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Welcome to Tübingen
Welcome to Tübingen

The University of Tübingen has been a cradle of innovative thought for more than 500 years, and today we are proud to still be promoting first-class research in medicine, the sciences, the humanities, and the social sciences.

We welcome students and researchers from around the world, and we enjoy partnerships with top research institutions both in Germany and abroad as well as with business in our economically strong region of southwest Germany.

Our infrastructure has been upgraded in recent years as a result of our 2012-2019 status as one of Germany’s Universities of Excellence. We have invested in people, too, with programs to attract and promote good researchers and teachers from all backgrounds. We therefore look forward to a secure future as a place for discovering, applying, and passing on knowledge.
Research
At the University of Tübingen we are seeing the results of years of planning and hard work; we have reinforced our areas of pioneering research with the help of Excellence Initiative funding to ensure their quality over the long term. Our Neuroscience excellence cluster and our excellence platform Environmental Systems Analysis have given rise to two groundbreaking new collaborative research centers. The humanities and social sciences have also benefited and with this new strength have obtained funding for research groups in key areas of History and Education. Across the University, the seeds which were planted and nurtured by the Excellence Initiative are bearing fruit, and will continue to do so in the future.

The University’s success in the 2012 Excellence Initiative placed Tübingen among Germany’s eleven Universities of Excellence – and earned us around 90 million euros of special funding over five years. We invested in key new structures and worked to integrate them with existing ones. Our institutional strategy set out four platforms for interdisciplinary, applications-oriented basic research in core areas.

We also improved our research infrastructure with better cross-disciplinary networking and the establishment of Core Facilities to offer centralized technical support. Special grant schemes for postdocs and a central Graduate Academy now make Tübingen even more attractive to talented young researchers. The Tübingen Research Campus, founded in 2015, helps us to coordinate our endeavors with the highly-respected non-university research institutions in Tübingen, raising our international profile. And we have a panel of international experts on our International Advisory Board to bring outside perspectives into our strategic planning.

The Center for Integrative Neuroscience Excellence Cluster has been sponsored since the first round of the Excellence Initiative in 2007. Its researchers investigate the brain’s role in perception, memory, emotions, communication, and actions. The CIN’s 25 independent working groups aim to understand these functions and to find better treatments when they go wrong. In 2016 the German Research Foundation authorized funding for a CIN collaborative research center to develop biological and machine-assisted vision. The Excellence Initiative-backed Graduate School of Learning, Educational Achievement, and Life Course Development incorporates an interdisciplinary research program into Education issues for up to 20 doctoral students. 130 scientists and academics from four faculties and the Leibniz Association-sponsored Knowledge Media Research Center (IWM), participate in the Graduate School.
Well-placed in international rankings

The University of Tübingen came in at 89 in the Times Higher Education World University Ranking, and at number eight in Germany. The Times Higher Education Rankings by Subject, Tübingen’s Life Sciences ranked 77th world-wide and Medicine at no. 76. The Humanities rose ten places to no. 38 in the world. The QS Rankings by Subject placed History, Modern Languages, Biological Sciences, and Anthropology at Tübingen among the world’s top 100, and within the top five in Germany. Archaeology in Tübingen ranked particularly well, placing sixteenth globally and second in Germany.

Two new collaborative research centers

The University of Tübingen has acquired two collaborative research centers, while the University of Tübingen’s Mathematics department is involved in several subprojects in a transregional collaborative research center. In the DFG-sponsored collaborative research centers, researchers from different disciplines and faculties work together on a research topic or area common to all with funding for up to twelve years.

Neuroscience and machine learning researchers in the collaborative research center 1233 Robust Vision will investigate the principles of biological and machine vision. Biological systems can identify objects reliably in changing light and from various perspectives. This ability, which the researchers call “robust visual inference,” requires complex calculations by visual systems nerve cells. Artificial vision systems, in turn — as used, for example, in self-driving cars — are making progress in reproducing the visual skills of humans. The scientists of this new collaborative research center will combine neuroscience and machine vision approaches to achieve a better understanding of the principles and algorithms that enable robust visual inference both in humans and machines. The CIN excellence cluster and the Institute of Theoretical Physics are working with the Max Planck Institute for Intelligent Systems. Professor Matthias Bethge, director of the Bernstein Center for Computational Neuroscience, is the spokesman of the collaborative research center. The collaborative research center will receive a total of 8.5 million euros from the DFG over four years.

In the collaborative research center 1253 Catchments as Reactors: Metabolism of Pollutants on the Landscape Scale scientists are investigating new approaches to quantifying the transportation and conversion of pollutants in rivers, ground water, and in the soil. Human activity releases pollutants which can have long-lasting effects on the environment. We often know little of how such compounds move around, what changes they undergo, or how they decompose. Making accurate long-term predictions of soil and water quality is a major challenge for Geoscience and Environmental Science.

Biologists, chemists, geologists and engineers will work together in the multi-disciplinary research network. They will examine the behavior of pollutants in surface water, ground-water and the soil using new approaches. The collaborative research center is headed by Professor Peter Grathwohl of the Center for Applied Geoscience. The Universities of Stuttgart and Hohenheim, the Helmholtz Centers for Environmental Health in Munich and for Environmental Research in Leipzig are also taking part. The collaborative research center will receive a total of 9.5 million euros from the DFG over four years.
## Collaborative research centers at the University of Tübingen

<table>
<thead>
<tr>
<th>Title</th>
<th>Spokesperson</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMPOS – Catchments as Reactors: Metabolism of Pollutants on the Landscape Scale (SFB 1253)</td>
<td>Professor Peter Grathwohl Center for Applied Geoscience (ZAG) – Hydrogeochemistry</td>
<td>1 Jan. 2017 - 31 Dec. 2020</td>
</tr>
<tr>
<td>Robust Vision – Inference Principles and Neural Mechanisms (SFB 1233)</td>
<td>Professor Matthias Bethge Werner Reichardt Center for Integrative Neuroscience/ Institute of Theoretical Physics</td>
<td>1 Jan. 2017 - 31 Dec. 2020</td>
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<tr>
<td>Molecular Coding of Specificity in Plant Processes (SFB 1101)</td>
<td>Professor Klaus Harter Center for Plant Molecular Biology</td>
<td>1 April 2014 - 31 Dec. 2017</td>
</tr>
<tr>
<td>Resource Cultures: Socio-cultural Dynamics in the Treatment of Resources (SFB 1070)</td>
<td>Professor Martin Bartelheim Institute of Prehistory and Medieval Archaeology</td>
<td>1 Oct. 2013 - 30 June 2017</td>
</tr>
<tr>
<td>Threatened Orders (SFB 923)</td>
<td>Professor Mischa Meier Institute of Ancient History</td>
<td>1 July 2011 - 30 June 2019</td>
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<tr>
<td>Construction of Meaning: The Dynamics and Adaptivity of Linguistic Structures (SFB 833)</td>
<td>Professor Sigrid Beck Institute of English Languages and Literatures</td>
<td>1 July 2009 - 30 June 2017</td>
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<tr>
<td>The Bacterial Cell Envelope: Structure, Function, and Infection Interface (SFB 766)</td>
<td>Professor Wolfgang Wohleben Interfaculty Institute of Microbiology and Infection Medicine</td>
<td>1 July 2007 - 30 June 2019</td>
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<tr>
<td>Immunotherapy: Molecular Basis and Clinical Application (SFB 685)</td>
<td>Professor Hans-Georg Rammensee Interfaculty Institute for Cell Biology</td>
<td>1 July 2005 - 30 June 2017</td>
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## Tübingen participates in these transregional collaborative research centers

<table>
<thead>
<tr>
<th>Title</th>
<th>Tübingen spokesperson</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Skin as a Sensor and Effector Organ Orchestrating Local and Systemic Immune Responses (SFB-Transregio 156)</td>
<td>Professor Martin Röcken Department of Dermatology</td>
<td>1 July 2015 - 30 June 2019</td>
</tr>
<tr>
<td>Biological Design and Integrative Structures Analysis, Simulation and Implementation in Architecture (SFB-Transregio 141)</td>
<td>Professor Klaus G. Nickel Geoscience – Applied Mineralogy</td>
<td>1 Oct. 2014 - 30 June 2018</td>
</tr>
<tr>
<td>Pathophysiology of Staphylococci in the Post-genomic Era (SFB-Transregio 34)</td>
<td>Professor Andreas Peschel Interfaculty Institute of Microbiology and Infection Medicine</td>
<td>1 July 2006 - 30 June 2018</td>
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<tr>
<td>Control of Quantum Correlations in Tailored Matter (SFB-Transregio 21)</td>
<td>Professor Reinhold Kleiner Institute of Physics</td>
<td>1 July 2005 - 30 June 2017</td>
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</tbody>
</table>

## Tübingen coordinates the transregional collaborative research center

<table>
<thead>
<tr>
<th>Title</th>
<th>Spokesperson</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasticity and Sleep (SFB/TRR 654)</td>
<td>Professor Jan Born Institute of Medical Psychology and Behavioral Neurobiology</td>
<td>1 July 2005 - 30 June 2017</td>
</tr>
</tbody>
</table>
New center of advanced study

Also in 2016 the German Research Foundation approved funding for a second center of advanced study, Migration and Mobility in Late Antiquity and the Early Middle Ages. Centers of advanced study are a special DFG funding format tailored to the needs of humanities research. They are headed by distinguished academics who aim to examine open questions or whose work is strongly experimental. Centers of advanced study may be funded for up to eight years.

The latest center of advanced study in Tübingen has gained funding of around two million euros for an initial four years. Its speaker is Professor Mischa Meier of the Institute of Ancient History, who is running the project jointly with Professor Steffen Patzold at the Institute of Medieval History and Professor Sebastian Schmidt-Hofner, who heads the Institute of Ancient History.

Research into Late Antiquity and the early Middle Ages has in recent years been dominated by two major issues – the significance of ethnic identities and the nature of the transition from the Roman to the post-Roman world. This center of advanced study focuses on other questions, expanding its horizons up to the year 900 and looking at different forms of mobility, including that of clergy and of agricultural labor. The researchers are examining the effect of such mobility on local societies. They see migration and mobility as a spectrum without clear borders, which requires historical comparative analysis. They also apply theories from disciplines which examine contemporary societies, such as sociology.

Lead medallion from Late Antiquity showing migrants entering the Roman Empire via the Rhine Bridge at Mainz.

