

### **A portrait** University of Basel.



# Knowledge for the **benefit of society.**

Founded in 1460, the University of Basel is proud to be Switzerland's oldest university. Over the centuries, it has evolved to become an internationally respected, regionally integrated research university with an extensive curriculum that enjoys an excellent position within the life sciences and other disciplines. The key to achieving this lies in the University's future-oriented positioning that has been at the core of its strategy.

The Basel region belongs to the most successful life science clusters in the world. Naturally, we also want to belong to the world's best research institutions in this field. At the same time, the University of Basel strives to create knowledge in all kinds of disciplines for the benefit of society. We build knowledge not only in the life sciences and medicine but also in the humanities and social sciences, fields that are imperative to the development of society.

Think about digitalization or personalized health care. These methods will soon change our lives fundamentally. But who will guide people through these changes? Who will consider their fears? And who will provide the legal basis? At the University of Basel, experts from numerous disciplines are working on finding answers to these questions.

### The best talent for Basel

Well-respected rankings attest to the University of Basel's outstanding academic performance. We want to consolidate further and extend our leading position. The number of PhDs from all over the world is proof that we are in the top league of research. These individuals have chosen Basel because they are supervised by excellent professors here. In addition to cutting-edge facilities, these young researchers also find a culture of cooperation and openness in Basel. We support them in turning their



innovative research into new products, applications and services.

We offer our own individual answer to the changes in the global challenges of our times. We build on our strengths and maintain close relations with economy and culture, society and politics. As a research-related, internationally connected institution, The University of Basel will expand its global focus even further in the future, while also playing a central role in the Basel region.

A. Solut. List.

Prof. Dr. Dr. h. c. Andrea Schenker-Wicki, President of the University of Basel

### Our **successes.**





### Science – **made in Basel.**

The University of Basel forms the center of Basel's academic and research activities. Developing a strong profile gives the University an international appeal.

The University of Basel is supported by the cantons of Basel-Stadt and Basel-Landschaft and is strongly rooted in the trinational region on the Upper Rhine. On the global stage, too, the University more than holds its own among the world's best research and teaching institutions. Rankings attest to the University of Basel's outstanding position with regard to research. With a distinctive curriculum in all fundamental academic subject areas, it offers excellent conditions for students from Switzerland and around the world. Its profile within the Life Sciences has gained for the institution a reputation for excellence.

### Strength through growth

The University of Basel has grown considerably over the past few years and now has around 13,000 students and PhD students. To make optimal use of this academic potential, the University focuses on internationalization – recruiting first-class early career researchers at Master's and doctoral level, participating in flagship research programs and entering into new collaborations with leading educational institutions. All this allows the University of Basel to maintain and build on its strengths.



Main building of the University of Basel: The "Kollegienhaus" opened on Basel's Petersplatz in 1939.

### **NETWORKED WITH PARTNER INSTITUTIONS**

The University of Basel works closely with distinguished research institutions such as the Friedrich Miescher Institute for Biomedical Research (FMI), founded in 1970, or the long-established Swiss Tropical and Public Health Institute (Swiss TPH). Swisspeace, the research institution based in Bern, has been associated with the University of Basel since 2010, while the Basel Institute on Governance – a think tank focusing on global, corporate and public governance – has been involved since 2013.

### At the cutting-edge of research.

The University of Basel is a research university with a high output of academic publications and a wealth of strong partnerships.

The University of Basel's place among the 100 best universities worldwide is confirmed by the annual "Academic Ranking of World Universities" published by Shanghai Jiao Tong University. This recognizes the large number of academic publications by the University of Basel that appear in leading academic journals as well as the frequency with which the findings of its researchers are cited. The University of Basel is committed to encouraging and supporting excellence. Centers of excellence and research platforms generate interdisciplinary synergies. Of notable importance are the close collaborations with the University of Applied Sciences and Arts Northwestern Switzerland, the Department of Biosystems Science and Engineering (D-BSSE) and other ETH institutions, as well as with research partners in the region's biochemistry and pharma industries.

