



Baden-Württemberg

Biotechnology

Biotechnology – a Growth Cluster in Baden-Württemberg

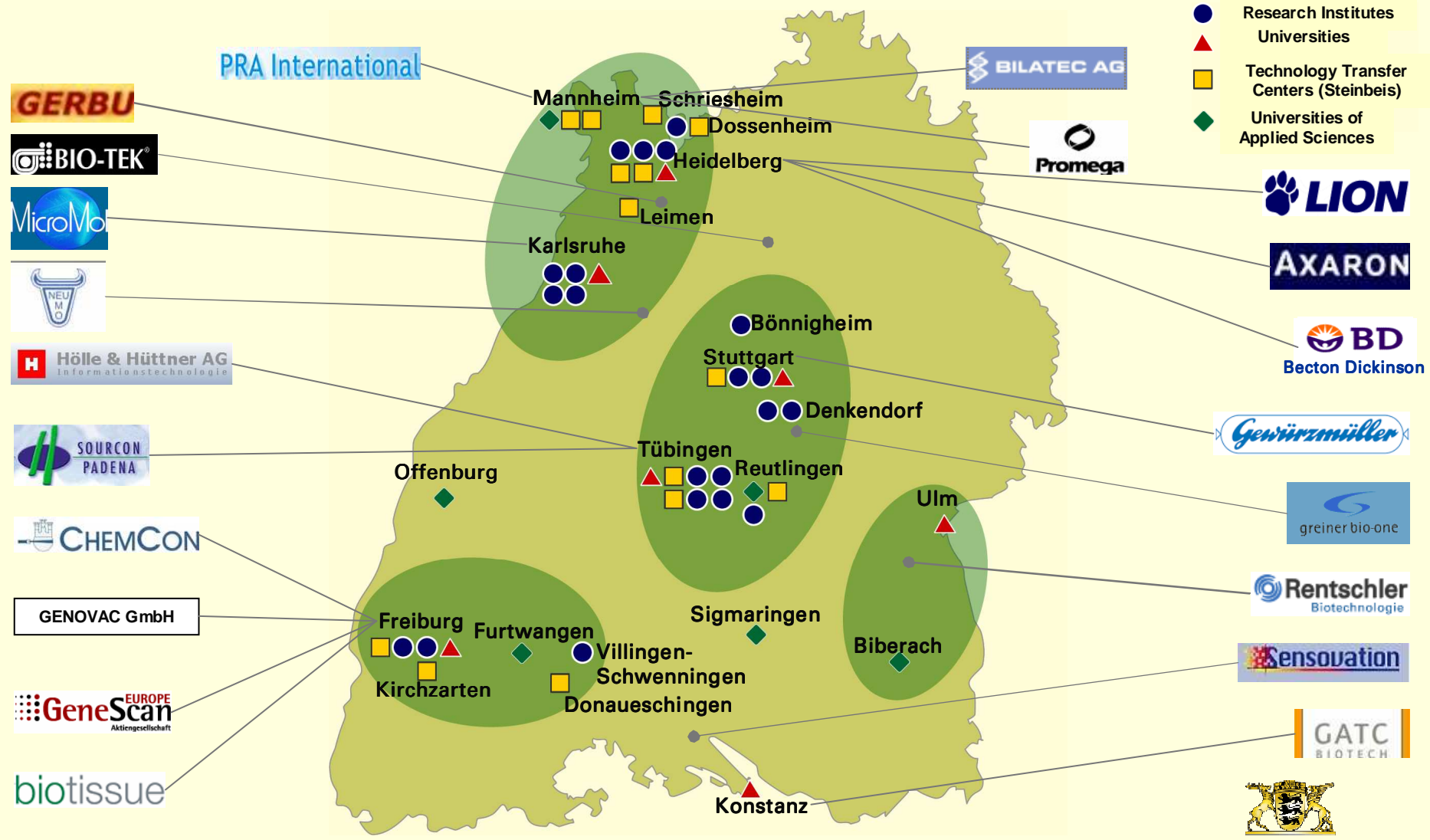
- The biotechnology sector is regarded as a future area of the 21st century and is experiencing an upturn again after a phase of consolidation. The experts are expecting a two-digit increase in sales per year until 2010 and envisage on the whole a better development for Germany than for the rest of Europe.
- As a product of excellent scientific research, a dynamic business landscape has emerged: there are approximately 150 biotechnology companies in the region, of these 63 are core biotechnological industries (2003).
- Leading German enterprises such as the Lion Bioscience AG or the Axaron Bioscience AG were in founded in Baden-Württemberg.
- Foreign enterprises such as GeneScan or PRA International have chosen a location in Baden-Württemberg, too.
- Baden-Württemberg, with its university environment and specialised courses of studies such as biotechnology or biotechnological pharmaceuticals, networks in the form of 5 bio-regions as well as with its concentration of pharmaceutical enterprises, offers enterprises of the biotechnology industry the very best possibilities for research and marketing or for the production of products.