Research units

<table>
<thead>
<tr>
<th>Institute</th>
<th>Title</th>
<th>Spokesperson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Ancient History</td>
<td>Migration and Mobility in Late Antiquity and Early Middle Ages (FOR 2496)</td>
<td>Professor Mischa Meier</td>
</tr>
<tr>
<td>Interfaculty Institute of Biochemistry</td>
<td>Macromolecular Complexes in mRNA Localization (FOR 2333)</td>
<td>Professor Ralf-Peter Jansen</td>
</tr>
<tr>
<td>Interfaculty Institute of Biochemistry</td>
<td>VIROCARB: Glycans Controlling Non-Enveloped Virus Infections (FOR 2327)</td>
<td>Professor Thilo Stehle</td>
</tr>
<tr>
<td>Internal Medicine I</td>
<td>Targeting Therapeutic Windows in Essential Cellular Processes for Tumor Therapy (FOR 2334)</td>
<td>Professor Lars Zender</td>
</tr>
<tr>
<td>Institute of Linguistics and Institute of Prehistory and Medieval Archaeology</td>
<td>Words, Bones, Genes, Tools Tracking Linguistic, Cultural and Biological Trajectories of the Human Past (FOR 2237)</td>
<td>Professor Gerhard Jäger Professor Katerina Harvati</td>
</tr>
<tr>
<td>Interfaculty Institute of Biochemistry</td>
<td>cGMP Signaling in Cell Growth and Survival (FOR 2060)</td>
<td>Professor Robert Feil</td>
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<tr>
<td>Center of Neurology and Hertie Institute for Clinical Brain Research</td>
<td>The Physiology of Distributed Computing Underlying Higher Brain Functions in Non-Human Primates (FOR 1847)</td>
<td>Professor Hans-Peter Thier</td>
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<tr>
<td>Internal Medicine VI</td>
<td>Expectation and Conditioning as Basic Processes of the Placebo and Nocebo Response (FOR 1328)</td>
<td>Professor Paul Enck</td>
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<tr>
<td>Cardiology and Cardiovascular Medicine</td>
<td>Platelets – Molecular Mechanisms and Translational Applications (KFO 274)</td>
<td>Professor Meinrad Gawaz</td>
</tr>
</tbody>
</table>
European research funding

European Research Council grants are made to individual researchers conducting outstanding new academic work. Advanced Grants of up to 2.5 million euros go to well-established top researchers, Consolidator Grants to those with seven to twelve years of experience, and Starting Grants are awarded to outstanding junior researchers.

The University of Tübingen’s Professor Katerina Harvati obtained an ERC Consolidator Grant in 2016. She works within both the Institute of Prehistory and Medieval Archaeology and the Senckenberg Center for Human Evolution and Palaeoenvironment. Assistant Professor Cynthianne Debono Spiteri, also of the Institute of Prehistory and Medieval Archaeology, is participating in a Starting Grant to Professor Philipp W. Stockhammer at LMU Munich. That project – Transformations of Food in the Eastern Mediterranean Late Bronze Age (FoodTransforms) – runs through 2020.

Professor Katerina Harvati followed up her ERC Starting Grant for Paleoanthropology at the Gates of Europe: Human Evolution in the Southern Balkans (PaGE) with her Consolidator Grant for Human Evolution at the Crossroads (CROSSROADS). The goal is to obtain a better picture of very early human migration and behavior in the Balkans. Harvati’s project will receive nearly two million euros over five years.

Expeditions in her previous project PaGE led to the discovery of almost 40 new prehistoric sites in Greece. They included Marathousa 1, an early stone age butchering site dated as 500,000 years old, making it the earliest scientifically-dated indication of a human presence in southeastern Europe.

Katerina Harvati, born in Greece in 1970, studied Anthropology at Columbia University, New York. She completed her doctorate at the City University of New York and conducted research at the Max Planck Institute of Evolutionary Anthropology in Leipzig. She has been a professor of Paleoanthropology at the University of Tübingen and deputy head of the Senckenberg Center for Human Evolution and Palaeoenvironment.

<table>
<thead>
<tr>
<th>Current European Research Council Grants</th>
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**Advanced Grants**

<table>
<thead>
<tr>
<th>Name</th>
<th>Project</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Hans-Georg Rammensee</td>
<td>Mutation-driven Immunoediting of Human Cancer? (Mutaediting)</td>
<td>2013 - 2018</td>
</tr>
<tr>
<td>Professor Gerhard Jäger</td>
<td>Language Evolution: The Empirical Turn (EVOLEAEMP)</td>
<td>2012 - 2017</td>
</tr>
<tr>
<td>Professor Bernd Pichler</td>
<td>Multiparametric Tumor Imaging and Beyond: Towards Understanding in vivo Signals (IMAGELINK)</td>
<td>2012 - 2017</td>
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</table>

**Consolidator Grants**

<table>
<thead>
<tr>
<th>Name</th>
<th>Project</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>Professor Katerina Harvati</td>
<td>Human Evolution at the Crossroads (CROSSROADS)</td>
<td>2017 - 2022</td>
</tr>
<tr>
<td>Professor Lars Zender</td>
<td>Functional in vivo Analysis of Cholangiocarcinoma Development, Progression and Metastasis (CholangioConcept)</td>
<td>2015 - 2020</td>
</tr>
<tr>
<td>Dr Thorsten Stafforst</td>
<td>Site-directed RNA Editing to Manipulate RNA and Protein Function (RNArepair)</td>
<td>2015 - 2020</td>
</tr>
<tr>
<td>Professor Todd Ehlers</td>
<td>Extreme Tectonics and Rapid Erosion in Mountain Environments (EXTREME)</td>
<td>2014 - 2019</td>
</tr>
</tbody>
</table>
## Starting Grants

<table>
<thead>
<tr>
<th>Name</th>
<th>Projekt</th>
<th>Laufzeit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor Cynthianne Debono Spiteri</td>
<td>Transformations of Food in the Eastern Mediterranean Late Bronze Age (FoodTransforms)</td>
<td>2016 - 2020</td>
</tr>
<tr>
<td>Institute of Prehistory and Medieval Archaeology partnering Professor Philipp W. Stockhammer, LMU München</td>
<td></td>
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</tr>
<tr>
<td>Dr Stephan König</td>
<td>From the Origin of Earth's Volatiles to Atmospheric Oxygenation (O2RIGIN)</td>
<td>2015 - 2020</td>
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<tr>
<td>Geoscience Department – Isotope Geochemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor Michael Kormann</td>
<td>Biochemically Modified Messenger RNA Encoding Nucleases for in Vivo Gene Correction of Severe Inherited Lung Diseases (BREATHE)</td>
<td>2015 - 2020</td>
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<tr>
<td>University Children's Hospital</td>
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<tr>
<td>Dr Markus Siegel</td>
<td>Spectral Fingerprints of Neuronal Interactions (SPECFIN)</td>
<td>2014 - 2019</td>
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<tr>
<td>Werner Reichardt Center for Integrative Neuroscience</td>
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<tr>
<td>Professor Ana García-Sáez</td>
<td>The Quantitative Bcl-2 Interactome in Apoptosis: Decoding How Cancer Cells Escape Death (APOQUANT)</td>
<td>2013 - 2019</td>
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<tr>
<td>Interfaculty Institute of Biochemistry</td>
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<tr>
<td>Professorin Daniela Thorwarth</td>
<td>Biologically Individualized, Model-based Radiotherapy on the Basis of Multi-parametric Molecular Tumor Profiling (BIO-IRT)</td>
<td>2013 - 2018</td>
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<tr>
<td>Department of Radiation Oncology</td>
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<tr>
<td>Professor Jan Wehkamp</td>
<td>The Influence of Environmental Factors on Antimicrobial Activity of Human Intestinal Defensins (DEFENSINACTIVITY)</td>
<td>2013 - 2018</td>
</tr>
<tr>
<td>University Hospitals, Inner Medicine 1, Hepatology, Gastroenterology, Infectiology</td>
<td></td>
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</tr>
<tr>
<td>Professor Andreas Kappler</td>
<td>Microbial Formation of Minerals by Communities of Fe(II)-oxidizing Bacteria in Modern and Ancient Environments (MICROFOX)</td>
<td>2012 - 2017</td>
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<tr>
<td>Geoscience Department</td>
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<tr>
<td>Dr Hendrikje Nienborg</td>
<td>Optogenetic Examination of the Role of Feedback on Visual Processing and Perception (NEUROPTOGEN)</td>
<td>2012 - 2017</td>
</tr>
<tr>
<td>Werner Reichardt Center for Integrative Neuroscience</td>
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</tr>
<tr>
<td>Professor Katerina Harvati</td>
<td>Paleoenthropology at the Gates of Europe: Human Evolution in the Southern Balkans (PaGE)</td>
<td>2011 - 2016</td>
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<tr>
<td>Geoscience Department</td>
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<tr>
<td>Dr Steffen Katzner</td>
<td>Cortical Circuits of Visual Perception (Percept)</td>
<td>2011 - 2016</td>
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<tr>
<td>Werner Reichardt Center for Integrative Neuroscience</td>
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### German Consortium for Translational Cancer Research – Finding better treatments

As part of the German Consortium for Translational Cancer Research (DKTK), Tübingen scientists have obtained more than 2.6 million euros for cancer research projects. Tübingen is one of eight DKTK locations where the German government sponsors such groundbreaking research.

“Identifying and Understanding Non-coding Mutations in Cancer Genomes” is a project in which Professor Alfred Nordheim at the Interfaculty Institute of Cell Biology – together with researchers from the Heidelberg, Düsseldorf/Essen and Dresden locations – investigates hitherto little-regarded mutations in cancer cells. The researchers are hoping for new insights into the causes of gene mutations which lead to cancers. The focus to date has been on changes to coded genetic information, which affects proteins. The new project will examine the non-coded regions of genes, as they are known to influence the activities of cancer-specific genes. The researchers will investigate aggressive types of skin and brain cancer (melanoma and glioblastoma).

In a second project known as IVasALL, Professor Hans-Georg Rammensee of the Interfaculty Institute of Cell Biology and Professor Peter Lang of the University Children’s Hospital are working with a colleague from Heidelberg to conduct a clinical trial of anti-tumor vaccines for young leukemia patients, whose condition often returns after chemotherapy or stem cell treatment. Tailor-made vaccines use special peptides to activate the patient’s immune system to attack tumor cells. The researchers make a comprehensive analysis of the patient’s healthy and cancerous cells in order to design the right mix of peptides. This data is also collated in the DKTK’s INFORM study, which enables scientists to compare the genes in tumor cells from children across Germany with the
Developing and testing new pharmaceuticals

The University of Tübingen has created new structures to help effective new medicines get from the laboratory to the patient. The Tübingen Center for Academic Drug Discovery & Development (TüCAD2) takes research into promising agents from the conceptual to the final phase of development, known as proof of concept. After exhaustive preclinical safety testing, TüCAD2 oversees clinical tests on real patients. TüCAD2 director is Stefan Laufer, Professor of Pharmaceutical Chemistry at the University of Tübingen’s Pharmaceutical Institute. TüCAD2 works closely with the University Hospitals’ Internal Medicine VIII department and its medical director, Professor Lars Zender.

Research projects can come from any of the wide spectrum of medical fields dealt with in Tübingen. TüCAD2 carries out quality assurance and offers consultation and support, as well as helping to find financing and partners in industry. It is currently overseeing ten projects – five in oncology, three in infectiology, and one each in regenerative and cardiovascular medicine.

The Center is one of just three German members of the Academic Drug Discovery Consortium (AD2C), an association of international universities founded ten years ago in the United States in response to cuts in drug development by commercial pharmaceuticals makers, who in turn have stepped up their collaboration with academic institutions.

Putting conspiracy theories under the microscope

The Ukraine crisis, the first moon landing, the terrorist attack on the French satirical magazine Charlie Hebdo – all have one thing in common: they are surrounded by speculation and rumors.

“Comparative Analysis of Conspiracy Theories,” a new research network, is sponsored by the initiative European Cooperation in Science and Technology (COST). Some 60 researchers from the humanities, political science, sociology, anthropology, cultural studies and psychology in more than 30 countries are to take part in the COST initiative from 2016 to 2020. The network is coordinated by Professor Michael Butter of the University of Tübingen’s Institute of English Language and Literatures.

