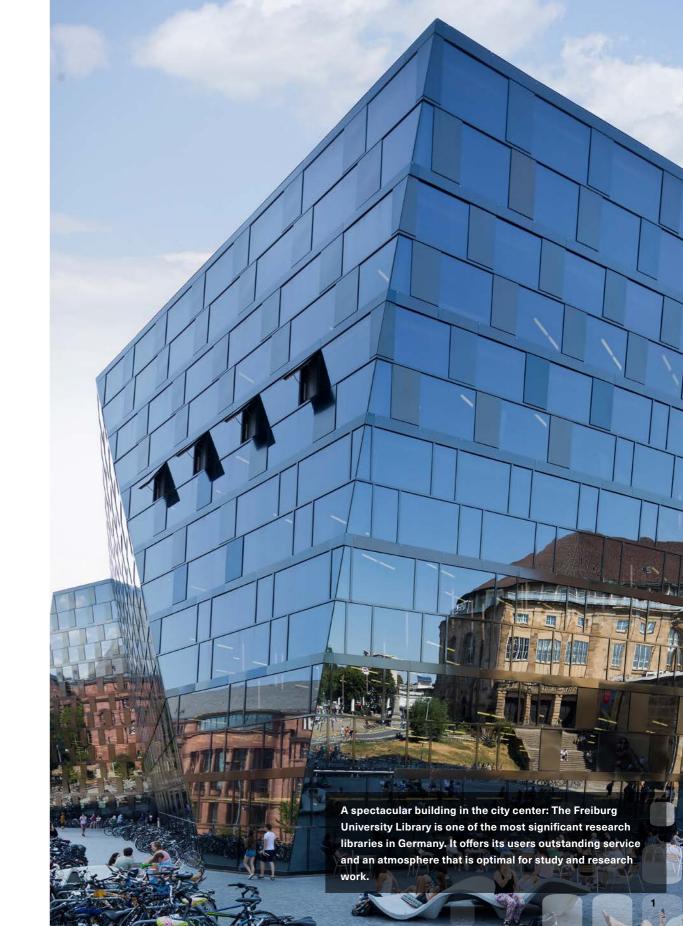
Its success is based on the outstanding contributions of its scholars in all eleven faculties. Freiburg offers the entire spectrum of subjects.

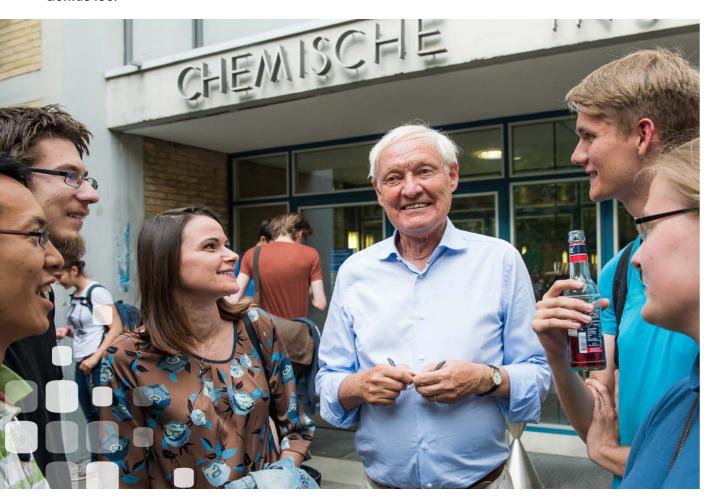
from the social and natural sciences, to technical disciplines and medicine, with the Freiburg University Medical Center being one of the largest medical facilities in Europe. Around 25,000 students find an ideal environment here for forward-looking, interdisciplinary studies.

The City

Germany's sunniest major urban center attracts countless visitors. In the old town, which is crossed by small streams, picturesque narrow lanes and lively shopping streets invite people to stroll in the shade of the globally-renowned Freiburg Minster.

A wealth of art and history, lively cafes, and popular open-air events dominate life in the dynamic city which has an international flair and an exceptionally young population.





Striking out on new paths together

At the University of Freiburg, creative minds have space and networks open to them to expand ideas.

