

# Research institutes in Life Sciences

» Handbook for investors





# ***More Talent.***

# ***More Business.***

# ***More Innovation.***

**Welcome to the Basel Area, an economic powerhouse and Switzerland's most dynamic business environment. Its tri-border location next to France and Germany with excellent transport and infrastructure connections, cultural offerings and high quality of life make it one of the world's foremost life sciences destinations.**

Thanks to an innovative environment, favorable taxation and a world-class, multinational talent pool, the region is a key driver of the Swiss economy and continues to grow and prosper. Blue-chip multinationals and leading research institutes rub shoulders with dynamic start-ups and prolific incubators. The entire life sciences value chain is represented here by more than 700 companies and you will find two of the largest European pharma markets right at your doorstep.

Numerous world-renowned research institutes are also located in the Basel Area: within a one-hour drive radius, there are 14 leading universities as well as 1,000 research groups in the surrounding border regions.

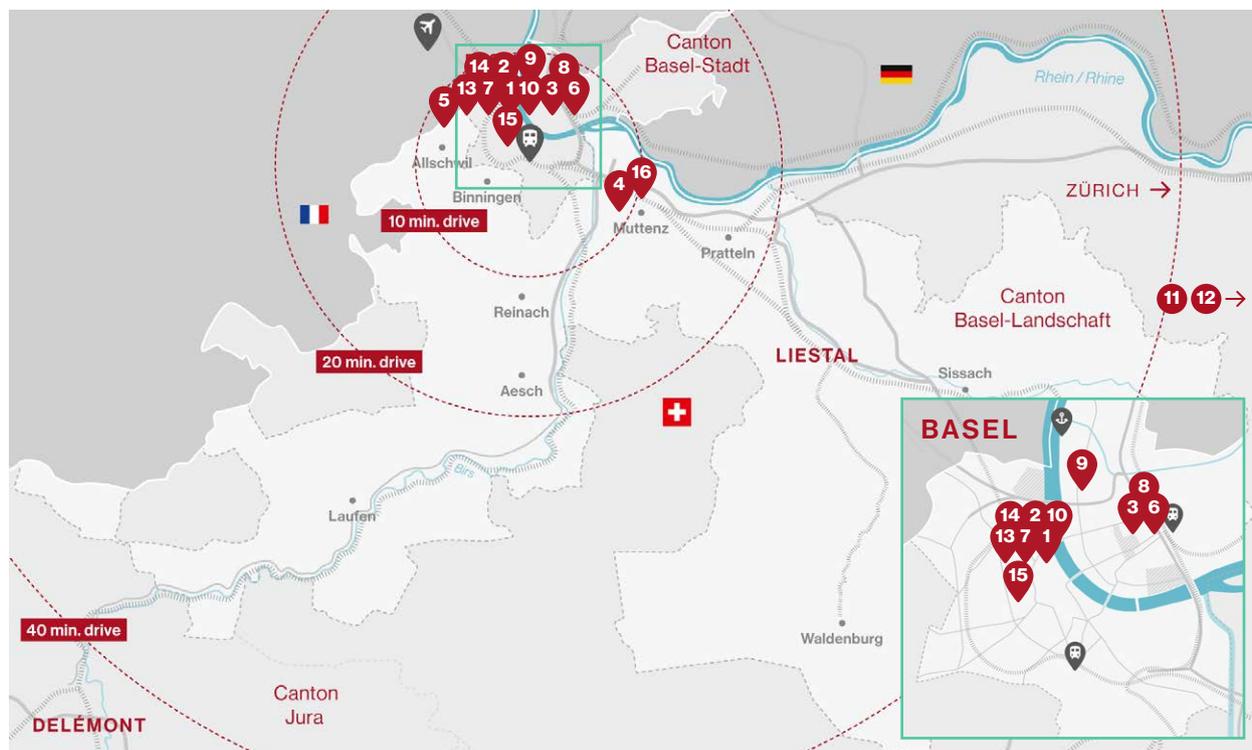
In its role as a research and innovation hub, the Basel Area offers a fertile and productive environment to help companies thrive and prosper. This is clearly underpinned by the fact that Basel has the highest hourly productivity worldwide: \$ 515 value added per hour worked (compared to Boston = \$ 156), keeping your company moving forward.

This guide provides an overview of some of the major research institutes that have come to call the Basel Area home.

