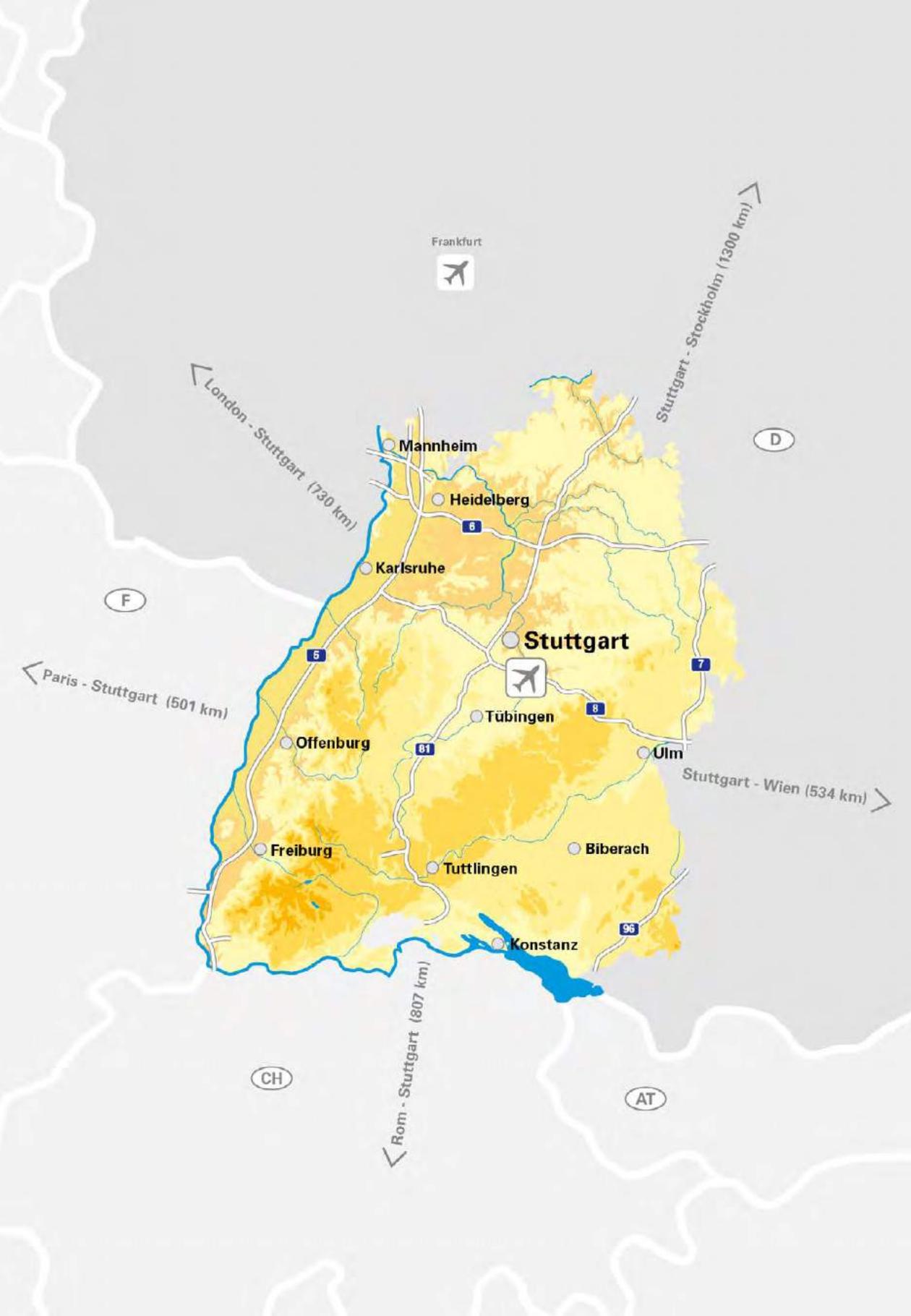


# Biotech Guide Baden-Württemberg

Biotech Companies in the South-West of Germany





Frankfurt



D

F

Paris - Stuttgart (501 km)

London - Stuttgart (730 km)

Stuttgart - Stockholm (1300 km)

Stuttgart

Tübingen

Offenburg

Ulm

Freiburg

Tuttlingen

Biberach

Konstanz

CH

Rom - Stuttgart (807 km)

AT

Stuttgart - Wien (534 km)

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# About the publication

The Biotech Guide Baden-Württemberg presents an extensive view of biotechnology companies located in Baden-Württemberg. This includes dedicated biotechnology companies and companies that provide different services to the biotechnology sector, e.g. analytics, sequencing and cell line production. The guide is presented at national and international events and occasions addressing potential business partners and investors.

All biotech companies located in Baden-Württemberg of which BIOPRO is aware\*, were offered the opportunity to provide a company profile (including one or more images). Each profile outlines the main focus of the company and the services it offers along with relevant contact information.

This Biotech Guide is published by BIOPRO. However, the companies are solely responsible for the information provided on the individual companies' profile page.

## **Project coordinators:**

The editorial staff and over 100 invited biotech companies help ensure the quality of this publication.

Carmen Groß ✉ [gross@bio-pro.de](mailto:gross@bio-pro.de)

Dr. Barbara Jonischkeit

Dr. Claudia Luther

Caroline Ref

\* There may be biotech companies in Baden-Württemberg of which BIOPRO is not aware. Please contact us if you are interested in being listed in the next Biotech Guide. Meanwhile we would like to offer you a listing in BIOPRO's online database available here: [www.gesundheitsindustrie-bw.de](http://www.gesundheitsindustrie-bw.de).

# Editorial



*Prof. Dr. Ralf Kindervater  
Chief Executive Officer  
BIOPRO Baden-Württemberg GmbH*

The biotechnology sector is extremely important for Baden-Württemberg as a healthcare industry location. It now has the potential to improve the treatment of widespread disorders including neurological and infectious diseases and cancer. Biotechnology will have a major impact on the identification and production of complex biomarkers for pinpointing diseases, and developing companion diagnostics alongside novel therapeutics.

BIOPRO has been active in this field since 2003 and is keen to continue supporting this development. Within the last eighteen months, twelve biotechnology start-ups have been established in Baden-Württemberg. Furthermore, the quantity and quality of investments, acquisitions and licensing/cooperation agreements (e.g. CureVac and Phenex) and the two IPOs (Affimed and Curetis) were excellent as well as successful. This level of activity clearly shows that Baden-Württemberg is a great location for founding biotech companies.

However, the sector still faces several major challenges that are typical of the life sciences sector as a whole: the length of time and large sums of money required for research and development along with the high risk factor associated with development projects. Nevertheless, some family offices and EU-based investors have invested in a handful of projects. One potential piece of good news is that the German federal government is considering allowing start-up companies, whose financing depends on bringing on board new shareholders or substituting existing shareholders, will be able to carry over unused losses provided that they continue the same business following any change in shareholders.

Publishing the Biotech Guide and presenting it at national and international events and occasions to potential business partners and investors, BIOPRO Baden-Württemberg improves the visibility of Baden-Württemberg's biotech sector continuously.

# Foreword



*Dr. Nicole Hoffmeister-Kraut, MdL  
Baden-Württemberg Minister  
of Economic Affairs,  
Labour and Housing*



*Theresia Bauer, MdL  
Baden-Württemberg  
Minister of Science,  
Research and the Arts*

Biotechnology is hugely important for Baden-Württemberg as an economic location. It is all about harnessing cells, cell components or entire organisms for converting substances or production purposes. It is a significant cross-sectoral technology and its economic potential is still a long way from being fully exploited.

Nowadays, drugs are already being produced on a large scale using biotechnological production processes. The largest biotechnological production plants in Europe are located in eastern Baden-Württemberg in the Ulm, Biberach and Laupheim area.

The demand for biopharmaceuticals is set to continue rising, as is the need for predominantly scientifically qualified staff. In addition to biotechnological university courses at various Baden-Württemberg universities, the state's biotechnological grammar schools also offer basic

biotechnological training. The first schools were established in 2001 and there are now thirty-one of them.

Biotechnology is also paving the way towards a more biobased economy. Biobased process and product innovations contribute to the creation of a sustainable bioeconomy. The many university and research institutions in Baden-Württemberg work in partnership with the region's biotechnology companies, providing ideas for new developments.

Biotechnology companies often emerge as spin-offs from universities and applied research institutions. They are highly innovative and extremely research intensive. The Baden-Württemberg state government's strategy is to make Baden-Württemberg one of the most dynamic start-up regions in Europe. It therefore supports these activities through special programmes aimed at encouraging

the establishment of new companies and promoting entrepreneurial thinking. The EXI start-up vouchers sponsored by the Baden-Württemberg Ministry of Economic Affairs, Labour and Housing provide comprehensive assistance and useful information to prospective company founders. The "Young Innovators" programme sponsored by the Baden-Württemberg Ministry of Science, Research and the Arts is aimed at young scientists and provides financial and content-related support to potential company founders at universities and other research institutions.

