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UNIVERSITÄT
TÜBINGEN



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University of Tübingen



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FOREWORD

Dear Readers,

2021 was a year of many challenges. The most immediate one was the ongoing Coronavirus pandemic, which restricted in-class teaching and numerous gatherings and conferences at the University of Tübingen. Once more we used the online and hybrid solutions developed in 2020 to make life as normal as possible. By October 2021, many students were able to return to the classrooms, thanks to vaccinations and the use of face masks.

Despite the pandemic, members of the University continued their work towards improvement in teaching as well as in many areas of research – such as the environment, the communication of reliable information, many aspects of

healthcare, artificial intelligence, and social and cultural understanding. Three new multi-million-euro facilities were opened at our science and medicine campuses. International exchanges began to recover following the lockdowns of 2020, and the University is now welcoming visiting scholars at the new College of Fellows.

On a personal note, I am leaving the University in October 2022 after 16 years as President. I look back on a busy and productive time – in which the University was highly successful in two rounds of the German government's Excellence Strategy, rose in both national and international rankings, and grew in many other ways as well. It has been an honor



and a pleasure to lead a university which exemplifies an impressive spirit of innovation and cooperation and which is also intensely devoted to excellent research and teaching.

Now that the University's Excellence Strategy has been implemented in all central areas, I pass the baton of leadership on to Professor Karla Pollmann, a specialist in Classics and Theology with a history of successful research, teaching and administration at locations in Germany and abroad. I am confident that Professor Pollmann will lead the University of Tübingen to further success in the future.

With best regards
Yours,

Professor Bernd Engler,
President, University of Tübingen



RESEARCH

INTERNATIONAL POSITIONING

As a German University of Excellence, the University of Tübingen is increasingly focused on its international outlook and global responsibilities. We have set up a College of Fellows to form a central meeting point at the University for international guests. The University's researchers are focusing on a vast range of multi-disciplinary and international themes; the success of their diligent work is reflected in the funding entrusted to them by the German Research Foundation, the European Research Council and other key research sponsors.

FEATURES IN THE EXCELLENCE UNIVERSITY LANDSCAPE

The University of Tübingen will receive special funding as a University of Excellence from 2019 to October 2026 via the German government's Excellence Strategy. Success in the Excellence University funding line was made possible by the establishment in 2018 of three clusters of excellence in the fields of machine learning; microbiology and infection research; and oncology, immunology and imaging. The University has access to approximately 14 million euros of central excellence funds annually to the end of 2025 and proportional funding for ten months of 2026.

The University of Tübingen uses these funds largely to strategically align its internationalization goals with its global responsibilities. We are introducing measures to further promote international exchange and strengthen our worldwide partnerships. Among our areas of outstanding research which reflect our wider perspective are religion and ethics, mental health, understanding and explaining artificial intelligence, as well as anthropological and historical investigations into the origins of today's human societies.



Professor Dagmar Herzog; Distinguished Professor of History and Daniel Rose Faculty Scholar at City University of New York at the opening of the Center for Religion, Culture and Society



College of Fellows established

Excellence Strategy funding has been used to establish the new College of Fellows, which gives visiting scholars a starting- and meeting-point when they arrive in Tübingen. Every year, numerous outstanding researchers from all over the world come to the University of Tübingen to take their research a decisive step further and to establish contacts with colleagues here. In October 2021, the College of Fellows was inaugurated, giving guest researchers a place where they can present their work, swap ideas, and network across disciplines. The College of Fellows is headed by Dr. Niels Weidtmann.

Left: A detail on the facade of the historical Villa Köstlin, where the College of Fellows will be located.

A center for religion, culture and society

Excellence monies have also been invested in the new Center for Religion, Culture and Society, where the University's diverse fields of religion-related research come together. Worldwide, the University of Tübingen is one of the foremost institutions in the field of religious research. It has two faculties of Christian theology, an institute of Islamic Theology, and long traditions in Jewish Studies and non-theological Religious Studies. In addition, many researchers from subjects such as literary and cultural studies, area studies, history and social sciences also investigate issues in which religious practices, identities, and institutions play a major role.

The Center for Religion, Culture and Society (CRCS) at the University of Tübingen is designed as a transfaculty platform for networking and mutual exchange for those conducting research on religion-related topics. The center was established in 2021 as part of the Excellence Strategy. The new center's management comprises Professor Monique Scheer from Cultural Anthropology and Professor Holger Zellentin from Religious Studies and Jewish Studies. The Center for Religion, Culture and Society was inaugurated at a ceremony in the Neue Aula auditorium in October 2021. Noted scholar Professor Dagmar Herzog held the keynote address on disabled and reproductive rights.

Internationalization and global responsibility

The University of Tübingen is strengthening its worldwide contacts in research and teaching. To this end, we have developed an internationalization strategy whose motto, Raising Global Awareness, reflects our need to consider the global dimension in all the challenges to which the University must respond. A five-point plan for the period from 2021 to 2026 was developed under the leadership of Professor Monique Scheer, Vice-President for International Affairs and Diversity. It integrates the University's goals of promoting internationally visible research and teaching and reinforcing its place among the world's top 100. The Raising Global Awareness internationalization strategy comprises five priority areas:

Align recruitment with internationality and diversity.

We plan to invite more people from abroad and with diverse backgrounds to come as researchers, teaching staff and students, bringing new perspectives and cooperation networks. The University should be an attractive place for the best brains and should seek long-term integration for those appointed here from all over the world.

Reaffirm and further develop strategic partnerships.

The University seeks to promote student and researcher mobility as a means to acquire international skills. Good relations with international partners are to be reaffirmed and the range of exchange places maintained. Physical and virtual mobility are to be more closely linked with the help of digital communication and teaching formats. The University's involvement in the European University Alliance CIVIS also contributes to the implementation of higher mobility goals.



Expand new forms of online mobility.

The principle of global awareness includes reflecting on one's own travel behavior. Even before the 2020 pandemic, it had become clear that the need for air travel to maintain international relations needed to be reconsidered for environmental reasons. Now, videoconferencing for shorter and more frequent meetings with international partners has proven to be extremely effective and will be maintained.

Promote a transnational campus with international teaching content.

The University of Tübingen cultivates a culture of internationality. International academics and students in Tübingen help grow the University. A pragmatic policy of bilingualism applies, with English accepted as a second working language in addition to German as the official language.

Advance the internationalization of administration.

The research community needs an effective administration. In the long term, everyone at the University should be able to benefit from tailored training programs and the implementation of digital, easy-access processes. Meanwhile, we seek to bring the international dimension into all areas of the administration. The goal is to have all important documents available in English by 2026 and to have at least one contact person with very good English skills and a specialization in international topics in each area.

Right: The new center for AI communication research opens up new perspectives on artificial intelligence.

Top grades in international rankings

As in the previous year, the University of Tübingen was ranked 78th in the Times Higher Education World University Rankings 2022. More than 1,600 universities in 99 countries were surveyed for the rankings. For the seventh time in a row, Tübingen was among the 100 best universities worldwide. In the latest Times Higher Education (THE) World University Rankings by subject, the Tübingen humanities leaped four places to 20th place worldwide in 2022. The THE ranking by subject compares eleven subject areas at universities worldwide, including in the U.S., Europe, Australia and Asia. In the 2021 Shanghai Ranking by subject, the University of Tübingen performed outstandingly in psychology. Tübingen was the only German university to place 51-75 in an international comparison, moving up from 76-100 the previous year. In the medical technologies, the University of Tübingen rose from 43 to number 32 worldwide. Tübingen's biotechnology and education science also performed well. Biotechnology improved to the top 100 worldwide. In education science, the University of Tübingen continues to be ranked 76-100 worldwide. The Global Ranking of Academic Subjects measures, among other things, research performance and research quality in each subject.

New Center for Knowledge Communication Research in AI

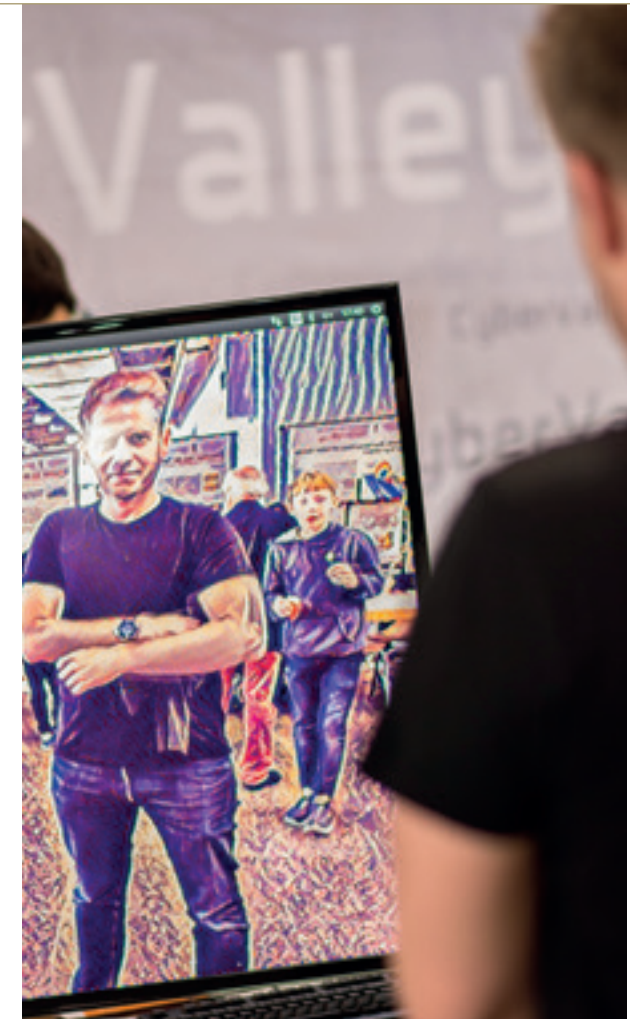
A center for science communication research with a focus on artificial intelligence is being established at the University of Tübingen. It is one of four such centers across Germany sponsored by the Volkswagen Foundation. The Center for Rhetorical Science Communication Research on Artificial Intelligence (RHET AI) will be coordinated by Professor Olaf Kramer of the

Tübingen to host a German Center for Mental Health

In March 2021 it was decided that Tübingen will be one of six locations for the new German Center for Mental Health (DZPG). This was the result of a successful application by scientists at the University Hospitals' Center for Mental Health and the Faculty of Medicine, along with other Tübingen cooperation partners. The six locations have been working on a joint research concept for the German Center for Mental Health since September 2021. Research is to begin in 2023, funded by the German Ministry of Education and Research with up to 30 million euros per year.

Mental illnesses are widespread, yet in many cases, their causes and mechanisms are still insufficiently understood. Both pharmaceutical and non-drug therapies often have only limited effect. Research is therefore needed to develop more effective prevention, diagnosis and treatment methods that are tailored to people's needs. To this end, nationwide competencies and expertise are to be pooled in the German Center for Mental Health. The aim is to transfer research results more quickly into practice in order to improve the situation of people with mental illnesses and to strengthen the mental health of the population. The Tübingen Center for Mental Health is coordinated by Professor Andreas Fallgatter.

Seminar for General Rhetoric. The Volkswagen Foundation will finance the Tübingen center with 3.9 million euros over five years with the option of a three-year extension. The University of Tübingen will support it permanently beyond the funding period. While research into artificial intelligence (AI) is roaring ahead, in society, fascination and enthusiasm compete with doubts,



skepticism and fears. At the Tübingen center, researchers will explore the public's conflicting interests and emotions from the perspective of rhetoric and science communication. The Tübingen AI Center and the cluster of excellence "Machine Learning – New Perspectives for Science" are among those supporting the project.

GERMAN RESEARCH FOUNDATION-FUNDED RESEARCH

Research units with a common focus

The DFG sponsors group projects in which researchers can work together on a specific, innovative research task. These research units usually receive two rounds of funding up to a total of six to eight years. In 2021, the University of Tübingen launched one new research unit and began its participation in another.

Sacred attribution of meaning to texts

The new interdisciplinary research unit “De/Sacralization of Texts” (FOR 2828) was established at the University of Tübingen in 2021. The researchers are investigating the sacred nature of texts from literature, law and politics – beyond obviously sacred writings such as the Bible and the Koran. They assume that the attribution of religious characteristics is subject to practical use and the changing interpretation of texts over time. In this dynamic, texts can also become desacralized. Scholars from Protestant Theology, Japanese Studies, English and Latin Philology, the Faculty of Law, Political Science, the Center for Islamic Theology, and the Heidelberg Center for American Studies at Heidelberg University are involved in this strongly interdisciplinary research unit. The DFG is providing nearly three million euros over four years. The spokesperson is Birgit Weyel, Professor of Practical Theology at the Faculty of Protestant Theology.

The research will focus on the sacred scriptures of religious communities, but also on humanist classics and the Universal Declaration of Human Rights. Such texts may take on religious characteristics because they are associated with unconditional authority and non-negotiable claims to truth.

The research unit will investigate how texts are attributed special qualities through their use, how these qualities can be described, and how texts also lose attributions of meaning. The research unit will also look at why some texts are placed above other texts in cultural, social, and political use. Practical issues include what children should read in school or under which conditions quotations from the Bible and the Koran may be differently interpreted, and how the discussion of human rights in a global society affects local discourses on justice.



Wastewater is fed into a riverbed in Mexico.



The Bible is a classic example of a sacred text and is a focus of investigation by the new research unit.

Risks of irrigation with wastewater

In addition, a Tübingen working group is involved in the new research unit "Interactions of pollutants, antibiotic resistance and pathogens in a changing wastewater irrigation system" at Justus Liebig University Giessen. Water scarcity and the increasing demands of a growing population have led to fields being irrigated with wastewater in many regions of the world. This conserves resources, but carries the risk that pollutants such as residues of pharmaceuticals and disinfectants, or even resistant bacteria, will find their way onto the fields, and via the plants into human food. The new

research unit plans to establish baselines to assess the extent and relevance of these risks and how to reduce them. The University of Tübingen's Christiane Zarfl, Professor of Environmental Systems Analysis, and her team are involved in the research unit, which the DFG is backing for an initial four years with around 2.5 million euros. The researchers will focus on the world's largest contiguous wastewater irrigation system, north of Mexico City. The area of around 900 square kilometers was irrigated for about a hundred years with a mixture of untreated wastewater and

rainwater. Only recently has a treatment plant for Mexico City's wastewater been put into operation, so that water with lower concentrations of pollutants now reaches the fields. The interdisciplinary research group will conduct extensive laboratory, field and model studies to determine whether this poses new risks, for example because pollutants are mobilized from the soil and antibiotic-resistant bacteria are increasingly selected as a result.