Conspiracy theories can lead to the radicalization of extremists, inflame tensions between nations, and undermine trust in democratic institutions. The network will systematically analyze previous research into the topic and identify the general characteristics of conspiracy theories – not least to come up with better ways of responding to them. To this end, the researchers are working with all those involved in the area, who are the target of conspiracy theories, or who have to deal with them – such as politicians and journalists, as well as climate researchers and other scientists.
Supercomputing for Bioinformatics and Astrophysics

The University of Tübingen received the high-performance computer BinAC as part of a strategy by the state government to provide Bioinformatics and Astrophysics institutes at its universities with outstanding infrastructure. Supercomputers at several locations across the state of Baden-Württemberg will provide services specially designed to meet the needs of selected disciplines. They include computing for Microsystems Technology, Neuroscience, and Elementary Particle Physics in Freiburg; for Economics and Social Sciences as well as Molecular Life Sciences in Mannheim and Heidelberg; and for Theoretical Chemistry in Ulm. Each location supports several hundred researchers in Baden-Württemberg, who can access the central services from their workplaces.

The supercomputer BinAC in Tübingen has more than 296 nodes, each with 28 cores, and four nodes, each with 40 cores. BinAC also uses 120 graphics cards with a total of nearly 300,000 cores which enable the system to carry out numerous complex operations in parallel. Astrophysics and Bioinformatics are important elements in the University of Tübingen’s research profile. Among the areas in which bioinformatics plays a major role is medical research. The state of Baden-Württemberg and the German Research Foundation have invested more than three million euros in the supercomputers.

Powerful calculations – Baden-Württemberg’s Minister of Science, Theresia Bauer, at the supercomputer switching-on ceremony in July 2016
**Superresolution live cell imaging**

The Virology and Epidemiology secure laboratory received a General Electric Delta Vision OMX SR microscope, which is so fast it enables superresolution live cell imaging. It can produce images of structures below the physical resolution boundary of 250 to 300 nanometers. That means the scientists can closely observe the infection of living cells by viruses and other pathogens. This system is the first of its kind in Europe, and the first in the world to be deployed in a biosafety level 3 laboratory.

For superresolution microscopy viruses must be fluorescence-marked without inhibiting their ability to reproduce. A team headed by Professor Michael Schindler is analyzing how viruses such as AIDS-HIV-1 and hepatitis C infect cells and spread. The researchers’ focus is on cellular transport paths and molecular interactions, and on the search for new compounds to prevent viruses from developing within the cell. The effects of possible new antiviral drugs can now be observed live at the molecular level. The 500,000-euro superresolution microscope was financed equally by the German Research Foundation and the University Hospitals.

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**Habilitations completed in 2016**

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Habilitations 2016</th>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

As of: 12 January 2017

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An image taken by the superresolution live cell imaging microscope. Image no. 3 shows the clarity now possible compared with other methods. Here: Human cells (nuclei shown in blue) producing a HIV-1 protein ( nef , shown in green).
THIRD-PARTY FUNDING

The University has been highly successful in attracting third-party funding. The Faculty of Medicine and the Hospitals brought in some 90 million euros in external funding, while the rest of the University attracted a record amount of nearly 100 million euros. We have supported quality research and made good use of national and international research funding sources, and generous private sponsorship.

Third-party funding
in millions of euros, 2007 - 2016

* preliminary figures
Reaping the benefits

Third-party funding attracted by the Sciences, Humanities, and Medicine
in millions of euros, 2007 - 2016

Sources of third-party funding
in millions of euros, 2007 - 2016

- General
- Sciences
- Humanities (including Psychology)
- Medicine

German Research Foundation (DFG) €84.3m
Foundations, donors €36.8m
Federal government €31.4m
Business €23.7m
European Union €10.1m
State government €3.9m

* preliminary figures
Support for junior researchers

Research training groups

In May 2016, the German Research Foundation (DFG) approved a new research training group, Shaping Transitions Throughout Life, in the field of Education. The DFG also voted to extend funding for the microbiology and infection medicine research training group, Molecular Principles of Bacterial Survival Strategies (GRK 1708), and Integrated Hydrosystem Modelling (GRK 1829) in applied geoscience. The DFG sponsors research training groups for a maximum of nine years to ensure junior researchers can work within a thematic research program with a clear structure.

Shaping Transitions Throughout Life is run jointly by Professor Barbara Stauber of the University of Tübingen Institute of Education and Professor Andreas Walter of the Goethe University Frankfurt. The group involves researchers from areas of general and adult education, psychology and social pedagogy. The research training group will investigate how people manage transitions over the course of their lives – changes such as entering school, starting work or a family, starting a new partnership or entering care for the aged. The focus is on the interplay of social discourse, the institutional regulation of such transitions, the way they are dealt with from the education perspective, and the individual’s processes of managing and learning from them.
# DFG-backed research training groups

<table>
<thead>
<tr>
<th>Title</th>
<th>Spokesperson</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social sciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing Transitions – The Formation of Transitions over the Life Course (GRK 2105)</td>
<td>Professor Barbara Stauber Faculty of Economics and Social Sciences</td>
<td>1 January 2017 - 30 June 2021</td>
</tr>
<tr>
<td><strong>Humanities</strong></td>
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</tr>
<tr>
<td>Ambiguity – Production and Reception (GRK 1808)</td>
<td>Professor Matthias Bauer Faculty of Humanities</td>
<td>1 Oct. 2013 - 31 March 2018</td>
</tr>
<tr>
<td>Religious Knowledge in Pre-modern Europe (800-1800) Transfers und Transformations – Ways to the Modern Knowledge Society (GRK 1662)</td>
<td>Professor Annette Gerok-Reiter Faculty of Humanities Professor Volker Leppin Faculty of Protestant Theology</td>
<td>1 April 2011 - 31 March 2020</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
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<tr>
<td>Research training group Stuttgart – Tübingen Spectral Theory and the Dynamics of Quantum Systems (GRK 1838)</td>
<td>Professor Marcel Griesemer University of Stuttgart Professor Stefan Teufel (deputy spokesman) University of Tübingen Faculty of Science</td>
<td>1 Oct. 2013 - 31 March 2018</td>
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<tr>
<td>International Research Training Group Tübingen – Hohenheim – Waterloo Integrated Hydrostyle Modelling (GRK 1829)</td>
<td>Professor Olaf Cirpka Faculty of Science</td>
<td>1 April 2012 - 31 March 2021</td>
</tr>
<tr>
<td><strong>Medicine – Science</strong></td>
<td></td>
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<tr>
<td>Molecular Principles of Bacterial Survival Strategies (GRK 1708)</td>
<td>Professor Karl Forchhammer Interfaculty Institute of Microbiology and Infection Medicine</td>
<td>1 April 2012 - 31 March 2021</td>
</tr>
<tr>
<td>International research training group Tübingen – Dundee The PI3K Signal Pathway in Tumor Growth and Diabetes (GRK 1302)</td>
<td>Professor Bernd Nürnberg Department of Experimental and Clinical Pharmacology and Toxicology</td>
<td>1 April 2006 - 31 March 2016</td>
</tr>
</tbody>
</table>
PhD networks

University of Tübingen 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. Successful PhD networks can form the basis of bigger research projects and may lead to research training groups sponsored by the German Research Foundation.

<table>
<thead>
<tr>
<th>Title</th>
<th>Spokesperson</th>
<th>Duration</th>
</tr>
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<tbody>
<tr>
<td>Ecotoxicity of Particle-associated Compounds</td>
<td>Professor Stefan B. Haderlein Environmental Mineralogy</td>
<td>Since 1 Jan. 2014</td>
</tr>
<tr>
<td>The Influence of Tax Law on Multinational Corporations</td>
<td>Professor Frank Stähler/Professor Georg Wamser Economics – International Economics and Labor Markets</td>
<td>Since 1 May 2014</td>
</tr>
<tr>
<td>A Different Aesthetic – Figures of Reflection in the Arts</td>
<td>Professor Annette Gerok-Reiter Faculty of Humanities</td>
<td>Since 1 Feb. 2014</td>
</tr>
<tr>
<td>The Castle and the Nobility</td>
<td>Professor Sigrid Hirbodian Institute of Library Science for Historians</td>
<td>Since 1 Nov. 2013</td>
</tr>
<tr>
<td>Of Plants and Men: Principles of Chitin Recognition in Arabidopsis and Humans</td>
<td>Professor Dominik Hartl University Children's Hospital – Department of Paediatrics</td>
<td>Since 1 Oct. 2013</td>
</tr>
<tr>
<td>Vision-based Flying Robots</td>
<td>Professor Andreas Zell Wilhelm Schickard Institute of Computer Science</td>
<td>Since 1 Oct. 2013</td>
</tr>
</tbody>
</table>

2016 doctorates

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Doctorates completed in winter semester 2015/16 and summer semester 2016</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Protestant Theology</td>
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<tr>
<td>Catholic Theology</td>
<td>2</td>
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<tr>
<td>Law</td>
<td>15</td>
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<tr>
<td>Faculty of Medicine</td>
<td>177</td>
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<tr>
<td>Humanities</td>
<td>34</td>
</tr>
<tr>
<td>Economics and Social Sciences</td>
<td>21</td>
</tr>
<tr>
<td>Faculty of Science</td>
<td>131</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
</tr>
</tbody>
</table>
SPONSORSHIP
EXTERNAL SUPPORT FOR THE UNIVERSITY

The University of Tübingen offers its heartfelt thanks to a variety of sponsors whose generosity enables our researchers to carry out a broad span of projects, such as getting faster diagnoses and better treatment for patients with complex diseases. In 2015 we founded our School of Education to specialize in giving teachers the best training in their subject and its didactics so that they will be able to bring out the best in school students – the researchers of tomorrow. A number of sponsors are helping us with endowed professorships in this area.

NEW ENDOWED PROFESSORSHIPS

Dieter von Holtzbrinck Foundation – Supporting didactics and teacher training

The Dieter von Holtzbrinck Foundation is financing a Professorship of Economics Education at the University of Tübingen’s Faculty of Economics and Social Sciences. The new professor is Taiga Brahm from the University of St. Gallen.

She will add a new dimension to our teacher training for the new subject in Baden-Württemberg’s schools, Economics/Professional and Study Orientation. It teaches teenagers practical understanding of economic processes and develops awareness of the economic role they themselves will play. It also explores ethical questions arising from the global economy.

Taiga Brahm studied Didactics of Economics at the University of Mainz and at Ghent University in Belgium. She completed her Master’s degree in Adult Education at the Technical University of Kaiserslautern and subsequently worked at its Distance Learning and Independent Studies Center before heading a project at the Swiss Centre for Innovations in Learning in St. Gallen. She completed her doctorate there in 2010 and went to Oxford University in the UK for research until 2015. Her research focuses on developing students’ skills in various education contexts, particularly interdisciplinary skills, and designing effective curricula.
Two foundations showed their support for the new School of Education founded in October 2015, underlining Tübingen’s commitment to Education Science. The Gips-Schüle Foundation endowed professorships in the didactics of Biology and of Chemistry as well as an assistant professorship in Education research focusing on science and technology in schools. The Vector Foundation sponsored a Professor of Physics Didactics, as well as funding the equipping of a special classroom for teacher training in Biology, Chemistry, Geography, Informatics, Mathematics, Science and Technology, and Physics. This will enable teachers-in-training to practice their skills in a classroom environment.