Baden-Württemberg's incentives and programmes have certainly been successful: Baden-Württemberg is the state with the most biotechnology company founders in Germany, according to an evaluation of the latest four Ernst & Young German biotechnology reports by BIOPRO Baden-Württemberg GmbH.

BIOPRO Baden-Württemberg is a state-owned company financed by the Baden-Württemberg Ministry of Economic Affairs, Labour and Housing and the Baden-Württemberg Ministry of Science, Research and the Arts. BIOPRO actively supports companies and researchers in the biotechnology sector. It works at the interface between industry and science, bringing together potential cooperation partners, providing information on relevant topics through various events and publications, discussing future trends and challenges and providing comprehensive information to the public on Baden-Württemberg as a economically and scientifically important location. We would like to thank BIOPRO for their valuable work. This Biotech Guide introduces you to Baden-Württemberg as a strong biotech location and the opportunities offered by the field of biotechnology.

**BIOPRO**

**Baden-Württemberg GmbH**

Breitscheidstr. 10  
70174 Stuttgart

Phone: +49 (0) 711 21 81 85 00  
Telefax: +49 (0) 711 21 81 85 02  
info@bio-pro.de  
www.bio-pro.de

**Contact person:**

Prof. Dr. Ralf Kindervater, CEO

**Employees:** 15

**Founding year:** 2002

**Production range, services:**

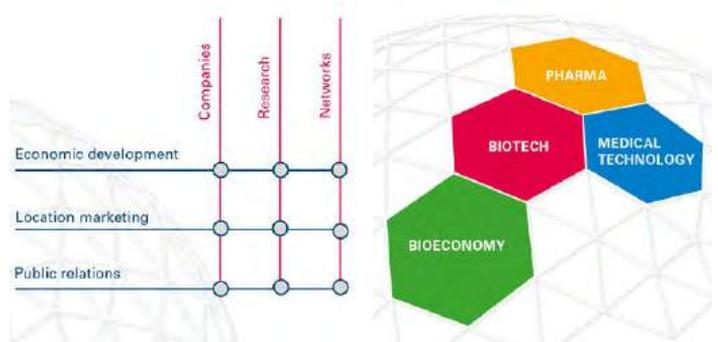
- Business development support
- Transfer of research into industry
- Business start-up services
- Location development
- Innovation communication

BIOPRO Baden-Württemberg GmbH plays a leading role in the state of Baden-Württemberg's two strategic priorities, namely the healthcare industry and the bioeconomy. The healthcare industry includes the biotechnology, a typical cross-sectoral technology, medical technology and the pharmaceutical industry.

BIOPRO is the central point of contact for companies, research institutes, networks and clusters in the state of Baden-Württemberg in southern Germany. We connect different sectors with one another and encourage lateral thinking. Our service portfolio includes innovative event concepts, trend-based topic analyses and helping companies and research institutions set up joint projects and partnerships. We also support start-ups with our EXI start-up programme and by organising information events on company foundation. All these initiatives help boost the development of Baden-Württemberg as a healthcare and bioeconomy location and promote the innovative capability of the state's companies.

We also provide the public with comprehensive information about the healthcare industry in Baden-Württemberg through our newsletter, the BIOPRO website, which includes two specialised sub-portals, and BIOPRO Magazin. Interviews with experts and company profiles complement our articles and dossiers, and provide interesting insights into current research topics. Our aim is to position Baden-Württemberg as an outstanding location for research projects, cooperation between companies and research institutes and investments. We also work to increase the visibility of companies in the healthcare industry on the national and international stage.

Please feel free to contact us!



**Baden-Württemberg International –  
Your partner on the way to success**

Baden-Württemberg International (bwi) is the competence centre for the internationalisation, promotion and development of business, science and research of the State of Baden-Württemberg. We lend support to domestic and foreign companies, clusters and networks, research institutions and universities by serving as the central point of contact in all questions relating to internationalisation.

**Our main objectives are:**

- Strengthening contacts between foreign and local companies, universities and research institutions
- Supporting the endeavours of Baden-Württemberg companies, universities and research institutions to enter foreign markets
- Positioning Baden-Württemberg as an excellent location for business and science in order to encourage foreign capital investment, the settlement of new companies as well as the recruitment of specialist employees.

**Our support services for foreign investors:**

When looking to settle in a new region, companies are confronted with diverse questions and challenges. Baden-Württemberg International supports them in their projects - quickly and easily, based on local expertise and knowledge.

- Provision of general information on Baden-Württemberg as a location for business and science, as well as specific location and structure data
- Supply of general information on the legal framework and social insurance
- Identification of suitable business and scientific partners of your company
- Identification of potential sites and organization of site visits in cooperation with regional and local business-promotion agencies
- Support with administrative procedures
- Gateway to all actors in the field of business promotion and development.

**Baden-Württemberg  
International**

Willi-Bleicher-Str. 19  
70174 Stuttgart

Phone: +49 (0) 711 227 87 0  
Telefax: +49 (0) 711 227 87 22  
info@bwi-i.de  
www.bwi-i.de/en

**Contact person:**

Dr. Gunnar Grah, Executive Manager  
Life Sciences and Healthcare

**Employees:** 60**Founding year:** 1984**Branches:**

Nanjing, Jiangsu, CHN

**Production range, services:**

- Door opener for foreign markets
- Arrangement of business and science contacts
- One-stop shop agency for foreign investors

**BioRegion Freiburg**

c/o Technology Foundation BioMed  
Freiburg, Rathausgasse 33  
79098 Freiburg

Phone: +49 (0) 761 388 112 01  
Telefax: +49 (0) 761 388 112 99  
michael.richter@fvwtm.de  
www.bioregion-freiburg.de

**Contact person:**

Dr. Michael Richter,  
Coordinator

**Employees:** ns

**Founding year:** 1996

**Production range, services:**

- BioTechPark with lab and office space for biotech-companies
- Marketing, coordinating & networking
- Support in economic development

**BioRegion Freiburg — a dynamic region within the BioValley**

The BioRegion Freiburg is a partner in the tri-national BioValley network which pools the biotechnology potential of the centres of Freiburg (D), Basle (CH) and Strasbourg (F).

The region is known for its excellent and highly diverse research and company landscape. This takes in the University of Freiburg, with its unique Faculty of Engineering, one of Germany's biggest university hospitals, the Max Planck Institute for Immunobiology and Epigenetics, the Hahn-Schickard Institute for Microanalysis Systems as well as five Fraunhofer Institutes, including the Fraunhofer Institute of Physical Measurement Techniques, which works on bioanalytics.

“Centers of Excellence” have sprung up in the areas of biomimetics, cell and developmental biology, immunology, oncology, nanotechnology, plant biology, tissue engineering and systems biology as well as neurotechnology. Particular mention should be made of the high-performance technology transfer from the University of Freiburg, whose portfolio takes in all the eminent high-tech companies. With more than 100 biotech companies, including 40 which are R&D companies, the BioRegion Freiburg is one of the most dynamic German biotech regions.

The Technology Foundation BioMed Freiburg was set up in 1996 as a central network for the region by political, research and economic interests with the aim of creating secure jobs in the field of Life Sciences. The members of the Foundation are the City of Freiburg, the University of Freiburg, the Chamber of Industry and Commerce Southern Upper Rhine, the Association of Industrial Enterprises Baden e.V., the Sparkasse Freiburg – Nördlicher Breisgau and the Chamber of Handicrafts of Freiburg.



The German Biotech Cluster Rhine-Neckar (BioRN) around the cities of Heidelberg, Mannheim, Ludwigshafen and Darmstadt has grown into one of Europe's leading biotechnology clusters. The region includes renowned academic research institutions such as the European Molecular Biology Laboratory (EMBL), the German Cancer Research Center (DKFZ), and the institutes and hospitals of Heidelberg University. Together, more than 3,000 scientists in research institutions are working in biotechnology-related areas.

The cluster is supported by international companies in the biomedical and pharmaceutical sectors such as AbbVie in Ludwigshafen, Merck in Darmstadt, Roche in Mannheim, and Boehringer Ingelheim in Ingelheim. Thanks to the excellent research environment and strong support for startup companies, about 80 innovative biotech companies with own R&D have settled in the region. Many of these companies are involved in development and commercializing new products and technologies for the diagnosis and therapy of human diseases, especially cancer, cardiovascular and infectious diseases. Beyond that, more than 80 service providers for the biotech industry are located in the region.

In the 2008 Leading-Edge Cluster Competition the BioRN cluster was distinguished as one of Germany's most significant high tech regions by the Federal Ministry of Education and Research (BMBF). This distinction carried with it financial support in the amount of 40 million euros up to the year 2013.