"In Freiburg they know that creativity is the basis of the renewal of knowledge that explains its success in research and many other areas of activity."

Prof. Dr. Joachim Frank,

Columbia University, New York (USA)
Alumnus, 2017 Nobel Laureate in Chemistry

Team spirit and visionary networking are strengths that set the University of Freiburg apart within the campus community, in trinational cooperation with partner institutions in France and Switzerland, as well as on a global level. Driven by the force of research and teaching, these features make it possible to find knowledge-based solutions to current and future challenges.

A regional driver

Freiburg is a model for environmental and economic reconciliation. Science, environmental policy, solar technology, sustainability concepts, and climate conservation inspire business and urban development. **Environmental economics and** research play a particularly large role. The sector employs 12,000 people in 2,000 companies and contributes around 650 million euros in added value - and a great deal to the region's positive image.





Local cooperations

Together with the five Freiburg
Fraunhofer Society institutions,
the university operates the
"Sustainability Center," which
researches materials, energy
systems and resilience, as
well as ecological and social
transformation. In addition to this,
there are cooperations with the
Freiburg Max Planck Institute and
all the other universities based in
the city and region.

@www.uni-freiburg.de/ forschung-en/partnerships



"The Fraunhofer has achieved a unique cooperation for Germany with the university in Freiburg. Together with industry and mid-sized companies, we work on ideas from the basics through to application. In the area of materials science, I'm particularly interested in additive manufacturing processes as a way to conserve resources in lightweight engineering of highly-stressed components."

Prof. Dr. Stefan Hiermaier, Director of the Sustainability Center, the Fraunhofer Institute for High-Speed Dynamics, Ernst Mach Institute (EMI), and the Department of Sustainable Systems Engineering (INATECH) of the University of Freiburg



Networked research

Internationally visible

The University of Freiburg is one of Europe's most research-oriented universities. As member of the League of European Research Universities (LERU) it is connected with 22 partners.

 ${\mathcal O}$ www.uni-freiburg.de/forschung-en



Profile Fields:

- · Biological Signalling Research
- Functional and Bioinspired Materials
- Neuroscience and Neurotechnology
- Medical Epigenetics, Immunology and Cancer Research
 - Civil Security Research

diversity, interdependence

- Data Analysis and Artificial Intelligence
- Environment and Sustainability
 Cultures of the Present and the Past history,

Emerging Fields:

Complexity of Nature and future Ecosystems
 Comparative Area Studies
 Metabolism Research

The University of Freiburg's broad spectrum of disciplines holds great potential for innovative basic research – within individual subjects and in terms of joint research projects. Research takes place in faculty research facilities, scientific centers, collaborative research centers, and at the Freiburg Institute for Advanced Studies (FRIAS). Intensive contacts with industry as well as other outstanding institutions of higher education and research exist at all levels. In this way, strategic partnerships are maintained with, for example, universities in Nagoya, Japan; Nanjing, China; and Adelaide, Australia, as well as with Pennsylvania State University in the USA.

"The university and the university medical center bring medical and technical knowledge together in Freiburg. That makes it an ideal breeding ground for innovations and start-ups in the health industry."

> **Dr. Michael Lauk**, Start-up Entrepreneur, Alumnus and Chairman of the Friends of the University Association



Global research



With its 11,500 employees, the Freiburg University Medical Center is one of the largest university hospitals in Europe.

Each year, around 1,300 doctors and 2,900 nursing staff care for almost 70,000 stationary patients and more than 830,000 outpatients. The connection between research, teaching, and caring for the sick has one aim – to offer today and in the future treatment that is oriented towards the latest scientific discoveries. @www.uniklinik-freiburg.de/en

"Top-level international research requires the ideas of excellent minds. At the university and Freiburg University Medical Center, numerous, joint, collaborative research centers provide space for creative exchange, networking, and cooperation."

Prof. Dr. Leena Bruckner-Tuderman,

Medical Director of the Clinic for Dermatology and Venereology of the Freiburg University Medical Center, Vice President of the German Research Foundation (DFG)





FRIAS

The Freiburg Institute for **Advanced Studies (FRIAS)** strengthens the global connection of Freiburg researchers and raises international awareness of their work. Promoting promising young scholars is a special priority: they work in continuous cooperation with experienced Senior Fellows in an interdisciplinary community that encompasses the most varied of nationalities and research cultures.