Regional Centres in Cluster Bio Technology

(Relevant research institutes, universities and examples of important enterprises)

- Research Institutes
- ▲ Universities
- Technology Transfer Centers (Steinbeis)
- ◆ Universities of Applied Sciences



Biotechnology – Selected Companies



Lion Bioscience AG, Heidelberg



AXARON Bioscience AG, Heidelberg



PRA International, Mannheim



Baden-Württemberg

Biotechnology – Selected Companies



Greiner Bio-One GmbH, Frickenhausen



GeneScan Europe AG, Freiburg



Rentschler Biotechnologie, Laupheim



Baden-Württemberg

Biotechnology – Selected Companies



NEUMO GmbH + Co. KG, Knittlingen



MicroMol Gesellschaft für mikrobiol.u.molekularbiolo. Auftragsforschung mbH, Karlsruhe



Biotissue Technologies AG , Freiburg



BIO-TEK Instruments GmbH, Bad Friedrichshall



Baden-Württemberg

Biotechnology – Selected Companies



SOURCON PADENA GmbH & Co. KG, Tübingen



GERBU Biotechnik GmbH, Gaiberg



Sensovation AG, Stockach



Baden-Württemberg

Biotechnology – Selected Companies



Bilatec AG, Mannheim



GATC Biotech AG, Konstanz



Promega GmbH, Mannheim



Gewürzmüller GmbH, Stuttgart



Baden-Württemberg

Biotechnology – Selected Companies



Hölle & Hüttner AG, Tübingen



BD Bioscience, Heidelberg

GENOVAC GmbH

GENOVAC GmbH, Freiburg

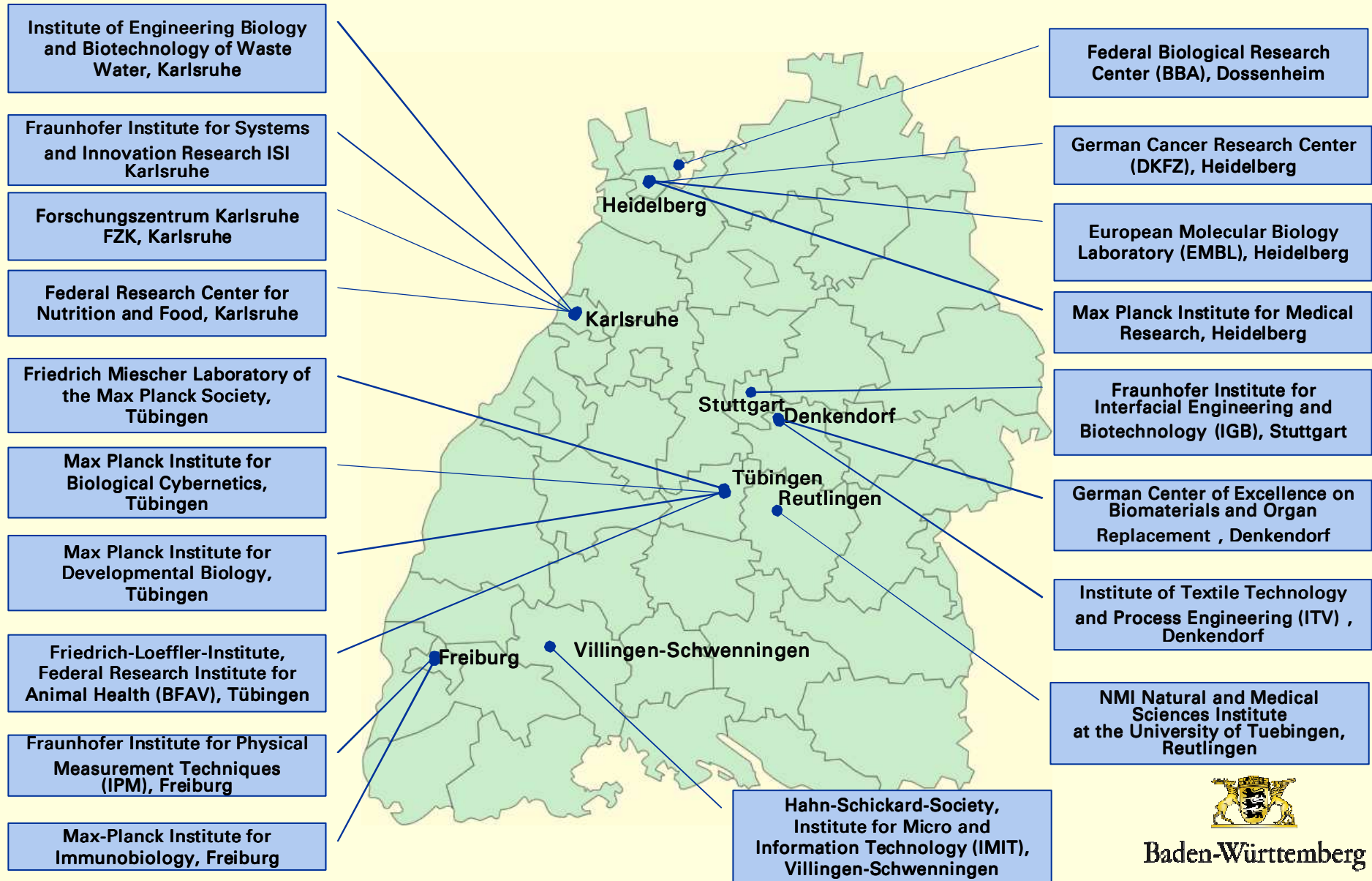


ChemCon GmbH, Freiburg



Baden-Württemberg

Biotechnology – Research Institutes



Biotechnology – Relevant Universities (Study Courses)

University of Heidelberg:

- Molecular Biotechnology
- Molecular & Cellular Biology

University of Stuttgart:

- Technical Biology

University of Karlsruhe (TH):

- Bioengineering
- Biotechnology

University of Tübingen:

- Biochemistry
- Bioinformatics

University of Freiburg:

- Biotechnology

University of Ulm:

- Biochemistry

University of Konstanz:

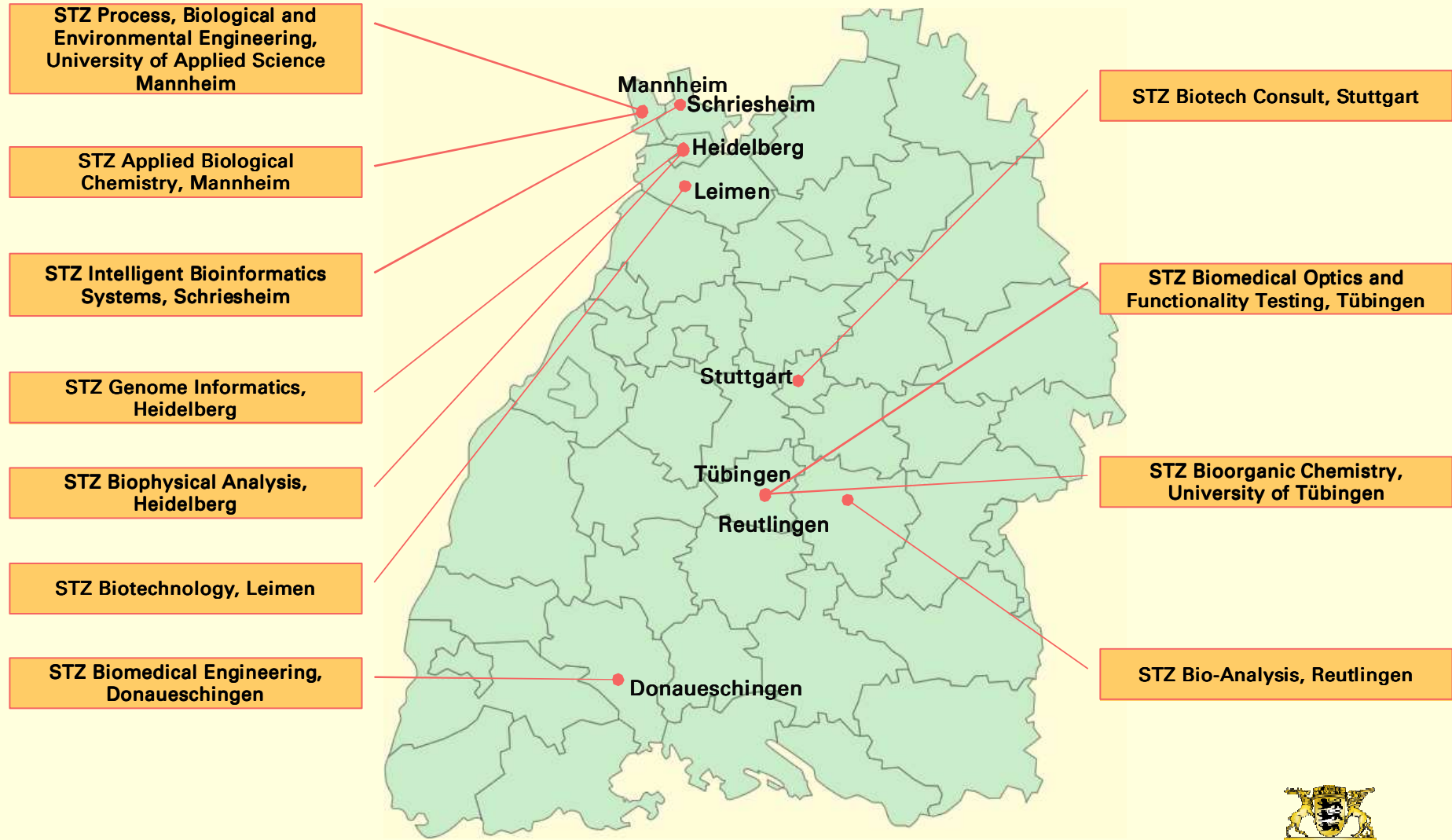
- Life Science



Biotechnology – Relevant Universities of Applied Sciences (Study Courses)



Biotechnology – Steinbeis Transfercenters (STZ)



Biotechnology - Research



Bundesforschungsanstalt für Ernährung und Lebensmittel (Federal Research Center for Nutrition and Food), Karlsruhe

<http://www.bfa-ernaehrung.de>



Biologische Bundesanstalt für Land- und Forstwissenschaften (Federal Biological Research Center) BBA, Dossenheim

<http://www.bba.de>



Friedrich-Loeffler-Institut, Bundesforschungsinstitut für Tiergesundheit (Federal Research Institute for Animal Health), Tübingen

<http://www.fli.bund.de>



Baden-Württemberg

Biotechnology - Research



Fraunhofer-Institut für Physikalische Messtechnik (Fraunhofer Institute for Physical Measurement Techniques) IPM, Freiburg

<http://www.ipm.fraunhofer.de>



Fraunhofer-Institut für Systemtechnik und Innovationsforschung (Fraunhofer Institute for Systems and Innovation Research) ISI, Karlsruhe