### CULTURE OF QUALITY IN TEACHING AND RESEARCH

The University of Basel has dedicated itself to achieving a culture of quality throughout the entire institution. The quality of research is ensured by monitoring publications, external funding, academic awards and further parameters. Quality management also incorporates the evaluation of classes, degree programs and the organizational structure. External quality checks guarantee academic excellence in accordance with established standards.



### **FACULTY OF THEOLOGY**

Focal areas take account of the urban and religiously diverse environment and consider the interaction between Christianity and other forms of religion.

### **FACULTY OF LAW**

Teaching and research at the Faculty emphasize regional and international focal areas such as Commercial Law and Life Sciences Law.

### **FACULTY OF MEDICINE**

Focal areas include Immunology, Oncology, Neuroscience, Cell Plasticity and Tissue Repair, and Biomedical Engineering.

### FACULTY OF HUMANITIES AND SOCIAL SCIENCES

The Faculty offers a broad variety of subjects, most prominent of which are Visual Studies and European and Global Studies.

### **FACULTY OF SCIENCE**

Key focal areas include Life Sciences, Nanophysics and Quantum Physics, Chemistry, Computational Sciences and research into new materials and energy forms.

### FACULTY OF BUSINESS AND ECONOMICS

The Faculty incorporates both Business and Economics and has a new focus on research into sustainability and energy.

### **FACULTY OF PSYCHOLOGY**

The Faculty has committed itself to three focal areas: Clinical Psychology and Neuroscience; Social, Economic and Cognitive and Decision Psychology; Developmental and Personality Psychology.

# Defining a profile **through focal areas.**

A broad range of subject areas lends the University of Basel authority and reputation. Thematic focal areas create an unmistakable profile.

All universities dedicated to excellence focus on specific areas in their teaching and research. Academic institutions use this focus to make their mark among the domestic and international competition. Achieving prominence in specific areas requires a distinctive curriculum. On this basis, developing disciplinary focal areas helps to harness all available potential in teaching and research. It sets the University apart and provides milestones for future development. In its Strategy 2007, the University of Basel established thematic focal areas and further developed these in Strategy 2014. These areas are defined from the bottom up, taking into account present social and economic concerns. Developing a profile is a living process that adapts

### SEVERAL FACULTIES ARE INVOLVED IN THE THEMATIC FOCAL AREAS

	Faculty of Theology	Faculty of Law	Faculty of Medicine
LIFE SCIENCES			
[o] VISUAL STUDIES			
NANOSCIENCES			•
SUSTAINABILITY AND ENERGY RESEARCH			
EUROPEAN AND GLOBA	AL •		

dynamically to current requirements. Thematic focal areas represent the variety of research conducted throughout the University and generate synergies among the faculties.

### Strategic potential

Basel has systematically expanded its profile within the Life Sciences and added the related focal area of Nanosciences. Over the past few years, the area of Visual Studies has become established within the humanities. These achievements at the University of Basel tie in with the expansion of research into sustainability and energy. At the same time, Basel's traditional strength in European research has been extended to European and Global Studies. The thematic focal areas at the University of Basel differ in scope and emphasis. Together, they offer strategic potential for development.

Faculty of Humanities and Social Sciences	Faculty of Science	Faculty of Business and Economics	Faculty of Psychology	Institute for European and Global Studies	Institute for Bio- and Medical Ethics Basel
•		•			•
			•		
			•		•
•			•		
	•	•			



The University of Basel has achieved global prominence in the **LIFE SCIENCES**, shaped by intensive collaboration with partners in business and industry.

### Understanding what makes life tick.

Life Sciences were the first focal area established at the University of Basel. The University is among the world's 50 best institutions in this field and among the top ten in Europe.