Within the framework of the initiative "Internationalization of Leading-Edge Clusters" of the Federal Ministry for Education and Research (BMBF), the BioRN Cluster coordinates since January 2016 pan-European projects between the partners of the Health Axis Europe.



Photo: Tobias Schwerdt; Copyright: Heidelberg Marketing GmbH

### **BioRN Network e.V.**

Im Neuenheimer Feld 582  
69120 Heidelberg

Phone: +49 (0) 6221 43 05 111  
Telefax: +49 (0) 6221 43 05 119  
info@biorn.org  
www.biorn.org

### **Contact person:**

Dr. Christian Tidona,  
Managing Director

### **Employees: 2**

### **Founding year: 1996**

### **Production range, services:**

- Access to a regional and international life-science network
- Free and reduced fee events
- Contact point for other networks and institutions

**BioLAGO e. V.**  
**life science network**

Byk-Gulden-Str. 2  
78467 Konstanz

Phone: +49 (0) 7531 921 52 50  
Telefax: +49 (0) 7531 921 52 59  
info@biolago.org  
www.biolago.org

**Contact person:**

Andreas Baur,  
General Manager

**Employees:** 5

**Founding year:** 2007

**Production range, services:**

- Brokering of contacts between firms and research institutions
- Consulting and support for firms and start-ups
- Transfer of technology and knowledge; events and PR

**BioLAGO – International life science network**

BioLAGO is the cross-border network for life sciences with 90 members in industry and research in the international region of Lake Constance (Germany, Switzerland and Austria). The network links industry with science for innovations; it promotes knowledge transfer and the foundation of new firms. The main topics are diagnostics & analytics, biotechnology, pharma and medical technology. The cooperation of industry and research is promoted by projects, special events, consultancy and training offers and the brokering of contacts. BioLAGO e.V. has initiated over 190 cooperations between its members. BioLAGO unites about 7,000 jobs in research, production and services. The enterprises have created 1,200 new jobs in recent years in the area of Lake Constance, which made an important contribution to economic development.

**Our Mission**

- Strengthening the life science industry around Lake Constance
- Cross-border cooperation and economic development
- Public relations and qualification on current branch topics

**New project: Network for new diagnostic techniques**

Under the leadership of the BioLAGO network companies and universities aim to develop new rapid tests for the detection of pathogens and tumors within the project „DiagNet – diagnostics of the future“. The project is funded by the European Regional Development Fund in the program „Interreg V Alpenrhein-Bodensee-Hochrhein“. Various partners of economy and science around the lake Constance are involved in the project, which starts in September 2016. Everyone who wants to join this project is welcome. Moreover, in the joint project „DiagNeeds“, BioLAGO brings clinics and doctors closer together with diagnostic providers to push the development of new processes.



The STERN BioRegion, comprising Stuttgart, Tübingen, Esslingen, Reutlingen and Neckar Alb, is a key center of biotechnology and medical technology in Germany combining excellent opportunities for young entrepreneurs with outstanding research institutions. Excellent transport infrastructure and close proximity to an exceptionally high number of renowned research institutes and universities make STERN BioRegion the ideal location for biotech and medtech companies of all sizes. More than 30,000 square meters of office and lab space are available for entrepreneurs and start-up companies in the Tübingen-Reutlingen Technology Parks and the Life Science Center in Esslingen.

### Thinking business forward

BioRegio STERN Management GmbH is the principal point of contact and source of advice for biotechnology and medical technology in the region. BioRegioSTERN Management GmbH advises start-ups, established businesses and research institutions on subjects ranging from grant applications and financing options to technology transfer as well as on finding international cooperation partners. It organizes and participates in biotech and medtech fairs, promotes networking and offers comprehensive services to all connected with biotechnology and medical technology in the STERN BioRegion.

### Creating Synergies

Interdisciplinary thinking is essential. Medical technology companies work together with players in fields as diverse as laser and materials research, micro-systems technology, IT and nanotechnology. Medical, technical, scientific and industrial expertise is systematically dovetailed here.



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### BioRegio STERN Management GmbH

Friedrichstr. 10  
70174 Stuttgart

Phone: +49 (0) 711 87 03 54 0  
Telefax: +49 (0) 711 87 03 54 44  
info@bioregio-stern.de  
www.bioregio-stern.de

### Contact person:

Dr. Klaus Eichenberg, CEO

**Employees:** 6

**Founding year:** 2001

### Production range, services:

- Cooperation and networking
- Online jobportal and corporate database
- Information and advice for biotech firms

**BioRegionUlm e. V.**

Olgastr. 95-101

89073 Ulm

Phone: +49 (0) 731 17 32 25

Telefax: +49 (0) 731 17 32 225

info@bioregionulm.de

www.bioregionulm.de

**Contact person:**

Walter Pytilik,

Coordination Office

**Employees: 2**

**Founding year: 1997**

**Production range, services:**

- Support of young talents

The BioRegionUlm is Europe's central location for biotechnological production, in particular of pharmaceutical products. The biotech companies of the region focus on the production of drugs. More than sixty enterprises from biotechnology, life sciences and medicinal engineering have settled in the area between the Schwäbische Alb and the Lake of Constance.

Ulm is also a city where business meets with its University. The University and academic as well as industrial research institutions offer the ideal infrastructure for engaging in partnership and an effective transfer of knowledge and technology.

A germanwide unique degree specific course in pharmaceutical biotechnology at the University of Applied Sciences in Biberach in cooperation with the University of Ulm (including the doctoral study course) strengthens the biopharmaceutical excellence in the BioregionUlm. Meanwhile a second course in industrial biotechnology completes Biberach's study guide in this field.

Since 2011 the Boehringer Ingelheim Ulm University Center (BIU) continues the extraordinarily successful scientific cooperation in the field of pharmaceutical biotechnology and opens up new strategies for the Graduate School of Molecular Medicine, which is funded under the German government's Excellence Initiative.

The dynamic development of the location can be put into figures. Teva will establish a second biotech production at its Ulm site and thereby create 300 new employees. Rentschler Biotechnology is going to double its fermenter capacity and Boehringer Ingelheim has invested more than 100 Mio. Euro at its Biberach site.



(Photo: Boehringer Ingelheim)



(Photo: Rentschler Biotechnology)

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**Infrastructure**

# Baden-Württemberg's excellent infrastructure for entrepreneurs in life sciences

Baden-Württemberg is home to numerous technology parks and thus offers an excellent infrastructure and attractive high-tech locations for life sciences companies in close proximity to scientific excellence. Young companies and business start-ups particularly stand to benefit from the opportunities for co-operation with other companies and research institutions in the technology parks and also from the relatively inexpensive rents for office and laboratory space.

The map depicts twelve technology parks in Baden-Württemberg that specifically address life science start-ups. This list is not intended to be exhaustive.



**MAFINEXMANNHEIM**  
MAFINEX-TECHNOLOGIEZENTRUM

[www.mafinex.de](http://www.mafinex.de)



**Technologiepark Heidelberg** GmbH

[www.technologiepark-heidelberg.de](http://www.technologiepark-heidelberg.de)



**B.I.W.GMBH**  
BETRIEBERGESELLSCHAFT  
INDUSTRIEPARK WILLSTÄTT

[www.biw-gmbh.net](http://www.biw-gmbh.net)