<http://www.isi.fhg.de>



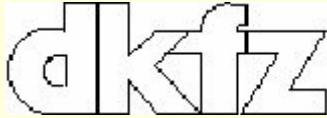
Fraunhofer-Institut für Grenzflächen- und Bioverfahrenstechnik (Fraunhofer Institute for Interfacial Engineering and Biotechnology) IGB, Stuttgart

<http://www.igb.fraunhofer.de>



Baden-Württemberg

Biotechnology - Research



Deutsches Krebsforschungszentrum (German Cancer Research Center) DKFZ, Heidelberg

<http://www.dkfz.de>



Forschungszentrum Karlsruhe FZK

<http://www.fzk.de>



Institut für Textil- und Verfahrenstechnik der DITF (Institute of Textile Technology and Process Engineering of the DITF) ITV , Denkendorf

<http://www.itv-denkendorf.de>



Baden-Württemberg

Biotechnologie - Research



Hahn-Schickard-Gesellschaft Institut für Mikro- und Informationstechnik (Hahn-Schickard-Society Institute for Micro and Information Technology) IMIT, Villingen-Schwenningen

<http://www.hsg-imit.de>



Max-Planck-Institut für Immunbiologie (Max-Planck-Institute of Immunobiology), Freiburg

<http://www.immunbio.mpg.de>

Institut für Ingenieurbiologie und Biotechnologie des Abwassers

Institut für Ingenieurbiologie und Biotechnologie des Abwassers (Institute of Engineering Biology and Biotechnology of Waste Water), University of Karlsruhe

<http://www.iba.uni-karlsruhe.de>



Naturwissenschaftliches und Medizinisches Institut (Natural and Medical Sciences Institute), University of Tübingen

<http://www.nmi.de>



Baden-Württemberg

Biotechnology - Research



Max-Planck-Institut für medizinische Forschung (Max Planck Institute for Medical Research), Heidelberg

<http://www.mpimf-heidelberg.mpg.de>



Friedrich-Miescher-Laboratorium für biologische Arbeitsgruppen in der Max-Planck-Gesellschaft (Friedrich Miescher Laboratory of the Max Planck Society), Tübingen

<http://www2.fml.tuebingen.mpg.de>



Max-Planck-Institut für Entwicklungsbiologie (Max Planck Institute for Developmental Biology), Tübingen

<http://www.eb.tuebingen.mpg.de>



Baden-Württemberg

Biotechnology - Research



Max-Planck-Institut
für biologische Kybernetik

Max-Planck-Institut für biologische Kybernetik (Max Planck Institute for Biological Cybernetics), Tübingen

<http://www.kyb.tuebingen.mpg.de>



Deutsches Zentrum für Biomaterialien und Organersatz (Biomaterials and Organ Replacement) BMOZ Stuttgart-Tübingen, Denkendorf

<http://www.bmoz.de>



Europäisches Molekularbiologisches Laboratorium (European Molecular Biology Laboratory) EMBL, Heidelberg

<http://www.embl-heidelberg.de>



Baden-Württemberg

Biotechnology – Networks



www.bio-pro.de

BIOPRO Baden-Württemberg GmbH

BIOPRO Baden-Württemberg as the State-wide service and marketing agency pursues the targeted support of research institutions and companies of the biotechnology and life science sectors.

Towards the end of 2002, the government of Baden-Württemberg founded the BIOPRO Baden-Württemberg GmbH based in Stuttgart as a company fully owned by the State. Through specific measures for the promotion of the economy, targeted location marketing and broad public relations work, it is the task of BIOPRO Baden-Württemberg to present and expand the large potential of this highly innovative technology sector in a transparent and efficient way.

The activities of the BIOPRO Baden-Württemberg GmbH strongly strengthen the science and business location Baden-Württemberg. The aim is to start a movement which will allow all members of the industry in the state to position themselves internationally and generate the best possible growth in synergetic surroundings.