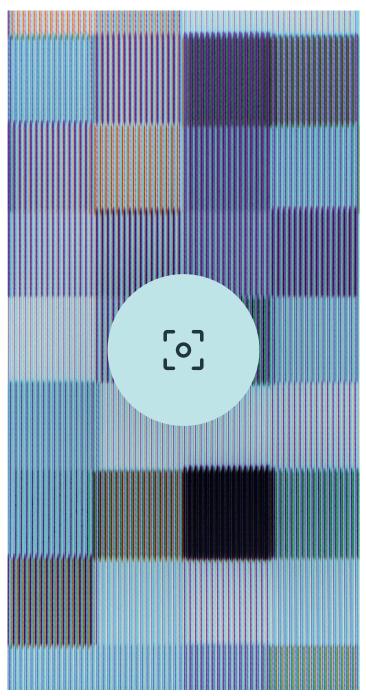
The following subjects form the core of teaching and research: fundamental molecular and biomedical research, systems biology, stem cell and cancer research, neuroscience, infection biology, nanomedicine and the pharmaceutical sciences. Translational research approaches bridge the gap between basic research and potential applications.

### Network of research, clinics and industry

The University of Basel is part of a unique partner network comprising research institutions, clinics and industrial companies. One person to grace the interdisciplinary Biozentrum was Werner Arber, one of the co-founders of molecular biology, who received the Nobel Prize for Physiology or Medicine in 1978 for discovering the restriction enzymes used to produce DNA fragments. Plans for the future include new buildings for the Biozentrum and the ETH Department of Biosystems at the Schällemätteli Life Sciences campus.

### Fertile ground for start-ups

The Basel region is home to one of the world's most successful Life Sciences clusters, with more than 700 companies and an annual turnover of 100 billion dollars. Two of the world's largest pharma companies, Novartis and Roche, are based here. This makes the area ideal for resourceful researchers: More than 100 start-ups have been launched here in the last ten years. Development is driven in particular by the strategic expansion of health research and nanomedicine.



The **VISUAL SCIENCES** focal area emerged from the "Iconic Criticism" (eikones) National Center of Competence in Research and is now firmly embedded at the University of Basel with several professorships.

# Learning to read **images.**

In recent years, the University of Basel has established a reputation as an internationally recognized center for the academic study of images.

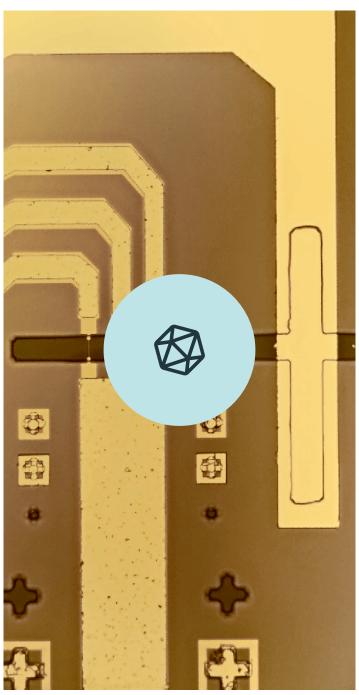
In a world where images play an increasing role in generating and imparting knowledge, the function and impact of images have become extremely important. At Basel, Visual Studies question the empirical and historical contingencies of visual communication while laying the theoretical groundwork for iconic criticism.

### Interdisciplinary approach

One of the most important tasks in Visual Studies is to critically reflect on the development cycle of images. This involves examining images from art, science, economics, urban planning, philosophy and the history of language and writing. The research conducted within Visual Studies is a cornerstone of Basel's humanities and will explore new perspectives in art, design and architecture. At the same time, this focal area has links to research topics in the cognitive neurosciences and scientific imaging.

### Cooperation with art institutions

Renaissance painter Hans Holbein the Younger and art historian Jacob Burckhardt both played a role in the history of the University of Basel. Visual Studies build on this tradition. The University maintains an intensive collaborative relationship with research institutions and notable regional cultural institutions such as the Schaulager in Münchenstein and the Kunstmuseum Basel.