Tübingen research units

Institute	Title	Spokesperson
Protestant Theology, Practical Theology	De/Sacralisation of Texts (FOR 2828)	Professor Dr. Birgit Weyel
Faculty of Catholic Theology, Medieval and Modern Church History	Being Catholic in West German society Semantics, Practices, and Emotions in West German Society 1965-1989/90 (FOR 2973)	Professor Dr. Andreas Holzem
Interfaculty Institute of Microbiology and Infection Medicine	The Autotrophy-Heterotrophy Switch in Cyanobacteria: Coherent Decision-Making at Multiple Regulatory Layers (FOR 2816)	Professor Dr. Karl Forchhammer
School of Business and Economics	Understanding the Behavior of Multinational Corporations in the Context of International Tax Institutions (FOR 2738)	Professor Dr. Georg Wamser
Department of Psychology	Modal and Amodal Cognition: Functions and Interactions (FOR 2718)	Professor Dr. Barbara Kaup
Center of Neurology and Hertie Institute for Clinical Brain Research	Epileptogenesis of genetic epilepsies (FOR 2715)	Professor Dr. Holger Lerche
Institute of Ancient History	Migration and Mobility in Late Antiquity and Early Middle Ages (FOR 2496)	Professor Dr. Steffen Patzold
Interfaculty Institute of Biochemistry	VIROCARB: Glycans Controlling Non-Enveloped Virus Infections (FOR 2327)	Professor Dr. Thilo Stehle
Translational Gastrointestinal Oncology	Targeting Therapeutic Windows in Essential Cellular Processes for Tumor Therapy (FOR 2314)	Professor Dr. Lars Zender
Senckenberg Center for Human Evolution and Palaeoenvironment and Institute of Linguistics	Words, Bones, Genes, Tools: Tracking Linguistic, Cultural and Biological Trajectories of the Human Past (Center for Advanced Studies 2237)	Professor Dr. Professor Katerina Harvati Professor Dr. Gerhard Jäger
Center of Neurology and Hertie Institute for Clinical Brain Research	The Physiology of Distributed Computing Underlying Higher Brain Functions in Non-Human Primates (FOR 1847)	Professor Dr. Hans-Peter Thier

Collaborative research centers for long-term projects

The German Research Foundation, the DFG, uses the instrument of collaborative research centers to fund thematic research for up to twelve years. In collaborative research centers, academics work together on a major research topic within the framework of an interdisciplinary program. This coordination and sharing of resources enables ambitious and complex research projects. The centers create focal points and structures within the University and they also provide an opportunity for cooperation with non-university research institutions.

The centers are made up of many subprojects headed by one or more researchers. Each collaborative research center is represented by a spokesperson. The two collaborative research centers "ResourceCultures: Sociocultural Dynamics in the Use of Resources" (SFB 1070) and "Molecular Coding of Specificity in Plant Processes" (SFB 1101) were each extended for a third funding period of four years following positive reviews.

Collaborative research centers at the University of Tübingen

Title	Spokesperson	Duration
Different Aesthetics (SFB 1391)	Professor Dr. Annette Gerok-Reiter German Language and Literature	1 July 2019 – 30 June 2023
CAMPOS – Catchments as Reactors: Metabolism of Pollutants on the Landscape Scale (SFB 1253)	Professor Dr. Peter Grathwohl Center for Applied Geoscience – Hydrogeochemistry	1 January 2017 – 31 Dec. 2021
Robust Vision – Inference Principles and Neural Mechanisms (SFB 1233)	Professor Dr. Matthias Bethge Werner Reichardt Center for Integrative Neuroscience/ Institute of Theoretical Physics	1 January 2017 – 31 December 2024
Molecular Coding of Specificity in Plant Processes (SFB 1101)	Professor Dr. Klaus Harter Center for Plant Molecular Biology	1 April 2014 – 31 December 2025
ResourceCultures: Socio-cultural Dynamics in the Treatment of Resources (SFB 1070)	Professor Dr. Martin Bartelheim Institute of Prehistory and Medieval Archaeology	1 October 2013 – 30 June 2025
Threatened Orders (SFB 923)	Professor Dr. Mischa Meier Institute of Ancient History	1 July 2011 – 30 June 2023
Construction of Meaning – The Dynamics and Adaptivity of Linguistic Structures (SFB 833)	Professor Dr. Sigrid Beck Institute of English Languages and Literatures	1 July 2009 – 30 June 2021

Tübingen participates in these transregional collaborative research centers

Title	Spokesperson	Duration
ANTIBIOTIC CellMAP — Cellular Mechanisms of Antibiotic Action and Production (SFB/TRR 261)	Professor Dr. Heike Brötz-Oosterhelt, Interfaculty Institute of Microbiology and Infection Medicine	1 July 2019 – 30 June 2023
	Tübingen spokesperson	
Platelets – Molecular, cellular and systemic functions in health and disease (SFB-Transregio 240)	Professor Dr. Meinrad Gawaz, Internal Medicine III, Cardiology	1 July 2018 – 30 June 2022
Liver Cancer – New mechanistic and therapeutic concepts in a solid tumor model (SFB-Transregio 209)	Professor Dr. Nisar Malek, Internal Medicine I	1 July 2017 – 30 June 2022
The Skin as a Sensor and Effector Organ Orchestrating Local and Systemic Immune Responses (SFB-Transregio 156)	Professor Dr. Martin Röcken, Department of Dermatology	1 July 2015 – 30 June 2023



Priority program on historical interaction of societies and floodplains

The DFG's new priority program **On the way to the fluvial anthroposphere** (SPP 2361) will analyze how the floodplains of central Europe developed in interaction with human societies in pre-industrial times. The program was jointly conceived by the Universities of Leipzig and Tübingen and the Technical University of Darmstadt. In the interplay of archaeology, geosciences and history, the interaction of humans with their environment will be investigated using the methods of various disciplines, starting in 2022. The priority program will receive around 5.5 million euros in the first phase of three years, with a total of six years of funding

planned. The coordinator in the first phase of the program is geographer Professor Christoph Zielhofer from the University of Leipzig; and in the second, Dr. Lukas Werther from Tübingen's Medieval Archaeology section. Floodplains are particularly dynamic landscapes; yet they are core zones of Europe's cultural heritage. As much as 95 percent of central Europe's floodplains have been deformed or destroyed, and even seemingly natural river meadows have been transformed by human intervention. The program will investigate the timescale and intensity of human interaction with river landscapes and what social ef-

fects this has had. The key river systems of the Rhine, the Elbe and the Danube will serve as model regions for comparative analyses. This research will enable conclusions about the development of other floodplains in central Europe and contribute to the discussion on the early phases of the Anthropocene.

The meadows of the Echaz river in Baden-Württemberg have been used by humans since the Middle Ages.

EUROPEAN UNION FUNDING

European Research Council grants are awarded to individual researchers conducting outstanding new academic work for a period of five years. Top independent researchers can obtain Advanced Grants of up to 2.5 million euros; Consolidator Grants of up to two million go to those with seven to twelve years of experience, and Starting Grants to a maximum of 1.5 million are awarded to outstanding early-career researchers. The ERC also awards Synergy Grants for interdisciplinary cooperation between two to four working groups for up to six years, with maximum funding of ten million euros.

*Palaeoanthropologist
Katerina Harvati investigates
the first steps taken
by modern humans in Europe.*



Topping a Consolidator Grant with an Advanced Grant

The University of Tübingen's Professor Katerina Harvati has received an Advanced Grant from the European Research Council for her research project "Our first steps to Europe: Pleistocene Homo sapiens dispersals, adaptations and interactions in South-East Europe" (FIRSTSTEPS). Harvati, from the Institute of Archaeological Sciences and the Senckenberg Centre for Human Evolution and Palaeoenvironment, will receive funding of 2.58 million euros over the next five years. Her project partner is Professor Stefano Benazzi of the University of Bologna, for whose collaboration the ERC is providing a further 0.72 million euros.

In the FIRSTSTEPS project, Harvati and Benazzi will explore the traces left by early Homo sapiens in southeastern Europe

some 200,000 to 30,000 years ago. Despite the many new details that have emerged on the origins of anatomically modern humans, the exact circumstances of their arrival in Europe are still obscure. According to Harvati's latest findings, the southeast of the continent could play a key role in the dynamic process of encounters between early human groups, their spread and evolution. Moreover, early migrations of Homo sapiens from Africa to Europe may have taken place 150,000 years earlier than previously assumed.

Harvati plans to evaluate new data from field research as well as drawing on old finds that date from 200,000 to 30,000 years ago. The goal is to consolidate the paleoanthropological finds from Greece, southeastern Europe, the

neighboring Balkan states and Italy. She combines methods from virtual anthropology and paleogenetics with various state-of-the-art excavation and dating techniques.

With the ERC Advanced Grant, Katerina Harvati continues a series of successes. As recently as March 2021, she received the German Research Foundation's Gottfried Wilhelm Leibniz Prize for her research into human evolution.

(<https://www.youtube.com/watch?v=3z9PcyVedwE>)

ERC Grants for Tübingen Researchers

Advanced Grants

Name	Project	Duration
Professor Dr. Katerina Harvati Department of Geoscience – Paleoanthropology	Our First Steps to Europe: Pleistocene <i>Homo sapiens</i> Dispersals, Adaptations and Interactions in South-East Europe" (FIRSTSTEPS)	2022 – 2027
Professor Dr. Jan Born Institute of Medical Psychology and Behavioral Neurobiology	Sleep Balancing Abstraction and Forgetting of Memory (SleepBalance)	2020 – 2025
Professor Dr. Gerhard Jäger Institute of Linguistics	Cross-Linguistic Statistical Inference Using Hierarchical Bayesian Models (CrossLingference)	2019 – 2024
Professor Dr. Klaus Scheffler Max Planck Institute for Biological Cybernetics/ Radiology	Ultra-Fast, Spread-Spectrum Magnetic Resonance Imaging (SpreadMRI)	2019 – 2024
Professor Dr. Harald Baayen Institute of Linguistics	Wide Incremental learning with Discrimination nEtworks (WIDE)	2017 – 2022

Consolidator Grants

Name	Project	Duration
Dr. Sireen El Zaatari Institute of Scientific Archaeology	Tracing Hominin Occupations of and Migrations through the Levant: Reviving Paleolithic Research in Lebanon (REVIVE)	2021 – 2026
Professor Dr. Claudia Lengerke Department of Medicine, Internal Medicine I – Haematology, Oncology, clinical Immunology and Rheumatology	Targeting Leukaemia by Modulating Hematopoietic Stem Cell Competitiveness (Hemstem)	2021 – 2025
Professor Dr. Michael Butter English Languages and Literatures	Populism and Conspiracy Theory (PACT)	2020 – 2025
Professor Dr. Markus Siegel Werner Reichardt Center for Integrative Neuroscience/Hertie Institute for Clinical Brain Research	Neuronal Information through Neuronal Interactions (NINI)	2020 – 2025
Professor Dr. Holger Zellentin Institute for the Study of Religion and Jewish Studies	The Qur'an as a Source for Late Antiquity (QaSLA)	2020 – 2025
Professor Dr. Eric Kemen Center for Plant Molecular Biology and Interfaculty Institute of Microbiology and Infection Medicine	Knowledge Based Design of Complex Synthetic Microbial Communities for Plant Protection (DeCoCt)	2019 – 2024
Professor Dr. Katerina Harvati Department of Geoscience – Paleoanthropology	Human Evolution at the Crossroads (CROSSROADS)	2017 – 2022
Professor Dr. Thorsten Stafforst Interfaculty Institute of Biochemistry	Site-directed RNA Editing to Manipulate RNA and Protein Function (RNArepair)	2015 – 2021

Starting Grants

Name	Project	Duration
Dr. Judith Feucht University Hospitals	Senolytic CAR T Cells as Novel Therapeutic Concept for Solid Tumors and Senescence-associated Diseases (CARsen)	2021 – 2026
Dr. Christoph Ratzke Interfaculty Institute of Microbiology and Infection Medicine	Bugs as Drugs: Understanding Microbial Interaction Networks to Prevent and Treat Infections (BugDrug)	2021 – 2026
Dr. Suayb Üstün Center for Plant Molecular Biology	Utilizing Diversity to Decipher the Role of Autophagy in Plant-microbe Interactions (DIVERSIPHAGY)	2021 – 2026
Professor Dr. Andreas Geiger Department of Informatics	Learning Generative 3D Scene Models for Training and Validating Intelligent Systems (LEGO-3D)	2020 – 2025
Dr. Christina Schwarz Research Center for Ophthalmology	Exploring Visual Processes with Two-Photon Ophthalmoscopy (TrackCycle.2P)	2020 – 2025
Professor Dr. Zeynep Akata Department of Informatics	Deeply Explainable Intelligent Machines (DEXIM)	2019 – 2024
Dr. Marcus Scheele Institute of Physical and Theoretical Chemistry	Coupled Organic Inorganic Nanostructures for Fast, Light-Induced Data Processing (COINFLIP)	2019 – 2024
Professor Dr. Marcello Porta Department of Mathematics	Macroscopic Behavior of Many-Body Quantum Systems (MaMBoQ)	2019 – 2024
Professor Dr. Philipp Hennig, Department of Informatics	Probabilistic Automated Numerical Analysis in Machine learning and Artificial intelligence (PANAMA)	2018 – 2023
Dr. Radu Iovita Early Prehistory and Quaternary Ecology	A Silk Road in the Palaeolithic: Reconstructing Late Pleistocene Hominin Dispersals and Adaptations in Central Asia (PALAEOSILKROAD)	2017 – 2022
Dr. Claudio Tennie Institute of Prehistory and Medieval Archaeology	Do Early Stone Tools Indicate a Hominin Ability to Accumulate Culture? (STONECULT)	2017 – 2022
Assistant professor Dr. Cynthianne Debono Spiteri Institute of Prehistory and Medieval Archaeology, partnering Professor Dr. Philipp W. Stockhammer, LMU München	Transformations of Food in the Eastern Mediterranean Late Bronze Age (FoodTransforms)	2016 – 2021
Dr. Stephan König Geoscience Department – Isotope Geochemistry	From the Origin of Earth's Volatiles to Atmospheric Oxygenation (O2RIGIN)	2015 – 2021

Synergy Grants

Tübingen Research Unit	Project	Duration
Professor Dr. Martin Giese Werner Reichardt Center for Integrative Neuro- science/Hertie Institute for Clinical Brain Research	How Body Relevance Drives Brain Organization (RELEVANCE)	2020 – 2025
Professor Dr. Ulf Ziemann Hertie Institute for Clinical Brain Research/Neurology	Connecting to the Networks of the Human Brain (ConnectToBrain) Aalto University, Finland	2019 – 2025

PROJECTS WITHOUT BORDERS

Three new Global Centers for climate and health

In a new program, the German Academic Exchange Service (DAAD) is funding interdisciplinary “Global Centers” to address worldwide challenges in the field of climate research as well as health issues and pandemics. No less than three Global Centers are run by the University of Tübingen: a Center for Climate and Environment on land use in the Jordan Valley and two Centers for Health and Pandemic Prevention in Vietnam and Gabon.

The centers are intended to promote international scientific exchange, especially with countries of the Global South, and to contribute to education with international Master’s programs, doctoral programs, and advanced training. Close consultation with politics, business and civil society is intended

to help new findings to be implemented. German universities, working with partners in the respective countries, are eligible to apply for funding to establish the centers, which will be set up in countries of the Global South. Each center receives up to 600,000 euros in funding per year, initially until 2025 and with the option of extension until 2030.

Dealing with drought

The Climate and Environment Center, headed by Professor Katja Tielbörger of the Institute of Evolution and Ecology, is based in Amman, Jordan. The Jordan Valley is characterized by drought and water scarcity. To counter the consequences of global warming, changes to agriculture and water management are crucial. Jordanian and Palestinian researchers are involved in developing sustainable solutions for the environmental problems of the region, and there is also German-Israeli cooperation within the center. An interdisciplinary Master’s program on climate change and resource management is to be established, with courses in Jordan and at German partner universities. A second pillar of the center is a graduate college, within the framework of which 22 doctoral fellowships have been filled.

Fast response to infectious diseases

The goal of the PACE-UP project (PAN ASEAN Coalition for Epidemic and Outbreak Preparedness) is to build effective systems and capacities that will enable a rapid and successful response to infectious diseases with epidemic or pandemic potential in the future. It is led by Professor Thirumalaisamy P. Velavan of the Tübingen Institute of Tropical Medicine with the Vietnamese-German Center for Medical Research (VG-CARE) as a partner. The three main

pillars of the PACE-UP project are based on sustainable education and training, clinical research on emerging and re-emerging infectious diseases, as well as expanded diagnostic capabilities and improved patient care. The project is establishing a doctoral program in experimental medicine, awarding internships and fellowships, and developing active training workshops and professional development seminars.