As an interdisciplinary technology, biotechnology influences innovations in many sectors. Through the targeted support in finding cooperation partners both within (pharmaceutical industry) as well as outside of the sector (classical industries), the BIOPRO Baden-Württemberg GmbH contributes to the security of companies and thus of jobs.



Baden-Württemberg

Biotechnology – Networks



BioRegio STERN

STERN BioRegion is one of the leading high tech regions in Europe with a long tradition of famous discoverers and well-known companies. Currently, the BioRegion has 86 biotech and 94 medical equipment companies, all contributing to the region's innovative and successful biotech industry.

www.bioregio-stern.de

STERN stands for Stuttgart, Tübingen, Esslingen, Reutlingen and Neckar-Alb – five dynamic biotech sites in South West Germany. STERN BioRegion benefits from the best possible conditions for turning ideas into reality. The region has an extremely good infrastructure, a dense network of research institutions, which cooperate closely with the region's companies as well as a traditionally strong entrepreneurial mentality. Such are the factors leading to STERN BioRegion's success.

BioRegio STERN Management GmbH offers a comprehensive portfolio of consulting services for start-up and established biotech companies in the region. The spectrum of services ranges from advice in business plan matters to advice in patenting issues. Individual solutions are worked out in confidential and close cooperation with those seeking advice.



Baden-Württemberg

Biotechnology – Networks



BioRegio Freiburg

Embedded in the tri-national network BioValley which bundles the biotechnological potentials of North-West Switzerland, the southern part of Baden and the Alsace, the BioRegio Freiburg has an international orientation since the mid-1990s. With 200 life-science companies, it belongs to the most dynamic BioRegions in Germany.

www.bioregion-freiburg.de

The BioRegio Freiburg possesses an excellent research landscape which includes the Freiburg University, the Clinic for Tumor Biology and the Universities of Applied Sciences in Offenburg and Furtwangen as well as renowned institutes of the Max Planck Society and Fraunhofer Society.

The coordination of the BioRegio Freiburg is the task of the technology foundation BioMed Freiburg which, amongst others, includes the City of Freiburg, Freiburg University and the Chamber of Industry and Commerce Southern Upper Rhine.



Baden-Württemberg

Biotechnology – Networks



BioRegion Ulm

Science, education and industry are all equally well represented in the BioRegionUlm. It is the central location in Europe for biotechnological production, in particular for the production of drugs. Fifty companies, active in the fields of biotechnology, life sciences and medical engineering, are located in the area bordered by the Swabian Mountains and Lake Constance. The BioRegionUlm is a healthy mix of well-known international companies and start-up companies, with a continuous dynamic development.

www.bioregioulm.de

Biotechnology has had a long tradition in Ulm and is at the heart of the city's activities. The science city of Ulm with the University, University of Applied Sciences, non-university institutions and industrial research institutes offers an excellent infrastructure for co-operation in a small geographic area, which facilitates the rapid transfer of knowledge and technology. Only recently, the University of Ulm underlined its life science competence with the construction of a building for stem cell biology. The project is being funded by the state of Baden-Württemberg to the tune of 11.5 million euros. The aim is to carry out research on adult stem cells.



Baden-Württemberg

Biotechnology – Networks



BioRegion Rhein-Neckar-Dreieck

A biotechnology region that holds its own against international competition emerged in the Heidelberg/Mannheim area in the vicinity of internationally well-known research centres and big chemical-pharmaceutical companies.

The Rhine Neckar Triangle BioRegion was one of the award-winning German BioRegions in the BioRegion competition held by the Federal Ministry of Education and Research (BMBF) in 1996. This initiated a dynamic development programme, which led to the foundation of more than 60 small and medium-sized biotechnology companies employing approximately 1,500 people. Numerous companies providing services for the biotechnology industry have established themselves in the region. Such growth was stimulated through the establishment of international chemical-pharmaceutical groups such as BASF and Abbot in Ludwigshafen, Roche Diagnostics in Mannheim and Merck in Darmstadt.