The NANOSCIENCES focal area at the University of Basel offers firstrate potential for developing new technologies.

## Inspired by **the nanocosmos.**

Nanosciences have become firmly established in Basel: The Swiss Nanoscience Institute is a well-connected center of excellence with international influence.

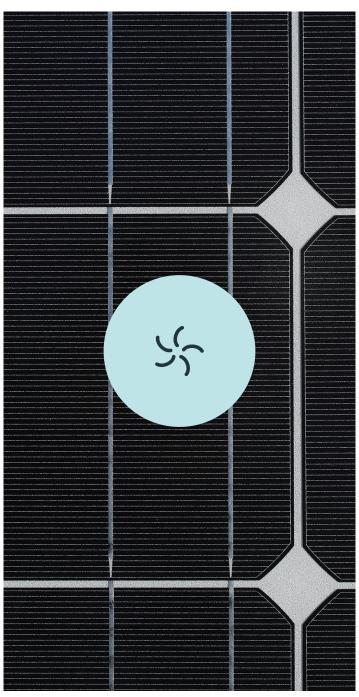
The Nanosciences concentrate on objects in the smallest spatial dimensions and have many practical applications. As an interdisciplinary area, they provide fresh momentum for the Life Sciences, Medicine, Energy Research, and Information and Communication Technologies. The University of Basel was the first Swiss higher education institution to set up an academic program in Nanosciences and also offers a PhD program in the subject.

### From fundamentals to application

At Basel, the Nanosciences combine basic and application-oriented research. Priority is given to nanobiology, quantum computing and quantum coherence, atomic and molecular nanosystems, molecular electronics and functional materials. The development of initiatives in molecular systems, nanomedicine, imaging, material sciences and sustainability research aims to further expand this focal area.

### Industry partnerships

Basel's Nanoscience offering is closely linked with regional, national and international partners and acts as a hub uniting the activities of higher education institutions, research institutions and industrial partners. Basic and applied research projects in north-west Switzerland are coordinated under the auspices of the Swiss Nanoscience Institute.



The focal area of **SUSTAINABILITY AND ENERGY RESEARCH** makes the University of Basel the ideal partner for major research programs currently underway in Switzerland and the EU.

# Shaping the energy revolution.

By combining Natural Sciences, Economics and Social Sciences, the University has established a position as a leading institution in Sustainability and Energy Research.

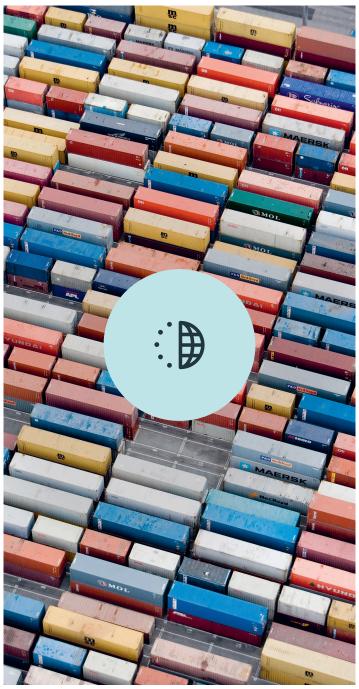
A sustainable approach to resources and the efficient use of energy are future-oriented topics of great political relevance. The University of Basel supports sustainable social development by affording particular attention to these issues in its teaching and research. The University of Basel has a wide range of expertise in Sustainability and Energy Research, be it in the Natural Sciences, Economics or the Social Sciences.

### Interdisciplinary problem-solving

The challenges presented by the environmental and energy sector require an interdisciplinary response. The focal area of Sustainability and Energy Research addresses this situation and fosters a dialog between various academic disciplines within the University.