The PACE-UP consortium consists of 28 partner institutions from Asian, European, and African countries.

Pandemic prevention in central Africa

The CAIDERA project (Central African Infectious Disease and Epidemics Research Alliance), a Global Center for Health and Pandemic Preparedness, is located at the Centre de Recherches Médicales de Lambaréné (CERMEL) in Gabon. It is headed by Professor Steffen Borrmann of the Tübingen Institute of Tropical Medicine, with the Institut Pasteur as a partner, as well as other regional research and academic institutions, in particular the Central Africa Network on Tuberculosis, HIV/Aids and Malaria (CANTAM). The project focuses on the joint implementation of a training and research program on emerging and re-emerging viral, bacterial and parasitic infectious diseases. The main measures include, among others, the establishment of a Master’s program of the Tübingen Medical Faculty at CERMEL, tailored to the specific needs of central African countries. This will be complemented by an interdisciplinary PhD program, as well as online courses on emerging and re-emerging viral diseases and pandemic preparedness. A third key role of CAIDERA is the coordination and targeting of outreach activities.

Tübingen projects in quantum technology

The Baden-Württemberg Ministry of Economics is making more than 19 million euros available for six collaborative projects for research into quantum computers. The University of Tübingen is involved in two of these projects. Coordinated by the Fraunhofer Competence Center "Quantum Computing Baden-Württemberg," the six collaborative projects will investigate how technology, application scenarios and algorithms can be used to make findings in the field of quantum technologies useful for practical applications and the economy.

In the joint project **SEQUOIA – Software Engineering of Industrial Hybrid Quantum Applications and Algorithms**, the research group headed by Professor Oliver Bringmann of Embedded Systems in Computer Science at the University of Tübingen is investigating the application of machine learning methods on quantum computers and hybrid systems. The team is looking at new methods, tools and approaches for quantum computing to be applied in various areas of industry such as manufacturing, development and logistics.

The focus is on hybrid quantum applications and algorithms, i.e. the cooperation between conventional systems and quantum computers, as well as a quantum software component toolkit. SEQUOIA is also seeking to establish an application center for quantum computing. Bringmann's working group aims to improve the interplay between quantum computers and conventional computers. In addition to Tübingen, partners in the joint project include the two Stutt-



gart-based Fraunhofer Institutes for Industrial Engineering and for Manufacturing Engineering and Automation, the Fraunhofer Institute for Applied Solid State Physics in Freiburg, the Research Center for Information Technology in Karlsruhe, and the University of Stuttgart. The project has some six million euros in funding.

In the joint project **QUORA: Quantum Optimization with Resilient Algorithms**, Professor Daniel Braun and his team from the Institute of Theoretical Physics at the University of Tübingen are working on optimization algorithms for quantum computers that will enable them to make fast and optimal decisions, and opening up the possibility that they could outperform conventional computers in optimization procedures in the future. Daniel Braun and his team will help to detect and characterize errors.

Subsequently, more efficient routines for the necessary optimization steps in the planned quantum algorithms will be developed which are resistant to "quantum noise" and remaining errors. The QUORA project, which also involves the Fraunhofer Institute for Applied Solid State Physics, the Universities of Constance and Stuttgart, and the Baden-Württemberg Cooperative State University, is funded with a total of approximately 2.5 million euros.

The inside of the IBM Quantum System One

THIRD-PARTY FUNDING

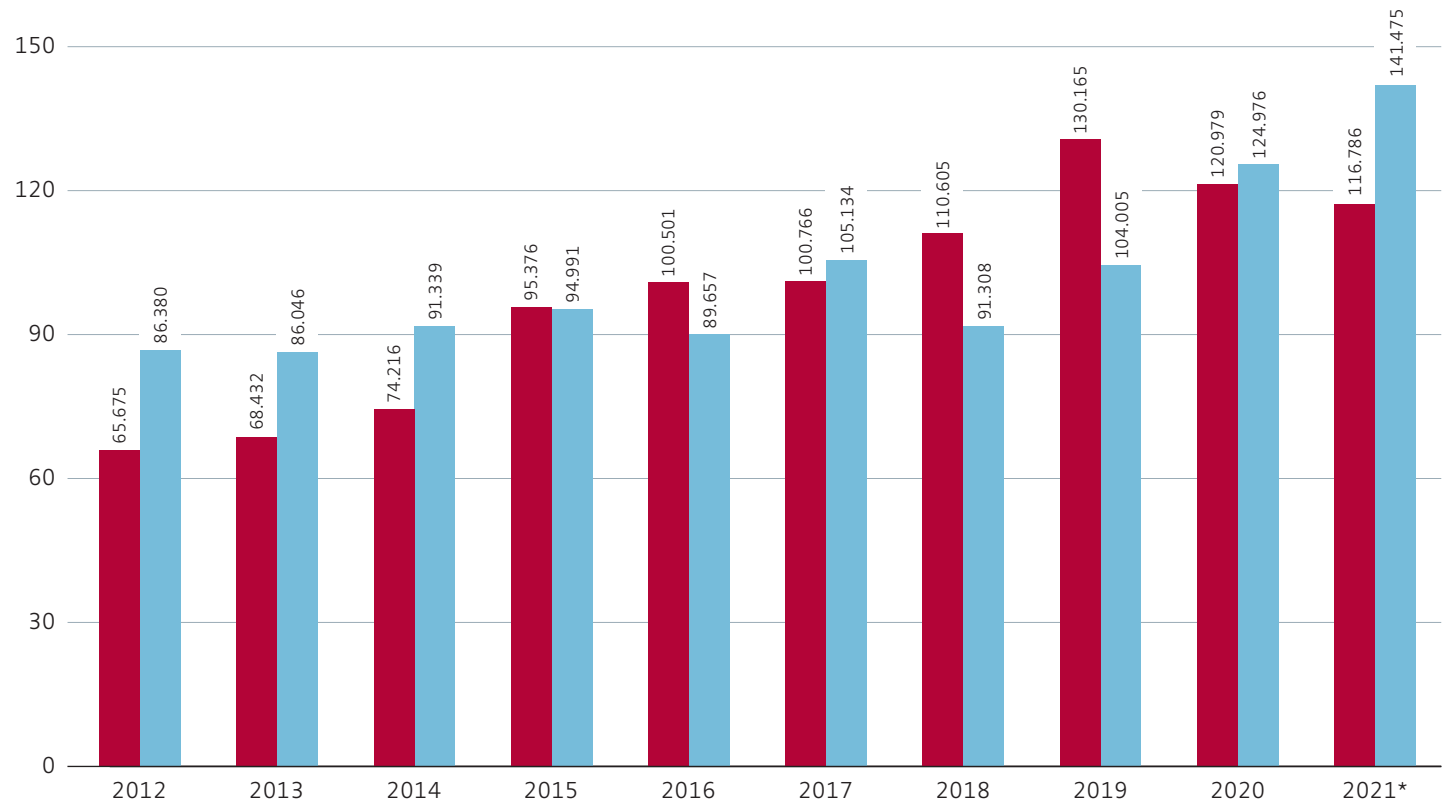
Innovative research and careful planning has enabled the University of Tübingen to steadily increase its third-party funding, from the German Research Foundation and the

European Research Council, the federal and state governments, as well as from a large number of commercial and private sponsors (see following chapter).

Third-party funding trends in millions of euros, 2012 – 2021

University

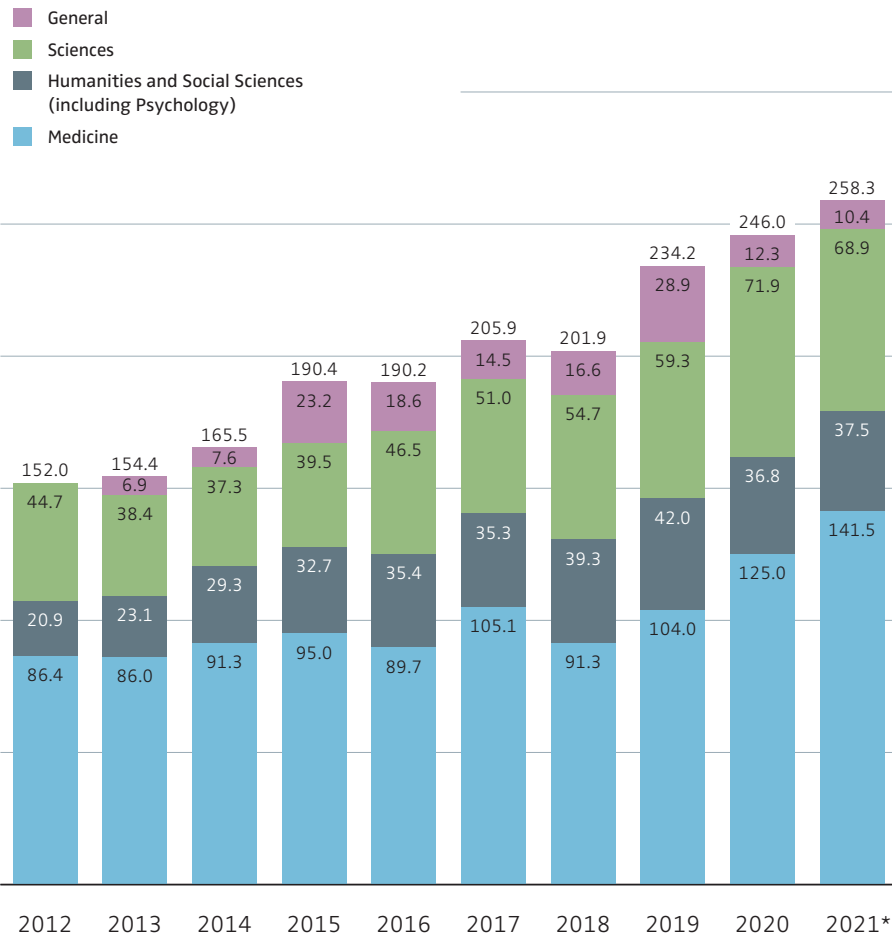
Medicine



* preliminary figures

Third-party funding by faculty/institution

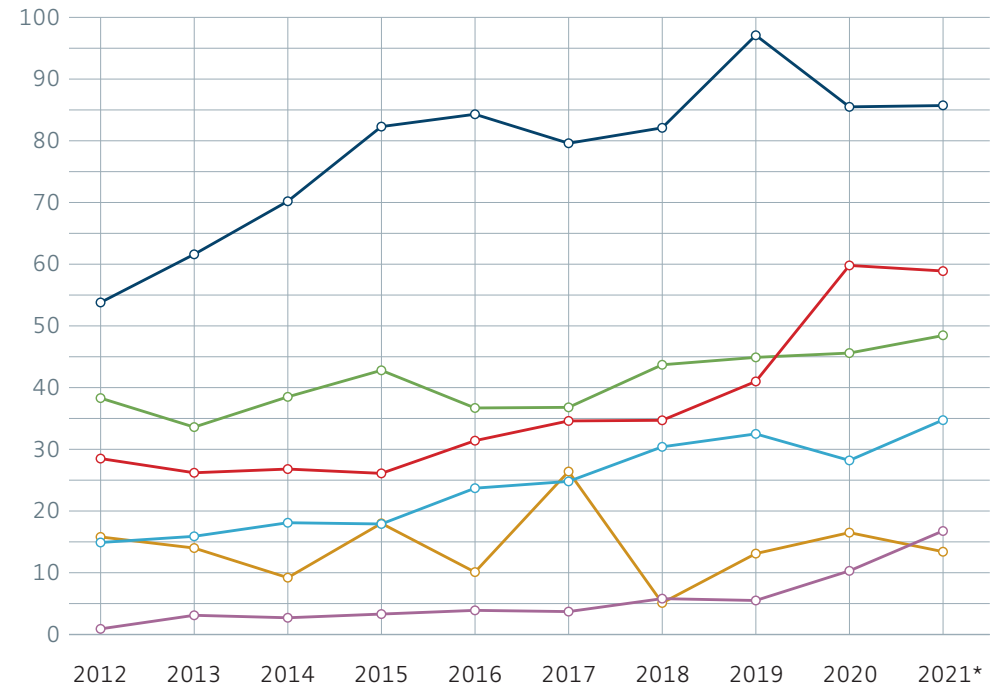
Third-party funding in the Sciences, Humanities and Medicine, and general income in millions of euros, 2012 – 2021



Sources of third-party funding in millions of euros, 2012 – 2021

* preliminary figures

2021:
 German Research Foundation (DFG): 85.8 m euros
 Federal Government: 58.9 m euros
 Foundations, endowments: 48.4 m euros
 Business: 34.9 m euros
 State of Baden-Württemberg: 16.9 m euros
 EU: 13.3 m euros



SUPPORT FOR EARLY-CAREER RESEARCHERS

Research training groups

To support researchers in the early stages of their careers, the German Research Foundation sets up thematic research programs for doctoral candidates – research training groups. They provide structured qualification programs. Research training groups receive DFG funding for a maximum of nine years. A second funding phase was approved for the research training group “Statistical Modeling in Psychology (SMiP)” (RTG 2277), in which the University of Tübingen participates. The group now runs for another four and a half years starting in early 2022.

Title	Spokesperson	Duration
Research training group Stuttgart – Tübingen Intraoperative multi-sensor tissue identification in oncology (GRK 2543)	Professor Dr. Oliver Sawodny University of Stuttgart	1 January 2020 – 31 December 2024
	Professor Dr. Arnulf Stenzl University of Tübingen · Faculty of Medicine	
cGMP: From the bedside to the laboratory bench (GRK 2381)	Professor Dr. Robert Feil Interfaculty Institute of Biochemistry	1 July 2019 – 31 December 2023
MOMbrane: The multifaceted functions and dynamics of the mitochondrial outer membrane (GRK 2364)	Professor Dr. Doron Rapaport Interfaculty Institute of Biochemistry	1 April 2018 – 30 September 2022
Research training group Mannheim – Freiburg – Heidelberg – Koblenz-Landau – Tübingen Statistical Modeling in Psychology (GRK 2277)	Professor Dr. Thorsten Meiser University of Mannheim	1 October 2017 – 30 September 2026
	Professor Dr. Mandy Hütter · Professor Dr. Rolf Ulrich University of Tübingen · Faculty of Science	
Research training group Frankfurt – Tübingen Doing Transitions – The Formation of Transitions over the Life Course (GRK 2105)	Professor Dr. Andreas Walther University of Frankfurt am Main	1 January 2017 – 31 December 2025
	Professor Dr. Barbara Stauber University of Tübingen · Faculty of Economics and Social Sciences	
Research training group Stuttgart – Tübingen Integrated Hydrosystem Modelling (GRK 1829)	Professor Dr. Olaf Cirpka Faculty of Science	1 April 2012 – 31 March 2021
Ambiguity – Production and Reception (GRK 1808)	Professor Dr. Matthias Bauer Faculty of Humanities	1 October 2013 – 30 September 2022
Molecular Principles of Bacterial Survival Strategies (GRK 1708)	Professor Dr. Karl Forchhammer Interfaculty Institute of Microbiology and Infection Medicine	1 April 2012 – 31 March 2021

Multidisciplinary PhD networks

The University's PhD networks are generally formed by three to five professors from different disciplines whose doctoral students are examining one topic from different perspectives. The PhD networks each provide up to seven grants for three years.