A total of around 8,000 jobs in industry and more than 6,000 jobs in research institutions are related to biotechnology. The Rhine Neckar Triangle is therefore one of the most important regions focusing on this key 21st Century technology.

www.bioregion-rnd.de



Baden-Württemberg

Biotechnology – Networks



www.biolago.org

BioRegion BioLago

In February 2005, 26 institutions from science and industry in the Lake Constance region joined forces in order to form a cross-border bioregion. Newly-founded “BioLAGO” is the fifth bioregion in Baden-Württemberg and contributes to extending southwest Germany as a top biotech location.

BioLAGO stands for a pan-regional and internationally-oriented [network](#) with core competences in modern biosciences including the life sciences, consumer protection healthcare and their technological environment.

The forum, integrating entrepreneurs and representatives from politics and science, sets out to give all members the opportunity for personal exchange of information as well as for establishing contacts between industry, science, the public and politicians.

The BioLAGO network aims to provide specific offers for further training and education and to facilitate technology transfer and market access of participating companies.



Baden-Württemberg

Biotechnology – Technology Parks



BioTechPark Freiburg, Freiburg

The BioTechPark Freiburg is an ideal location for new and established companies engaged in biotechnology, microsystems technology, medicine technology, pharmacy and related fields.

Closely connected to the University of Freiburg, one of Germany's top universities, the BioTechPark Freiburg forms the center of the BioRegion Freiburg. Its responsible body is the Technology Foundation BioMed Freiburg, which is a union based on scientific, economical and political interests, and at the same time functions as the central coordination unit of the BioRegion Freiburg.

www.biotechpark.de

The BioRegion Freiburg is an attractive and dynamic region, offering a high quality of life and an excellent and varied company and research landscape. Situated in the border triangle of Germany, France and Switzerland, the BioRegion Freiburg is a partner of the tri-national BioValley network, which bundles the biotechnological potential of the centres Freiburg (D), Basel (CH) and Strasbourg (F), creating a world famous biotechnological site.



Baden-Württemberg

Biotechnology – Technology Parks



Heidelberg Technology Park, Heidelberg

The Heidelberg Technology Park is a science park and centre of Life Sciences. Mainly focused on biotechnology the Park is closely related with the Heidelberg University and to the famous national and international research institutions located here.

It offers about 50.000 sqm lab and office space to 63 tenants (companies/institutions) with about 950 employees.

[www.heidelberg.de/
Technologiepark](http://www.heidelberg.de/Technologiepark)

As centre of a network of information and communication, the Heidelberg Technology Park provides contact for start-up`s and SME`s with focus on Life Sciences, helping them with renting office and lab space, financing, management, marketing and legal affairs.

There is a close cooperation with the ministry, many national and international institutions and the major scientific institutes in Heidelberg.



Baden-Württemberg

Biotechnology – Technology Parks



Life Science Center Esslingen am Neckar

The LSC is the official Life Science Center of the Stuttgart Region. It includes biotechnology but also covers a wider range of technology than this. The LSC is oriented towards the future markets of health, diet, agriculture and environment.

The first building phase was started in April 2000. It encompasses approx. 1000m² of laboratory area and approx. 1000m² of office space, which is fully rented out. The second building phase is already in the planning stage.

www.lsc-esslingen.de

The economic development programme of the city of Esslingen am Neckar supports the companies of the Life Science Center in all entrepreneurial questions. It organises consultation and financing services, including Venture Capital with a company.

Nine companies are currently based at the Life Science Center.



Baden-Württemberg

Biotechnology – Technology Parks



TFU-BiotechnologieZentrum Ulm

The Technologieförderungsunternehmen Ulm provides the companies based in the Biotechnology Center with office services, computer networking services, reception services, subsidy consultancy services, business plans, company start-up consultancy services, ISDN services, conference rooms, photocopiers, mail-order and telephone switchboard services.

www.tfu.de

The Center comprises a total of 62 companies that work in the fields of biotechnology, electronics, apparatus construction, mechanical engineering, microelectronics, pharmaceuticals, software as well as other industries.



Baden-Württemberg