In recent years the Klaus Tschira Foundation promoted Kramer’s “Youth Presents” research project. This latest sponsorship underscores its commitment to rhetorics research in the modern information society.

Olaf Kramer studied Rhetoric, Philosophy, and Psychology in Tübingen, Frankfurt am Main, and at the University of North Carolina. In his new position, he will investigate contemporary forms of discourse, including the presentation, which has largely replaced the traditional lecture, and international forums like science slams and TED talks. A member of the Excellence Initiative-backed LEAD Graduate School, Kramer plans to make Rhetoric a standard element in Education research in Tübingen.
### Endowed professorships

<table>
<thead>
<tr>
<th>Field</th>
<th>Name</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Humanities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese Studies: Financial Ethics</td>
<td>Professor Matthias Niedenführ</td>
<td>Karl Schlecht Foundation</td>
</tr>
<tr>
<td>General Rhetoric and Science Communication</td>
<td>Professor Olaf Kramer</td>
<td>Klaus Tschira Foundation</td>
</tr>
<tr>
<td><strong>Economics and Social Sciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intergenerationally Just Policies</td>
<td>Professor Jörg Tremmel</td>
<td>Foundation for the Rights of Future Generations</td>
</tr>
<tr>
<td>Science and Technology in Schools</td>
<td>Professor Kerstin Oschatz</td>
<td>Gips-Schüle Foundation</td>
</tr>
<tr>
<td>Economics Education and the Didactics of Economics (Tübingen School of Education)</td>
<td>Professor Taiga Brahm</td>
<td>Dieter von Holtzbrinck Foundation</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurodegenerative Diseases</td>
<td>Professor Thomas Gasser</td>
<td>Hertie Foundation</td>
</tr>
<tr>
<td>Cell Biology: Foundations of Neurological Diseases</td>
<td>Professor Matthias Jucker</td>
<td>Hertie Foundation</td>
</tr>
<tr>
<td>Clinical Neurogenetics</td>
<td>Professor Ludger Schlöss</td>
<td>Hertie Foundation</td>
</tr>
<tr>
<td>Functional Neurogenetics</td>
<td>Professor Philipp Kahle</td>
<td>Hertie Foundation</td>
</tr>
<tr>
<td>Neurology/Epileptology</td>
<td>Professor Holger Lerche</td>
<td>Hertie Foundation</td>
</tr>
<tr>
<td>Preclinical Imaging and Imaging Technology</td>
<td>Professor Bernd Pichler</td>
<td>Werner Siemens Foundation</td>
</tr>
<tr>
<td>Occupational and Social Medicine</td>
<td>Professor Monika Rieger</td>
<td>Südwestmetall Employers’ Federation (Südwestmetall)</td>
</tr>
<tr>
<td>Clinical Pharmacology</td>
<td>Professor Matthias Schwab</td>
<td>Robert Bosch Foundation</td>
</tr>
<tr>
<td>Infectious Diseases of the Circulatory System</td>
<td>Professor Harald Langer</td>
<td>Lichtenberg Professorship (VW Foundation)</td>
</tr>
<tr>
<td>Neuroplasticity of the Developing Brain</td>
<td>Professor Martin Staudt</td>
<td>Schön Kliniken GmbH, Behandlungszentrum Vogtareuth</td>
</tr>
<tr>
<td>Molecular Diabetology</td>
<td>Professor Cora Weigert</td>
<td>Sanofi-Aventis Deutschland GmbH</td>
</tr>
<tr>
<td>Personalized Diabetes Therapy</td>
<td>Professor Andreas Peter</td>
<td>Böhinger-Ingelheim</td>
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<tr>
<td>Functional and Metabolic Brain Imaging</td>
<td>Professor Hans Wehr</td>
<td>Carl Zeiss Foundation</td>
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<tr>
<td><strong>Faculty of Science</strong></td>
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<tr>
<td>Geoarchaeology</td>
<td>Professor Christopher Miller</td>
<td>Carl Zeiss Foundation</td>
</tr>
<tr>
<td>Didactics of Biology (Tübingen School of Education)</td>
<td>Professor Christoph Randler</td>
<td>Gips-Schüle Foundation</td>
</tr>
<tr>
<td>Didactics of Chemistry (Tübingen School of Education)</td>
<td>Professor Claudia Bohrmann-Linde</td>
<td>Gips-Schüle Foundation</td>
</tr>
<tr>
<td>Didactics of Physics (Tübingen School of Education)</td>
<td>position not yet filled</td>
<td>Vector Foundation</td>
</tr>
</tbody>
</table>
Special awards in 2016

University Prize for Werner Siemens Foundation

In recognition of its outstanding efforts to support excellence and innovation at the Werner Siemens Imaging Center (WSIC), the University of Tübingen presented its 2016 University Prize to the Werner Siemens Foundation. The Foundation has donated 12.3 million euros since 2006 – endowing a professorship and a doctoral research training center, and funding the construction and equipping of the new Werner Siemens Imaging Center. In the coming years, the Foundation will invest a further 15.7 million in the development of new imaging techniques.

The Center employs 55 researchers headed by Professor Bernd Pichler. They will use the 15.7 million euros to investigate cutting-edge biological and medical methods in preclinical imaging. Imaging procedures are becoming increasingly important in diagnostics and treatment, as well as in basic research in biomedicine. A new combination of magnetic resonance imaging (MRI) and positron emission tomography (PET) technologies is yielding encouraging results. Professor Pichler’s working group developed the world’s first preclinical combined PET-MRI system. Working in collaboration with Siemens, the group followed that with the first clinical combined system, allowing better diagnosis of neurodegenerative disorders like Alzheimer’s. Successful basic research in the area is currently being translated into clinical studies.

The big issue in the coming years will be the linking of the quantitative parameters of multi-modal imaging with high-throughput technologies such as genomic, proteomic and metabolic analyses. Close cooperation with the Max Planck Institutes located in Tübingen enables the researchers to use the latest machine learning techniques to process and mine the often very large multi-parametric data sets. The goal is a very precise definition of any disease in question – enabling a search for a tailor-made treatment. Potential applications include diagnosing and treating a broad sweep of oncological and neurodegenerative diseases. The Center plays an internationally pioneering role in diagnostics using imaging in the field of infectious diseases and in immunological questions and immunotherapy.

Werner von Siemens (1816-1892) was an inventor and entrepreneur who brought vision and impetus to the fledgling electroindustry in the second half of the nineteenth century. The Werner Siemens Foundation supports projects in the areas of education, training, and youth sponsorship; in the sciences, particularly in technology and the natural sciences.
Deutsche Krebshilfe backs Comprehensive Cancer Center Tübingen-Stuttgart

German cancer aid organization Deutsche Krebshilfe pledged three million euros over four years to the Comprehensive Cancer Center CCC Tübingen-Stuttgart for its outstanding cancer research. The Center is run jointly by the University Hospitals and the Faculty of Medicine with the Robert Bosch Hospital in Stuttgart.

It has expanded its established interdisciplinary structures such as organ cancer centers and tumor conferences, and in the past three years has nearly doubled the number of patients taking part in clinical studies.

The Deutsche Krebshilfe sponsors cutting-edge cancer research aimed at improving treatment for cancer patients across Germany; at these cancer research centers, tumor patients are given the latest therapies. The centers are pledged to promote innovative research to continually improve cancer treatment and to form networks in cancer research.

Else Kröner-Fresenius Foundation funds research training group for oncologists

The Else Kröner-Fresenius Foundation has put up one million euros to support joint training for doctors specializing in cancer treatment at the Tübingen University Hospitals. The research training group gives highly-qualified young doctors the chance to become clinician scientists, conducting research parallel to working as doctors. This enables them to better connect basic research with clinical application to develop better treatments.

Doctors’ specialist training usually leaves them with little time for research. The research training group gives participants 18 months relief of clinic commitments over three years in order to concentrate on research projects.

The focus is on the resistance to treatment which develops in solid tumors in the brain and the gut. The group is supervised by eleven professors active in top international research. The research training group’s spokeswoman is Professor Ghazaleh Tabatabai, head of the Interdisciplinary Section for Neurooncology at the University Hospitals and the Hertie Institute for Clinical Brain research.

Karl and Anna Buck Foundation sponsors chemistry research

The Karl and Anna Buck Foundation backs projects in the sciences. In 2016, the foundation made its fifth grant to create doctoral research positions and to enable the purchase of instrumentation for chemistry research.

This enables a project addressing new compounds which can be used to develop organic solar cells. A second project takes the first steps in the search for new protein biomarkers to help catch cancer in its early stages. The Karl and Anna Buck foundation is also backing a project in solid-state chemistry and theoretical inorganic chemistry which seeks to synthesize molybdenum-halogen compounds and investigates their photophysical properties.

The Stuttgart-based foundation has been sponsoring projects in medicine, medical technologies, chemistry, biotechnology, and other life sciences since 2000. It was established by Karl Buck, founder of the Buck Chemie chemicals company in Herrenberg.
Ludwig Hiermaier Foundation project successfully completed

The Ludwig Hiermaier Foundation for applied cancer research sponsored a project by Tübingen radiologist Dr Georg Bier, who sought better imaging of ribs. Finding lesions in the ribs is particularly important for patients with the plasm cell cancer multiple myeloma – because their number decides the type of treatment doctors choose. Bier developed new software to identify damage in the ribs much faster and more reliably than before. The program is able to virtually “open up” the computer tomography images of damaged ribs.

Gift of manuscript reproductions

In March 2016 the University Library received an endowment of valuable facsimiles of manuscripts from Lydia Stilz, following on her 2013 donation of a collection of facsimiles of the illuminated Codex Egberti from the tenth century. Ms Stilz’ latest gift includes reproductions of parts of the Golden Evangelienbuch of Echternach, prayer books belonging to Otto III and James IV of Scotland, the Wolfenbüttel Sachsenspiegel, the Utrecht Psalter, the Reichenau Perikopenbuch, and the Werden Psalter. This greatly expands the University Library’s collection in this area and makes valuable historical works accessible to researchers and the general public.
Networks
Partners at home and abroad

Here in Tübingen we are working to ensure that the latest technology is harnessed to improve lives and strengthen society – today and in the future. We know that technological progress must go hand-in-hand with ethical reflection and dialogue between cultures, so we promote these in many different ways. Tübingen has joined with other universities to play a greater role in evidence-based policymaking to make the European Union stronger and smarter. To that end, we work closely with partners around the world, and invite international students and researchers to join us.

Cyber Valley artificial intelligence cooperation launched in southwest Germany

Intelligent systems may be set to radically change the way we live and work. Research institutions in southwest Germany seeking to shape this process have launched a collaborative effort called Cyber Valley. With the aim of making the Stuttgart area one of the top locations for artificial intelligence, the Universities of Tübingen and Stuttgart, the state of Baden-Württemberg, the Max Planck Institute for Intelligent Systems, and the companies Bosch, Daimler, Porsche, BMW, ZF Friedrichshafen and Facebook joined forces in December 2016 to turn results of basic research into commercial applications.