PhD networks

Title	Spokesperson	Duration
Theory of Balance - Forms and figures of balance in the media, art and literature	Professor Dr. Eckart Goebel German Language and Literature	1 November 2017 – 30 June 2021
The persistence of gender binaries	Professor Dr. Marion Müller Institute of Sociology	1 December 2017 – 31 December 2022
Entangled Temporalities in the Global South	Professor Dr. Sebastian Thies Romance Languages and Literatures	1 December 2017 – 31 April 2022
Individual response to physical activity – A transdisciplinary approach	Professor Dr. Ansgar Thiel Institute of Sports Science	1 December 2017 – 28 February 2021
New nanoparticles – From synthesis to application in the life sciences	Professor Dr. Erik Schäffer Center for Plant Molecular Biology	1 December 2017 – 30 April 2021
Integrative Augmented Reality (IAR)	Dr. Siegfried Wahl Research Center for Ophthalmology	1 February 2018 – 30 June 2021

Doctorates completed in 2021

Faculty	Doctorates 2020-21	
	female	male
Protestant Theology	2	4
Catholic Theology		2
Law	11	10
Medicine	199	164
Humanities	32	22
Economics and Social Sciences	21	19
Science	121	127
Center of Islamic Theology	1	
Total	387	348
	735	

As of: 16 February 2022

Habilitations completed in 2021

Faculty	2021 habilitations	
	female	male
Protestant Theology	1	1
Catholic Theology		2
Medicine	4	6
Humanities	2	4
Economics and Social Sciences	1	
Science	2	6
Total	10	19
	29	

As of: 25 February 2022

PRIZEWINNING RESEARCH

Leibniz Prize for Mischa Meier

2021 saw the announcement that Professor Mischa Meier of the Ancient History institute would receive the 2022 German Research Foundation's Gottfried Wilhelm Leibniz Prize. The prize of 2.5 million euros is for Meier's groundbreaking work on the history of late antiquity. The Leibniz Prize is Germany's most important research award. Winners can use the prize money for their research work for up to seven years.

Meier's studies have contributed significantly to a new, more finely-differentiated understanding of "long Late Antiquity," the period from the 3rd to the 8th century AD. He emphasizes that this epoch encompassed far more than the fall of Rome. It was characterized by the coexistence and opposition of competing empires, the parallel rise of different monotheistic religions, environmental catastrophes and pandemics, and significant migrations. Meier first unfolded this new view of Late Antiquity in his seminal book, *Das andere Zeitalter Justinians* (2003). Meier then focused on the migration of peoples, the Justinian plague, the fall of Rome in 410, and the late Roman emperor Anastasius.

At Bielefeld University in 2002, Meier wrote his habilitation thesis on the era of the Emperor Justinian. After working as a research assistant at the Universities of Bielefeld and Bonn, he was appointed to the Professorship of Ancient History at the University of Tübingen in 2004. His activities include being spokesperson for the collaborative research center "Threatened Orders," which analyses historical and current crises in politics, economics, society and nature; and taking a leading role in the Heidelberger Academy of Sciences and Humanities' project on the World Chronicle of Johannes

Malalas. The historian has received several awards in recent years. In 2012, he received the Aby Warburg Foundation prize, in 2015 the Karl Christ Prize for Ancient History and in 2021 the Wissenschaftliche Buchgesellschaft's Sachbuch prize. He has been a full member of the Heidelberg Academy of Sciences and Humanities since 2010.



Mischa Meier, born in 1971, studied Classical Philology, History and Education at the University of Bochum, where he completed his doctorate in 1998 with a thesis on Sparta in the 7th century BCE.



Meier's work focuses on the reign of the Byzantine emperor Justinian I (527 – 565), depicted here in a contemporary mosaic in the Basilica of San Vitale, Ravenna, Italy.



ENDOWMENTS

ACCENTS IN THE RESEARCH LANDSCAPE

Some of our most valued sponsors have made major contributions to the funding of entire institutes over many years. Many other donors provide prizes for special achievements, endow structure-building professorships, and support select projects in research and teaching. In doing so, they all set visible accents in the research landscape at the University.

HECTOR FOUNDATION INVESTIGATES BETTER EDUCATION OPTIONS

The Hector Foundation significantly expanded its financial support for education research at the University of Tübingen in 2021. As part of its commitment to the Hector Research Institute of Education Sciences and Psychology, the organization founded by Dr. h. c. Hans-Werner Hector and Josephine Hector pledged 19 million euros over a period of ten years. This will help secure the institute's position as one of Germany's leading places for education research. The institute's empirical research will help policymakers to understand and improve education processes.

The Hector Institute was founded in 2014 with 7.5 million euros of financial support from Dr. and Mrs. Hector. In 2019,

the institute's work was comprehensively evaluated by leading international experts in accordance with Leibniz Association standards. The positive result led to the extension of the sponsoring agreement in 2021 and to an increase in the amount of funding. Reflecting the Hector Institute's successful work in 2020 was the acquisition of a prized Humboldt Professorship for Professor Kou Murayama – a first for the field of education research.

The Hector Institute has expanded its foundation, with publications in journals worldwide contributing to its profile. In 2021, around 80 researchers at the institute were investigating education services and processes and developing

improved options for teaching. The institute offers both a Bachelor's and a Master's degree program in Education Science and Pedagogical Psychology and, since the winter semester of 2021/22, professional training in School Management and Leadership.



ENDOWED PROFESSORSHIPS

Field	Name	Sponsor
Law		
Artificial Intelligence Law	Professor Dr. Michèle Finck, LL. M.	Carl Zeiss Foundation
Humanities		
Modern Taiwan Studies	Professor Dr. Yuchin Tseng	Education Ministry of the Republic of China (Taiwan)
Music	Professor Dr. Matthew Gardner	Mainz Academy of Sciences and Humanities
Economics and Social Sciences		
Financial Literacy and Economic Didactics	Professor Dr. Taiga Brahm	Dieter von Holtzbrinck Foundation
Educational Effectiveness/Educational Trajectories	Professor Dr. Richard Göllner	Hector Foundation
Ethics of Globalisation	Professor Dr. Claus Dierksmeier	Karl Schlecht Foundation
Medicine		
Preclinical Imaging of the Immune System	Professor Dr. Bettina Weigelin	Adolf Leuze Foundation
Functional and Metabolic Brain Imaging	Professor Dr. Kristina Herfert	Carl Zeiss Foundation
Transfusion Medicine	Professor Dr. Tamam Bakchoul	DRK-Blutspendedienst and Baden-Württemberg-Hessen gGmbH
Translational Gynaecology	N. N.	Karl Storz company
Molecular Mechanisms in Age-related Macular Degeneration (AMD)	Professor Dr. Simon Clark	Helmut Ecker Foundation
Neurodegenerative Diseases	Professor Dr. Thomas Gasser	Hertie Foundation
Computational Sensomotomics	Professor Dr. Martin Giese	Hertie Foundation
Cell Biological Foundations of Neurological Diseases	Professor Dr. Mathias Jucker	Hertie Foundation
Functional Neurogenetics	Professor Dr. Philipp Kahle	Hertie Foundation
Neurology/ Epileptology	Professor Dr. Holger Lerche	Hertie Foundation
Clinical Neurogenetics	Professor Dr. Ludger Schöls	Hertie Foundation
Ubiquitin Signaling in Cancer	Professor Dr. Nikita Popov	Ludwig Hiermaier Foundation
Experimental Senology	Professor Dr. Markus Hahn	Novartis Foundation for Sustainable Development
Clinical Pharmacology	Professor Dr. Matthias Schwab	Robert Bosch Foundation
Molecular Diabetology	Professor Dr. Cora Weigert	Sanofi-Aventis Deutschland GmbH
Occupational and Social Medicine	Professor Dr. Monika Rieger	Südwestmetall Employers' Federation (Südwestmetall)
Preclinical Imaging and Imaging Technology	Professor Dr. Bernd Pichler	Werner Siemens Foundation
Faculty of Science		
Philosophy and History of Science	Professor Dr. Reinhard Kahle	Carl Friedrich von Weizsäcker Endowed Professorship, Udo Keller Foundation Forum Humanum
Continual Learning and Multimodal Datastreams	Professor Dr. Gerard Pons-Moll	Carl Zeiss Foundation
Didactics of Chemistry (Tübingen School of Education)	Professor Dr. Stefan Schwarzer	Gips-Schüle Foundation
Machine Learning	Professor Dr. Matthias Hein	Robert Bosch GmbH
Didactics of Informatics (Tübingen School of Education)	Professor Dr. Jan-Philipp Burde	Vector Foundation



Michèle Finck

CARL ZEISS FOUNDATION SUPPORT IN DIVERSE AREAS

Professorships in key new fields

The Carl Zeiss Foundation sponsored two new endowed professorships at the University of Tübingen in 2021. Professor Kristina Herfert has been appointed Professor of **Functional and Metabolic Brain Imaging** at the Werner Siemens Imaging Center. At the Law Faculty, Professor Michèle Finck was appointed to the professorship for **Artificial Intelligence Law**. The Carl Zeiss Foundation already funds the Informatics professorship for Continuous Learning on Multimodal Data Streams, held by Professor Gerard Pons-Moll.

Focus on Michèle Finck

The fields of law and artificial intelligence intersect at many points, ranging from smart homes to the use of self-teaching artificial intelligence and the evaluation of big data in medicine and industry. "Aspects of data use and patent law or even data protection in AI will play an increasingly important role," says Artificial Intelligence Law Professor Michèle Finck. Her professorship at the University of Tübingen is funded by the Carl Zeiss Foundation with three million euros for a period of ten years. Finck is a member of the Faculty of Law as well as the Cluster of Excellence Machine Learning for Science. It was the interdisciplinary orientation of the professorship that attracted Finck to Tübingen.

Without data use, data analysis and processing, there is no AI, says Finck. Therefore, data protection law has a role to play in issues as diverse as the development of Coronavirus vaccines or individualized cancer treatments, or when AI uses meteorological and geographical data to increase yields in agriculture.

Finck studied law at the University of Luxembourg as well as at King's College London and the Sorbonne in Paris, where she obtained a double degree in English and French law. This was followed by a Master of Laws at the European University Institute Florence and a PhD at the University of Oxford in 2015. She subsequently worked at the London School of Economics until 2017 and the Max Planck Institute for Innovation and Competition in Munich until 2021.





Norbert Schmitz

Improving AI systems for healthcare

The Carl Zeiss Foundation's Breakthroughs program is backing a project combining artificial intelligence and medicine, led by Professor Matthias Hein and a team from the Department of Informatics and the Machine Learning for Science excellence cluster. The project will receive five million euros for a period of six years.

In healthcare, deep-learning systems process large sets of patient data and have the potential to make diagnostic decisions. But are decisions made by such systems transparent, robust, reliable and fair in every case? Professor Matthias Hein's project, **Certification and Foundations of Safe Machine Learning Systems in Healthcare**, seeks to optimize the quality of these decision-making processes. The researchers will use concrete applications to explore the interdependencies and potential trade-offs of fairness, accuracy, interpretability and privacy, as well as their ethical implications. Hein and his team also want to establish guidelines for the certification of AI systems in healthcare.

Project partners are the Departments of Radiology and Ophthalmology of the University Hospital Tübingen, working with TÜV SÜD and TÜV AI.LAB, which are involved in the development of certification protocols. In addition, three medical start-ups are supporting the project with data – AIRamed and eye2you in Tübingen, and the Berlin-based company Vara.

Professorship for health science research

Professor Norbert Schmitz took over the new professorship for **Health Behavior, Prevention and Management** at the Institute of Health Sciences of the Medical Faculty of the University of Tübingen in August 2021. At the same time, he became head of its new Population-Based Medicine section. He is playing a leading role in establishing the new Master's program in Population-Based Medicine & Health Care Leadership. Schmitz's move from McGill University in Montreal, Canada, to the University of Tübingen was sup-

ported by the Carl Zeiss Foundation with a sum of 120,000 euros from its fund for the appointment of international scientists in the natural sciences, engineering and mathematics, or in business administration.

The new Population-Based Medicine section conducts research on population health, studying influences and conditions that determine health status both within and across populations, as well as the mechanisms by which these conditions manifest themselves in the health of individuals. These include biological, as well as psychological, social, cultural, and economic factors. The knowledge gained can be used to develop health prevention measures.

Before accepting the new appointment in Tübingen, Schmitz conducted research and teaching at McGill University for more than 17 years. Most recently, he was a professor in the Departments of Psychiatry and Epidemiology, Biostatistics & Public Health and carried out research at the Douglas Mental Health University Institute and the Montreal Diabetes Research Center.

EBERLE FOUNDATION RECEIVES UNIVERSITY PRIZE

The University of Tübingen awarded the Dr. K. H. Eberle Foundation its University Prize in October 2021. In doing so, it honored the foundation's long-standing commitment to innovative research and digitization measures at the University of Tübingen. The distinction goes to friends, sponsors, and longstanding cooperation partners who support research and teaching at the University.

Since 2018, the Dr. K. H. Eberle Foundation has awarded its Innovation Prize to researchers at the University of Tübingen four times. The prize, endowed with up to 300,000 euros, is reserved for highly innovative research. In recent years, the winning projects have included alternatives to animal experiments, virotherapy, alternative forms of sunlight storage, and innovative diagnostic procedures.

The Eberle Foundation also provides considerable funding for the Dr. Eberle Center for Digital Skills at the University. Here, students and academics are trained in the use of digital media in their studies and research. The foundation also awards prizes for innovative digital teaching and learning materials that are made available internationally as open educational resources (OER).

In 2021, the foundation included five new OER projects in its funding:

- InterSim – a game for simulating social science interviewing (Methods Center and Digital Humanities);
- Philosophy in the Global South: Developing Multimedia Learning Materials on Intercultural Philosophy in Latin America (Center for Interdisciplinary and Intercultural Studies);
- Abgerechnet – a podcast teaches mathematical concepts in German and English (Institute of Neurobiology);
- Informatik Interaktiv Erfahrbar Machen – computer science teaching materials are developed into electronic and interactive textbooks (Department of Informatics – Programming Languages);
- Development of the “Mammals in the field” module for trainee Biology teachers conducting excursions (Institute of Evolution and Ecology – Comparative Zoology).

In 2021, the foundation also supported a campaign by the University of Tübingen to attract talented international Master's and doctoral students. The Dr. K. H. Eberle Foundation, based in the southern German town of Lörrach, was established from the legacy of entrepreneur Dr. Karl Helmut Eberle, who studied Medicine in Tübingen and later ran a successful real estate business.



The University Prize is awarded to the Dr. K. H. Eberle Foundation. Left to right: Foundation board members Hansjörg Abt, Peter Unmüssig, Georg Freiherr von Schönau, Thomas Schwind and Alexandra Zoller with University President Bernd Engler

HERTIE INSTITUTE FOR CLINICAL BRAIN RESEARCH CELEBRATES 20TH ANNIVERSARY

At the Tübingen Hertie Institute for Clinical Brain Research (HIH), research has been conducted into the brain and its diseases since the institute was founded in 2001. The aim is to develop new and more effective strategies for diagnosis, treatment and prevention. The close link between the research institute and the University Hospitals ensures that scientific findings can be transferred into clinical practice as quickly and safely as possible. For example, patients at the Neurological Hospital benefit from the ongoing discovery of genetic defects which lead to disease. This knowledge helps doctors to come up with treatments adapted to the individual patient. The HIH, headed by Professor Thomas Gasser, is a pioneer in Germany when it comes to translating neuro-medical research findings into clinical practice. The non-profit Hertie Foundation has supported the HIH with more than 55 million euros over the 20 years of its existence. HIH celebrated the anniversary at the end of October 2021 on its website (www.hih-tuebingen.de).

In the anniversary year 2021, the HIH began to expand its research spectrum, stepping up strategies for the early detection, prevention and rehabilitation of neurological diseases. The focus will be on systems-based neuromedicine

and personalized medicine. The first approach aims to treat the diseased brain or nervous system as a whole, for example with the help of neuroprostheses. In the second approach, the underlying cause of the disease – such as a genetic defect – is treated in a way that is tailored to the person with the disease. Advances in modern biomedicine involve ever-greater data sets in the laboratory and the clinic; therefore, the institute is strengthening the area of digitization and integrating AI methods.