***Ready to discover?***

**More**  
*talent*

## Basel Area overview



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# More

*than \$ 21 B  
in R&D  
spending*



## **Basel Institute for Clinical Epidemiology and Biostatistics (CEB)**

CEB's mission is to improve decision-making in healthcare. New technologies entering the healthcare system must be based on sound evidence, provide clinically relevant benefit, be safe, and represent added value to the healthcare system. They evaluate new and established technologies and provide evidence that informs the decision-making process of patients, healthcare professionals, health policy decision makers and the industry. CEB combines academic rigor, clinical knowledge and business acumen, allowing us to understand the specific needs for decision-making at all healthcare levels. It develops and teaches methods of evidence-based medicine in order to improve the quality of clinical research and to examine the effectiveness of health technologies in the real world setting. CEB's goal is evidence-based healthcare at the local, national and international level.

### **Key competences**

- Methodological and biostatistical support for large-scale observational data analyses
- High level causal modeling from observational data, trial emulations
- Protocol developments for clinical trials (phase II-III, III and IV)
- Conducting clinical trials, pragmatic trials
- Generation and analysis of real world evidence data
- Meta-epidemiological studies and clinical research methodology studies
- Meta- analysis (all types, aggregated and individual patient data, network meta-analyses)
- HTA reports and HTA submissions
- Submission of protocols to licensing agencies
- Market access analyses, cost-effectiveness analysis
- Postgraduate teaching and consulting in real world evidence for industry partners

### **Research cooperation with companies**

Cooperation with various larger industries and academia (national and international): The Swiss Universities of Zurich, Berne, Geneva & Lausanne, ETH Zurich, Swiss Tropical and Public Health Institute, Stanford University, Harvard University, McGill University, Montreal, McMaster University, Hamilton, University College London, Oxford University, University of Southampton, University of Utrecht, University of Aarhus, University of Copenhagen, Institute for Health Metrics and Evaluation, University of Washington, International Research Collaborations in HIV: COHERE, D.A.D., Euroside, RESPOND, HIV Causal, Rwanda Biomedical Center. Doctor Evidence, Santa Monica, USA, Swiss Ministry of Health (Bundesamt für Gesundheitswesen), Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (IQWiG).

### **Key facts**

<b>Head count (FTE)</b>	30
<b>Nationalities</b>	5
<b>Master students</b>	2
<b>PhD students</b>	8
<b>Postdocs</b>	14
<b>Professors</b>	4
<b>Additional adjunct professors</b>	4
<b>Publications (Ø per year)</b>	37
<b>Publications (in total)</b>	670

**Founded in** 2001

Further information is available at  
[www.ceb-institute.org/en](http://www.ceb-institute.org/en)

## BIOZENTRUM

The Center for  
Molecular Life Sciences

### Biozentrum – University of Basel

The Biozentrum of the University of Basel is one of the leading life sciences institutes in the world. It consists of 32 groups and about 450 employees that research how molecules and cells create life, spanning the scale from atom to organism. Founded in 1971, the Biozentrum has been the birthplace of many fundamental discoveries in biology and medicine, spawning several Nobel Laureates.

#### Key competences

- 32 research groups
- Molecular and biomedical research and teaching
- Cell growth and development
- Infection biology
- Neurobiology
- Structural biology and biophysics
- Computational and systems biology

#### Research cooperation with companies

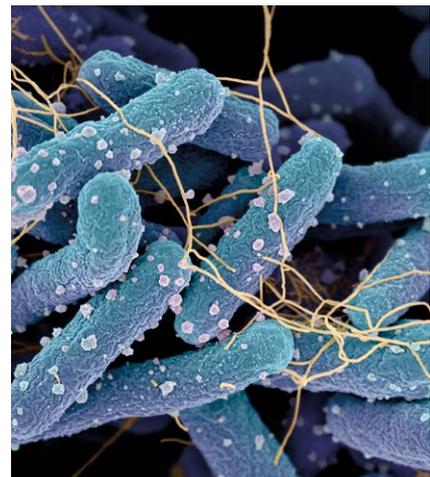
Actelion, ARTIDIS, Basilea Pharmaceuticals, BioVersys, Novartis, Polyphor, Santhera Pharmaceuticals, Roche.

#### Key facts

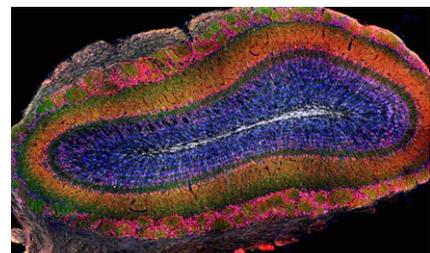
<b>Head count (FTE)</b>	432
<b>Nationalities</b>	55
<b>Bachelor students</b>	24
<b>Master students</b>	33
<b>PhD students</b>	106
<b>Postdocs</b>	98
<b>Professors</b>	32
<b>Spin offs</b>	6
<b>Publications (Ø per year)</b>	200
<b>Patents (Ø per year)</b>	15

#### Founded in

1971



Intestinal bacterium *Escherichia coli*. © Research Group Urs Jenal, Biozentrum University of Basel.