Artificial systems are able to perceive, understand, act, and learn from experience before carrying out subsequent actions. They are able to work independently in a complex and dynamic environment – something people and even animals do all the time. Researchers aim to understand the underlying mechanisms which drive and regulate living organisms and to recreate them in artificial systems for applications in both the real and the virtual worlds. Intelligent systems are used in self-driving cars and industrial production and can be used in the diagnostics and treatment of diseases, to evaluate very large data sets, or for tasks too dangerous for humans in rescue or disaster situations.
Partners at home and abroad

Institute for Intelligent Systems and the Universities of Stuttgart and Tübingen.
The ten-year, 5.4 million euro professorship sponsored by Bosch at the University of Tübingen will focus on machine learning, one of the core research areas in the joint work on artificial intelligence, robotics, and computer vision.

It is hoped that this major collaborative effort will encourage world-class research and new commercial enterprises in these future technologies. The Cyber Valley initiative is backed by a consortium of foundations including the Carl Zeiss Foundation, the Christian Bürkert Foundation, the Gips Schüle Foundation and the Vector Foundation – who are funding four junior research groups. This contribution to research helps to bring together university and non-university specialists.

Combining local expertise in this way is expected to make the region more attractive to highly-qualified junior researchers and company founders. Nine research groups are being set up with financing from the state government, industry, and regional foundations. Working with the Max Planck Institute for Intelligent Systems, the Universities of Tübingen and Stuttgart are setting up ten new professorships. Bosch and Daimler are sponsoring two professorships; and a Graduate School for up to 100 doctoral researchers is to follow mid-2017 under the auspices of the Max Planck Institute for Intelligent Systems and the Universities of Stuttgart and Tübingen.

Far left: President Engler signs the artificial intelligence cooperation agreement in the presence of State Minister of Science, Research and the Arts Theresia Bauer, and State Premier Winfried Kretschmann.

Above: Intelligent systems can learn from experience and may soon take on tasks which are highly complex or dangerous – or which humans simply find dull.
Ethics in academia

Global Ethics Institute – Promoting international responsibility

World peace depends on world economic conditions. And just economic conditions depend on global ethics. To ensure basic research into global ethics, the renowned theologian Professor Hans Küng founded the Global Ethics Institute in 2012. The Institute’s researchers work to define the theoretical legitimation of a global ethic and seek dialogue between cultures. The Global Ethics Institute is associated with the University of Tübingen. It provides a forum for smarter management and leadership ideas. The institute is sponsored by the Karl Schlecht Foundation and has seven full-time staff headed by Professor Claus Dierksmeier and Dr Bernd Villhauer. It works with academic, business, and civil institutions and is based on decades of interreligious research by the Global Ethic Foundation.

Among its projects is the World Citizen School, an innovative training program for more than 200 volunteer students who carry out joint projects and initiate projects based on their own ideas. The Global Ethics Institute also offers teaching units for University of Tübingen students and public events.

Director Professor Claus Dierksmeier (fourth from right) with staff of the Global Ethics Institute
Key research partners in Germany

- BCCN – Bernstein Center for Computational Neuroscience
- Dr Margarete Fischer-Bosch Institute for Clinical Pharmacy (Stuttgart)
- Forschungsinstitut für Arbeit, Technik und Kultur e.V. (Tübingen)
- Forschungszentrum Jülich (Helmholtz Association)
- Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB, Stuttgart)
- Friedrich-Miescher-Laboratorium of the Max Planck Society (Tübingen)
- Global Ethics Institute (associated institute)
- Heidelberg Academy of Sciences and Humanities
- German Center for Diabetes Research (DZD; Helmholtz Association)
- German Center for Infection Research (DZIF; Helmholtz Association)
- German Center for Neurodegenerative Diseases (DZNE; Helmholtz Association)
- German Consortium for Translational Cancer Research (DKTK; Helmholtz Association)
- Helmhotz Centre for Environmental Research (Leipzig-Halle)
- Hertie Institute for Clinical Brain Research (Tübingen)
- Institut für donauschwäbische Geschichte und Landeskunde (Tübingen)
- Institut für Rehabilitationsforschung, Qualitätsentwicklung und Strukturanalyse in der Behindertenhilfe (REQUEST) e. V. (Tübingen)
- Institute for Applied Economic Research (associated institute)
- Knowledge Media Research Center (Tübingen; Leibniz Association)
- Max Planck Institute for Biological Cybernetics (Tübingen)
- Max Planck Institute for Developmental Biology (Tübingen)
- Max Planck Institute for Intelligent Systems (Stuttgart/Tübingen)
- MFO mathematics research institute (Oberwolfach; Leibniz Association)
- NMI – Natural and Medical Sciences Institute (associated institute)
- Senckenberg Research Institute (Frankfurt am Main)
- Sthaaliches Seminar für Didaktik und Lehrerbildung (Gymnasien) Tübingen
- Universität Hohenheim – Center for Nutritional Medicine (ZEM) Tübingen – Hohenheim
- University of Applied Forest Sciences – Rottenburg
- University of Stuttgart – Inter-University Center for Medical Technology (IZST)
- Werner Siemens Foundation

In collaborative research centers/transregional collaborative research centers

- Plasticity and Sleep (SFB/TRR 654)
  - Kiel University
  - Lübeck University
- The Skin as a Sensor and Effector Organ Orchestrating Local and Systemic Immune Responses (SFB-Transregio 156)
  - University of Heidelberg
  - University of Mainz
- Biological Design and Integrative Structures Analysis, Simulation and Implementation in Architecture (SFB-Transregio 141)
  - University of Stuttgart
  - University of Freiburg
  - Fraunhofer Institute for Building Physics (Stuttgart)
  - Stuttgart State Museum of Natural History
- Pathophysiology of Staphylococci in the Post-genomic Era (SFB-Transregio 34)
  - University of Greifswald
  - University of Würzburg
- Control of Quantum Correlations in Tailored Matter (SFB-Transregio 21)
  - Max Planck Institute for Solid State Research (Stuttgart)
  - University of Stuttgart
  - University of Ulm
Tübingen hosts new Center for Archaeometry and Materials Sciences

University of Tübingen is now home to a new center specializing in archaeometry. The Competence Center Archaeometry – Baden-Württemberg (CCA-BW) is jointly sponsored by the Baden-Württemberg Ministry of Science, Research, and the Arts, Helmut Fischer GmbH Institut für Elektronik und Messtechnik and University of Tübingen funding from the government’s Excellence Initiative, who together will provide 800,000 euros over three years. The new center arose from the Archaeometry section of Applied Mineralogy and will be headed by Tübingen mineralogists Dr Christoph Berthold, Professor Klaus G. Nickel and Senior Professor Klaus Bente.

The researchers will be able to obtain detailed information about the materials used primarily in ceramics – such as chemical and mineralogical composition, structure and texture. They will examine prehistoric sherds as an expression of neolithic evolution, as well as glazed ceramics of classical civilizations and the biomineral decorations of Celtic jewelry; they will also be able to certify whether items from historical times are genuine or not. The archaeometrists are able to identify the raw materials used in an object in order to trace the route along which it may have been traded, as well as the techniques used to make it, which may help us to better understand the deterioration of archaeological finds and perhaps to improve on current restoration techniques.

The center will work with its industrial partner, Helmut Fischer GmbH Institut für Elektronik und Messtechnik, to develop a mobile analysis unit which will enable the high-resolution, non-destructive, multi-method analysis of finds even in remote places.

Using materials science methods – here a combination of X-ray microdiffraction and Raman spectroscopy – the researchers at the Center can obtain detailed data about the composition of archaeological finds.
Elie Wiesel research in cooperation with Heidelberg

The University of Tübingen Faculty of Catholic Theology is working with Heidelberg’s Jewish Studies Center, the Hochschule für Jüdische Studien, on research into Elie Wiesel. The aim is to consolidate international and interdisciplinary research into the Holocaust survivor, author, and Nobel Peace Prize laureate Elie Wiesel.

Elie Wiesel was born into a Jewish Orthodox family in Sighet, Romania, in 1928. In May 1944 at the age of 15, he and his family were deported to Auschwitz concentration camp. He was later transferred to Buchenwald. Wiesel survived the mass murder of Jews by the Nazis. After WWII he was taken to France. He later emigrated to America. He spent the rest of his life working for remembrance of the Holocaust and against political and religious persecution. He received the Nobel Peace Prize in 1986. Elie Wiesel died in New York in 2016 aged 87.

The research institute named after Wiesel was established in 2013 by Professor Reinhold Boschki in Tübingen and Professor Daniel Krochmalnik at the Hochschule für Jüdische Studien Heidelberg. Boschki has edited a number of volumes of essays and interviews, authored many academic publications, and translated various works by Wiesel into German. The two researchers are preparing a German-language edition of Wiesel’s full works. They also work for education about the Holocaust, a culture of critical remembrance, and for Jewish-Christian dialogue.
Tübingen joins Guild of European universities

A group of world leading universities met in June 2016 in Brussels to found the Guild of European Research Intensive Universities. The University of Tübingen is one of the founding members. Other members include the Universities of Bologna, Glasgow, Göttingen, Groningen, the Jagiellonian University in Krakow, and the Universities of Oslo, Uppsala, and Warwick.

The aim is to harness the expertise to collaborate on innovative solutions to some of Europe’s most intractable scientific and social challenges, via dialogue and cooperation with the European Commission, MEPs, national parliaments, and other state bodies. The Guild is headed by Professor Ole Petter Ottersen (Oslo).

Guild members appealed to policymakers to act to prevent social divisions in Europe, and to work with institutions of higher education to promote dialogue and equality regardless of cultural and social borders.

China Center opened

In April 2016 the University of Tübingen opened the China Center Tübingen (CCT). It was initiated and sponsored by the Karl Schlecht Foundation and will support research into the manifold aspects of economic, political, social and cultural life in China.

A core area of research is the transmission of values in the Chinese world. The CCT will investigate the approaches to sustainability and ethics in Chinese economy. Sinologist Professor Helwig Schmidt-Glintzer is the CCT’s director. Deputy director Matthias Niedenführ has been an assistant professor in Sinology and Economic Ethics at the University of Tübingen since 2014. The professorship is sponsored by the Karl Schlecht Foundation.

The new institute sees itself as a platform for researchers and those with practical experience in China. It provides the opportunity for exchange and communication with Chinese academics, and plans to develop programs to improve knowledge transfer with today’s China. The CCT will share some research areas with the Global Ethics Institute, which is also sponsored by the Karl Schlecht Foundation. The two institutes are located near to each other in Tübingen. The CCT will integrate the Erich Paulun Institute, which was founded in 2013 at the TU Munich by the German-Chinese Bureau of Economic Research. It supports Sino-German student clubs and the teaching of Chinese. (www.erich-paulun-institut.de)
Jean Monnet Centre of Excellence researches regionalization in the EU

The Jean Monnet Centre of Excellence PRRIDE opened its doors at the University of Tübingen in June. PRRIDE is an acronym for “Positioning Regions and Regionalism in a Democratic Europe.” The focus is on the European Union’s regions and the tendency toward regionalism. The aim is to bring together researchers from various disciplines working in this area and to link them up at the regional, national, and international levels. The center is sponsored by the European Commission’s Erasmus plus program to 2018. Director of the PRRIDE center is Professor Gabriele Abels of the Institute of Political Science.

Professorship in Gabon

The University of Tübingen set up its first professorship in an African country. The post is sponsored by the German government-financed German Center for Infection Research (DZIF) and the government of Gabon. The new professor is based at the Centre de Recherches Médicales de Lambaréné (CERMEL) in Gabon and focuses on immuno-epidemiology and clinical infection research in the tropics. Dr Ayola Akim Adegnika has been appointed to the post for an initial five year period. Dr Adegnika is currently co-director at CERMEL in the Gabonese town of Lambaréné, some 270km southeast of the capital Libreville.