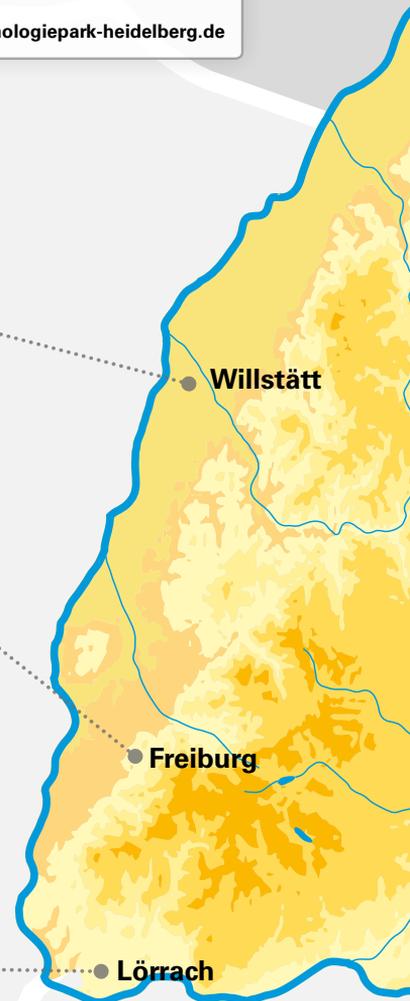
**BioTechPark Freiburg**

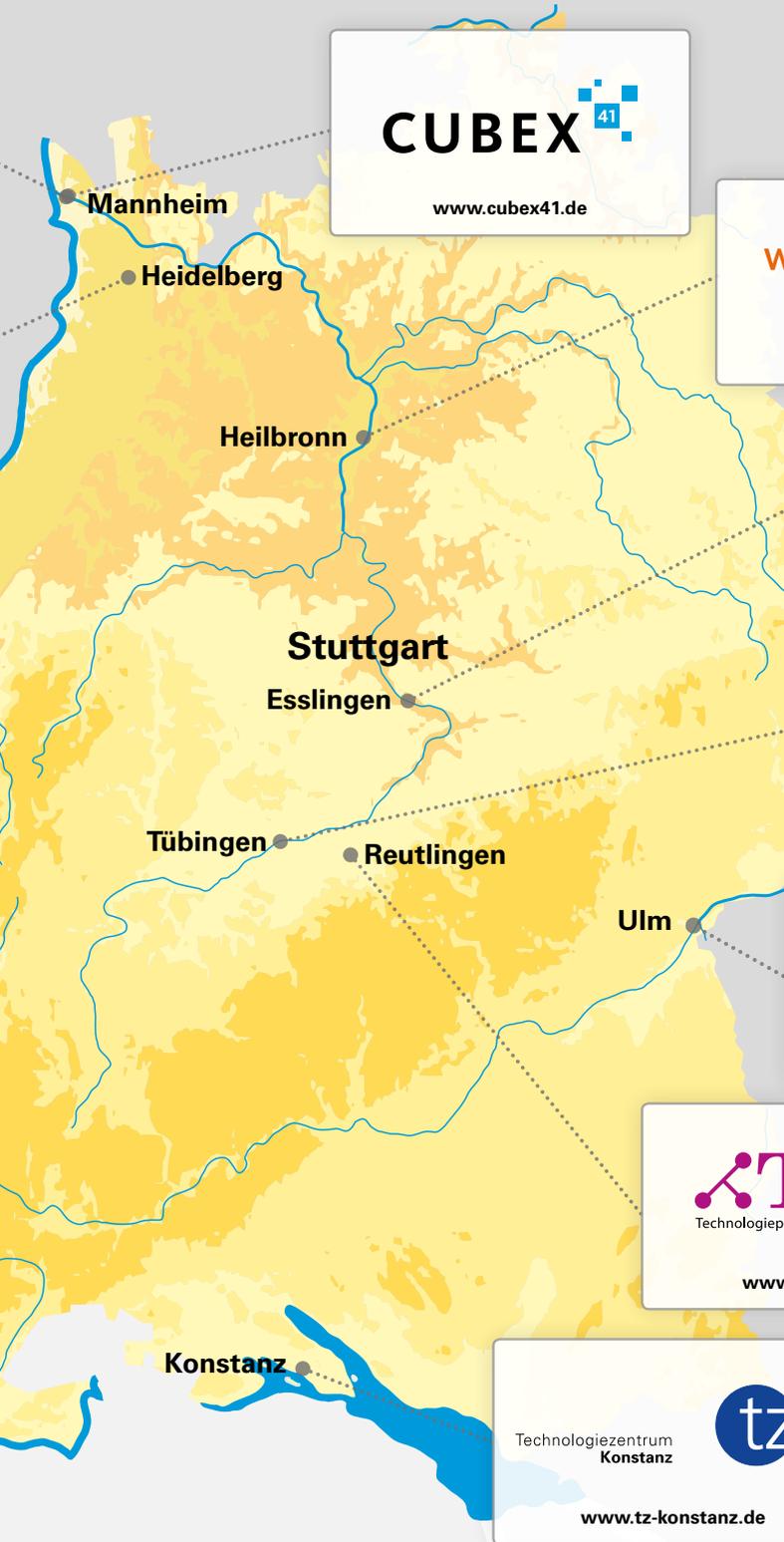
[www.biotechpark.de](http://www.biotechpark.de)



**innocel**  
Innovations-Center  
Lörrach

[www.innocel.de](http://www.innocel.de)





**CUBEX**   
[www.cubex41.de](http://www.cubex41.de)

**wohlgelegen** <sup>®</sup>  
zukunft am neckar  
[www.wohlgelegen.de](http://www.wohlgelegen.de)

  
[www.esslingen.de/Lde/start/es\\_themen/Life+Science+Center.html](http://www.esslingen.de/Lde/start/es_themen/Life+Science+Center.html)

  
Technologiepark Tübingen-Reutlingen  
[www.ttr-gmbh.de](http://www.ttr-gmbh.de)

  
[www.tfu.de](http://www.tfu.de)

  
Technologiepark Tübingen-Reutlingen  
[www.ttr-gmbh.de](http://www.ttr-gmbh.de)

Technologiezentrum  
Konstanz   
[www.tz-konstanz.de](http://www.tz-konstanz.de)

# The biotechnology sector in Baden-Württemberg

The biotechnology sector is an important industry for Baden-Württemberg as an economic location. Baden-Württemberg is home to 156 biotech companies that research, develop, produce and offer services such as sequencing, cell line development and analytics. With a total of 18,680 employees, the Baden-Württemberg biotechnology sector generated a taxable revenue of 5.03 billion euros in 2014. These figures also take into account biopharmaceutical production. The largest biotechnological production facilities in Europe are located in the cities of Biberach, Laupheim and Ulm.

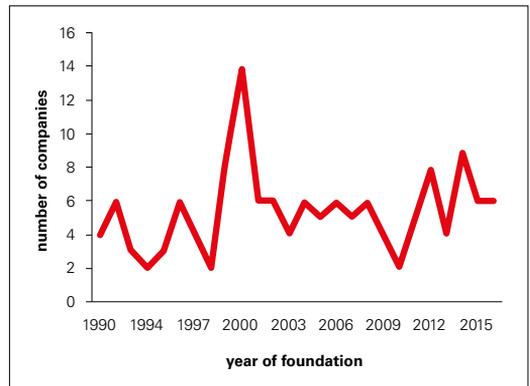
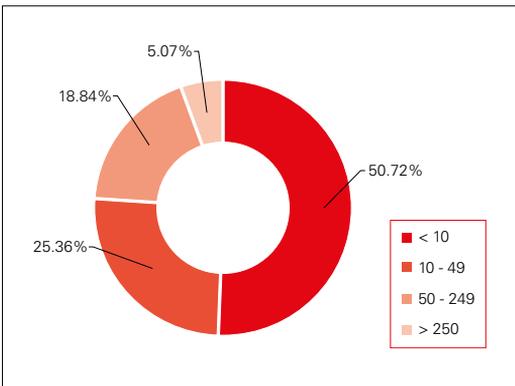
The state of Baden-Württemberg is second only to the United States in biopharmaceutical production.

The biotechnology sector is dominated by micro and small companies. Half of the companies have less than 10 employees and a further 44 percent have between 10 and 249 employees. Most biotechnology companies are located in the Rhine-Neckar region (44), the southern Upper Rhine area (26) and in the Neckar-Alb region (21).

Baden-Württemberg is a prime location for start-ups in the field of biotechnology. Ten

biotechnology companies were founded in 2014, twelve between January 2015 and July 2016, including 300MICRONS GmbH, Atriva Therapeutics GmbH, BioCopy GmbH and SialoTec GmbH.

Drug developers in Baden-Württemberg focus largely on new therapies for cancer. As development is lengthy, costly and research-intensive, many companies offer technology platforms. The biotechnology industry also relies on venture capitalists or lucrative cooperation treaties and licensing agreements mostly with large pharmaceutical companies.



Percentage of biotechnology companies in Baden-Württemberg in 2014 by employment size class. The analysis was carried out by the Baden-Württemberg statistics office on the basis of data held in the BIOPRO company database.

Number of biotechnology companies in Baden-Württemberg founded between the years from 1990 to 07/2016, based on data held in the BIOPRO company database.

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# Fields of Activity

# Definition of Fields of Activity

## **Biotech sector:**

**Agriculture/Food:** Companies using innovative biotechnological methods in the fields of nutrition and/or agriculture. This does not include classical fermentation technologies that have been used for many centuries, e.g. for the production of wine and sauerkraut.

**Environmental biotechnology:** Companies using biological systems in technological methods with the goal of reducing environmental stress and saving resources. The companies typically combine knowledge in bioprocess engineering, applied microbiology and applied engineering to develop and use methods for air and waste gas purification, soil decontamination, water and wastewater purification or waste treatment.

**Red biotechnology (medical biotechnology):** Companies active in research & development or production of new diagnostics, therapeutics/therapeutic procedures, vaccines or delivering biotechnological services, tools and technologies or devices for (bio)medical research.

**White/Industrial biotechnology:** Companies employing biotechnological methods to manufacture industrial products such as organic basic and fine chemicals, food and food additives, technical enzymes and bio-fuels with microorganisms, cells or their constituents. The term can also refer to companies that carry out R&D in this field, including the development of bacterial strains. Companies from the field of red biotechnology are not part of this field.