New neurons (white) enter the olfactory bulb, a part of the brain that processes odor signals. © Research Group Fiona Doetsch, Biozentrum University of Basel.

Further information is available at  
[www.biozentrum.unibas.ch](http://www.biozentrum.unibas.ch)



## **Botnar Research Centre for Child Health University of Basel & ETH Zurich (BRCCH)**

The Botnar Research Centre for Child Health started operations in 2019 and has a clear vision: To become a leading institution for use-inspired, cutting-edge and translational research aimed at improving the health and well-being of children and adolescents worldwide. The BRCCH brings together researchers and clinicians from a variety of disciplines such as systems biology, medicine and various areas of life sciences, engineering, economics, social sciences and information technology. Collaborative research projects combine expertise from the Basel research community, as well as national and international partners. The BRCCH is initially supported by a CHF 100 million contribution from Fondation Botnar in Basel, which is spread over a 10-year period.

### **Key competences**

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#### **Research Focal Areas:**

- Paediatric Digital Health
- Advanced Bioengineering for Paediatric Medicine
- Essential Paediatric Medical Devices
- Ethics, Policy and Implementation Research in Paediatric Health

### **Research cooperation with companies**

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University of Basel, ETH Zurich, University Children's Hospital of Basel (UKBB) and the Swiss Tropical and Public Health Institute (Swiss TPH).

### **Operations started in**

2019



*Transdisciplinary research.*



*The BRCCH brings together top scientists and clinical researchers from a variety of disciplines in order to develop digital and next generation healthcare solutions for use in paediatrics.*

Further information is available at  
[www.brc.ch](http://www.brc.ch)



## **CSEM (Centre Suisse d'Electronique et de Microtechnique)**

CSEM, founded in 1984, is a research and development center (public-private partnership) specializing in microtechnology, nanotechnology, microelectronics, system engineering, photovoltaics and communications technologies. 520 highly qualified and specialized employees from various scientific and technical disciplines work for CSEM in Neuchâtel, Zurich, Muttenz, Alpnach and Landquart.

### **Key competences**

- Additive manufacturing
- Functional surfaces
- Scientific instrumentation
- Tools for life sciences
- Photonics
- MEMS & packaging
- Data & AI
- Industry 4.0
- Digital health
- Quantum technology
- IoT
- Edge processing
- Digital grid
- PV & solar buildings
- Storage
- Mobile harvesters

### **Research cooperation with companies**

182 industrial clients (2020) including Hinni, Renata, ROLIC, Regent, BASF, Roche, SBB, BKW.

### **Key facts**

<b>Head count (FTE)</b>	520
<b>Nationalities</b>	42
<b>Bachelor students</b>	6 in Muttenz
<b>Apprentices</b>	7
<b>Master students</b>	21 in Muttenz
<b>PhD students</b>	26
<b>Postdocs</b>	7
<b>Spin offs</b>	43
<b>Patents (in 2017/in total)</b>	22/219 overall patents family

### **Founded in**

1984



*World's first fully autonomous camera that can be deployed like a sticker, opening possibilities for surveillance and IoT.*



*Roll-to-roll printing technologies applied to mass manufacture a battery-free and flexible sensing platform.*

Further information is available at [www.csem.ch](http://www.csem.ch)

**More**  
*business*

# More

*than 700  
life sciences  
companies*



## Department of Biomedical Engineering – University of Basel (DBE)

The Department of Biomedical Engineering (DBE) translates basic science and engineering into medical knowledge and healthcare innovations. It provides high quality education and capacity building for academics, clinicians, and industrial partners. The DBE is a joint venture of the University of Basel, the University Hospital Basel and the University Children's Hospital Basel and is associated with researchers of the University Center for Dental Medicine Basel. The DBE's members collaborate in and across the below fields of competences. A Master of Science program and a PhD program aim to contribute to an enriching environment in the field of biomedical engineering. Moreover, the department is the place of origin for a number of award-winning med-tech spin offs.

### Key competences

- 30 research groups
- Biomechanics and biomaterials
- Medical lasers and robotics
- Imaging, modeling and diagnosis
- Regenerative surgery
- 3D print
- Micro- and nanotomography

### Research cooperation with companies

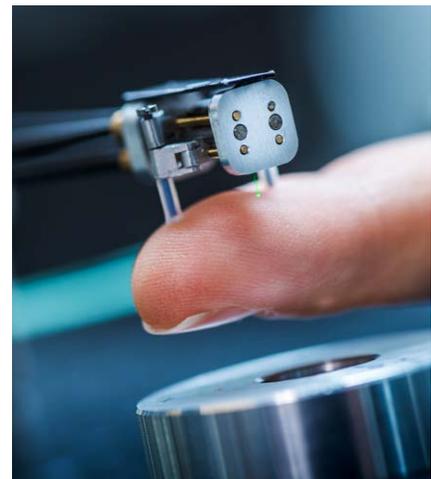
>10, names are confidential.