The new research professorship reinforces co-operation between the University of Tübingen and both the DZIF and its partners in Gabon. Professor Peter Kremsner of the Tübingen Institute of Tropical Medicine has worked with CERMEL and the Albert Schweizer Hospital in Lambaréné for many years, and is currently their scientific director. The new professorship provides an opportunity to step up collaboration in developing new vaccines and treatments. 42 year old Adegnika will conduct most of his research and teaching in Gabon, interspersed with lecturing and heading research in Tübingen.

Humboldt Professorship

Humboldt Professorships bring top international researchers to Germany. Candidates are nominated by the universities and the winners are selected by the Humboldt Foundation. The Foundation has selected three candidates for the Humboldt Professorship in the current round 2017.

The University of Tübingen is hosting its third Humboldt Professorship. Germany’s largest monetary international research prize brings applied microbiologist Professor Lars Angenent to the university’s Geoscience Department. Previously he conducted his research at the Department of Biological and Environmental Engineering at Cornell University, New York. The Humboldt Professorship is sponsored with 5 million euros over five years.

Angenent will build bridges in two different ways. On the one hand, he creates a connection between environmental and medical microbiology; on the other hand, he links up basic research with a problem-oriented, applications-based discipline. 46-year old Angenent was born in the Netherlands. He studied environmental science and microbiology and has worked as a researcher in the US for many years, most recently at Cornell University, New York.

He has worked on microbiome characterization in air, bioreactors, and lungs. For example, he developed a method with which all microbes in the air of a building could be logged – for instance, to track down the source of airborne disease in a hospital. In the area of environmental technology he was one of the first scientists to work on storing energy from renewables with the help of microbes. In this process, solar and wind power are used to produce hydrogen gas, which microbes convert into methane – a gas that can be stored. Professor Angenent is also interested in the production of soluble biochemicals from wasted materials and the capture of carbon produced by industry. Yet, he is also involved in basic research, which helps us to better understand the biochemistry and energetics of microbial metabolic pathways.

Angenent is the University of Tübingen’s third Humboldt Professor. Before, the Professorship was awarded to the linguist Rolf Harald Baayen, who came from the University of Alberta in 2012, and last year the plant geneticist Marja Timmermans came to Tübingen from Cold Spring Harbor Laboratories, New York.
Distinguished Guest Professors in Tübingen

The Distinguished Guest Professorship enables Tübingen professors to invite outstanding academics to work on specific joint projects at the University. The Distinguished Guest Professorship is funded by the Excellence Initiative and the state Ministry of Science, Research, and the Arts.

Mathematician Professor Simon Brendle of Columbia University launched his three-year Distinguished Guest Professorship in 2016. Professor Brendle, a Tübingen alumnus, is one of the leading mathematicians in the field of geometric analysis. He is spending three-month periods in Tübingen to conduct research and teach Tübingen students. His research intersects with many of the fields of core research at the University of Tübingen’s Mathematical Institute. He will cooperate closely with Professor Gerhard Huisken on geometric analysis and mathematical relativity theory.


Brendle’s special field is geometric partial differential equations, which describe the deformation of geometric bodies. He has found solutions to a number of longstanding mathematical problems and has constructed counterexamples to what were believed to be solutions to others. Brendle has also made substantial contributions to mathematical finance, for instance in the area of portfolio optimization.

The University of Tübingen’s latest Distinguished Guest Professor is the Finnish professor of drug design, Professor Antti Poso of the University of Eastern Finland in Kuopio. Poso works with Professor Lars Zender of Tübingen’s Department of Internal Medicine VIII at the University Hospital and is involved in the DFG-sponsored research unit 2314: Targeting Therapeutic Windows in Essential Cellular Processes for Tumor Therapy.

Poso works with Professor Lars Zender of Tübingen’s DFG-sponsored research unit 2314: Targeting Therapeutic Windows in Essential Cellular Processes for Tumor Therapy.

The latest methods of computer-assisted drug design enable researchers to predict the interaction between a target in the body and a potential new drug at the molecular level. Targets for the development of new medications are, for instance, substances and receptors which appear different in cancer cells and in healthy cells. Professor Poso uses 3D models of the targets to search substance databases for ideal constituents which would dock onto the target and attack the cancer cells. Promising pharmaceuticals are passed on to Poso’s partners in Tübingen, who subject them to further laboratory and clinical testing. If a substance passes these tests, it is often sent back to Professor Poso, who seeks to optimize the drug in a further round of theoretical examination.
The University joins “Scholars at Risk”

In 2016 the University of Tübingen joined the Scholars at Risk (SAR) network, which supports researchers around the world who are persecuted or restricted in their work. Tübingen is the eighth member of the network’s German section. Our Tübingen Refugee Coordination Office receives information from SAR about academics in danger around the world who could continue their careers at the University of Tübingen.

Syrian archaeologist Professor Ammar Abdulrahman is an internationally-recognized researcher and was director of Archaeology at the University of Damascus. He had to leave because of the civil war in Syria. He will be continuing to teach and conduct research – now at the University of Tübingen, thanks to a two-year fellowship from the Philipp Schwartz Initiative of the Humboldt Foundation.

There he will work at the Institute for Ancient Near Eastern Archaeology with Professor Peter Pfälzner on the evolution of Bronze Age settlements in Syria and northern Iraq. Their research project involves mapping ancient sites using the latest geo-information systems. The project will make an important contribution to the preservation of the historical record. The two men previously worked together on excavations in Syria for a number of years.

The Philipp Schwartz Initiative was founded by the Humboldt Foundation in conjunction with the German Foreign Office.

Mobilizing students and researchers

Baden-Württemberg Foundation – Promoting exchanges

The Baden-Württemberg-Stipendium is a program run by the Baden-Württemberg Foundation, under which several hundred scholarships are awarded annually to promising students seeking to study abroad. The University of Tübingen made use of the scheme to help finance some 1,600 international and Tübingen students since 2001. In the academic year 2015-16, the scheme provided 262,900 euros, adding another 88 scholarship holders.

The Baden-Württemberg Foundation’s BWS Plus scheme promotes innovative international joint projects. In 2016 Tübingen received funding for law professor Bernd Heinrich’s “Cooperation Eastern Europe” project. Running for three years, the project oversees the exchange of law students between Tübingen and universities in Lviv, Ukraine, and Szeged, Hungary. The project aims to reinforce the concept of the rule of law, initiate dialogue on political and social issues and thereby raise understanding between Germany and Eastern Europe. It runs from January 2017 to the end of 2020.

Strong support from the German Academic Exchange Service

The University of Tübingen received 5.2 million euros from the internationalization funds of the German Academic Exchange Service (DAAD) in 2015 – an increase of more than one million over the previous year (2014: 4.14m euros). In 2015, 216 international students, doctoral candidates, and visiting academics received DAAD sponsorship to come to Tübingen – up from 199 in 2014. The University received some 3.02 million euros in funding for projects and for group programs such as ERASMUS, Bachelor-Plus, PROMOS, and ISAP, about one million more than the previous year.
Our partners around the world

The University of Tübingen has three branches in Asia and maintains regular exchange programs with some 150 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 more than 300 European institutions. Our seven Faculties also have around 150 cooperation agreements with institutions around the globe.

More than 800 students annually take advantage of the many exchange schemes we offer. Numbers on the map indicate how many Tübingen students studied in which continents in 2016.

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**North America**

Canada
- University of Alberta - EDMONTON, ALBERTA
- McGill University - MONTREAL, QUEBEC
- 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
- University of Arizona - TUCSON, AZ
- California State Universities - CS*
- University of Denver - DENVER, CO
- Connecticutt 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*
- 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
- Princeton Theological Seminary - PRINCETON, NJ
- St. Mary’s College of California - Moraga, CA
- Hobart and William Smith Colleges - GENEA, NY
- North Carolina State Universities - NC*
- University of North Carolina at Chapel Hill - CHAPEL HILL, NC
- 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
- Universidade em Lapão - LAJADO
- Universidade Federal Fluminense - RIO DE JANEIRO
- Universidad Católica - RIO DE JANEIRO
- Universidade Federal de Pernambuco - RECIFE
- Universidad Federal de Santa Maria - SANTA MARIA
- Universidad de São Paulo - SÃO PAULO
- Campus Universitario Ribeirao Preto - SÃO PAULO

Chile
- Pontificia Universidad Católica de Chile - SANTIAGO

Colombia
- Universidad San Francisco de Quito - QUITO

Ecuador
- Universidad Francisco de Quito - QUITO

Mexico
- Universidad Iberoamericana - CIUDAD DE MEXICO

Peru
- Pontificia Universidad Católica del Perú - LIMA

Uruguay
- Universidad de Montevideo - MONTEVIDEO

Venezuela
- Universidad de los Andes - MÉRIDA
Variety and innovation

At the University of Tübingen we are aware of the broad span of our students’ interests and seek to support them as they take new academic paths into previously undreamed-of fields of study and into new professions now needed in society. Our recently-established School of Education helps future teachers to become highly specialized and effective while being keenly aware of the part they will play in shaping the next generations of students and workers. We are helping to train specialists in areas as diverse as Medical Informatics and Muslim Pastoral Care, while also helping to prepare young people – including refugees – for university studies.

Tübingen’s popularity with international students stronger than ever

Overall numbers remain stable

In the winter semester of 2016-17 the University of Tübingen had a total of 28,394 enrolled students, almost the same number as in the previous year. The proportion of women students has remained at around 58 percent for the past six years; and the proportion of international students has continued its gentle rise. At the start of the 2016-17 academic year it stood at 13.7 percent, up from 13.1 percent in 2015.
Student numbers at a glance

Enrollments

<table>
<thead>
<tr>
<th>Winter semester 2016-17</th>
<th>Total</th>
<th>Female</th>
<th>International students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall enrollments</td>
<td>28,394</td>
<td>16,536</td>
<td>58.2% 3,887 13.7%</td>
</tr>
<tr>
<td>New enrollments</td>
<td>5,720</td>
<td>3,452</td>
<td>60.3%</td>
</tr>
</tbody>
</table>

By Faculty

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Winter semester 2016-17</th>
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<tbody>
<tr>
<td>Protestant Theology</td>
<td>539</td>
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<tr>
<td>Catholic Theology</td>
<td>229</td>
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<tr>
<td>Law</td>
<td>2,361</td>
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<td>Medicine</td>
<td>3,874</td>
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<td>Humanities</td>
<td>8,506</td>
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<td>Economics and Social Sciences</td>
<td>4,583</td>
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<td>Center of Islamic Theology</td>
<td>178</td>
</tr>
<tr>
<td>Leibniz Kolleg</td>
<td>36</td>
</tr>
</tbody>
</table>

Leibniz Kolleg joins University of Tübingen

The Leibniz Kolleg – which helps young people with diverse interests prepare for formal studies – became part of the University of Tübingen on 1 October 2016. It was previously run by a foundation.

The Leibniz Kolleg seeks to develop character as well as passing on knowledge via its Studium generale and Studium sociale programs. Kolleg members automatically join the University and can use its services as well as having their work accredited in a subsequent degree program.