### Competence center for energy research

Current projects range from economic, legal and social science topics associated with the withdrawal from nuclear energy through to the issue of sustainable energy and water use and applied research in the Nanosciences, Chemistry, Material Sciences and Physics. The University of Basel is the Leading House of the Competence Center for Research in Energy, Society and Transition (CREST), one of seven competence centers created by the federal government with regard to the energy revolution.



Through the **EUROPEAN AND GLOBAL STUDIES** focal area, the University of Basel is also opening up to emerging regions in Africa and Asia.

### Discovering **new worlds.**

European and Global Studies enables the University to expand its expertise in European research to include a global perspective, with a key focus on Africa and East Asia.

At the University of Basel, European and Global Studies ties in with the institution's many years of experience researching European history and social science. The research focus tackles topics of global significance such as demographic ageing: By 2050, there will be more people over the age of 60 than under the age of 15. This development has profound economic, social and political consequences not only in Europe, but also in Asia and Africa. It raises questions that can only be answered using methods and concepts drawn from a variety of subject areas.

### Economics and urban planning in Africa

Traditionally, research into the African continent has focused heavily on aspects such as theology and history, culture and social sciences, environment and health. Now, the University of Basel is turning its research focus to urban planning and economics, as well.

### Strong links with China

Equally, China and, therefore, East Asia are attracting increasing attention. Contemporary Chinese culture, society and economics are becoming more and more important from a global perspective. New partnerships such as that with East China Normal University in Shanghai strengthen relationships with emergent Asian societies.

### **International** networks.

International exchange means mutual inspiration and productive competition for the best ideas. The University of Basel is taking on this global competition.

In its internationalization, the University of Basel pursues objectives on several levels that can be realized in the shape of strategic initiatives from the President's Board as well as through supporting measures for initiatives within the faculties. Both approaches are connected and supported equally by the International Office of the University of Basel.

Located in Basel, the University has an international outlook: internationalization at home plays an equally important role as cross-border internationalization. This encompasses all measures to implement an international dimension in education, teaching, administration, communications and marketing, including diverse activities such as English-speaking summer schools. Guest lecturers, exchange students and PhD candidates all enrich Basel's teaching and research. The University uses English as its second language of communication.

### Bilateral research groups

Building on its international identity, the University invests in collaborations, research projects and partnerships both within Europe and worldwide. In addition to partnerships involving the entire university, the focus is on bilateral collaborations in research groups or study programs. The University of Basel sees itself as part of a global scientific community. The University offers attractive and internationally competitive terms of employment.



### An international corner on the Rhine

Eucor – The European Campus is a cross-border university alliance of five French, German and Swiss universities located on the Upper Rhine that cooperate in teaching, research, administration, culture and sports. Not only Bachelor's and Master's students profit from this: in addition to lectures, courses are also open to PhD candidates and postdocs from the partner universities. This mobility within the European Campus also applies to staff. Joint research projects are financially supported.

### Non-European partnerships

The University of Basel is specifically expanding its collaborations with universities outside Europe. The focus is on three geographical regions: Africa (South Africa and sub-Saharan Africa), the Boston Area and Asia (China, South Korea, Japan). Today, Basel already has an established and successful bilateral research collaboration with South Africa and selected countries in the sub-Saharan region.

# **Springboard for** resourceful early career researchers.

The University of Basel combines the freedom of teaching and research with systematic career advancement and progressive continuing education.

The University offers high-quality degree programs at Bachelor's, Master's and doctoral level. Many of the Master's programs are interdisciplinary and aimed at the University's focal areas. Students in Basel benefit from an excellent staff to student ratio. The positive study environment attracts large numbers of international students, particularly from Germany.

### Innovative programs for PhDs and postdocs

As an innovative and professional platform, GRACE, the Graduate Center for doctoral candidates and postdocs, offers the best possible environment for doctoral candidates and postdocs to succeed. Various networking events and training formats support interdisciplinary exchange and prepare for future challenges. Also, various internationally competitive doctoral programs offer the opportunity to complete a structured PhD in a discipline. Mentoring programs provide coaching for the next generation of researchers.