## **Experts in:**

**Analytics:** Companies manufacturing products for laboratory analytics or providing analytical services, e.g. sequencing, HPLC.

**Bioinformatics:** Companies developing software for application in the life sciences/biotechnology or providing clients with bioinformatics or IT/IT services for specific application in the field of systems biology. Not included are software products for use in medical practices or clinics, e.g. software for sequence optimisation, modelling of signalling cascades.

**Cells/Cell Lines:** Companies active in the field of cells/cell lines, including companies that offer cell line development, produce biotechnological products using cells, develop/offer cell therapies as well as companies that develop/manufacture products for work involving cells (e.g., cell cultures); companies that use cells for biotechnological services or contract research.

**DNA/RNA:** Companies with activities related to DNA/RNA, e.g., sequencing, epigenetics, cloning, therapeutic RNA.

**Diagnostics:** Companies providing diagnostic laboratory services and companies manufacturing products for use in in vitro diagnostics. Not included are manufacturers of laboratory articles such as 96-well plates.

**Production Organisms:** Companies using cells or microorganisms for the

biotechnological production of antibodies/proteins, for example, as well as companies offering cell and strain development for subsequent use in biotechnological manufacture of products.

**Proteins/Peptides:** Companies with activities related to proteins/peptides, e.g. companies that manufacture and commercialise proteins/peptides/antibodies or companies that produce them on behalf of third parties; companies focussing on research and production of proteins/peptides or companies that manufacture products for the analysis of proteins.

**Therapeutics:** Companies focussed on research, development and production of products for therapeutic purposes using biotechnological tools, e.g. proteins, peptides, antibodies.

**Tissue Engineering:** Companies carrying out research or other activities in the field of regenerative medicine. This includes, for example, the production of cell preparations, tissues, and scaffolds that provide structural support for the attachment of patient cells and subsequent tissue development.

Page		Contract research	Custom production	Production	Research & development	Sales & trade	Service provider	Supplier	Agriculture/Food	Environmental biotechnology	Red biotechnology	White/Industrial biotechnology	Analytics	Bioinformatics	Cells/Cell Lines	DNA/RNA	Diagnostics	Production Organisms	Proteins/Peptides	Therapeutics	Tissue Engineering	
		Business model					Biotech sector					Experts in										
22	300MICRONS GmbH		•	•				•			•				•							•
23	4base lab AG	•			•					•	•						•	•				
24	Ad-O-Lytics				•						•				•	•				•	•	
25	Affimed				•						•										•	
26	Aldevron Freiburg GmbH	•	•				•				•				•	•	•			•	•	
27	ATG:biosynhetics GmbH	•			•		•				•	•		•		•		•		•	•	
28	ATRIVA Therapeutics GmbH				•						•										•	
29	Aucteq Biosystems			•	•						•				•							
30	Berthold Technologies GmbH & Co. KG			•							•	•	•			•	•			•		
31	Biometrics GmbH				•			•		•		•	•							•		
32	Bioanalytic GmbH		•	•			•				•	•	•				•					
33	Bioassay – Labor für biologische Analytik GmbH	•					•				•		•									
34	BioCat GmbH		•				•	•			•		•		•	•				•		
35	BioCopy GmbH	•			•		•				•	•	•			•				•	•	
36	biomers.net GmbH		•								•					•						
37	BIOMEVA GmbH	•	•								•							•		•	•	
38	Biomex GmbH			•			•	•			•		•				•					
39	BioRepair GmbH			•	•						•						•					
40	biosyn Arzneimittel GmbH			•	•	•					•	•	•								•	
41	BioTeSys GmbH				•		•		•				•		•							
42	BMG LABTECH GmbH			•							•		•		•	•				•		
43	Boehringer Ingelheim Biopharmaceuticals GmbH		•	•			•				•		•		•	•				•	•	
44	candidum TGU / TTI GmbH	•			•		•				•	•	•	•		•	•			•		
45	CANDOR Bioscience GmbH		•	•				•	•		•		•				•			•		
46	CeGaT GmbH	•			•		•				•		•	•		•	•					
47	Cellendes GmbH			•	•			•			•				•							•
48	CellGenix GmbH			•	•			•			•									•		
49	CLS Cell Lines Service GmbH	•	•	•			•				•				•	•				•		

Page		Contract research	Custom production	Production	Research & development	Sales & trade	Service provider	Supplier	Agriculture/Food	Environmental biotechnology	Red biotechnology	White/Industrial biotechnology	Analytics	Bioinformatics	Cells/Cell Lines	DNA/RNA	Diagnostics	Production Organisms	Proteins/Peptides	Therapeutics	Tissue Engineering	
		Business model					Biotech sector					Experts in										
50	Computomics GmbH	•			•		•		•	•				•								
51	Curetis N.V.			•	•	•					•							•				
52	CureVac AG			•	•						•					•					•	
53	da-cons GmbH	•	•			•			•	•			•	•								
54	DIARECT AG			•				•				•						•		•		
55	Dispendix GmbH							•			•		•			•						
56	EMC microcollections GmbH		•		•						•		•							•		
57	ExploSYS GmbH	•			•						•			•								
58	GATC Biotech AG				•		•				•					•	•					
59	Genaxxon bioscience GmbH		•			•		•		•						•				•		
60	Gene Bridges GmbH	•					•	•			•	•				•		•				
61	GeneWerk GmbH	•					•				•			•		•						
62	GoSilico GmbH	•					•				•			•						•		
63	Greenovation Biotech GmbH		•	•	•						•				•			•	•	•		
64	Greiner Bio-One GmbH		•	•	•							•	•		•		•					
65	Hain Lifescience GmbH			•	•	•					•						•					
66	HB Technologies AG		•							•		•		•		•				•		
67	Heidelberg Pharma GmbH				•		•				•		•		•					•	•	
68	HERBRAND PharmaChemicals GmbH	•		•	•							•									•	
69	highQu GmbH			•	•	•		•				•				•				•		
70	HISS Diagnostics GmbH			•	•	•			•		•			•	•	•	•					
71	HS-Analysis GmbH				•						•		•	•								
72	Hydrotox GmbH	•			•					•			•		•							
73	IBAM GbR	•			•		•		•		•		•									
74	Immatics				•						•										•	
75	Insilico Biotechnology AG	•			•		•			•	•	•	•	•	•			•	•			
76	Intavis AG		•	•								•								•		
77	Jobst Technologies GmbH	•	•	•						•	•	•	•				•					
78	Labor Dr. Merk & Kollegen GmbH		•				•				•		•		•							
79	Labor für DNA-Analytik						•				•		•			•	•					

Page		Contract research	Custom production	Production	Research & development	Sales & trade	Service provider	Supplier	Agriculture/Food	Environmental biotechnology	Red biotechnology	White/Industrial biotechnology	Analytics	Bioinformatics	Cells/Cell Lines	DNA/RNA	Diagnostics	Production Organisms	Proteins/Peptides	Therapeutics	Tissue Engineering		
		Business model					Biotech sector					Experts in											
80	Mediagnost GmbH		•	•			•				•				•		•	•	•				
81	menal GmbH	•			•		•				•	•	•										
82	MetaSystems GmbH			•	•						•						•						
83	micro-biolytics GmbH						•	•		•			•										
84	MicroMol GmbH	•	•		•						•		•		•				•	•	•		
85	Multi Channel Systems MCS GmbH		•					•			•		•	•									
86	myPOLS Biotec GmbH	•	•		•						•				•	•	•						
87	nadicom GmbH	•			•		•		•	•			•	•									
88	nanoTools Antikörpertechnik GmbH & Co. KG	•	•				•				•				•					•			
89	Novis GmbH				•			•	•			•	•					•					
90	npi electronic GmbH		•			•		•			•				•								
91	Octapharma Biopharmaceuticals GmbH				•						•		•		•					•	•	•	
92	Phenex Pharmaceuticals AG				•						•										•		
93	PROGEN Biotechnik GmbH			•	•	•					•						•		•				
94	ProQinase GmbH	•			•		•				•				•					•			
95	Q-bios GmbH Biotechnology			•	•			•			•	•			•	•	•	•	•	•			
96	ravo Diagnostika			•	•			•			•						•						
97	Renovatum Therapeutics				•						•									•	•	•	
98	Rentschler Biotechnologie GmbH		•								•		•		•					•	•		
99	RHEACELL GmbH & Co. KG		•		•			•			•				•								•
100	Roche			•	•	•					•		•				•	•	•	•	•		
101	Sartorius Stedim Cellca GmbH	•	•								•				•			•	•	•			
102	Sciomics GmbH		•		•		•				•	•	•	•	•		•		•				
103	Sensovation AG		•				•	•			•		•	•			•						
104	SERVA Electrophoresis GmbH				•			•			•	•								•			•
105	SpinDiag GmbH			•	•						•					•	•						
106	Subitec GmbH				•		•	•				•											
107	Synovo GmbH	•			•		•				•		•		•								
108	Teva GmbH			•	•	•						•	•		•					•	•		