The Leibniz Kolleg charges tuition fees; subsidies and grants are available to needy students. The Udo Keller Stiftung Forum Humanum is one of its main sponsors.

The Leibniz Kolleg was founded on the initiative of the occupying French military government in 1948.
Making new roads in Education

Tübingen School of Education established

The University launched the Tübingen School of Education (TüSE) in February 2016. It is a new institution to develop new concepts for educating and training high school teachers. The School of Education will help future teachers to meet the growing challenges of their profession – such as diversity and inclusion, and how to integrate new technical options into lessons. TüSE will have 15 new professors, with no less than ten research-oriented professors of specialist subject didactics.

Practical teacher training in the digital classroom

Complementing the Tübingen School of Education, the University of Tübingen opened a digital teaching lab in mid-2016 to help train new teachers. The Tübingen Digital Teaching Lab is located within the Knowledge Media Research Center, one of the University’s close external partners. Students can learn how to design media-based lessons in realistic surroundings and conduct research into the ramifications of using electronic media in the classroom. The state ministry of Science, Research, and the Arts is sponsoring about one million euros for the lab over five years.

The School will bring together subject expertise with cutting-edge Education research. Findings based on solid empirical research will be able to flow on into the education of new teachers. The School of Education works with the Hector Institute of Education Science, the University’s school psychology unit, the Institute of Education and the Leibniz Association’s Knowledge Media Research Center. TüSE director is Professor Thorsten Bohl. The University has invested 5.2 million euros from state government funds to found the School of Education.
New Master’s programs in Medical Informatics and Islamic Pastoral Care

The University of Tübingen is offering a wider and more innovative range of Master’s degrees thanks to the state of Baden-Württemberg’s “Master 2016” program, which provides more than one million euros in funding annually. This has enabled us to create 148 new places in Master’s programs and up to six new professors.

Two new programs were launched in winter semester 2016-17. The Master of Medical Informatics builds upon the Bachelor’s degree in the same subject. And the Center of Islamic Theology began a new Master’s in Practical Islamic Theology – Pastoral Care and Social Work. The four-semester program will prepare its graduates to work with members of the Muslim faith in Germany’s hospitals, refugee shelters, schools, prisons, facilities for the aged, in the armed forces and in Muslim congregations. Participants in the program study the pedagogical and legal foundations of pastoral care and social work, the theory and practice of rituals in Islam, as well as debating Islam in the context of other religions. These new programs help us to produce graduates who will play a practical role in current developments in society.

Training for pharmacists in aid and crisis situations

The Institute of Pharmaceuticals Science has introduced a further-training program unique in Germany – Pharmacy in Development Aid and Disaster Relief. Thirteen qualified pharmacists and 14 Tübingen students were selected to take part in the eight days of training between August and October 2016; this was followed by two-week projects and a final presentation. Two pharmacists from Cameroon took part. The program, directed by Professor Lutz Heide of the Institute of Pharmaceuticals Science is intended to enable pharmacists to use their skills in development aid. It is sponsored by the German Ministry of Education and Research as part of its “Innovative curricula and practical teaching” program.

Pharmaceutical development aid seeks to provide the right medications to people in poor countries and to ensure that the medicine is used properly – this also means organization, specialist consultation, and training of local staff.
Preparatory course for refugees launched

The University of Tübingen has developed its own nine-month course to prepare refugees for formal studies in Germany. The largest part of the 26 to 36 hours of weekly lessons comprises intensive language teaching, leading to the German language certificate required for higher education studies. The first semester outlined German history, politics and society, cultural values and intercultural training. In the second semester, specialist tutors prepare participants for studies in areas such as medicine or mathematics. Participants are guided by local students as part of a buddy program. Non-academic activities, such as excursions and cooking together, are planned both as group and one-to-one exercises.

Participation is free for the 45 refugees in the course in its inaugural year. The participants must meet university entrance requirements for Germany, have a level B1 certificate in German as a foreign language, and have refugee status. Applicants must include a cover letter describing their motivation for taking the course as well as their personal background and academic plans for the future. While taking the course, participants may apply for a regular study place in their chosen subject for the following winter semester of 2017-18. Fifteen of the participants are women. Most of the participants are from Syria; others are from Iraq, Eritrea, Togo, and Egypt. The majority hopes to study medicine, pharmacy, or economics.

Generally speaking, refugees and asylum-seekers in Tübingen may register as guest students, join a mentoring program, and/or take part in a language tandem exchange with German students.
Awards

Historian Johannes Grossmann took the University’s 2016 Teaching Prize, which comes with €2,500 in prize money, for methods which encourage students to work independently and practically. In 2015 he worked with Tübingen’s Institut Francais to hold the intermediary seminar “The French in Tübingen 1945 – 1949/92,” which led to a virtual city tour and audio guide to parts of Tübingen important to its postwar occupation. Grossmann also designed an accompanying exhibition at the Institut Francais. He received the Teaching Prize for this work which enabled students to test out a historian’s role as a guide, archivist, journalist, or curator.

The University of Tübingen’s annual Student Commitment Prize went to the organizers of the 5th Student Sociology Congress. Students Jochen Geiselhart, Thomas Lauterwasser, Max Leckert, Chaim Schenk, Maira Schobert, and Maja Urbanczyk received their award at the Dies Universitatis event in October 2016.

The congress is considered a key event for new sociologists; it was held in Tübingen for the first time in October 2015 under the title Rethinking Thinking. It gave students in the discipline a forum to present and discuss their research projects to other sociologists as well as to students from related subjects among the 250 attendees.

Tübingen law students Sima Samari, Susanne Renz, Karolin Dirscherl and Adrian König won the Roman Law Moot Court at the University of Vienna in April 2016, competing against teams from Athens, Cambridge, Liege, Naples, Oxford, and Trier. It was the first time Tübingen had taken the title. Professor Thomas Finkenauer and Sebastian Schneider coached the team in the case, which involved tort and administrative law. Tübingen beat Cambridge at the final, held at Austria’s constitutional court. Sima Samari and Karolin Dirscherl took the first and third prizes for their performances.

No less than six Sustainability Prizes were awarded for Bachelor’s theses in November 2016. Behrend Dellwisch and Sarah Koch made special contributions in the area of sustainability in their Bachelor’s theses in Geoeconomy and Education respectively. Master’s graduates Johanna Conrad and Carla Herth received their prizes for their work in Human Geography and Geoeconomy. Teaching degree students Josua Föttinger and Andri König earned their prizes in the fields of Physics and Philosophy/Ethics. The awards were made at the annual Sustainability Lecture, in 2016 held by energy expert Ursula Sladek on the challenges of introducing large-scale renewable energies in Germany.
**Following through on strategy**

2016 saw the completion of a major building project and the launch of two more at our Morgenstelle science campus. Our efforts to support equal opportunities are reflected in some key indicators. And the President’s Office welcomed Professor Monique Scheer to reinforce and further develop our international strategies.

**News**

<table>
<thead>
<tr>
<th>The President’s Office</th>
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<tbody>
<tr>
<td><strong>President</strong></td>
<td><strong>Professor Bernd Engler</strong></td>
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<tr>
<td><strong>Executive Vice-President</strong></td>
<td><strong>Dr Andreas Rothfuss</strong></td>
</tr>
<tr>
<td><strong>Vice-President of Academic Affairs</strong></td>
<td><strong>Professor Karin Amos</strong></td>
</tr>
<tr>
<td><strong>Vice-President of Research</strong></td>
<td><strong>Professor Peter Grathwohl</strong></td>
</tr>
<tr>
<td><strong>Vice-President of International Affairs</strong></td>
<td><strong>Professor Monique Scheer</strong></td>
</tr>
</tbody>
</table>
New Vice-President of International Affairs

US-born cultural anthropologist Monique Scheer became the University’s Vice-President of International Affairs in October 2016, when Professor Heinz-Dieter Assmann retired. As an American, Professor Scheer maintains close contacts with top universities in North America, as well as with many other partner institutions around the world.

She plans to spend her four-year term promoting the University of Tübingen’s long-term international goals, focusing on cooperation with outstanding universities in Europe and North America in the areas of student exchanges and in research. She stresses the importance of maintaining contacts with international researchers as part of making networks sustainable. She aims to ensure that contacts made can be kept up, particularly via the Tübingen researchers’ alumni network.

Monique Scheer has been a professor of Historical and Cultural Anthropology at the University of Tübingen since 2014, focusing on cultural variety.

Women climbing the career ladder

The proportion of women holding full professorships at the University of Tübingen rose from 7.2 percent in 2005 to 21.3 percent in 2016. We have taken a number of steps in recent years to encourage top female researchers to pursue their academic careers with us; in this way the University benefits from their talent and reduces the gap between the numbers of male and female professors.

Several indicators show positive trends. The measures include participation in the German government’s Women Professors Program, which provided funding in 2007 and 2012 for professorships going to qualified women. We were also able to appoint a number of outstanding women researchers to professorships under our Excellence Initiative programs. We hope that the growing number of women in senior positions will motivate female students to choose academic and scientific careers.

Women represent a growing proportion of successfully completed doctorates and postdoctoral qualifications at the University of Tübingen – 51 percent of doctorates in 2016. The proportion of women completing the postdoctoral habilitation has risen to 26 percent, a result partly due to our programs to support female researchers at the University of Tübingen.

Professors at the University of Tübingen

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
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<tbody>
<tr>
<td></td>
<td>Total</td>
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<tr>
<td>Protestant Theology</td>
<td>14</td>
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<td>Catholic Theology</td>
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<tr>
<td>Center of Islamic Theology</td>
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<td>Law</td>
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<tr>
<td>Faculty of Medicine</td>
<td>113</td>
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<tr>
<td>Humanities</td>
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<td>Economics and Social Sciences</td>
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<td>Science</td>
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<tr>
<td>Knowledge Media Research Center</td>
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<tr>
<td>Central institutions</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
</tr>
</tbody>
</table>

As of: 30 June 2016
University finances

University budget (excluding Medicine)

Revenue 2016 (€340.3m)*

- State funding: €203.6m (59.8%)
- Baden-Württemberg state funding: €22.6m (6.7%)
- Third-party funding: €100.5m (29.5%)
- Other: €13.6m (4.0%)

Expenditure 2016 (€335.2m)*

- Operating buildings: €22.4m (6.7%)
- Baden-Württemberg state funding: €21.1m (6.3%)
- Teaching and research incl. University Library and Center: €22.8m (6.8%)
- Staff: €160m (47.8%)
- Other: €21m (6.3%)
- Set-up investments: €5.5m (1.6%)
- Building investments: €10.4m (3.1%)
- Third-party funding: €90.9m (27.1%)

Faculty of Medicine

Revenue 2016 (€222.2m)*

- State funding for investments: €4.1m
- Third-party funding: €89.7m
- Other: €17.6m
- State funding: €110.8m

Expenditure 2016 (€235.5m)*

- Staff and operating costs: €106.2m
- Investments via state funding: €4.1m
- Investments via third-party funding: €8m
- Other: €23.8m
- Third-party funding: €93.4m

* preliminary figures
Following through on strategy

University Structures

The cornerstone for a new Environmental and Geoscience Center (GUZ) building was laid at the Morgenstelle Campus in March 2016. The energy-efficient building will have 10,000m² of floor space for labs, workshops, offices, lecture halls, and classrooms. It will cost around 64 million euros and is slated for completion in mid-2018.