### Advantages of teaching in English

The University gives high priority to talent promotion, creating a professionally attractive and financially competitive environment for assistants, postdocs and assistant professors. Providing grants and releasing staff from teaching duties provide additional incentives for excellent research. The use of English in teaching and correspondence makes the University of Basel even more attractive to early career researchers who do not speak German.



### An eye on future potential

The University is committed to research-based teaching measured against the highest international standards. A flexible promotion system offers talented early career researchers a career path from assistant professor to associate professor and, finally, to full professor. Promotions are based both on a person's current performance and on their potential. External evaluations and the application of the latest academic educational theory help assure the quality of teaching. Equal opportunities also take priority.

### The power of **tradition**.

As Switzerland's oldest university, Basel has a rich and fascinating history in teaching and research spanning more than 555 years.



On April 4, 1460, Bishop Johann von Venningen appoints Georg von Andlau (left, kneeling) as the first Rector and presents mayor Hans von Flachslanden with the foundation charter.

### 1460

The University of Basel opens with a foundation ceremony in the Minster.



### 1527

Physician, alchemist and philosopher Paracelsus teaches as a Professor of Medicine.

### 1588

An anatomy theater and hortus medicus (later the Botanical Gardens) are established.

### 1590

The University Library is expanded to include 2,700 books from the former monastery libraries.

### 1661

Together with the University, the City of Basel purchases a private collection of artworks, objects and books. The "Amerbach Cabinet" is opened to the public in 1671.

### 1822

The course directory appears in German, rather than Latin.

### 1869

Friedrich Nietzsche assumes the chair as Professor of Classical Philology.

### 1890

Emilie Louise Frey becomes the first woman admitted to study (Medicine).

### 1938

Elsa Mahler (back), Associate Professor of Russian Language and Literature, becomes the first female professor appointed to her Alma Mater Basiliensis.



### 1939

The "Kollegienhaus" on Petersplatz becomes the University's new main building.

### 1950

Tadeusz Reichstein, Professor of Organic Chemistry, receives the Nobel Prize for Medicine.

### 1965

The construction of the new University Library is completed.

### 1971

The Biozentrum provides an interdisciplinary Center for the Life Sciences.

### 1978

Microbiologist and geneticist Werner Arber receives the Nobel Prize for Medicine.



### 1996

The University becomes independent of cantonal administration.

### 2003

The Faculty of Psychology becomes the seventh faculty at the University of Basel.

### Facts and Figures **2016**.

1460

founding of the University Basel

12852

students and PhD students

**55** 

percent of students are female

**753** 

million CHF annual budget

148

million CHF of external funding acquired

faculties

387

professors

1759

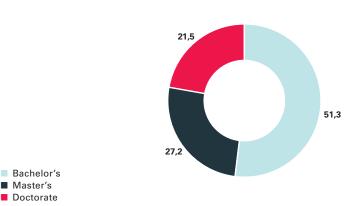
First-year students in fall semester 2015

24

percent international students and PhD students from over 100 countries

### Study level

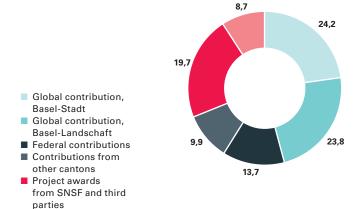
With 21.5 percent PhD students, Basel has a high proportion of early career researchers.



### Financing (in percent)

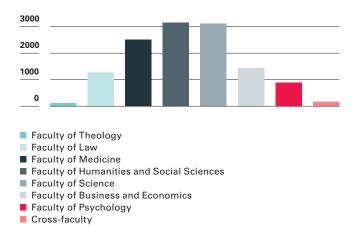
Other income

Basel-Stadt and Basel-Landschaft provide almost half the University's funding.