∂ www.frias.uni-freiburg.de/en

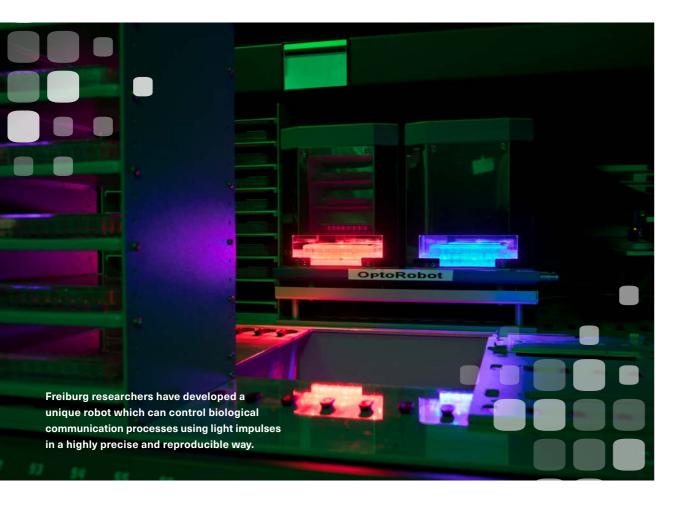


FRIAS offers leading academics and outstanding junior researchers from all around the globe the best conditions for concentrating fully on their research projects for a certain time period. The international research college of the University of Freiburg brings together the humanities and social sciences as well as medicine and the life, natural, and engineering sciences under one roof.



"FRIAS creates lively associations of researchers and teachers in a way that few centers achieve. The interdisciplinary and intergenerational communities facilitate new research approaches to and perspectives on some of the most urgent global challenges."

Prof. Dr. Anne Harrington, Harvard University (USA), External Fellow at FRIAS



Competitive strength

Freiburg scientists were already successful in previous rounds of the Excellence Initiative.
The clusters Brain-Links-BrainTools and BIOSS Centre for Biological Signalling Studies as well as the Speman Graduate School of Biology and Medicin (SGBM) are centers of top-level research at the University of Freiburg.

A boost for top-level research

Biological Signalling Research and Bioinspired Materials Research are among the strategic areas of the University of Freiburg. The Excellence Strategy contest has now given them a boost: since January 2019 two new Clusters of Excellence have been added to Freiburg's top-level research.



Technology modeled on nature: the foam in the hard hat uses the structural principles of the light yet highly cushioning peel of the pomelo fruit.



"Cells form a functioning body by exchanging biological signals. Our objective is to gain an in-depth understanding of this language of life."

Prof. Dr. Wilfried Weber, CIBSS – Centre for Integrative Biological Signalling Studies

CIBSS – Centre for Integrative Biological Signalling Studies

Biological Signalling Research studies the communication processes fundamental to life and health: It explores how cells communicate with one another and how they respond to their environment, to form and maintain a healthy organism – whether human, animal or plant. The aim of CIBSS is to gain an integrated understanding of biological signalling processes across scales, from individual molecules and cells, to tissues, organs and entire organisms. This research will open up new possibilities to address global challenges in biomedicine and plant sciences.

Partners: Freiburg University

livMatS – Living, Adaptive and Energy-autonomous Materials Systems

Today's materials have certain characteristics that are given to them during the production process and remain almost constant over time – such as a specific strength, hardness, transparency or conductivity. Living systems in nature, by contrast, adapt independently to changes in their environment. The vision of *livMatS* is to combine the best of both worlds and transfer insights from adaptivity in nature to technical materials systems.

Partners: Fraunhofer Institute for Solar Energy Systems ISE, Fraunhofer Institute for Mechanics of Materials IWM, Öko-Institut e.V.



"We develop materials systems that adapt to their environment just like living beings. Our materials systems utilize clean energy that they harvest from their immediate environment."

Prof. Dr. Jürgen Rühe, *liv*MatS – Living, Adaptive and Energy-autonomous Materials Systems

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and Energy autonomous Materials Systems



Transcending frontiers

115,000 students, 15,000 researchers, 11,000 doctoral candidates: Eucor – The European Campus is a transnational center where abilities and opportunities crystallize.