Since its founding, the Hertie Institute for Clinical Brain Research has grown rapidly, with more than 450 employees working in its six departments. Their focus areas range from stroke, Parkinson's disease and epilepsy, to brain tumors and Alzheimer's disease, and cover the entire spectrum of neurological diseases. Researchers at HIH have made several groundbreaking discoveries. For example, they have succeeded in identifying a biomarker that can be used to detect Alzheimer's disease at very early stages

by means of a blood test. They discovered a series of genetic defects that lead to epilepsies, Parkinson's disease or rare neurodegenerative diseases. Another fundamentally new approach is to stimulate the diseased brain in synchrony with its internal state of excitation. The method proved successful in the rehabilitation of individual stroke patients with hand or arm paralysis. Researchers are investigating its application to comparable diseases of the brain.



The Hertie Institute for Clinical Brain Research

ADOLF LEUZE FOUNDATION BACKING

The Adolf Leuze Foundation has been funding various projects at the University of Tübingen since 2014. In 2021, further projects were added: the professorship for Preclinical Imaging of the Immune System at the Werner Siemens Imaging Center, the Mobile Activity Lab project of Sports Science and Sports Medicine, and the Neuroscience Student Lab.

At the Werner Siemens Imaging Center, the professor for **Preclinical Imaging of the Immune System** is Bettina Weigel. She is seeking new approaches to immunological cancer treatments using preclinical imaging. This includes shedding light on immunological processes and correlations by means of imaging and other molecular methods.

The **Mobile Activity Lab** seeks to discover why some people move often, and others less or not at all – knowing that regular physical activity is the easiest way to protect oneself from many diseases. This interdisciplinary project is headed by Professor Ansgar Thiel from the Institute of Sports Science and Professor Andreas Niess from Sports Medicine at the University Hospitals. The laboratory bus can travel to kindergartens, schools, businesses and retirement homes, or even to local trade fairs. It will enable movement monitoring under everyday conditions as well as the analysis of individual training needs and motivation.

The **Neuroscience School Laboratory** offers senior high school students from southwest Germany a first look at neuroscience and insights into the mysteries of the brain. It is directed by Professor Uwe Ilg and is located in the Neurological Hospital.

The foundation is named after Adolf Leuze (1931 - 2014), who established it in 1999. It sponsors a broad spectrum of research projects at the University of Tübingen and at other locations in Germany.



At the summer party celebrating the anniversary of the Deutschlandstipendium, left to right:

President Bernd Engler, Léonie Trick (Vector Foundation), Honorary Senator Arnd-Diether Rösch, Rebecca Hahn (Unibund), and alumnus and patron Abraham Kustermann.

SPONSORSHIP AND PRIZES

Deutschlandstipendium marks 10th year

The Deutschlandstipendium scholarship has been available at the University of Tübingen since the summer semester of 2011. In the ten years to March 2021, a total of 1,595 students at the University of Tübingen have benefited from it. During this period, more than five million euros were disbursed, half of which came from private funds. The amounts raised by the University are matched by the German government.

Applications are open to students of any subject; the main requirement is outstanding academic performance combined with social criteria. The students receive a scholarship

of 300 euros per month. University president, Professor Bernd Engler, described the format as a successful partnership between the state and private sponsors.

The largest single donor is the Universitätsbund, the University of Tübingen's support association. It contributed more than 1.3 million euros – almost half of the funds – from 2011 to 2021. In the 2021-22 cohort, a total of 195 students received the Deutschlandstipendium.

The **Wolfgang Rosenstiel Foundation** was established in November 2020 with assets of 1.2 million euros. The money



will provide Deutschlandstipendium scholarships to students of informatics and other sciences. Wolfgang Rosenstiel, who was Professor of Computer Engineering and Dean of the Science Faculty at the University of Tübingen, passed away in August 2020. According to his bequest, one tenth of the sum is being made available each year for Deutschlandstipendium scholarships until the balance is used up. Priority will be given to first-year students in the Science Faculty's teaching degree programs and the degree programs in computer science, psychology, biochemistry, geosciences and pharmacy.

Sponsorship for special projects

The 2021 Tübingen **Early Prehistory and Quaternary Ecology prize** went to Dr. Stephanie Anna Florin from the University of Queensland in Brisbane. The Australian archaeologist received the award for her analysis of 65,000-year-old plant macrofossils found at Madjedbebe in northern Australia, tracing changes in human diet and land use. Her work shows that early humans were skilled gatherers who mastered complex processing techniques for plant foods. Florin, now at the University of Wollongong in Australia, worked closely with the Mirarr Aborigines, whose expert knowledge of the land and plants enabled the archaeological finds to be placed in context. The 5,000-euro prize is sponsored by the EiszeitQuell mineral water brand and was awarded for the 23rd time in 2021.

The **AI Makerspace** is an artificial intelligence learning place for children and young people. It was set up in Tübingen's city center at the end of 2021. It is the ideal place to experience programming and artificial intelligence. In courses and supervised experiments, fledgling programmers can realize their own projects. The AI Makerspace invites users to engage with the functionalities, techniques, applications and social implications of artificial intelligence. It is a joint project of the University of Tübingen, Cyber Valley Public Engagement, the Tübingen Youth Community Council and the Federal Artificial Intelligence Competition (BWKI) of the Tübingen AI Center. The Vector Foundation Stuttgart is providing funding for three years.

The Stuttgart-based **Karl and Anna Buck Foundation** promotes research in Chemistry at the University of Tübingen with funding for positions and research equipment. In 2021, the "3D-printed PEEK microreactors for the synthesis of radiopharmaceuticals" project was selected. It is by doctoral student Florian Menzel from the research group of Dr. Jochen Neumaier at the Institute of Organic Chemistry. The project will receive 120,000 euros over a period of three years. The Karl and Anna Buck Foundation, based in Stuttgart, has been promoting scientific research since 2000. It was established by Karl Buck, founder of the Buck Chemie chemicals company.



PARTNERSHIPS

TOGETHER, NEAR AND FAR

The University of Tübingen is developing wider dynamic partnerships within Europe while maintaining its ties around the world. There are exciting developments in the growing European University Alliance CIVIS, where new initiatives are being launched to promote the idea of Europe as a common higher education region. International exchanges were battered by the pandemic but are set to recover with increasing, targeted sponsorship.

PARTNERS IN EUROPE

CIVIS builds structures so European Universities can work together

In 2018, the University of Tübingen joined forces with seven other universities in the European University Alliance **CIVIS – A European Civic University**, with two more partners joining by 2021. CIVIS has been funded as a “European University” under the European Commission’s Erasmus program since 2019. Even before the end of the first three-year funding round, the decision was made to make the project permanent. Together, the partners seek to create a common higher education area at all levels – from studies and research to exchanges in administration. They are also promoting international student exchange, joint teaching formats and cooperation with universities in Africa. The aims of CIVIS are to address the major societal challenges of the 21st century, to conduct relevant research and to enable students to act responsibly and sustainably both in their careers and as citizens. The CIVIS Alliance sets five thematic priorities: climate, environment and energy; digital and technological change; society, cultures and cultural heritage; health; cities, spaces and transport.



the members of the CIVIS Alliance as well as the activities within the University of Tübingen, a separate office was created in 2021. Intensive cooperation within the alliance, particularly in teaching and learning, but also in research, is intended to enable programs that would be difficult or impossible for a university to implement on its own, such as new mobility programs and joint teaching programs. The head of the new European University Alliance CIVIS office is Dr. Volker Balli.

The Research and Innovation Strategy for CIVIS (RIS4CIVIS) was launched in an online event at the end of January 2021. The development of the strategy is supported by the Euro-

The University of Tübingen has taken the lead in establishing cooperations with universities in African countries within CIVIS and has already successfully initiated six such partnerships.

In order to coordinate among the members of the CIVIS Alliance as well as the activities within the University of Tübingen, a separate office was created in 2021. Intensive cooperation within the alliance, particularly in teaching and learning, but also in research, is intended to enable programs that would be difficult or impossible for a university to implement on its own, such as new mobility programs and joint teaching programs. The head of the new European University Alliance CIVIS office is Dr. Volker Balli. The Research and Innovation Strategy for CIVIS (RIS4CIVIS) was launched in an online event at the end of January 2021. The development of the strategy is supported by the Euro-

pean Commission over three years in the program “Science with and for Society.”

In addition to Tübingen, members of the CIVIS Alliance are the Aix-Marseille Université, the National and Kapodistrian University of Athens, the Universitatea din București, the Université libre de Bruxelles, the Universidad Autónoma de Madrid, Sapienza – Università di Roma and the Stockholms Universitet. In 2020, the University of Glasgow was incorporated as a new associated member, and in 2021 the Paris Lodron Universität Salzburg joined the CIVIS alliance.



The Paris Lodron Universität Salzburg



The Guild adds 21st member

In 2016, 18 European research universities joined forces in Brussels in the university network **The Guild of European Research-Intensive Universities**. The University of Tübingen was among these founding members. In 2017, the University of Bern joined, and in 2020 the Romanian Babeş-Bolyai University of Cluj-Napoca. In 2021, Pompeu Fabra University in Barcelona, Spain, joined The Guild as its 21st member. More than 12,000 students are enrolled in its eight departments. UPF is a young university; it was founded in 1990 and quickly rose to international prestige. It is named after Pompeu Fabra i Poch (1868- 1948), the engineer and grammarian who systematized the Catalan language. One of the main goals of the university network is to contribute the expertise of its members to European Union research policy. By promoting understanding among universities, the members also want to counteract the political and social divisions in the countries of Europe.

WORLDWIDE STUDY CONNECTIONS

German Academic Exchange Service support

The Coronavirus pandemic cut international exchange at the University of Tübingen, with German Academic Exchange Service (DAAD) funding down more than one million euros to around 3.895 million euros in 2020. DAAD scholarships for both incoming and outgoing students, doctoral candidates, and visiting researchers nearly halved. As a result, the total amount of funding made available by the DAAD in 2020 for individual sponsorship fell by around one third to around 1.332 million euros.

The pandemic also caused significant cuts in the DAAD-funded cooperation projects with international partners and in the program lines for the internationalization of universities. With a total of around 2.563 million euros, DAAD funding for the University of Tübingen in 2020 was around 0.4 million euros less than the funding in the previous year. In the DAAD's 2020 funding year, the European University Networks funding line was added. For its participation in the European University Alliance CIVIS, the University of Tübingen will receive DAAD funding for the three-year period from 2020 to the end of 2022; in 2020, this amounted to some 0.376 million euros.

The Baden-Württemberg Foundation – Promoting international student exchanges

The Baden-Württemberg Foundation has been funding exchange programs between Baden-Württemberg universities and their partner institutions outside Europe since 2001. Due to pandemic restrictions, a total of 76 Tübingen and international students received sponsorship in 2021, following about 100 the previous year.

The regional development component of the fellowship, known as Baden-Württemberg STIPENDIUM REK, has been in place since 2017. It sponsors exchange programs with institutions from African, Caribbean and Pacific (ACP) countries and least developed countries (LDCs). In 2021, 13 scholarships were awarded to doctoral students from Rwanda, Côte d'Ivoire, Senegal, South Africa, Togo, and Cuba, among other countries.

Online student exchange with the TÜ-VIPP program

For all international exchange students who were unable to come to the University of Tübingen in 2021 due to the pandemic, the University's International Office developed a digital package of language courses, courses on German culture, politics and society, and intercultural communication. Called the TÜ-VIPP program (Tübingen – Virtual Intercultural Preparation Package), it was offered free of charge to students at Tübingen's partner universities in America, Africa and Europe from October to December 2021. The program, which was conducted largely in English, is intended as preparation for studies already planned at the University of Tübingen or at another university in Germany. Almost 400 students took part in the TÜ-VIPP program. Among them were Belarusian students whose enrollment at their own universities had been terminated due to the political situation in their home country. Tübingen students were also able to develop their intercultural skills from home through the TÜ-VIPP program, for example with a language course in Kiswahili offered by the University of Rwanda.

Our partners around the world

The University of Tübingen maintains regular exchange programs with some 260 institutions of higher education across many different countries, as well as with our six partners in the Matariki Network of Research Universities.

We are highly active in the European Union's Erasmus Program, involving partnership deals with 381 European institutions. Faculties at the University maintain agreements with institutions across Europe and farther afield.

Due to coronavirus restrictions, online student exchanges continued to play a significant role in 2021. Nevertheless, almost 700 Tübingen students went abroad for a temporary study visit, almost twice as many as in the previous year. Most of them visited a European partner university as part of the Erasmus program.

University of Tübingen branches

European Center for Chinese Studies,
Peking University - **BEIJING**
Tübingen Center for Japanese Studies,
Dōshisha University - **KYOTO**
Tübingen Center for Korean Studies,
Korea University - **SEOUL**

North America

Canada
University of Alberta - **EDMONTON, ALBERTA**
McGill University - **MONTRÉAL, QUÉBEC**
McMaster University - **HAMILTON, ONTARIO**
Ontario Colleges and Universities - **ONTARIO**
Université Laval - **QUÉBEC, QUÉBEC**
Mount Allison University - **SACKVILLE, NEW BRUNSWICK**

United States of America
University of Alaska - **FAIRBANKS, AK**
Northern Arizona University - **FLAGSTAFF, AZ**
Arizona State University - **TEMPE, AZ**
University of Arizona - **TUCSON, AZ**
California State Universities - **CA**
University of California San Diego - **SAN DIEGO, CA**
University of Denver - **DENVER, CO**
Connecticut State Universities and Colleges - **CT**
Yale University - **NEW HAVEN, CT**
Georgetown University - **WASHINGTON, D.C.**
University of Hawai'i at Mānoa - **HONOLULU, HI**
Drake University - **DES MOINES, IA**
Roosevelt University - **CHICAGO, IL**
Butler University - **INDIANAPOLIS, IN**
Valparaiso University - **VALPARAISO, IN**
Bellarmine University - **LOUISVILLE, KY**
Louisiana State University - **BATON ROUGE, LA**
University of Massachusetts - **BOSTON, AMHERST, MA**
Boston College - **BOSTON, MA**
Tufts University - **MEDFORD, MA**
Washington College - **CHESTERTOWN, MD**
University of Maryland - **COLLEGE PARK, MD**
University of Michigan - **ANN ARBOR, MI**
Western Michigan University - **KALAMAZOO, MI**
University of Missouri - **COLUMBIA, MO**
Washington University - **ST. LOUIS, MO**
Montana State University - **BOZEMAN, MT**
North Carolina State Universities - **NC**
University of North Carolina at Chapel Hill - **CHAPEL HILL, NC**
Princeton Theological Seminary - **PRINCETON, NJ**
Hobart and William Smith Colleges - **GENEVA, NY**
State University of New York - **STONY BROOK, NY**
Oregon University System - **OR**
Reed College - **PORTLAND, OR**
Temple University - **PHILADELPHIA, PA**
College of Charleston - **CHARLESTON, SC**
University of Tennessee - **KNOXVILLE, TN**
Rhodes College - **MEMPHIS, TN**
Texas A & M University - **COLLEGE STATION, TX**
University of North Texas - **DENTON, TX**
University of Washington - **SEATTLE, WA**



Latin America

Argentina
Pontificia Universidad Católica Argentina - **BUENOS AIRES**
Universidad Nacional de Córdoba - **CORDOBA**

Brazil
Univates em Lajeado - **LAJEADO**
Universidade Federal Fluminense - **NITEROI**
Universidade Federal do Rio Grande do Sul - **PORTO ALEGRE**
P.U.C. do Rio Grande do Sul - **PORTO ALEGRE**
Universidade Federal de Pernambuco - **RECIFE**
USP Campus Universitario Ribeirão Preto - **RIBEIRÃO PRETO**
Universidade de Santa Cruz do Sul - **SANTA CRUZ**
Universidade Federal de Santa Maria - **SANTA MARIA**
Universidade de São Paulo - **SÃO PAULO**