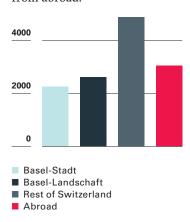
### Students

Humanities and Science are Basel's largest faculties.



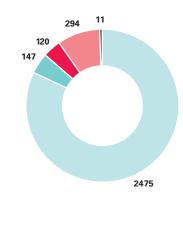
### Origins

Around one quarter of students and PhD students come from abroad.



### **Origins**

19 percent of international students come from outside Europe.



### Rankings

Europe

AfricaAmericaAsiaAustralia and Pacific Islands

Of the 12,000 universities worldwide, Basel is among the 150 best institutions.

2013	2014	2015	2016	2017
00	00	07	101-	0.5
83	90	87	150	95
64	56	48	45	54
110	116	139	141	149
142	74	75	101	98
	83 64 110	83 90 64 56 110 116	83 90 87 64 56 48 110 116 139	83 90 87 150 64 56 48 45 110 116 139 141

### Built **for the future.**

The University of Basel is preparing for the future with an ambitious building program. The spectacular new Biozentrum is a clear sign of this.

The University will spatially concentrate on three main sites: the Petersplatz campus is the center of Humanities, Cultural Studies and Social Sciences. It houses the President's Office and the University Administration.

The Schällemätteli campus, close to the University Hospitals, is developing into a center for natural sciences. Biomedicine, Nanosciences, Physics, Chemistry and the ETH Department of Biosystems are grouped around the new Biozentrum. This Life Sciences cluster enables intensive collaboration with industry and start-ups.

The Rosental campus encompasses, among other things, Environmental Sciences and Dental Medicine. Other sites include the Bahnhof campus (Faculties of Law and Business and Economics) and St. Jakob Park (Sports Sciences).

The University's new Biozentrum reaches up 73 meters into the sky above Basel. The building is planned to open in 2019, has room for 800 students and 600 employees and embodies the University of Basel's major building program. By 2030, more than one billion francs will be spent on enlarging and modernizing the academic building infrastructure. But however it develops in the future, the University will preserve one of its greatest assets: its location in the center of Basel with its urban quality of life.



The new Biozentrum at the University of Basel will open in 2019.



The University is concentrating on five sites: The Rosental campus (1), Schällemätteli campus (2), Petersplatz campus (3), Bahnhof site (4) and sports site (5).

# A university **open to all.**

At the University of Basel, institutions share their knowledge with the general public. The thrilling experience of research becomes an integral part of society.

Beyond academic teaching and research, the University of Basel engages in a lively exchange with society, culture and business. Its focal areas reflect current political and social developments and help to advance our community. As part of its responsibility toward the cantons that support it, the University provides a wide range of services open to anyone in the region who is eager to learn.



### **MUSEUMS**

The University's Anatomical Museum and Pharmacy Museum provide unique insights into the development of medical research.

### **BOTANICAL GARDENS**

Thrill tens of thousands of plant lovers with their blooming titan arum and many other treasures.

### CONTINUING EDUCATION

Under the name "Advanced Studies", the University of Basel offers a wide range of part-time continuing education degree programs for professionals in all subject areas. Basel Advanced Studies range from one-day courses and lecture series to the Diploma of Advanced Studies (DAS) and Master's programs.

### UNIVERSITY LIBRARY BASEL

With its extensive stock, the library provides academic information to the University and the people of the Basel region.

### BASEL ADULT EDUCATION CENTER

Offers courses for adults (with particular consideration for senior citizens) on topics such as the environment and nature, health, design, art and culture, society, work and communication, and foreign languages.

### **ALUMNIBASEL**

University of Basel alumni retain a lifelong connection with one another. AlumniBasel is the organization for all former alumni, alumni clubs and friends of the University of Basel.

### IMPRINT

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### Educating Talents since 1460.

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