### Key facts (DBE site in Allschwil)

<b>Head count (FTE)</b>	65
<b>Nationalities</b>	22
<b>Master students</b>	>25
<b>PhD students</b>	35
<b>Postdocs</b>	15
<b>Research &amp; scientific assistants</b>	19
<b>Professors</b>	2
<b>Spin offs</b>	11
<b>Publications (Ø per year/in total)</b>	>50/>1000
<b>Patents (Ø per year/in total)</b>	4/22

### Founded in

2015



*Miniature robot for minimally invasive laserosteotomy.*



*MIRACLE Project.*

Further information is available at  
[www.dbe.unibas.ch/en](http://www.dbe.unibas.ch/en)

# D BSSE

## Department of Biosystems Science and Engineering – ETH Zurich (D-BSSE)

The mission of D-BSSE is the understanding, rational design and programming of complex biological systems from the nanoscale up to whole organisms. The department advances basic and applied biological sciences with the overall goal of translating its research into biomedical and industrial applications, and promoting the development of new processes and products in the biotech, pharmaceutical and chemical industries. To maximize the impact of this ambitious endeavor, the department is located in Basel, the life sciences capital of Europe. In collaboration with partners from industry, hospitals and other academic institutions, the Basel location facilitates research applications in the emerging fields of precision medicine and personalized health, molecular systems engineering and data science. As of 2022, all 20 research groups at D-BSSE will be united under one roof in close to vicinity to the University of Basel, the University Hospital and the Children's Hospital Basel. With the new BSS building on the Schällemätteli campus in Basel, ETH Zurich is creating a modern research building with work and lab spaces for up to 600 users.

### Key competences

- 20 research groups
- Analysis of processes in cells and organisms
- Development of strategies and techniques for programming and rational design of cell functions
- Implementation of complex biological systems
- Exploring open scientific questions and unmet societal needs in the fields of biotechnology and life sciences

### Research cooperation with companies

In addition to working with institutions at Basel University and its hospitals (73 collaborations) and other ETH Zurich institutions (40 collaborations), research collaborations with over 30 corporations and about 120 international partners.

### Key facts

<b>Head count (FTE)</b>	306
<b>Nationalities</b>	30
<b>Staff members</b>	350
<b>Master students</b>	130
<b>PhD students</b>	180
<b>Postdocs (FTE)</b>	81
<b>Professors</b>	20
<b>Spin offs</b>	13
<b>Publications in 2018</b>	232
<b>Patents (Ø per year)</b>	7

### Founded in

2007



New BSS building on the Schällemätteli campus in Basel. Image visualization: Nickl & Partner Architekten AG.



High-density array of thousands of micro-electrodes, which are used for electrophysiological recordings at sub-cellular resolution. Photo: Pino Covino for ETH Zurich, image on the monitor: Branka Roscic, Douglas Bakkum/ ETH Zurich.

Further information is available at  
[www.bsse.ethz.ch](http://www.bsse.ethz.ch)



## Department of Pharmaceutical Sciences – University of Basel

The Department of Pharmaceutical Sciences is active in the discovery and development of drugs, their manufacturing, mode of action, clinical use and safety. The Pharmaceutical Sciences are a classical translational discipline at the interface between natural sciences and medicine. Currently the department is represented by 10 research groups, covering a wide spectrum of topics ranging from drug discovery and optimization of new active substances to pharmacological action, drug safety research galenics / technology and clinical application of drugs.

### Key competences

- 2 research groups
- Biopharmacy
- Clinical pharmacology & toxicology
- Clinical pharmacy & epidemiology
- Computational pharmacy
- Molecular & systems toxicology
- Molecular pharmacy
- Nanopharmaceutical and regulatory science
- Pharmaceutical biology
- Pharmaceutical care
- Pharmaceutical technology
- Regulatory toxicology
- Translational complementary medicine

### Research cooperation with companies

A wide range of small and large pharmaceutical companies in Switzerland and abroad.

### Key facts

<b>Head count (FTE)</b>	98.5
<b>Nationalities</b>	45
<b>Bachelor students</b>	368
<b>Master students</b>	215
<b>PhD students</b>	82
<b>Postdocs</b>	16
<b>Professors</b>	11
<b>Spin offs</b>	1
<b>Publications (Ø per year)</b>	100–120
<b>Patents</b>	2

### Founded in

1917



*Pharmaceutical Sciences laboratory.*

Further information is available at  
[www.pharma.unibas.ch](http://www.pharma.unibas.ch)

# FMI

Friedrich Miescher Institute  
for Biomedical Research

## Friedrich Miescher Institute for Biomedical Research (FMI)

The Friedrich Miescher Institute for Biomedical Research, based in Basel, Switzerland, is a world-class biomedical research institute dedicated to understanding the molecular mechanisms of health and disease. Its main areas of expertise are neurobiology, quantitative biology and epigenetics. With a staff of about 350, the FMI offers an exceptional training environment for PhD students and postdoctoral fellows from around the world. The FMI is affiliated with the University of Basel and the Novartis Institutes for BioMedical Research.