Page		Contract research	Custom production	Production	Research & development	Sales & trade	Service provider	Supplier	Agriculture/Food	Environmental biotechnology	Red biotechnology	White/Industrial biotechnology	Analytics	Bioinformatics	Cells/Cell Lines	DNA/RNA	Diagnostics	Production Organisms	Proteins/Peptides	Therapeutics	Tissue Engineering	
		Business model						Biotech sector						Experts in								
109	Thermo Fisher Scientific Phadia GmbH			•	•	•						•	•					•		•		
110	TICEBA GmbH Tissue & Cell Banking			•	•						•				•							•
111	trenzyme GmbH	•			•		•				•	•			•	•		•	•			
112	varionostic GmbH			•	•		•				•		•		•	•	•					
113	VAXIMM GmbH				•							•				•					•	
114	Venneos GmbH				•						•				•							
115	Vetter Pharma International GmbH		•				•					•							•	•		
116	Viscofan BioEngineering			•	•			•			•									•		•
117	Vivacell Biotechnology GmbH	•			•		•		•		•		•		•	•						
118	WITec GmbH			•				•			•		•									

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# Company Profiles

## 300MICRONS GmbH

Daimlerstr. 35  
76185 Karlsruhe

Phone: +49 (0) 721 94 24 78 91  
Telefax: +49 (0) 721 94 24 78 93  
info@300microns.com  
www.300microns.com

### Contact person:

Prof. Dr. Eric Gottwald, CEO

### Employees: 8

### Founding year: 2015

### Fields of Activity:

#### Business model

- Custom production
- Production
- Supplier

#### Biotech sector

- Red biotechnology

#### Experts in

- Cells/Cell Lines
- Tissue Engineering

#### Production range, services:

- HT-/HC-Screening compatible 3D cell culture platforms
- Custom microcavity array platforms
- Contract research services

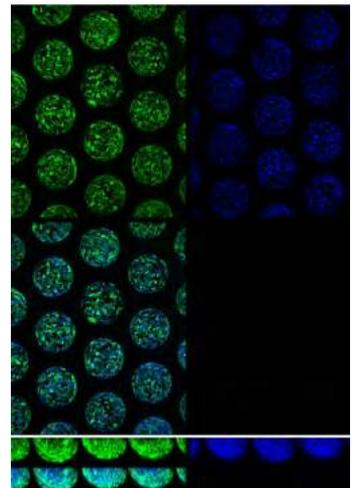
## 300MICRONS GmbH

300MICRONS produces microthermoformed polymer films with various geometries. Typical sizes for thermoformed microcavities are in the range of 300  $\mu\text{m}$ . These microcavities are typically arranged in arrays, resulting in the housing of about 10.000 to 500.000 cells per well of a standard 96-well plate, depending on the desired cell number of the assay.

### Advantages of polymer film microcavity arrays are

- Organotypic culture of various cell lines and primary cells such as stem cells
- Uniform adherent or non-adherent 3D-aggregates
- Generate more than 16.000 spheroids per 96-well plate
- Functionalized surfaces as defined interfaces to control cell growth, adhesion, cell morphology & differentiation
- Improved extraction from the cell culture device for subsequent R&D steps due to the needlessness of a cell culture matrix
- Excellent microscopic image quality due to polymer film thickness of only several microns
- Adherent cellular aggregates in microcavity arrays that possess defined positions, thereby making them ideal for automated microscopic analysis, such as time lapse series in High-Content-/High-Throughput-analysis
- Easy manual or robotic usability due to standard dimensions

In addition to multiwell plate formats we are able to manufacture a wide range of custom polymer film microcavity arrays with a wide range of geometries and materials.



The 4base lab AG was founded in 1996 and holds excellent expertises in molecular cloning and gene analysis of human pathogens. As one of the first biotech companies in Germany, 4base lab operates its enterprise in compliance with the quality management standard as specified by the DIN EN ISO 9001. 4base lab is an approved and accredited testing laboratory for drinking water analysis in accordance with DIN EN ISO 17025. Facilities include S1/L2 labs as well as strictly controlled PCR labs. 4base lab is also approved by regulatory authorities to analyse animal samples for epizootic diseases. Since 2006, 4base lab was also authorized by the Regierungspräsidium Tübingen to perform GMP compliant services for biopharmaceutical drugs, especially for innovative RNA-based cancer therapeutics.

4base lab offers an extensive expertise in the development and validation of customized qNAT assays. GMP compliant methods for biodistribution analysis of DNA/RNA targets in tissue samples, detection of residual vector DNA or E. coli DNA in preclinical drugs are available for the pharmaceutical industry.

Ultrapure human BAC-DNA and genetic stability testing are additional services for diagnostic manufacturer.

4base lab offers a wide range of molecular and microbiological services including for the detection of nucleic acid contaminants or pathogens in pharmaceuticals, consumables, food, water, human or insect samples.



#### **4base lab AG**

Aspenhastr. 25  
72770 Reutlingen

Phone: +49 (0) 7121 317 87 80  
Telefax: +49 (0) 7121 317 87 839  
info@4base-lab.de  
www.4base-lab.de

#### **Contact person:**

Dr. Despina Tougianidou, CEO

#### **Employees:** 10

#### **Founding year:** 1995

#### **Fields of Activity:**

#### **Business model**

- Contract research
- Research & development

#### **Biotech sector**

- Environmental biotechnology
- Red biotechnology

#### **Experts in**

- DNA/RNA
- Diagnostics

#### **Production range, services:**

- Custom DNA sequencing
- Water analysis (17025)
- GMP/GLP compliant services
- Biodistribution analysis
- NA contamination analysis
- Detection of viral pathogens

**Ad-O-Lytics**

Helmholtzstr. 8/1  
89081 Ulm

Phone: +49 (0) 731 50 04 47 06  
info@adolytics.com  
www.adolytics.com

**Contact person:**

PD Dr. Florian Kreppel, Founder

**Employees:** ns

**Founding year:** 2017

**Fields of Activity:**

**Business model**

- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Cells/Cell Lines
- DNA/RNA
- Proteins/Peptides
- Therapeutics

**Production range, services:**

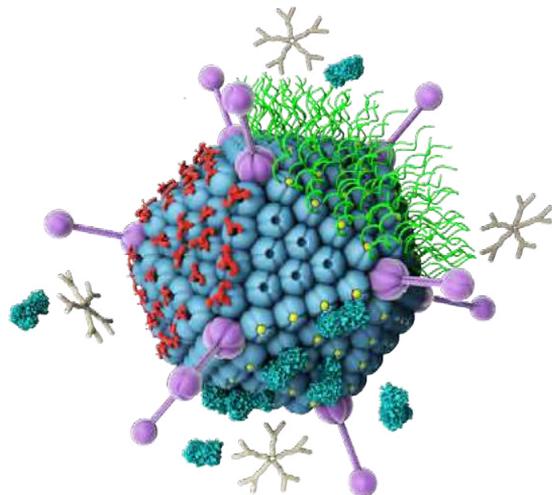
- Oncolytic Immunovirotherapy
- Targeted, capsid-modified adenovirus
- Plattform technology for systemic delivery through blood

Ad-O-Lytics will be founded in 2017 as a biotech spin-off company of Ulm university. Ad-O-Lytics develops innovative anti-cancer drugs by employing oncolytic viruses to fight cancer. This approach called immunovirotherapy has great potential while showing only few and mild side effects compared to conventional cancer therapies.

It has been clinically proven that oncolytic viruses infect and kill tumors, and stimulate the patient's immune system. However, up to date only local treatments of single tumor sites are feasible. Multiple tumors and disseminated metastases cannot be reached by the locally injected virus. To reach cancer cells all over the body simultaneously and efficaciously, the curative virus should be delivered to the patient via the blood. Unfortunately, in the blood the viruses are inactivated by undesired virus-blood interactions before having the chance to reach the cancer tissue.

Ad-O-Lytics has studied this problem and developed a technology based on a unique combination of genetics and chemistry to protect the virus from inactivation by blood and direct it to tumors and metastases. This award-winning Ad-O-Lytics technology has been internationally patented. It finally enables virus delivery through the blood and optimizes it to efficiently infect cancer tissues. The platform technology can be applied to various types of solid tumors. By being specific, flexible and effective, it fills the gap to clinically successful virotherapy.

The management of Ad-O-Lytics is composed of internationally renowned scientists and experienced business managers. The team will push the product development up to an early clinical stage before partnering with pharma industry.



Affimed (Nasdaq: AFMD) engineers targeted immunotherapies, seeking to cure patients by harnessing the power of innate and adaptive immunity (NK- and T-cells). We are developing single and combination therapies to treat cancers and other life-threatening diseases.