Chile
Pontificia Universidad Católica de Chile - **SANTIAGO**
Universidad de Chile - **SANTIAGO**

Ecuador
Universidad San Francisco de Quito - **QUITO**

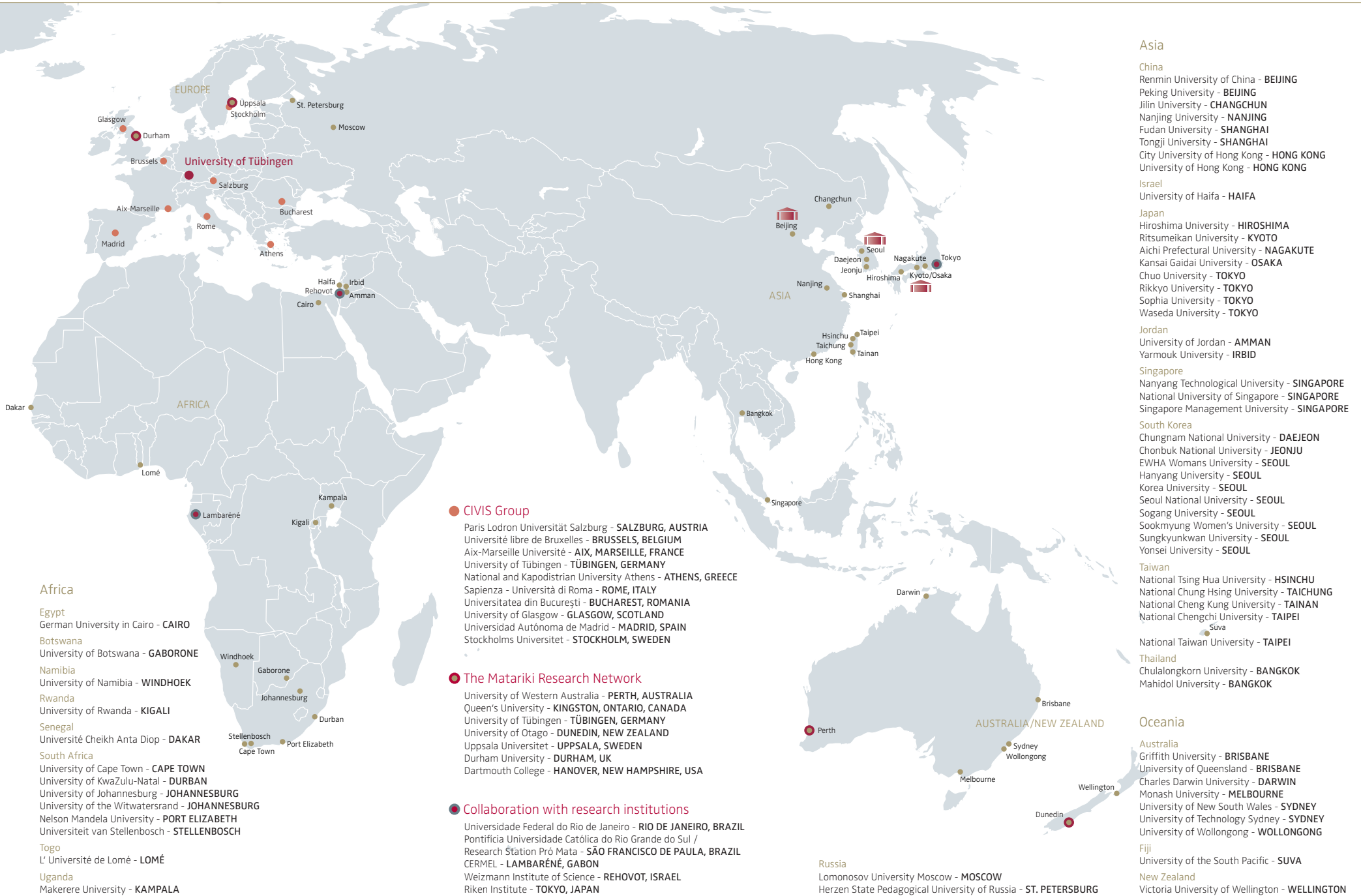
Colombia
Universidad de los Andes - **BOGOTÁ**
Universidad Icesi - **CALI**

Mexico
Universidad Iberoamericana - **CIUDAD DE MEXICO**
El Colegio de México - **CIUDAD DE MEXICO**
Universidad Nacional Autónoma de México - **CIUDAD DE MÉXICO**
Universidad de Guadalajara - **GUADALAJARA**
Universidad de Guanajuato - **GUANAJUATO**
Tecnológico de Monterrey - **MONTERREY**
Universidad de Monterrey - **MONTERREY**
Universidad de las Américas - **PUEBLA**
Benemérita Universidad Autónoma de Puebla - **PUEBLA**

Peru
Pontificia Universidad Católica del Perú - **LIMA**

Uruguay
Universidad de Montevideo - **MONTEVIDEO**

Venezuela
Universidad de los Andes - **MÉRIDA**



Asia

- China
 - Renmin University of China - BEIJING
 - Peking University - BEIJING
 - Jilin University - CHANGCHUN
 - Nanjing University - NANJING
 - Fudan University - SHANGHAI
 - Tongji University - SHANGHAI
 - City University of Hong Kong - HONG KONG
 - University of Hong Kong - HONG KONG
- Israel
 - University of Haifa - HAIFA
- Japan
 - Hiroshima University - HIROSHIMA
 - Ritsumeikan University - KYOTO
 - Aichi Prefectural University - NAGAKUTE
 - Kansai Gaidai University - OSAKA
 - Chuo University - TOKYO
 - Rikkyo University - TOKYO
 - Sophia University - TOKYO
 - Waseda University - TOKYO
- Jordan
 - University of Jordan - AMMAN
 - Yarmouk University - IRBID
- Singapore
 - Nanyang Technological University - SINGAPORE
 - National University of Singapore - SINGAPORE
 - Singapore Management University - SINGAPORE
- South Korea
 - Chungnam National University - DAEJEON
 - Chonbuk National University - JEONJU
 - EWHA Womans University - SEOUL
 - Hanyang University - SEOUL
 - Korea University - SEOUL
 - Seoul National University - SEOUL
 - Sogang University - SEOUL
 - Sookmyung Women's University - SEOUL
 - Sungkyunkwan University - SEOUL
 - Yonsei University - SEOUL
- Taiwan
 - National Tsing Hua University - HSINCHU
 - National Chung Hsing University - TAICHUNG
 - National Cheng Kung University - TAINAN
 - National Chengchi University - TAIPEI
 - National Taiwan University - TAIPEI
- Thailand
 - Chulalongkorn University - BANGKOK
 - Mahidol University - BANGKOK

Oceania

- Australia
 - Griffith University - BRISBANE
 - University of Queensland - BRISBANE
 - Charles Darwin University - DARWIN
 - Monash University - MELBOURNE
 - University of New South Wales - SYDNEY
 - University of Technology Sydney - SYDNEY
 - University of Wollongong - WOLLONGONG
- Fiji
 - University of the South Pacific - SUVA
- New Zealand
 - Victoria University of Wellington - WELLINGTON

Africa

- Egypt
 - German University in Cairo - CAIRO
- Botswana
 - University of Botswana - GABORONE
- Namibia
 - University of Namibia - WINDHOEK
- Rwanda
 - University of Rwanda - KIGALI
- Senegal
 - Université Cheikh Anta Diop - DAKAR
- South Africa
 - University of Cape Town - CAPE TOWN
 - University of KwaZulu-Natal - DURBAN
 - University of Johannesburg - JOHANNESBURG
 - University of the Witwatersrand - JOHANNESBURG
 - Nelson Mandela University - PORT ELIZABETH
 - Universiteit van Stellenbosch - STELLENBOSCH
- Togo
 - L' Université de Lomé - LOMÉ
- Uganda
 - Makerere University - KAMPALA

CIVIS Group

- Paris Lodron Universität Salzburg - SALZBURG, AUSTRIA
- Université libre de Bruxelles - BRUSSELS, BELGIUM
- Aix-Marseille Université - AIX, MARSEILLE, FRANCE
- University of Tübingen - TÜBINGEN, GERMANY
- National and Kapodistrian University Athens - ATHENS, GREECE
- Sapienza - Università di Roma - ROME, ITALY
- Universitatea din București - BUCHAREST, ROMANIA
- University of Glasgow - GLASGOW, SCOTLAND
- Universidad Autónoma de Madrid - MADRID, SPAIN
- Stockholms Universitet - STOCKHOLM, SWEDEN

The Matariki Research Network

- University of Western Australia - PERTH, AUSTRALIA
- Queen's University - KINGSTON, ONTARIO, CANADA
- University of Tübingen - TÜBINGEN, GERMANY
- University of Otago - DUNEDIN, NEW ZEALAND
- Uppsala Universitet - UPPSALA, SWEDEN
- Durham University - DURHAM, UK
- Dartmouth College - HANOVER, NEW HAMPSHIRE, USA

Collaboration with research institutions

- Universidade Federal do Rio de Janeiro - RIO DE JANEIRO, BRAZIL
- Pontifícia Universidade Católica do Rio Grande do Sul / Research Station Pró Mata - SÃO FRANCISCO DE PAULA, BRAZIL
- CERMEL - LAMBARÉNÉ, GABON
- Weizmann Institute of Science - REHOVOT, ISRAEL
- Riken Institute - TOKYO, JAPAN

- Russia
 - Lomonosov University Moscow - MOSCOW
 - Herzen State Pedagogical University of Russia - ST. PETERSBURG

IMPORTANT PARTNERS AT HOME

How do autonomous systems solve complex tasks?

The University of Tübingen and Festo SE & Co. KG established a new **Industry on Campus** cooperation in the field of artificial intelligence in June 2021. Within this framework, Festo established the Festo Autonomous Systems Lab at the University for joint research activities. The new lab is headed by Dr. Shahram Eivazi, who has been seconded to the university by Festo for five years for the Industry on Campus cooperation. He is building a research group that explores independent learning of complex tasks, working closely with Professor Enkelejda Kasneci, head of the Human-Computer Interaction group at the University of Tübingen.

Autonomous systems are needed to manufacture individual products efficiently. They can solve tasks independently and

adapt their actions. From transport systems within a plant to flexible production equipment and quality control, autonomous systems are one of the key technologies for the smart factory of the future. “Collaborative robots” can learn from each other and support humans in repetitive and tiring tasks. Eivazi’s research focuses on deep reinforcement learning in robotics. The robot tries to achieve a given goal through trial and error. Based on the feedback it receives, it gradually optimizes its actions until it successfully solves the task. Meta-learning, edge AI, auto-machine-learning approaches, distributed learning and generative models are further AI fields that will be tested here. The results are continuously incorporated into existing and new AI applications

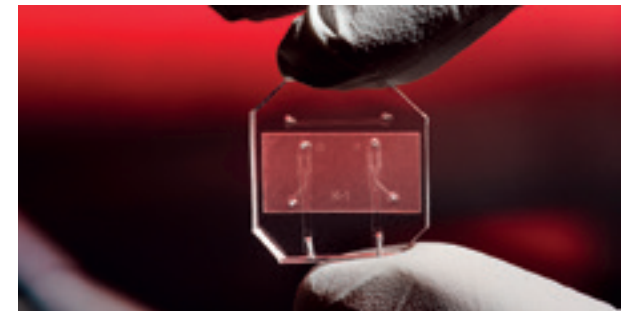
from Festo. The Esslingen-based company specializes in industrial automation technology in more than 35 industries, including the growing life tech sector with medical technology and laboratory automation. Shahram Eivazi received his PhD in Finland in 2016 on the topic of hands-off surgical microscopy. During his PhD, he researched interactive human-computer technologies in the medical field, such as eye tracking. He knew Enkelejda Kasneci’s working group from his two years as a postdoc at the University of Tübingen before joining Festo. In the Industry on Campus collaborations, scientists from basic research at the University work together with industrial partners on issues occurring prior to industrial application.

3R network for better animal welfare in research

The **3R Center for In Vitro Models and Animal Experimentation Alternatives** was founded jointly by the Medical Faculty and the Natural and Medical Sciences Institute (NMI) at the University of Tübingen in 2020. The center, headed by Professor Peter Loskill, now becomes part of a larger network, the 3R Network Baden-Württemberg, which seeks to include all biomedical sites in the state that conduct research on or work with animals.

In medicine, animal experiments contribute to a better understanding of diseases and help in the development of many new diagnostic procedures and treatments. Despite the development of alternatives, they cannot be completely replaced in biomedical research in the foreseeable future.

The “3Rs” stand for “Replacement, Reduction and Refinement” to limit animal experiments. According to this principle, all researchers are obliged to replace animal experiments with suitable alternatives wherever possible, to reduce the number of experiments to a reasonable minimum, and to limit the stress on laboratory animals. The state is providing almost four million euros over a period of five years for the establishment of the Baden-Württemberg 3R Network, which is intended to advance both scientific research and animal welfare in Baden-Württemberg. The participating universities are adding a total of nearly three million euros of their own funds.



Organ-on-a-chip models like this chip for heart muscle fibers represent the natural microenvironment of human cells and organs. They can help reduce the number of animal experiments.

Key research partners in Germany

SHEP – Senckenberg Centre for Human Evolution and Palaeoenvironment
(University of Tübingen associated institute)

Institute for Applied Economic Research
(University of Tübingen associated institute)

NMI – Natural and Medical Sciences Institute
(Reutlingen, University of Tübingen associated institute)

Global Ethics Institute
(University of Tübingen associated institute)

Bernstein Network for Computational Neuroscience (Freiburg)

DKTK – German Consortium for Translational Cancer Research

Dr. Margarete Fischer-Bosch Institute for Clinical Pharmacology (Stuttgart)

DZD – German Center for Diabetes Research

DZIF – German Center for Infection Research

DZNE – German Center for Neurodegenerative Diseases (DZNE)

DZPG – German Center for Psychic Health (in planning)

Forschungsinstitut für Arbeit, Technik und Kultur e. V. –
group researching processes of social, cultural and technical change (Tübingen)

Forschungszentrum Jülich, member of the Helmholtz Association

Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB, Stuttgart)

Friedrich Miescher Laboratory, Max Planck Society (Tübingen)

Heidelberg Academy of Sciences and Humanities

Helmholtz Centre for Environmental Research (Leipzig-Halle)

Hertie Institute for Clinical Brain Research (Tübingen)

University of Applied Forest Sciences Rottenburg

Institut für donauschwäbische Geschichte und Landeskunde (Tübingen)

Institut für Rehabilitationsforschung, Qualitätsentwicklung und Strukturanalyse in der
Behindertenhilfe (REQUEST) e. V. (Tübingen)

IWM Knowledge Media Research Center (Leibniz Association)

MFO mathematics research institute (Oberwolfach), member of the Leibniz Association

Max Planck Institute for Biology (Tübingen)

Max Planck Institute for Biological Cybernetics (Tübingen)

Max Planck Institute for Intelligent Systems (Stuttgart/Tübingen)

Senckenberg Nature Research Society (Frankfurt am Main)

Staatliches Seminar für Didaktik und Lehrerbildung (Gymnasien) Tübingen

Universität Hohenheim – Center for Nutritional Medicine (ZEM) Tübingen – Hohenheim

University of Stuttgart – inter-university center for medical technology (IZST)

Werner Siemens Foundation



TEACHING AND ORGANIZATION

FLEXIBLE FORMATS

The University of Tübingen entered its second year of the Coronavirus pandemic armed with useful tools for teaching and study activities despite the many restrictions. By winter semester 2021-22 a majority of classes were able to take place on campus once more. The pandemic did not stand in the way of building projects or innovative new course development; it even led to more creative teaching methods. University president Professor Bernd Engler announced that after 16 years he would not serve out his full third term. He wants to give his successor enough time to get to know the University and thus be able to set her own agenda for the upcoming Excellence Strategy.