"Five universities from three countries unite their potential and define common perspectives, opening an entire region of research and industry to top-level and junior academics and students."

Dr. Klaus Mangold, former board member of DaimlerChrysler AG and honorary senator of the University of Freiburg



Eucor – The European Campus is a trinational association of universities in Germany, France, and Switzerland. In addition to the University of Freiburg, its members are the Universities of Basel, Haute-Alsace and Strasbourg, and the Karlsruhe Institute of Technology (KIT). As the academic region of the Upper Rhine gradually coalesces, it presents new opportunities for international exchange and networking - particularly through the joint use of research infrastructure.

Within Eucor, students can pursue studies internationally and multilingually to prepare themselves for entry into the international employment market. Courses can be attended throughout the entire European Campus and all the libraries may be used. Binational or trinational courses of study include phases abroad and often enable students to gain a degree from two or three member universities.

European university of superlatives

2,300,000,000

The impressive aggregate budget of the five universities amounts to more than two billion euros. This sum is available to institutions which coordinate their plans and strategies, and at the same time maintain autonomy.

∂ www.eucor-uni.org/en

Karlsruhe Institute of Technology

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Founded: 2009 25.000 students

50 km

Université de Strasbourg
Founded: 1621
50,000 students

Albert Ludwig University
Freiburg
Founded: 1457
9,000 students

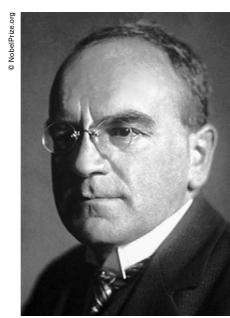
Mulhouse

University of Basel
Founded: 1460
13,000 students

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Observing tradition, developing visions

On the University of Freiburg campus, one can sense the spirit of Nobel laureates and Leibniz Prize winners who researched and taught here. World famous names – from Erasmus of Rotterdam to Hannah Arendt – are closely associated with the university.



1927: Chemist Heinrich Otto Wieland was the University of Freiburg's first Nobel laureate.

teaching standards attract talent from all around the world. The achievements of the University of Freiburg are regularly reflected in a range of national and international rankings for universities and colleges. In internationally recognized rankings, Freiburg is listed as one of the top five comprehensive universities in Germany. The University of Freiburg is also among the global leaders ranking in the world's top 100 universities.



Today more than ever, the university's high research and



Heinrich Otto Wieland Nobel Prize for Chemistry, 1927

Adolf Otto Reinhold Windaus Nobel Prize for Chemistry, 1928

Hans Spemann Nobel Prize for Physiology or Medicine, 1935

Georg von Hevesy

Nobel Prize for Chemistry, 1943

Hermann Staudinger

Nobel Prize for Chemistry, 1953

Hans Adolf Krebs

Nobel Prize for Physiology or Medicine, 1953

Friedrich August von Hayek

Nobel Prize for Economics, 1974

Georg Wittig

Nobel Prize for Chemistry, 1979

Georges Köhler

Nobel Prize for Physiology or Medicine, 1984

Harald zur Hausen

Nobel Prize for Physiology or Medicine, 2008



The University of Freiburg has always drawn exceptionally gifted men and women to the city. Here they found ideal conditions to make their scientific dreams into realities. 23 Nobel laureates have researched, taught, and studied at departments and faculties of the university. Even today, their achievements characterize the scientific discourse within and beyond the bounds of their fields. University of Freiburg researchers have also won Germany's most significant scientific award, the Leibniz Prize, thirteen times since 1990.

For his discoveries about how the immune system works. Prof. Dr. Michael Reth received the Paul Ehrlich Foundation's Paul Ehrlich and Ludwig Darmstaedter Prize.

Funding Atlas of the German Research Foundation

Number 1 in Germany

The University of Freiburg is the tops: in relation to the number of chairs and range of subject it offers, it leads German universities with by far the most external funding from the German Research Foundation (DFG). This can be seen from the current Funding Atlas published by the DFG in 2018 - clear evidence of the research performance of Freiburg's academics.