The human immune system is normally capable of recognizing foreign or aberrant cells, but cancer cells have acquired highly effective ways to escape immune surveillance. Thus, immune cells such as NK-cells (a part of innate immune system) and T-cells (a part of the adaptive immune system) cannot recognize tumor cells as foreign or aberrant and therefore cannot fight them. To overcome these limitations, we have developed a technology that disables the tumors' evasion mechanisms and activates immune cells, triggering an integrated immune response mediated by both innate and adaptive immune cells. Leveraging our proprietary, next-generation TandAb platform, we have developed a pipeline of promising clinical and preclinical bi- and trispecific antibody product candidates for which we retain global commercial rights.

TandAbs and Trispecific Abs are immune cell-engaging antibodies with a tetravalent architecture characterized by four binding domains. Binding to targets on both the immune and the tumor cell, they redirect immune cells and establish a bridge between either NK-cells or T-cells and cancer cells, triggering a signal cascade that leads to the destruction of cancer cells. In clinical studies, our products have already demonstrated promising signs of therapeutic activity in patients. Based on their appropriate safety profile, we develop our TandAbs both as monotherapy and in combination with other therapeutics.



**Affimed**

Technologiepark  
Im Neuenheimer Feld 582  
69120 Heidelberg

Phone: +49 (0) 6221 64 79 33 41  
Telefax: +49 (0) 6221 65 30 74 9  
a.alexandru@affimed.com  
www.affimed.com

**Contact person:**

Dr. Anca Alexandru,  
Head of Communications, EU IR

**Employees:** 64

**Founding year:** 2000

**Fields of Activity:**

**Business model**

- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Therapeutics

**Production range, services:**

- Biologics/ antibodies

**Aldevron Freiburg GmbH**

Waltershofener Str. 17

79111 Freiburg

Phone: +49 (0) 761 45 63 60

Telefax: +49 (0) 761 45 63 629

antibody@aldevron.com

www.aldevron.com

**Contact person:**

Dr. Stefan Lang,

Director, Business Development

**Employees:** 150

**Founding year:** 1999

**Branches:**

Fargo, North Dakota, USA

Madison, Wisconsin, USA

**Fields of Activity:****Business model**

- Contract research
- Custom production
- Service provider

**Biotech sector**

- Red biotechnology

**Experts in**

- Cells/Cell Lines
- DNA/RNA
- Diagnostics
- Proteins/Peptides
- Therapeutics

**Production range, services:**

- Antibody development
- Plasmid manufacturing
- Protein expression and purification

**Aldevron – The Basis for Breakthroughs**

At Aldevron we combine best-in-class products and service with the ideal operating environment to lay the groundwork for vital new discoveries worldwide. Aldevron is a leader in advancing biological science. Our custom development and manufacturing services have provided scientists around the world with the essential components to accelerate research and open up their laboratories for groundbreaking science and breakthrough discoveries.

It's our mission to provide products and services that make meaningful contributions to biological science worldwide. We seek to be the partner of choice for producing high-quality plasmid DNA, proteins, enzymes, antibodies, and other biologicals in support of our clients' comprehensive objectives.

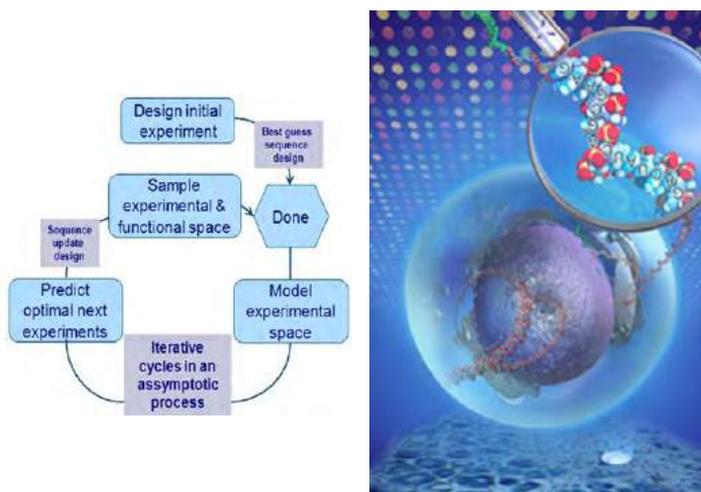
For close to 20 years, Aldevron in Freiburg has been providing transformative antibody development solutions for the most difficult targets. Our GENOVAC Antibody Technology™ is a discovery platform that supports all project types from reagent antibodies to diagnostic and therapeutic applications. Our custom antibodies have driven innovation and been validated in numerous publications and patents by clients worldwide. With unparalleled effectiveness in optimized genetic immunization strategies, we develop antibodies against even the most challenging targets with no need for antigen production. Our proprietary methods provide high-quality antibodies faster, without the additional cost and time required for recombinant protein purification.



**The basis for breakthroughs**

ATG: biosynthetics GmbH (ATG=advanced technical genetics) stands for thorough genomics information mining and analyses towards establishing new rational strategies for the *BioDesign* of applications in synthetic biology. Especially active is ATG for the *Pharmaceutical Industry* and the *Health Care sector* in general but in addition for environmentally relevant bio-industrial approaches. At present ATG is involved in contractual research and related BMBF funded projects aiming on continuously improving the bio-pharmaceutical bio-production of natural NRPS-Peptide compounds (e.g. new antibiotics like Argyrins – see Figure-1) in terms of structural variants thereof as well as increasing production yields. The prerequisite for combining rational comparative genomics with proprietary expression technologies at ATG are multi-parametric sequence calculations of biochemical gene clusters (BGC) performed with *EvoMAG<sup>IS-v2</sup>* a proprietary software package at ATG.

The *MycoSynVAC* -Project funded by the EU applies comparative immune genomics and genetics for the development of highly functional designer vaccines against *Mycoplasma spec.* by combining proprietary molecular databases and the lab-platform *PeplD* (peptide identity) as ATG's epitope discovery technology. At ATG a bio-peptide library technology is used for the identification of epitopes concomitant with the assessment of its value for diagnostics and therapeutics. Especially comparative and subtractive genomics of interrelated pathogens in comparison with non-pathogenic species genomes are highly valuable tools for the reduction of molecular complexity and to increase informational relevance.



## ATG: biosynthetics GmbH

Weberstr. 40

79249 Merzhausen

Phone: +49 (0) 761 88 894 24

info@atg-biosynthetics.com

www.atg-biosynthetics.com

### Contact person:

Dr. Hubert S. Bernauer, CEO

### Employees: 6

### Founding year: 2001

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Red biotechnology
- White/Industrial biotechnology

#### Experts in

- Bioinformatics
- DNA/RNA
- Production Organisms
- Proteins/Peptides
- Therapeutics

#### Production range, services:

- Synthetic Gene/ DNA Services
- Bioinformatics Services
- Synthetic Biology Services
- Genome Mining Services
- Multiple Expression Systems
- Protein Display Technology

**ATRIVA Therapeutics GmbH**

Christophstr. 32

72072 Tübingen

Phone: +49 (0) 7071 859 76 73

info@atriva-therapeutics.com

www.atriva-therapeutics.com

**Contact person:**

Dr. Rainer Lichtenberger, CEO

**Employees:** ns

**Founding year:** 2015

**Fields of Activity:**

**Business model**

- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Therapeutics

**Production range, services:**

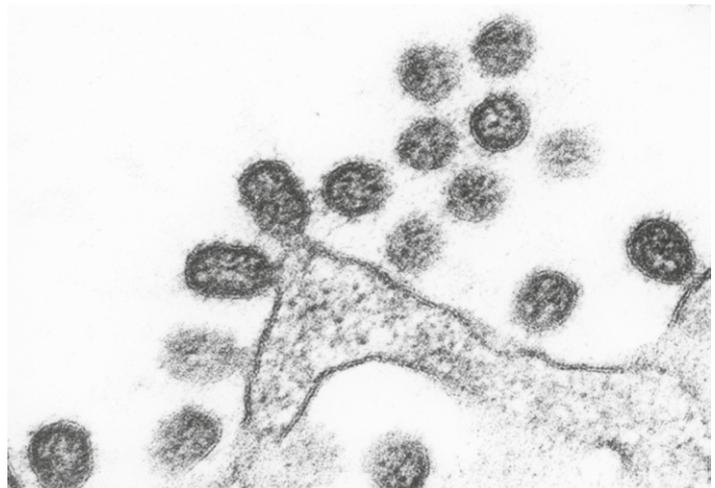
- Antiviral Therapy
- Influenza Treatment
- Biotechnology

ATRIVA Therapeutics GmbH, an emerging antiviral biotech company, based in Tübingen, Germany, exploits the benefits of MEK-Inhibitors as powerful and broadly applicable antiviral drugs. MEK-Inhibitors, originally developed as cancer therapy, are blocking the intracellular kinase MEK, part of the Raf/MEK/ERK signaling pathway, which many RNA viruses need to replicate.