### Key competences

23 research groups

#### Research areas

- Epigenetics
- Quantitative biology
- Neurobiology

#### Research themes

- RNA biology & development
- Chromatin structure & gene regulation
- Genome integrity & maintenance
- Mathematical & molecular modeling
- Stemness & organogenesis
- Neuronal circuits & behavior
- Learning & memory

### Research cooperation with companies

No research cooperation but affiliated with Novartis.

### Key facts

<b>Head count (FTE)</b>	350
<b>Nationalities</b>	40
<b>Master students</b>	12
<b>PhD students</b>	76
<b>Postdocs</b>	106
<b>Professors</b>	12
<b>Publications (in 2018/in total)</b>	111/3,938 since 1972
<b>Patents (in 2018/in total)</b>	7/138 since 1999

### Founded in

1970



Friedrich Miescher Institute for Biomedical Research.



FMI laboratory.

Further information is available at  
[www.fmi.ch](http://www.fmi.ch)

**More**  
*innovative*

# More

*than 33,900  
specialized  
talents*



## **Institute of Molecular and Clinical Ophthalmology Basel (IOB)**

Around the world, millions of patients suffer from currently incurable vision loss. The Institute of Molecular and Clinical Ophthalmology Basel has been created to help them. IOB accelerate the conversion of basic research into innovative treatments, which change the field of ophthalmic therapy. Interdisciplinary teams of researchers and clinicians work hand in hand. These problem-solvers and innovators have in-depth knowledge of unmet medical needs and daily exposure to patients. Together, they improve the understanding of vision and of the cells involved in eye disease. In this highly collaborative environment, the IOB turns discoveries and technologies into clinical benefits for patients with blinding conditions. IOB helps advance the practice of ophthalmic disease based on the genetic, structural and functional understanding of the cell types and their interactions within the human eye.

### **Key competences**

- 8 research groups at the Molecular Research Center
- 8 research groups at the Clinical Research Center
- 4 translational cross-functional research projects to accelerate new therapies for patients
- Development of gene therapy for macular degeneration (Stargardt disease)
- Optogenetic approaches to generate light sensitivity in the retina of blind patients suffering from retinitis pigmentosa
- Human retinal organoids as in-vitro testing models for novel therapies to restore vision
- Growth regulation of the eye bulb to address myopia
- Identification of currently unknown disorders of movement detection

### **Research cooperation with companies**

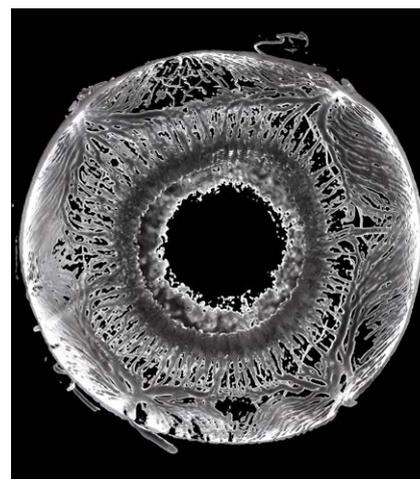
Affiliated with the University of Basel. In addition to working closely with institutions at the University of Basel and its hospitals (particularly the Eye Clinic), IOB has research collaborations with over 65 international academic partners and corporations.

### **Key facts**

<b>Head count (FTE)</b>	85
<b>Nationalities</b>	25
<b>Bachelor students</b>	2
<b>Master students</b>	3
<b>PhD students</b>	6
<b>Postdocs</b>	33
<b>Professors</b>	7
<b>Publications</b>	>85 since 2018

**Founded in**

2017



*Eye view from inside. © IOB.ch.*



*IOB laboratory. © IOB.ch.*

Further information is available at  
[www.iob.ch](http://www.iob.ch)



## Medical Image Analysis Center AG (MIAC)

The Medical Image Analysis Center is a clinical research organisation (CRO) supporting international trials with advanced medical image analyses, medical and scientific expertise. As a non-profit share-holding company and academically accredited institute founded at the Basel University Hospital in 1995, MIAC is today tightly embedded in national and international research networks, driving the translation of novel imaging and post-processing methodologies from bench to their application in clinical trials and, finally, clinical diagnostic routine.