The University of Freiburg has frequently been recognized for its broad range of courses of study. Around 250 study programs, including more than twenty in the English language, offer space for innovative approaches to teaching.





Graduates of the University of Freiburg take on responsible positions in society, business and research. Actual orientation towards social, political, and scientific developments shapes daily teaching practice. Students encounter experienced teachers who draw on their latest research results in seminars and lectures.

In terms of place and time, modern technologies and the internet bring teaching everywhere together. At the University of Freiburg, this development has been used to renew the organization of courses and conceive of them as transcending boundaries. Digital media make a valuable contribution to the efficiency and improve the quality of ongoing internationalization processes. The use of digital teaching and study formats means teachers and students work together intensively and flexibly – worldwide.



"Studying at the University of Freiburg isn't just about attaining knowledge and skills and gathering experiences. It's about developing a responsible attitude and the ability to think critically and engage in reflection, too."

Julia Karch, UCF student

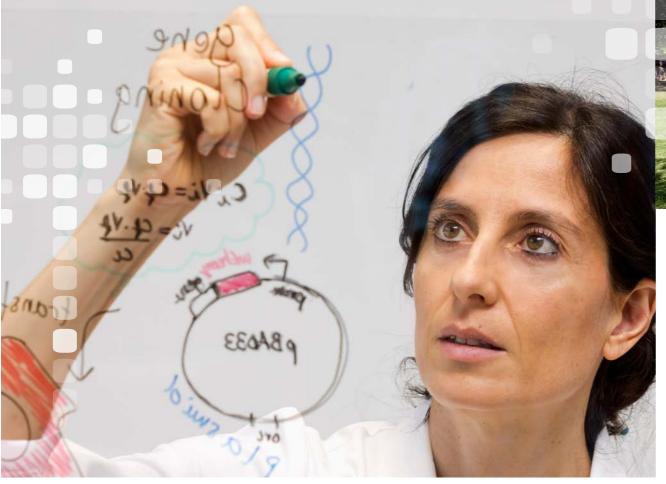
A forward-looking model

University College Freiburg

The University College
Freiburg (UCF) serves as
a laboratory for innovative
teaching and study formats.
The heart of the program
is the English-language
Bachelor's course of study
in Liberal Arts and
Sciences, which brings
together the social and
natural sciences as well
as theory and practice.

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Life and career







The University of Freiburg relies on a culture of well-coordinated teamwork and goal-oriented furthering of abilities and potential. As it strives to attract the best minds, the university offers top academic career opportunities and family-friendliness as well. As one of the largest employer in the region it orients itself towards the realities of life of its employees.

The university supports new employees in searching for work for their partners, as well as helping to find accommodation and providing childcare. Whether seeking advice, development or a career boost: the University Freiburg has a wide range of services to help its researchers and teaching staff - from doctorate to time as a postdoc through to professorship or other permanent academic position. The university also supports its administrative and technical employees in all stages of employment and qualification.

A clear head for studying

Support and guidance

Students benefit from a wideranging offering: the Student
Service Center provides advice
and support to help them settle
in and feel at home quickly at the
university. The Studierendenwerk
Freiburg-Schwarzwald students'
union helps find job opportunities
or with financial questions, runs
canteens and offers rooms in halls
of residence. On top of this, there
are the many leisure activities run
by numerous student groups and
the University Sports Center.

 ${\cal O}$ www.studium.uni-freiburg.de/en



"The University of Freiburg offers not only a superb research environment, but also flexibility and the support that's required for successful, junior women researchers to unite career and family with one another."

Junior professor Dr. Jennifer Andexer, Heinz-Maier-Leibnitz Prize 2018

Making people a priority

The University of Freiburg demonstrates impressively how dynamic cooperation between students, researchers, and staff members can lead to first class international achievements.





A walk through Freiburg is like a stroll through its history. The picturesque old town is captivating, with its narrow alleyways opening onto sudden views of historic buildings such as the medieval Schwabentor gate, or the Minster. Listed buildings with their pretty gables stand near stylish examples of modern architecture such as the University Library. Districts such as Vauban and Rieselfeld reflect the heart of the "Green City" and charm residents as well as tourists from around the world with their sustainable and accessible construction.