NEW STUDIES AND ADVANCED TRAINING

Advanced professional training for education leaders

The Master's degree in **School Management and Leadership** at the University of Tübingen is a new program designed to prepare prospective managers in the education sector as well as equipping those already in such positions for future-oriented school management. The program incorporates the latest research essential for the evidence-based optimal organization of schools and teaching. Along with communication and school and personnel management skills, issues such as online teaching, globalization and heterogeneity are part of the curriculum as some of the central challenges now facing schools. The program was launched in winter semester 2021-22. It is a part-time course enabling current teachers and head teachers to complete the work alongside full-time employment in the standard study period of four semesters.

The School Management and Leadership Master's degree program was developed by the Hector Research Institute of

Education Sciences and Psychology at the University of Tübingen in cooperation with the state of Baden-Württemberg schools' quality assurance center (ZSL), the Baden-Württemberg institute for education analyses (IBBW), and the privately-sponsored academy for innovative education and management (aim) in Heilbronn.

Groundbreaking interreligious Master's program

In winter semester 2021-22, the University of Tübingen established a Master's degree program which is unique in Germany. The **Interfaith Studies** program is a collaboration between the Faculty of Protestant Theology, the Faculty of Catholic Theology, and the Center for Islamic Theology. Jewish perspectives on religious studies are also included.

The program investigates the relationships between the traditions of Christianity, Islam, and Judaism. Students examine the messages of religious texts and traditions in their cultural context and seek possibilities for interreligious dialogue.

The program offers career perspectives for its graduates in areas dealing with religious practices, groups, and institutions.

Inaugural class in the School Management and Leadership Master's degree program



ENROLLMENTS RISE ABOVE 28,000

The number of students at the University of Tübingen rose again in the winter semester of 2021-22. A total of 28,159 people were enrolled, 723 more than in the previous year. The increase was due to more new enrollments as well as a

higher number of re-registrations. The latter is attributed to the problems some students had in completing their studies under the difficult conditions created by the pandemic. International students literally made a comeback; their

number climbed to 3,927, an increase of around 300. This brings the proportion of students from outside Germany (13.9 percent) closer to the pre-pandemic level (14.2 percent starting winter semester 2019-20).

Student numbers at a glance

Enrollments	Total	Female students		Students from abroad	
Winter semester 2021-22	28,159	16,589	58.9 %	3,927	13.9 %
New enrollments	5,428	3,326	61.3 %		

By faculty or institution	Summer semester 2021	Winter semester 2021-22
Protestant Theology	458	462
Catholic Theology	167	163
Law	2,093	2,133
Medicine	4,284	4,552
Humanities	6,961	7,310
Economics and Social Sciences	4,128	4,760
Science	7,698	8,556
Center of Islamic Theology	168	171
Leibniz Kolleg	29	53

Online and on-campus studies

More than 90 percent of students were willing to be vaccinated against Covid-19 in 2021. The University of Tübingen began offering vaccinations to employees and students in mid-2021.

Covid restrictions on gatherings meant that three semesters had been taught largely online, but by winter semester 2021-22 the University leadership was determined for students to return for as many in-person classes as possible. The University went to great organizational lengths to make this possible, mindful that many students were suffering from the disadvantages of online study and social isolation.

Across all subjects, classes began in winter semester 2021-22 with an attendance rate of more than 50 percent. Students had to wear face masks and show that they were vaccinated, had recovered from Covid-19, or had recently tested negative for the virus. In-class teaching under these conditions quickly became the new normal. In order to slow down the spread of new variants, to protect vulnerable students, and in order to not exclude unvaccinated students, more and more lecturers offered hybrid classes – both in class and online – as the winter progressed.

UNIVERSITY PRIZES FOR THE MOST CREATIVE IDEAS

Talking about Math

Four Mathematics Department staff members received the University of Tübingen 2021 **Teaching Prize** for their new digital teaching-learning concept. The 2,500-euro prize went to Dr. Stefan Keppeler, Professor Hannah Markwig, Professor Thomas Markwig and Professor Roderich Tumulka for a raft of integrated teaching methods introduced during the pandemic. The teachers based the new measures on the premise that mathematics is learned by studying concepts and methods on one's own, by regularly working on problems, and then transferring the methods and calculation techniques to new problems; for students of mathematics and sciences, it is also essential to discuss their approaches with others.

To enable them to do this in the semesters of online teaching, the mathematicians developed a digital learning plan and the corresponding materials with a special focus on first-year students. They created an online platform for sharing weekly assignments, solutions and corrections in small groups. Students were able to discuss their answers or to develop them in real time in video conferences with instructors. The mathematics teachers also produced videos outlining solutions to selected assignments. Support was provided by student mentors, and the instructors received training in how to teach online. The University of Tübingen Teaching Prize is awarded annually for highly innovative teaching formats or special commitment to teaching.

"Be the change you wish to see"

The University's **Student Commitment Prize** went to the "sustainAbility" doctoral initiative in 2021. PhD students at the University of Tübingen founded the initiative in 2016 in the spirit of Mahatma Gandhi's maxim, "Be the change you wish to see in the world." Under the initiative, doctoral students carry out projects on the topic of sustainability – around 30 doctoral students from different subjects and nations have participated in the initiative since its founding.

The initiative foresees a special grant for Tübingen students who address sustainability issues in their PhD thesis as well as providing financial and advisory support. The "Stay Grounded Grant" allows exchange students to apply for travel funding for alternative transportation instead of air travel. With this, sustainAbility participants seek to raise awareness about the immense carbon footprint of air travel. In its Sustainable Work podcast, the initiative provides information about occupational fields that have a positive sustainable impact on society. The initiative's StuVegan alliance worked with partners to promote plant-based meals in Tübingen's canteens. The initiative is also conducting a study on the mental health of doctoral students. The 300 euros prize money is earmarked to finance another round of the Stay Grounded Grant and to purchase technical equipment for recording "sustainAbility" podcasts. The Student Commitment Prize is awarded annually.

Left to right: Cornelius Schröder of the "sustainAbility" initiative with the Student Commitment Prize; Vice-President of Academic Affairs Karin Amos; and Thomas Markwig of the Mathematics Department, representing the winners of the 2021 Teaching Prize



Six outstanding works on sustainability

In November 2021, the University of Tübingen presented the eleventh **Sustainability Awards** in a hybrid event – both in the historical Alte Aula building and online. The six prizes were evenly divided between three Bachelor’s and three Master’s degree theses in which graduates dealt with topics of sustainable development. Executive Vice-President Dr. Andreas Rothfuss presented the prizes for Bachelor’s theses to Claire Roesch (Biology) and Michel Timmreck (Economics and Business Administration) and to the duo Eva Buss and Valeria Strabone for their joint thesis in Media Studies. Ivan Musil (Nanoscience), Hannah Schütt (Cognitive Science),

and Lena Wiest (Economics) received the distinction for their Master’s theses. The award winners gave brief insights into their academic work to the audience of around 150 in the Alte Aula and in the video conference.

Sustainability Award winners Lena Wiest, Eva Buss, Valeria Strabone, Hannah Schütt and Ivan Musil (front row left to right) with Thomas Potthast of the International Center for Ethics in the Sciences and Humanities and Executive Vice-President Andreas Rothfuss

The keynote speech at the ceremony, the Sustainability Lecture, was given by British economist Professor Kate Raworth, who presented her concept of the “doughnut economy” via video conference. The title of her address was “Can Tübingen live within the doughnut?” The ring shape of the doughnut symbolizes the boundaries within which economic action must operate. Raworth talked about changing the basic dynamics in society from degenerative to regenerative principles.

Thomas Potthast introduces Kate Raworth, who held the 2021 Sustainability Lecture.





President Bernd Engler

ORDERLY TRANSITION

University President Engler to retire in third term of office

The University of Tübingen's long-serving president, Professor Bernd Engler, announced in 2021 that he would not serve out his full third term after 16 years at the helm of the University; this would enable an orderly transition for his successor. President Engler hands the reigns over to Professor Karla Pollmann on 1 October 2022. The overlapping terms of office between the new President and current members of the President's Office will help to provide the framework for continuity in the University management.

Bernd Engler, a professor of American Studies, has headed the University since 2006. Under his aegis, the University of Tübingen has shown strong growth, has raised its research

profile in many fields, and has reached an excellent position in international rankings. Moreover, the University was successful in both the Excellence Initiative and the Excellence Strategy as well as other major German government funding platforms.

When announcing his retirement, President Engler said the Excellence Strategy had been implemented in all central areas of the University and that he considered his task to be complete. He added that he had chosen the time of his departure so that the future President would have enough time in the coming years to shape the next round of the Excellence Strategy and to prepare the University for new challenges.

The President's Office

The Vice-Presidents Professor Monique Scheer and Professor Peter Grathwohl were re-elected in 2020 for a further eight-year term of office which began on October 1, 2020.

President and Vice-Chancellor

Professor Dr. Bernd Engler
Institute of English Languages and Literatures

Executive Vice-President

Dr. Andreas Rothfuss

Vice-President of Student Affairs and Studies

Professor Dr. Karin Amos,
Institute of Education

Vice-President for Research and Innovation

Professor Dr. Peter Grathwohl,
Center for Applied Geoscience

Vice-President for International Affairs and Diversity

Professor Dr. Monique Scheer,
Ludwig Uhland Institute of Historical and Cultural Anthropology

PROFESSORSHIPS AT A GLANCE



Lara Ditrich



Isabel Gugel



Kathrin Schag

Professors at the University of Tübingen in 2021

including junior and assistant professors

	2021		
	total	male	female
Protestant Theology	15	12	3
Catholic Theology	13	11	2
Center of Islamic Theology	6	4	2
Law	22	18	4
Medicine	114	90	24
Humanities	99	55	44
Economics and Social Sciences	73	51	22
Science	186	144	42
Knowledge Media Research Center (IWM)	7	4	3
Central institutions	4	3	1
Total	539	392	147

Number of women professors increases steadily

From 2007 to 2021, the proportion of women in professorships at the University of Tübingen rose from nine percent to 27.6 percent. The University has developed a raft of support measures aimed at female PhDs with the potential for a career in research and academia.

The **Athene Program** offers support in the form of networks, coaching, mentoring and grants. In a phase of their careers in which many qualified women choose not to pursue a career in research, the Athene Program measures can help to overcome the main hurdles such women face in their path to an assistant professorship or full professorship.

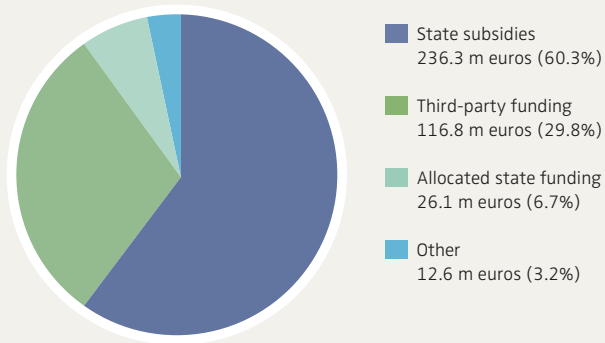
Women researchers in Tübingen have also benefited from the state of Baden-Württemberg's **Margarete von Wrangell Program**, which provides qualified women with a position in research – usually for five years – in which time they can earn the further qualifications required for a professorship.

In 2021, three Tübingen researchers were selected for Margarete von Wrangell funding. They are the Knowledge Media specialist Dr. Lara Ditrich, the neurosurgeon Dr. Isabel Gugel, and the psychotherapy researcher Dr. Kathrin Schag.

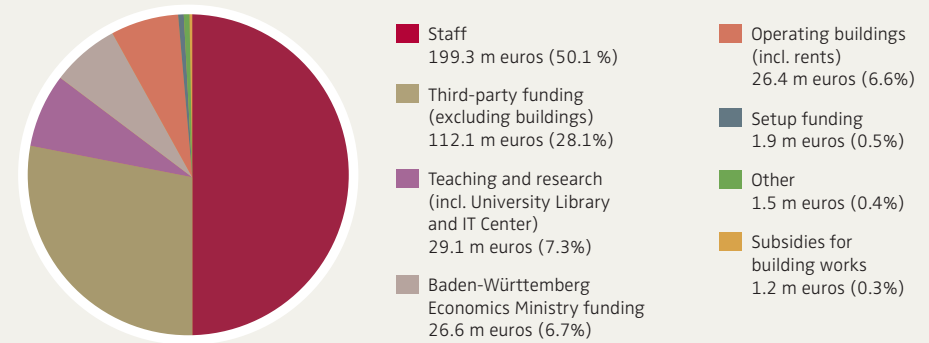
UNIVERSITY FINANCES

University budget excluding Medicine

Revenue 2021 (391.8 million euros)*

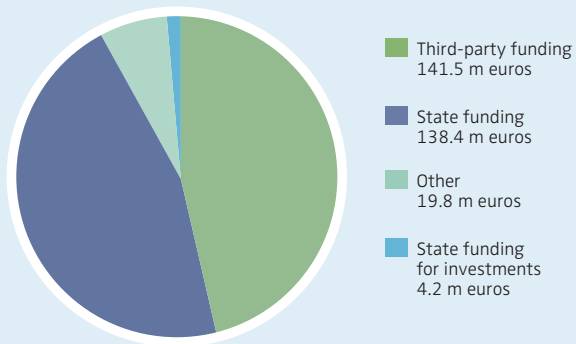


Expenditure 2021 (398.1 million euros)*

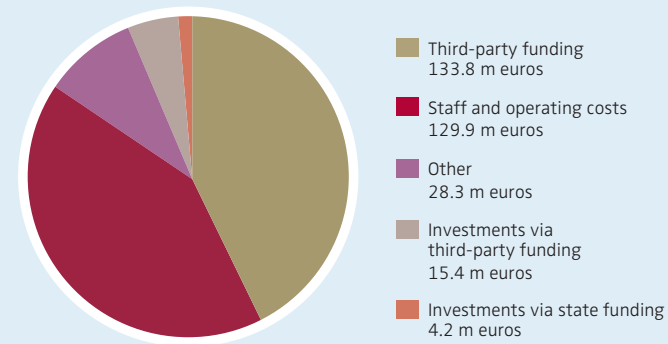


Faculty of Medicine

Revenue 2021 (303.9 million euros)*



Expenditure 2021 (311.6 million euros)*



THREE KEY NEW BUILDINGS

The University of Tübingen welcomed Baden-Württemberg's State Secretary of Finance Gisela Splett and other state government officials no less than three times in 2021 for the official opening of important new buildings.

The opening of the **Geo and Environmental Research Center (GUZ)** on the Morgenstelle campus was celebrated on 1 April 2021. The new GUZ building brings together the Applied Geosciences, which had been spread across several locations, with parts of Mineralogy and Geodynamics and Paleobiology. The six-story building provides around 10,000 square meters of space for laboratories, seminar rooms, lecture halls and offices. The state of Baden-Württemberg invested some 83 million euros in the Geo and Environmental Research Center, with the University of Tübingen contributing nearly 37 million euros.

The new research building for the **Interfaculty Institute of Biochemistry (IFIB)** was inaugurated on 16 April 2021. The institute's move from Schnarrenberg to the Morgenstelle campus places it at the heart of the University's science landscape and amid infrastructure for interdisciplinary research. The new IFIB building offers researchers and students space for their work over 5,300 square meters. The proximity to the Center for Plant Molecular Biology enables joint use of lecture halls, seminar rooms and workshops. There are also synergy effects in highly specialized facilities such as microscopy. The state invested approximately 43.3 million euros in the new building.