### Key competences

- 25 years of international trials with 24/7 customer support
- Reference center for scientific and medical reporting
- Quantitative modeling and morphometry
- High throughput pipeline-based data workflows
- Board-certified neuro-/radiologists
- Advanced MRI analyses incl. ultrahigh, ultralow and quantitative MRI, MR elastography, QSM, ASL, DTI
- Quantitative OCT and PET analyses
- Highest quality and data protection standards
- Certification according to FDA / EMA / EN ISO 13485 / ICH / GCP

### Research cooperation with companies

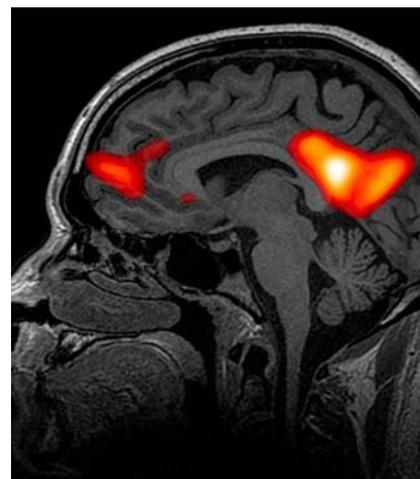
University Hospital Basel, University Basel, MAGNIMS, NAIMS, Guthy Jackson Charitable Foundation, Charité Berlin, National Institute of Health, Harvard University, University of Nottingham, University of Graz, University of Barcelona.

### Key facts

<b>Head count (FTE)</b>	21
<b>Nationalities</b>	8
<b>Postdocs</b>	1
<b>Spin offs</b>	3
<b>Publications (Ø per year)</b>	25–30

### Founded in

1995



Magnetic resonance imaging (MRI) of the head.

Further information is available at  
[www.miac.swiss/en](http://www.miac.swiss/en)



## Paul Scherrer Institute (PSI)

The Paul Scherrer Institute is the largest research institute for natural and engineering sciences within Switzerland and performs world-class research in three main subject areas: Matter and Material; Energy and the Environment; and Human Health. By conducting fundamental and applied research, PSI works on long-term solutions for major challenges facing society, industry and science. PSI develops, builds and operates complex large research facilities, such as the Swiss Light Source (SLS), the free-electron X-ray laser SwissFEL, the SINQ neutron source and the S $\mu$ S muon source, which offer out-of-the-ordinary insights into the processes taking place in the interior of different substances and materials. These are the only such facilities within Switzerland, and some are the only ones in the world.

### Key competences

#### Research areas

- Matter and Material study of the internal structure of a wide range of different materials
- Energy and Environment study to develop new technologies to facilitate the creation of a sustainable and secure supply of energy
- Human Health searching for the causes of illnesses and exploring potential treatment methods

### Research cooperation with companies

Many national and international research collaborations with companies from various industries.

### Key facts

<b>Head count</b>	2,200
<b>Nationalities</b>	>60
<b>PhD students</b>	320
<b>Postdocs</b>	150
<b>Professors</b>	100
<b>Spin offs</b>	15
<b>Publications (Ø per year)</b>	1,400
<b>Patents (Ø per year/in total)</b>	12/110 active patent families

### Founded in

1988



Paul Scherrer Institute.



Swiss Light Source SLS.

Further information is available at  
[www.psi.ch/en](http://www.psi.ch/en)

# FiBL

## Research Institute of Organic Agriculture (FiBL)

FiBL is an independent, non-profit, research institute with the aim of advancing cutting-edge science in the field of organic agriculture. FiBL's research team works together with farmers to develop innovative and cost-effective solutions to boost agricultural productivity while never losing sight of environmental, health and socio-economic impacts. Alongside practical research, FiBL gives high priority to transferring knowledge into agricultural practice through advisory work, training and conferences. FiBL has offices in Switzerland, Germany, Austria, France and Brussels (FiBL Europe) and numerous projects and initiatives in Europe, Asia, Latin America and Africa.

### Key competences

- Soil Sciences
- Crop Sciences
- Livestock Sciences
- Socioeconomics
- Extension, Training and Communication
- International Cooperation

### Research cooperation with companies

Numerous research cooperations, e.g. with universities, technical colleges, farmers' associations, food industries and foundations. For more information, see FiBL Activity Report, or FiBL website.