The city overflows with life: since the university's facilities are spread across the entire city, students and researchers are an inherent part of urban life. Alongside its cultural variety, Freiburg also offers a wide range of sports and excursions. In summer, the nearby mountains invite you to go hiking or climbing, or to fly a kite; in the winter, to go skiing, snowboarding or sledging.

Nature and culture

An excellent location

The central European region, surrounded by the shared borders of Germany, France, and Switzerland, is a popular place to live. The mild climate of the Rhine Valley, the Black Forest hills, and nearby, culturally vibrant urban areas, promise colorful variety of leisure opportunities.

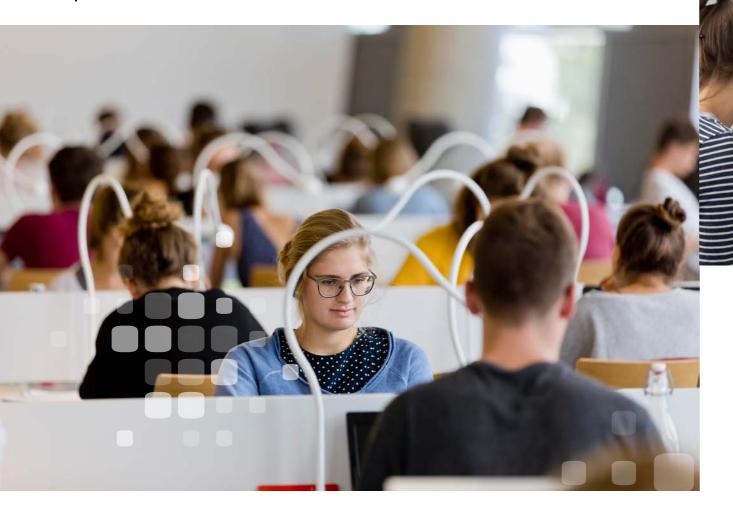
Learning and loving life The sun shines more here than in an

The sun shines more here than in any other German city, colorful "Bächleboote" bob through the picturesque old town, and just a few minutes away by bicycle is the enticing Black Forest: Freiburg is known and loved far and wide for its high standard of living.

"I can think of a lot of terms for Freiburg: relaxed, open-minded, sustainable, fond of discussion. And as one of the youngest cities in Germany, Freiburg is clever, creative and child-friendly."

> Martin W.W. Horn, Mayor of Freiburg





The new construction projects of the historic University of Freiburg offer the prospect of structural changes as well as bringing together subject disciplines and organizational units. The "Am Flugplatz" Campus, near the airport, is a priority development area. Space is being created here for research in fields that hold great promise for the future at facilities such as:

- The Institute for Machine-Brain Interfacing Technology (IMBIT)
- A laboratory building for the Faculty of Environment and Natural Resources
- The Institute of the Department of Sustainable Systems Engineering (INATECH)



"Freiburg is en route to 'University 4.0': Digitalization, artificial intelligence, and machine learning have opened up enormous opportunities and potential for research and learning as well as strategic development of the university itself. We are shaping our future by advancing these new technologies in a socially responsible way so that all the university's disciplines can profit from them."

Prof. Dr. Hans-Jochen Schiewer,Rector of the University of Freiburg
and President of Eucor – The European

New open space



Efficient routes

The University of Freiburg will share building land in the western part of the city with interdisciplinary facilities and continue to support additional spin-offs, partnerships, and synergies:

- Innovation Center for "Industry on Campus" projects
- Kiepenheuer Institute for Solar Physics
- Fraunhofer Institute for Physical Measurement Techniques – IPM

Realizing the future

As one of the world's leading research universities, the University of Freiburg is advancing structural progress and development of locations within the trinational region.

Publisher

University of Freiburg Rector Prof. Dr. Hans-Jochen Schiewer

Content

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"The European Campus is a unique and innovative cluster. It aims to promote free cooperation between universities of all three countries and open all borders to students and researchers alike. Because knowledge knows no bounds."

Prof. Dr. Michel Deneken, President, Université de Strasbourg

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connecting creative minds

trinational | european | global