After four years of construction, the **University Hospitals Pharmacy** has a new home at a central location among the hospitals on the Schnarrenberg medical campus. The new building will conserve space and resources, while its central

location also facilitates logistics. The handover was on 8 November 2021. The university pharmacy, with around 80 employees, acts as a distribution center for medicines; moreover, it produces an increasing proportion of the treatments required in the hospitals. The new building has 2,660 square meters of floorspace over five levels. Around 700 square meters of this is accounted for by a good manufacturing practice (GMP) clean room, which meets the highest standards for drug production.

The new Geo and Environmental Research Center on the Morgenstelle Campus (left)

A glance inside the Interfaculty Institute of Biochemistry (center)

The University Hospitals Pharmacy was made possible by around 21.3 million euros of funding from the state of Baden-Württemberg. (right)





CELEBRATING KNOWLEDGE

BRIDGING THE DISTANCE

Several declines in the number of infections allowed a return to a little more public life in the second year of the Coronavirus pandemic. The University staged many hybrid events – with guests attending in person and via online transmission. This allowed the first Tübingen Science Day to take place, as well as annual events such as the Global Ethics Lecture and the Tübingen Writers' Lectureship. The Children's University was held online.

FIRST TÜBINGEN SCIENCE DAY

Excellence clusters explain their work

The first Tübingen Science Day on July 2, 2021, introduced people both near and far to the outstanding research under way in Tübingen. In front of a live audience and online, the clusters of excellence presented their work in areas such as

antibiotic resistance, the fight against cancer, and machine learning. The University of Tübingen Museum also reported on its current research into the provenance of historical objects. And there was time for questions from the audience.

Three researchers spoke for the "Individualization of Tumor Therapies by Molecular Imaging and Functional Identification of Therapeutic Targets" cluster of excellence. Professor Bettina Weigelin described how teamwork is needed in research into the use of T-killer cells to combat cancer. Dr. Judith Feucht outlined how the body's own immune system can be strengthened to fight tumors, and Professor Josef Leibold talked about cancer's "Achilles heel."

From the "Control of Microorganisms to Fight Infections" cluster, Professor Heike Brötz-Oosterhelt and Professor Andreas Peschel presented their research on microbiomes, antibiotics research and resistance. They reported on how a more detailed understanding of microbial mechanisms can provide better protection against infections.

In the "Machine Learning for Science" cluster, Dr. Christian Baumgartner spoke about the challenges of applying artificial intelligence methods in medical imaging. He explained how AI is being used in medicine and how it can help doctors to improve their diagnoses, and to avoid potential errors in the future.

The Tübingen University Museum director, Professor Ernst Seidl, and Dr. Fabienne Huguenin took up a topic that many museums today have to deal with, particularly in the critical reappraisal of colonial history – the precise origin of the objects in their collections. They described how they were tackling this difficult and important research.

Science Day concluded with a mixture of short lectures and music at the Tübingen fairground, along with an audiovisual journey through the wilderness of North America.

Tübingen Science Day in pictures:
https://youtu.be/pPWQ8Spw6_8

The University of Tübingen's first Science Day was a hybrid event.



Knowledge Communication Prize inaugurated



Prize winner Michael Butter

In another first, Science Day also saw the inaugural Prize for Knowledge Communication awarded. The prize, endowed with 10,000 euros, went to the American Studies professor, Michael Butter. The jury said his courageous stand against conspiracy theories made "an extraordinarily important

contribution against a destructive discourse that undermines trust in our public institutions and thus massively threatens social harmony."

For several years, Michael Butter and his team have been investigating the connection between conspiracy theories and the rise of populist movements worldwide, currently within the framework of the "Populism and Conspiracy Theory" project, funded by a European Research Council Consolidator Grant. Butter publicizes his research in frequent interviews and public lectures. He also advises political parties and the German government.

In the junior researcher category, the Knowledge Communication prize of 5,000 euros went to medical ethicist Dr. Robert Ranisch and cultural researcher Dr. Julia Diekämper for their communication on ethical issues relating to genome modification. The jury said their joint project, "ZukunftMensch," takes the birth of the first genetically-modified humans as a starting-point for public discussion about the potential consequences of genetic intervention.

The Tübingen Prize for Knowledge Communication seeks to motivate researchers to communicate more effectively about findings and issues arising from their work. The award is part of Tübingen's excellence strategy.

ANNIVERSARIES

Catholic Institute of Religious Instruction celebrates 20 years

The Catholic Institute for religious education in vocational schools, known by its German acronym KIBOR, celebrated its 20th anniversary in October 2021. KIBOR is a third-party funded institute whose innovative, research-based materials are developed for the various needs of religious education at vocational schools across Germany.

In his keynote address at the celebration, KIBOR's founding director, Professor Albert Biesinger, described how little religious education for vocational students was appreciated in 1980s politics. He explained why young people in vocational training in particular need religious education – because they need to reorient themselves in their new professional role and find the right values for it; and also because they need the time and opportunity – just like executives – to reflect on their work and on their actions. Biesinger also stressed that religious and intercultural education is also a must for a good working atmosphere in today's diverse German society.

KIBOR has been supported by the German Bishops' Conference since its inception. The Institute cooperates with the Protestant institutes for vocationally-oriented religious education in Tübingen (EIBOR) and in Bonn (bibor) as well as with Professor Fahimah Ulfat from the Center for Islamic Theology at the University of Tübingen.



50 years of Historical and Cultural Anthropology

The Ludwig Uhland Institute for Historical and Cultural Anthropology was inaugurated in May 1971. In 2021, its members celebrated this nationally and internationally recognized center of innovative cultural studies research and teaching.

The institute's predecessor institution was the focus of heated debates, as it had been founded in 1934 with a clearly National Socialist orientation as the "Institute for German Folklore". Even as late as the 1960s, the predecessor institute stood accused of ignoring Germany's wartime history.

It was Professor Hermann Bausinger who advocated a programmatic reorientation of the subject and proposed the name *Historical and Cultural Anthropology*. Bausinger, born in 1926, studied German, history and folklore at the University of Tübingen and was appointed professor of folklore in 1960. Bausinger focused on a sociological treatment of the subject matter.

The Ludwig Uhland Institute's academically independent profile makes it attractive for students. Its broad notion of culture linked to everyday life has made it possible to focus research on the everyday lives of many different people – initially on popular reading materials, working-class culture and the veneration of saints. But today the institute's research topics range from cultural heritage and museums, to diversity and migration, to digitization and artificial intelligence.

*Top left:
The Haspelturm round tower at
Hohentübingen Castle houses part of
the Ludwig Uhland Institute*

*Top right:
Institute founder Hermann Bausinger*

GLOBAL ETHICS LECTURE WITH BERNHARD SCHLINK

Lawyer and author Professor Bernhard Schlink delivered the 15th Global Ethics Lecture in October 2021 in the University of Tübingen's Neue Aula. The speech was also broadcast live online. Schlink dedicated his speech to the Global Ethics founder Hans Küng, who died in 2021. Schlink shared his childhood memories of Küng, who was a regular guest of Schlink's father, a professor of Theology in Heidelberg.

Schlink addressed the question of how people could use their moral values to make the world more peaceful, kinder and better. Religion, he said, is one way to achieve this goal, but it is not essential to it. Schlink compared climate change to the threat of nuclear war – once considered the biggest threat to humankind – and described climate change as our greatest challenge now. He said this was partly because the fight against global warming requires a change in human habits. "We are living in the Anthropocene today, as we did then. A climate disaster today would be as anthropogenic as a nuclear war back then. But change to the climate... comes step by step and can be influenced step by step. It comes if

Moderator Aline Abboud and the writer Bernhard Schlink in the discussion following the Global Ethics Lecture



Hans Küng discussed Global Ethics with many important international and national figures, including UN Secretary-General Kofi Annan, seen here with Küng in 2003.



humans do nothing; a nuclear war comes only if humans do something,” Schlink said.

Schlink warned that painful action is needed now so that future generations would not carry the entire burden. He advised young people to join political parties and institutions, whose organization enables them to bring about change.

Professor Bernhard Schlink taught law at the Humboldt University in Berlin and at the Benjamin N. Cardozo School of Law in New York until his retirement. His novel “The Reader” won several international awards and in 2008 was made into a film starring Kate Winslet and Ralf Fiennes.

The Global Ethics Lectures have been organized jointly by the Global Ethic Foundation and the University of Tübingen since 2000. Public figures are invited to give their perspectives on Global Ethics issues. The Global Ethics discussion was launched in 1990 by Professor Hans Küng and is intended to find common ethical ground between the values, standards and basic beliefs of world religions and humanist traditions.

Hans Küng, founder of the Global Ethics project

In 2021, the University of Tübingen lost the founder of the Global Ethics Lecture, the theologian Professor Hans Küng, who passed away on April 6 at the age of 93.

Küng was born in 1928 in Sursee, Switzerland. He was ordained as a priest in 1954. In 1960, Küng was appointed professor of fundamental theology at the University of Tübingen’s Faculty of Catholic Theology. Three years later, he founded the Institute of Ecumenical Research in Tübingen. Due to repeated criticism of the Pope and the Catholic Church, his ecclesiastical teaching license was revoked. He was able to continue his teaching activities at the University of Tübingen when his Institute for Ecumenical Research became independent of the Faculty of Catholic Theology.

As a pioneer of interreligious dialogue, and for his commitment to human ethics transcending cultures and religions, Hans Küng gained recognition in all the world religions. In 1995 the Global Ethic Foundation was founded in Tübingen. Küng was its president until 2013.

AWARDS AND DISTINCTIONS

Understanding the foreign

The **2021 Dr. Leopold Lucas Prize** went to the philosopher Bernhard Waldenfels. The jury paid tribute to his work, which explores the ways of understanding what is foreign. The prize, endowed with 50,000 euros, is awarded annually by the Faculty of Protestant Theology. Once more, due to the pandemic, the award ceremony was postponed.

Bernhard Waldenfels, born in 1934, is an emeritus professor of Philosophy at the Ruhr University in Bochum. He is a key author in the field of contemporary phenomenology. His work is mainly devoted to the development of a “phenomenology of the foreign.” The jury said he met “the challenge of developing a phenomenological discourse that can be used to grasp the extent to which the foreign reveals itself in an authentic way in the unstable and pluralistic terrain of experience, and thereby remains recognizable.”

Waldenfels is an important figure in contemporary philosophy. His work has been dedicated to the project of a genuine dialogue between nations and countries, the jury added. The plurality of areas in which the foreign reveals itself prompts Waldenfels not to limit himself merely to the results of phenomenological research in a narrow sense.

The Dr. Leopold Lucas Prize goes to individuals who have made a major contribution to greater tolerance and better relations between people and nations, and who have helped to promote a philosophy of tolerance. The prize was established in 1972 in memory of the Jewish scholar and rabbi Dr. Leopold Lucas, who was killed in Theresienstadt concentration camp in 1943.

Tracking internet extremism



Media Prize winner
Simon Strick

The new **Hans Bausch Media Prize**, endowed with 5,000 euros, was awarded for the first time in May 2021 by the broadcaster Südwestrundfunk and the Institute for Media Studies at the University of Tübingen. The prize for social responsibility in digital public spheres went to Dr. Simon Strick of the Brandenburg Center for Media Studies for his book, *Rechte Gefühle. Affekte und Strategien des digitalen Faschismus*.

In his work, Strick investigated the strategies used to anchor right-wing ideas at the emotional level and the role played by digital media in this process. He shows how this worldview comes across in everyday life, appeals to the counterculture and youth culture on an emotional level, and ultimately aims to be perceived as connectable and unobjectionable. In the words of the Hans Bausch Media Prize jury, the book “could not be more topical in view of past and present right-wing terrorist attacks, as well as everyday racist, sexist and anti-Semitic violence.”

The broadcaster’s non-profit Hans Bausch Media Prize Foundation promotes knowledge, research and innovation in the media sector. The prize is awarded to academic work that makes an outstanding contribution to social development in the area of ethics and the media.

NEW FORMATS

Constructing stories for our times

The writers Eva Menasse and Thomas Hettche were guests at the 34th Tübingen **Writers’ Lectureship** in November 2021. Authors are invited to give public lectures and offer workshops for students at what is normally an annual series of events. The Writers’ Lectureship was canceled in 2020 due to the pandemic, but was held in front of reduced audiences and as an online livestream in 2021.

Menasse and Hettche discussed their favorite works, the business of literature, and the role of books in the modern media. Vienna-born Menasse said a novel seeks to contain a piece of the world and helps us to understand the experiences of others. Speaking about her latest novel *Dunkelblum*, she said research was important, but that the writer then needs to detach from the facts to enter the freedom of fictionalization.

Thomas Hettche discussed his most recent novel *Herzfaeden. Roman der Augsburger Puppenkiste*. Writing a novel, he said, means dissolving – this allows the text to create new relationships. He called literature “an infinite conversation across all times and borders, in which motifs reflect and unfold.”

Since 1996, the Writers’ Lectureship has been hosted by the University of Tübingen’s German Seminar and organized by Professor Dorothee Kimmich. The Tübingen Writers’ Lectureship is sponsored by the Würth Foundation and Adolf Würth GmbH & Co. KG.

www.poetik-dozentur.de

Left to right: writer Thomas Hettche,
Writers' Lectureship organizer Dorothee
Kimmich and writer Eva Menasse



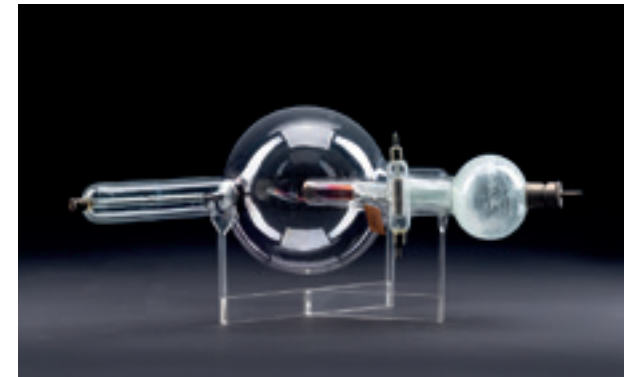
Children's University goes online

The first German Children's University attracted thousands of children to the lecture halls of the University of Tübingen in 2002. The new digital Children's University, organized by the Hector Kinderakademien started in September 2021 in online lecture halls and labs via livestream. On that day, Tübingen virologist Professor Thomas Iftner answered the question "Why do some viruses make you sick?" Eleven more Children's University lectures have been published. Top researchers from Tübingen, including Nobel Prize winner Professor Christiane Nüsslein-Volhard, answered questions such as "Why do animals make themselves beautiful?", "Why do wars happen?" and "What is behind sensory illusions?"

In order to provide more than just a lecture, a 20-person film team accompanied the professors to their place of work – to the research lab, office or lecture hall. These discovery tours feature special effects, animations, live questions to the professors, and comments by two comedians. The initiator of the new format is Professor Ulrich Trautwein from the University of Tübingen. The online Children's University is a cooperation with the local newspaper *Schwäbisches Tagblatt*, and is academically supported by the Hector Kinderakademien and the University of Tübingen.

www.hka-bw.de/digital/kinderuni/

Dental collection opens wide



An early x-ray tube. The discovery of x-rays revolutionized dentistry.

The University's collection of objects from the history of dentistry got a permanent home in November 2021. The Dental|Things exhibition places some 400 rare and curious objects on display in refurbished rooms at the Tübingen University Clinic for Dentistry, Oral and Maxillofacial Surgery.

The exhibition is the result of cooperation between the clinic and the Tübingen University Museum. Master's students of "Museums & Collections" spent two years carrying out an inventory and documenting the objects. They also produced a 300-page publication: *Dental|Things. Die zahnmedizinische Sammlung der Universität Tübingen*.

www.unimuseum.de

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