### Key facts

<b>Head count (FTE)</b>	200 at FiBL Switzerland
<b>FIBL global (FTE)</b>	300
<b>Nationalities</b>	23
<b>Trainees, bachelor, master students, guest scientists</b>	80
<b>PhD students</b>	17
<b>Professors</b>	4
<b>Spin offs</b>	3
<b>Publications (Ø per year)</b>	700 (thereof 80 peer-reviewed)
<b>Patents (in total since 2014)</b>	3

### Founded in

1973



Farmers select the best cotton plants. Six varieties have already been bred in this way. Photo: Monika Messmer



Prototype of a multi-spectrum camera enables FIBL livestock researcher to detect even the smallest injuries in pigs. Photo: Marion Nitsch

Further information is available at [www.fibl.org/en](http://www.fibl.org/en)

**More**  
*productive*

# More

*than 400*

*biotech-related  
companies*



Swiss Institute of  
Bioinformatics

## SIB Swiss Institute of Bioinformatics (SIB)

The SIB Swiss Institute of Bioinformatics is an academic not-for-profit organization whose mission is to lead and coordinate the field of bioinformatics in Switzerland. Its data science experts join forces to advance biological and medical research and enhance health. SIB provides the national and international life science community with a state-of-the-art bioinformatics infrastructure including services, resources, expertise. It also federates world-class researchers and delivers training in bioinformatics. The institute includes more than 70 world-class research and service groups including 800 scientists in the fields of genomics, proteomics, evolution and phylogeny, systems biology, structural biology, text mining and machine learning and personalized health.

### Key competences

- 360° bioinformatics support for research in the health- and research sectors in Switzerland and abroad, with core services including:
- Over 150 bioinformatics databases and software tools, to be used and adapted to private companies' specific needs
- Regulated environment services
- High-performance computing and storage for sensitive and non-sensitive data
- Data coordination center for large-scale health data sharing in Switzerland and for international projects
- Bioinformatics analysis and biostatistics including experimental design
- Data management planning
- Software engineering, code optimization, web technologies and scientific services hosting.
- Bioinformatics training for researchers and clinicians, from the Swiss and international scientific community
- Over 70 research and service groups

### Research cooperation with companies

Elsevier, Medisupport, Geneva University Hospitals.

### Key facts

<b>Head count (FTE)</b>	190
<b>Nationalities</b>	23
<b>PhD students</b>	190 among SIB members, 54 in Basel
<b>Publications (in total)</b>	254 /2,450 since creation

### Founded in

1998



*SIB members provide over 150 high-quality databases and software tools to the global life sciences community.*



*Embedding bioinformaticians in the various research labs. SIB Swiss Institute of Bioinformatics, Photos: Nicolas Righetti.*

Further information is available at  
[www.sib.swiss](http://www.sib.swiss)



## Swiss Nanoscience Institute – University of Basel (SNI)

The Swiss Nanoscience Institute at the University of Basel is a center of excellence for nanosciences and nanotechnology founded in 2006 on the initiative of the Canton of Aargau and the University of Basel. In the SNI network, interdisciplinary teams of scientists conduct basic and applied research that actively supports knowledge and technology transfer with industrial companies from Northwestern Switzerland as part of the Nano Argovia program. The SNI's Nano Imaging Lab offers a comprehensive imaging service for companies and research institutions. The SNI provides interdisciplinary training for young scientists through a bachelor's and master's study program in nanoscience and the PhD School. The SNI is also involved in public relations activities and specifically supports initiatives aiming to interest various target groups in the natural sciences and support collaboration between academia and industry.

### Key competences

- Quantum sciences
- Sensing
- Nano electronics
- Imaging at nanoscale
- Graphene and other two-dimensional materials
- Biomimetic and functional surfaces
- Nanomechanics

### Research cooperation with companies

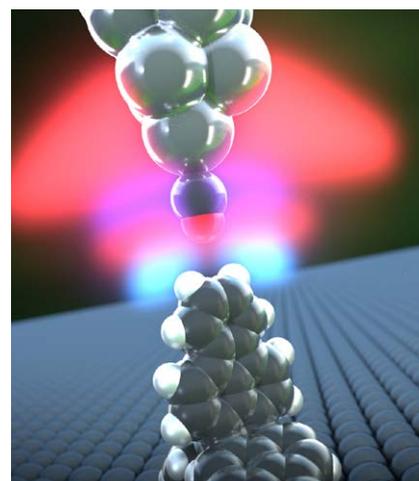
Cooperations in last 4 years: ABB Switzerland Ltd, Aigys AG, Alstom AG, BASF Schweiz AG, BRUGG CABLES INDUSTRY, Cellpack AG Packaging, CIS Pharma AG, Credentis AG, Dectris Ltd., DMS Nutritional Products Ltd., FGen GmbH, Gemalto AG, HeiQ Materials, Huntsman, INOFEA GmbH, InterAx Biotech AG, Jakob Härdi AG, leadXpro AG, Medicoat AG, Atesos Medical AG, Hager & Meisinger GmbH, Memo Therapeutics AG, Mems AG, Menhir Photonics AG, Omya International AG, QNAMI, Roche, Rolic Technologies Ltd., Synthes, TargImmune Therapeutics, WATERjet Robotics AG.