Geoscience in Tübingen focuses on issues of climate change, soil and water pollution, harnessing new sources of energy and raw materials, and the development of new technologies to protect the environment. This building will bring together disciplines which have been at separate locations until now, including Mineralogy and Geodynamics, parts of Palaeobiology and Applied Geoscience. The new location among our natural sciences institutes will promote exchange with the disciplines of Biology, Physics, and Chemistry.

Tübingen’s Geoscience Department’s strong networks and good reputation have made it an attractive partner for colleagues in Germany and abroad.

Work begins on new Environmental and Geoscience Center

The new Geosciences complex under construction at the Morgenstelle Campus
The new building for the Tübingen location of the German Center for Neurodegenerative Diseases at the Schnarrenberg Campus

Opening ceremony for German Center for Neurodegenerative Diseases

The Tübingen location of the German Center for Neurodegenerative Diseases (DZNE) opened its doors in January 2016. Close by the Tübingen University Hospitals, its 150 researchers will seek new strategies for dealing with neurodegenerative disorders such as Alzheimer’s and Parkinson’s disease – including better prevention, diagnostics, and treatment.

The building costs of 15.9 million euros were borne jointly by the DZNE, the Faculty of Medicine, and University Hospitals under the auspices of the state government. The Baden-Württemberg Ministry of Science, Research and the Arts contributed 3.25 million euros to plan and equip the Center. Tübingen is home to one of the German Centers for Neurodegenerative Diseases.

The German Center for Neurodegenerative Diseases (DZNE) formed the third and final part of the Neuroscience Campus ensemble, which also includes the Hertie Institute for Clinical Brain Research and the Center for Integrative Neuroscience (CIN). The new building comprises 2,700m² of floor space over eight levels, including laboratories, offices, and classrooms used by the 70 employees.
Interfaculty Institute of Biochemistry –
Building phase II launched

The ground was broken on a new research building for the Interfaculty Institute of Biochemistry (IFIB) in October 2016. It is the second phase of the Center for Plant Molecular Biology complex. The first was completed in 2013. The new building will comprise some 5,300m² of floor space, including labs, computer rooms, classrooms, offices, and meeting rooms and is due for completion in 2019. The 41 million euro construction is funded by the state of Baden-Württemberg.

IFIB researchers investigate biochemical processes from the organism and cell level, right down to the molecular level. Research often focuses on communications within the cell and between cells, and on the fate of individual cells. Biochemistry findings frequently lead to a better understanding of the causes of disease – thereby offering approaches for new treatments. The Interfaculty Institute of Biochemistry forms a bridge between biological, chemical and medical research. It works closely with the Center for Plant Molecular Biology. The new physical proximity of the institutions will provide optimal conditions for research and teaching at IFIB.
Celebrating Knowledge
How the Arts and Sciences Unite Us

A range of exciting events at the University of Tübingen in 2016 showed how ideas bring people together. A musical highlight and a number of prominent speakers underlined how interconnected today’s world is; and two institutes working internationally celebrated five decades of discovery in their fields.

Prominent Events
A fictional detective becomes an opera hero

In July 2016 the University’s Musical Director, Philipp Amelung, took Tübingen into new artistic territory when he put Kurt Wallander, the detective from the Swedish crime novels by Henning Mankell, onto the opera stage. The opera “W – The Truth Beyond” premiered July 15. It was composed by Fredrik Sixten and the libretto was by Klas Abrahamsson, both from Sweden.

The opera took up the theme of Mankell’s final Wallander novel. Shortly before his retirement, Wallander returns to an old, unsolved case, uncovering dark secrets and the long hidden “truth beyond” of the title. The opera in two acts told the story of remembrance and forgetting, love and identity. After three shows in Tübingen, the production moved to the Swedish town of Ystad, setting of the Wallander novels, where it ran seven times in August with the La Banda Modern Orchestra. “W – The Truth Beyond” received good reviews for both the originality of the idea and the quality of the production.

Lucas Prize for Polish writer Adam Zagajewski

Polish writer and essayist Adam Zagajewski received the University of Tübingen’s 2016 Dr Leopold Lucas Prize. The Faculty of Protestant Theology paid tribute to his literary work, as well as to his political and social activities as a critic of dictatorship and totalitarianism, and his promotion of unity and freedom in Europe.

Adam Zagajewski was born in 1945 in Lwów, studied Psychology and Philosophy at the Jagiellonian University of Krakow, where he subsequently worked. He was a member of the Workers’ Defense Committee; his works were banned in Poland in 1976. He lived in West Berlin on a DAAD artists’ program from 1979 to 1981. From 1982 he lived as an exile in Paris and taught at the University of Houston in Texas, then at the University of Chicago. In 2002, Zagajewski returned to Krakow.

His best known works include Mysticism for Beginners (1997); Eternal Enemies: Poems (2008); and Unseen Hand: Poems (2011). His works have been translated into a number of languages, including English and German. He has received widespread international recognition, most recently the Jean Améry Prize for European essay writing.

The €50,000 Dr Leopold Lucas Prize honors outstanding achievements in the fields of theology, intellectual history, historical research, and philosophy. It goes to individuals who have promoted tolerance and better relations between people and nations. The Prize is a tribute to the memory of the Jewish rabbi and scholar, Dr Leopold Lucas, murdered at Theresienstadt concentration camp in 1943. The Prize was endowed by his son, Franz D. Lucas, in 1972.

At the suggestion of the Faculty of Catholic Theology, the Lucas Prize for Junior Researchers went to theologian Dr Daniela Blum for her outstanding 2014 doctoral thesis, “Confessional coexistence, conflicts and cooperation in Speyer in the second half of the 16th century.”
“Spiegel” blogger gives Media Lecture

Spiegel Online journalist and blogger Sascha Lobo was the guest at the 2016 Media Lecture. He spoke about the social effects of digital communications and the self-radicalization which may happen when people create their own media echo chambers. Lobo outlined how the internet once seemed to promise transparency and greater democracy by making possible discussion by the many; yet has become a tool for surveillance and misinformation.

Lobo has written extensively on digital technologies and the companies which promote them, as well as the nature of work in the digital age. He has analyzed the “comment culture” of the internet and how it frequently leads to hate speech; he has criticized social and political apathy towards the internet surveillance revealed by US secret service contractor Edward Snowden in 2013. The Media Lecture is sponsored by regional broadcaster SWR and is intended to inspire future journalists.

Unseld Lecture – British sociologist Colin Crouch on postdemocracy

The 2016 Unseld Lecture was held by sociologist and political scientist Colin Crouch. He believes that citizens today play a merely passive role in policymaking – and that business lobbyists have taken the reins. This is the heart of “postdemocracy,” a term Crouch coined in 2000 and which has been the focus of debate ever since. Speaking in German, Crouch explained why we should be concerned at citizens’ waning participation in politics – while the influence of business waxes. He also described how revived xenophobic movements in many European countries hurt democracy with their misleading appearance of political participation. A panel discussion with Colin Crouch on the deficiencies of European democracy now seems prophetic, as it took place on the eve of the United Kingdom’s referendum to leave the European Union. The distinguished academic also held a week-long master class with 15 international doctoral and postdoctoral students.

Colin Crouch is a professor emeritus of the University of Warwick and external scientific member of the Max Planck Institute for the Study of Societies at Cologne, and advises the OECD’s Directorate for Public Governance and Territorial Development. The University’s Forum Scientiarum holds the Unseld Lectures in cooperation with the Udo Keller Foundation Forum Humanum and Suhrkamp publishers.
Writers’ Lectureship celebrates 20th anniversary

The writer Siri Hustvedt and the neuroscientist Professor Vittorio Gallese were the guests at the 20th Writers’ Lectureship in November 2016.

They reflected on literature and its ties to academic, political, and ideological issues as well as questions of perception and aesthetics. Siri Hustvedt is one of America’s foremost writers; some of her notable works are The Blindfold (1992), The Enchantment of Lily Dahl (1996), and What I Loved (2003), which brought her international fame.

Vittorio Gallese is professor of human physiology at the University of Parma, Italy, professor in Experimental Aesthetics at the University of London, and Adjunct Senior Research Scholar at the Department of Art History and Archaeology at Columbia University in New York. His research seeks to explain the neural mechanisms behind empathy, language, and aesthetic experience – this forms a link to the works of Siri Hustvedt.

Gallese is probably best well known for two interconnecting areas of research – mirror neurons and embodied simulation theory. Embodied simulation theory is, amongst other things, a theory of social cognition – a theory of how it is we understand others’ actions, basic intentions, emotions and sensations. Gallese’s work not only provides a model for explaining human interaction and learning processes, it also helps us to understand why people need fictional narratives.

The Tübinger Writers’ Lectureship is organized by the Institute of German Language and Literature and sponsored by the Würth Foundation and Adolf Würth GmbH & Co. KG. Previous guests include Günter Grass, Herta Müller, Amos Oz, Susan Sontag, Ruth Klüger, Lars Gustafsson, Terézia Mora, Péter Esterházy, Ilija Trojanow, Feridun Zaimoğlu, Jonathan Franzen, Daniel Kehlmann, Juli Zeh and Christoph Ransmayr.

Video: www.youtube.com/watch?v=h7Xy11VJgbA
Medical Genetics – The key to treating rare and complex diseases

Medical Genetics is an important, innovative part of modern medicine which exemplifies just how fast change can be. The forerunner of today's Institute of Medical Genetics and Applied Genomics was founded in 1966; now it has hundreds of employees, working in interdisciplinary teams for diagnostics, counselling, research, and teaching to give patients the very best possible care.

Fifty years later, whether dealing with issues of fertility, fetal deformities, slow development or deformities in children, cancer, or neurodegenerative or other genetically-linked conditions, the institute provides valuable expertise to all the Tübingen University Hospitals and to many national and international institutions.

Its research groups work with other experts around the world, searching for the genetic causes of a vast number of diseases, and investigating environmental influences on the human genome. Their findings may be transferred into clinical practice with personalized treatment concepts which also further expand the knowledge of doctors as well as students of Medicine, Molecular Medicine, Biology, and Medical Technologies. Germany's only Further Training Academy for Rare Disease (FAKSE) is part of this Tübingen Institute.

The Institute of Medical Genetics and Applied Genomics has remained true to its innovative beginnings, helping to found Germany's first Center for Rare Diseases in 2010 and the Center for Personalized Medicine in 2015.
50 years of Ancient Near Eastern Studies

The ancient Mideast has been the focus of comprehensive studies in Tübingen since 1966, when Professor Wolfgang Röllig was authorized to establish an institute.

He successfully set up an institute which hosted two collaborative research centers, one of them – The Tübingen Atlas of the Near East – produced a key work in the discipline encompassing 134 volumes and has been described as one of the most successful collaborative research centers ever.

Röllig not only studied ancient near eastern texts, he conducted extensive archaeological surveys in Syria, which led to long-term excavations at Tel Sheikh Hamad in northern Mesopotamia.

This work was taken up by a new Professor of Near Eastern Archaeology, Peter Pfälzner, in 1996; Konrad Volk succeeded Wolfgang Röllig as Professor of Ancient Near Eastern Philology in 1998.

The Institute of Ancient Near Eastern Studies has carried out excavations at several locations in Syria, including at a royal palace in Qatna, a city destroyed by the Hittites in 1340 BCE. The excavations were extensively researched as part of research training groups and a further collaborative research center.

Cuneiform script from the Uruk III period