### Key facts

<b>Head count</b>	156 network members
<b>Nationalities</b>	16
<b>Bachelor students</b>	53
<b>Master students</b>	47
<b>PhD students</b>	38
<b>Professors</b>	5 financially supported, 57 in the network
<b>Spin offs</b>	4 since 2013
<b>Publications (Ø per year)</b>	65
<b>Patents (Ø per year)</b>	1–3

### Founded in

2006



A hydrogen bond forms between a propellane (lower molecule) and the carbon monoxide functionalized tip of an atomic force microscope.



Argovia professor Martino Poggio with his PhD student Simon Philipp.

Further information is available at  
[www.nanoscience.ch/en](http://www.nanoscience.ch/en)

Source: SNI



## Swiss Tropical and Public Health Institute (Swiss TPH)

The Swiss Tropical and Public Health Institute is a world-leading institute in global health with a particular focus on low- and middle-income countries. Associated with the University of Basel, Swiss TPH combines research, education and services at the local, national and international level. Over 800 people from 80 nations work at Swiss TPH focusing on infectious and non-communicable diseases, environment, society and health as well as health systems and interventions.

### Key competences

- Environment and health
- Health systems and interventions
- Infectious diseases
- Non-communicable diseases
- Society and health

### Research cooperation with companies

Novartis, Merck, GlaxoSmithKline, Janssen, Lygature, Straumann (and many more).

### Key facts

<b>Head count (FTE)</b>	817
<b>Nationalities</b>	80
<b>Master students</b>	55
<b>PhD students</b>	190
<b>Postdocs</b>	700
<b>Professors</b>	39 (Including Full, Associate, Titulary and PD professorships)
<b>Publications (per year)</b>	500
<b>Patents</b>	21

### Founded in

1943

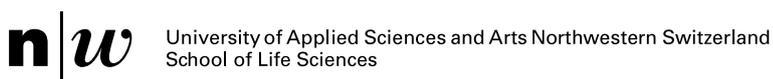


Swiss Tropical and Public Health Institute.



Swiss TPH has in-depth know-how in conducting clinical trials in low-resource countries.

Further information is available at  
[www.swisstph.ch/en](http://www.swisstph.ch/en)



## **University of Applied Sciences and Arts Northwestern Switzerland (FHNW) School of Life Sciences**

The FHNW School of Life Sciences is part of Europe's largest life sciences center and lies at the heart of pharmaceutical and medical technology, the chemical industry and environmental and biotechnology. It is here that they train skilled specialists and come up with solutions to the social and economic challenges of tomorrow. They are committed to developing new preventive and therapeutic products and services, improving people's quality of life and promoting a sustainable attitude to the environment.

### **Key competences**

4 Institutes

#### **Main research areas**

- Institute for Chemistry and Bioanalytics
- Institute for Ecopreneurship
- Institute for Medical Engineering and Medical Informatics
- Institute for Pharma Technology

### **Research cooperation with companies**

Adolphe Merkle Institut, BASF Schweiz AG, BioVersys AG, Bühlmann Laboratories AG, Bundesamt für Umwelt, CAMAG, Clariant AG, CSEM-Muttenz, Curaden AG, DSM Nutritional Products Ltd, EAWAG, EMPA, EPFL, ETH Zurich, HeiQ Materials AG, Huntsman Advanced Materials GmbH, F. Hoffmann-La Roche Ltd, KKS Ultraschall AG, Lonza AG, Novartis, Omya International AG, Paul Scherrer Institut, Polyphor AG, Siegfried, SKAN AG, Spirig Pharma Ltd, Universität Basel, Universität Bern, Universität Freiburg, Universität Zurich, Unispital Basel, Unispital Genf, ZHAW.

### **Key facts**

<b>Head count (FTE)</b>	202
<b>Nationalities</b>	20
<b>Bachelor students</b>	360
<b>Master students</b>	53
<b>PhD students</b>	22
<b>Postdocs</b>	38
<b>Professors</b>	31
<b>Spin offs</b>	3 since 2013
<b>Publications (Ø per year)</b>	50
<b>Patents (2014-2019)</b>	1

**Founded in**

2006



*FHNW School of Life Sciences in Muttenz.*



*Entrance hall of the new building with the diagonal stairs and the art monolith in the middle.*

Further information is available at  
[www.fhnw.ch/en/degree-programmes/  
lifesciences](http://www.fhnw.ch/en/degree-programmes/lifesciences)

**More**

***to discover***

Basel Area Business & Innovation  
Dufourstrasse 11  
4010 Basel  
Switzerland

T +41 61 295 50 00  
[invest@baselarea.swiss](mailto:invest@baselarea.swiss)

[www.baselarea.swiss](http://www.baselarea.swiss)  
[www.investinbasel.com](http://www.investinbasel.com)