Eight experienced entrepreneurs and scientists founded ATRIVA in 2015 as a spin-off from the Universities Münster, Giessen and Tübingen. The lead project uses the scientific findings of three founders to develop a new class of treatment for severe influenza. ATRIVA already made substantial progress with the technology and the lead project as well as its project pipeline and has broadened its scope to other severe viral diseases including MERS, SARS (Coronavirus), Hantavirus (Bunyaviridae). Commonly, these viruses cause severe respiratory disease, often with fatal outcome, and no efficacious cure is yet available. MEK-Inhibitors are active against this variety of RNA viruses, as shown in several preclinical studies.

ATRIVA does not expect any resistance development, as the virus cannot reverse the blockade of the cellular signaling pathway. Relevant side effects within the intended antiviral use are unlikely, as 1) treatment duration will not exceed 14 days, and 2) drug concentrations inhibiting viral replication are expected to be lower than those for anti-proliferative effects in tumor therapy, as shown in ATRIVA's extensive preclinical studies.

In essence, ATRIVA provides the technology for a completely novel anti-pathogen approach representing a paradigm change in therapy of severe respiratory infections.



innovative  
start-up  
idea



## **Aucteq Biosystems – The (R)evolution of bioreactors**

Aucteq Biosystems is a startup company which was in its pre-founding phase in 2016 and is planned to be founded in 2017.

We are developing a complete new kind of bioreactor with unique and special features to simplify and optimize eucaryotic cell culture processes. The aucteq bioreactor is the next milestone in the evolution of all bioreactors since it combines all advantages of single use technology with the unique aucteq feature.

Our vision is the development of a culture system that allows the user to save working time, materials, plastic waste, and additionally reduces contaminations which might be induced during the passaging steps contained in the expansion process.

Most bioreactors and culture vessels are designed to optimize the cell culture process. Aucteq Biosystems provides a culture vessel which combines process optimization with advantages for the employees who are working with cell cultures on a daily bases. Our system reduces trivial working steps so the personnel can focus on potentially more important process steps.

## **Aucteq Biosystems**

Tauberstr. 2  
68167 Mannheim

Phone: +49 (0) 174 38 14 179  
info@aucteq.com  
www.aucteq.com

### **Contact person:**

Valentin Kramer (B.Sc.), Founder

### **Employees: 2**

### **Founding year: 2017**

### **Fields of Activity:**

#### **Business model**

- Production
- Research & development

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Cells/Cell Lines

#### **Production range, services:**

- Culture vessels for eucaryotic cell lines.
- Single use bioreactors.

**AUCTEQ**  
The (r)evolution of bioreactors

**Berthold Technologies GmbH  
& Co. KG**

Calmbacher Str. 22  
75323 Bad Wildbad

Phone: +49 (0) 7081 177 0  
Telefax: +49 (0) 7081 177 100  
bio@berthold.com  
www.berthold.com/bio

**Contact person:**

Dr. Thomas A. Schild,  
Head of Marketing Bioanalytic

**Employees:** 350

**Founding year:** 1949

**Branches:**

Wien, AUT; Zug, CHE; Vilvoorde, BEL;  
Harpندن, GBR; Thoiry, FRA; Oak  
Ridge, Tennessee, USA; Brugherio,  
ITA; Bundoora, Victoria, AUS; Peking,  
CHN; Chennai, IND; Tokyo, JPN

**Fields of Activity:**

**Business model**

- Production

**Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

**Experts in**

- Analytics
- DNA/RNA
- Diagnostics
- Proteins/Peptides

**Production range, services:**

- Multi-Mode Microplate Readers
- Luminescence Readers
- Label-free Microarray Systems
- In vivo Imaging Systems
- HPLC Radio Detectors
- Gamma Counters

Berthold Technologies is a global technology leader in life sciences, process control, and radiation protection with more than 350 employees and revenues of €75 million. For over 60 years, scientists, technicians and engineers have trusted Berthold Technologies integrated measuring solutions. Our innovative technical systems are known for their accuracy, precision and unmatched reliability, helping customers to solve complex analytical challenges in a wide variety of industries, academia as well as federal and local government agencies. Serving the Research Science, Medical Science, Applied Science, and Industrial Science Markets we enable our customers to improve life in meaningful ways.

Our extensive range of instrument solutions helps to ensure quality and performance for every lab. Thousands of plate readers, luminometers, HPLC radio detectors, *in vivo* imagers, label-free microarray systems and gamma counters have been trusted by scientists globally who demand user-friendly, accurate, analytical solutions, delivering high quality, precision and sensitivity. These technologies make possible the identification, quantification, and analysis of the molecular, physical and biological properties of thousands of substances and products.

We provide our customers with comprehensive support across our broad product portfolio to help them develop, optimise, and implement new applications and techniques and strive to improve, meet or exceed our customers' expectations. Quality is a priority throughout our organization. We are focused to align with global industry standards – in particular ISO 9001 and BS OHSAS 18001.



**About Biametrics**

Biametrics GmbH develops and markets label-free analytical system solutions for life science applications. The patented label-free biosensor technology includes innovative detection, surface chemistry and assay development for the time-resolved analysis of any kind of biomolecular interaction.

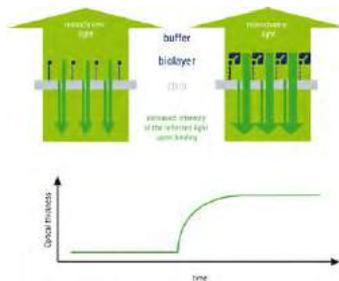
**Our Technology**

Our proprietary SCORE technology exploits the interference of monochromatic light at the boundaries between bilayers to directly monitor the binding between biomolecules. You gain direct access to binding curves without labels, within a robust hardware setup, using low cost consumables.

**Applications**

Our versatile technology can be used in a wide range of different and even complementary applications. These include protein/protein interaction studies, pharmaceutical screening, kinetic analysis, cell-based assays, diagnostics or oligonucleotide characterisations.

Contact us to discuss your application needs with our specialists.



**Biametrics GmbH**

Waldhäuser Str. 64  
 72076 Tübingen

Phone: +49 (0) 7071 14 31 30  
 Telefax: +49 (0) 7071 14 31 344  
 mail@biametrics.com  
 www.biametrics.com

**Contact person:**

Dr. Florian Pröll, CEO

**Employees:** 10

**Founding year:** 2010

**Fields of Activity:**

**Business model**

- Research & development
- Supplier

**Biotech sector**

- Environmental biotechnology
- White/Industrial biotechnology

**Experts in**

- Analytics
- Proteins/Peptides

**Production range, services:**

- b-screen – label-free microarray reader
- b-portable – affordable bench-side kinetic studies
- sensor chips – immobilize any kind of biomolecule

## Bioanalytic GmbH

Waldmatten 10-13  
79224 Umkirch/Freiburg

Phone: +49 (0) 7665 59 51  
Telefax: +49 (0) 7665 56 83  
office@bioanalytic.de  
www.bioanalytic.de

### Contact person:

Dr. Ferdinand M. Rüdinger, CEO

### Employees: 9

### Founding year: 1978

### Fields of Activity:

#### Business model

- Custom production
- Production
- Service provider

#### Biotech sector

- Red biotechnology
- White/Industrial biotechnology

#### Experts in

- Analytics
- Diagnostics

#### Production range, services:

- Biomedical and analytical chemical reagents
- In vitro diagnostics (IVD)
- Biomedical science & analysis technology

Bioanalytic GmbH is a family-run company located in Umkirch close to Freiburg, Germany. Since 1978 we produce in vitro diagnostics, calibration standards, buffer and electrolyte solutions and complete test kits. Our portfolio includes device-specific OEM reagents and cleaning products for the medical, chemical and analytical-technical laboratories as well as reagents for the biotechnological and pharmaceutical industry.

Our customers are many diagnostic and reagent manufacturers, global manufacturers of analyzers and measurement technology. For these clients, Bioanalytic GmbH primarily does OEM manufacturing. Furthermore, pharmaceutical and biotechnological large enterprises, equipment importers as well as government institutes are clients of Bioanalytic GmbH. Our products are distributed worldwide, also as OEM products under many brand names of our customers.

Bioanalytic GmbH has state of the art facilities for the production of high-quality reagents. Our scientific experience, our advice and strict quality standards have made us known as a reliable and competent business partner. Bioanalytic GmbH has the know-how to implement legal requirements and directives and is registered with the FDA.

We offer our customers individual OEM solutions. Our manufacturing capabilities allow great flexibility in terms of formulation, bottling and batch size. From manufacturing to ready to sale packaging including OEM labeling and safety data sheets, Bioanalytic GmbH offer an one-stop solution. Our ISO certifications (EN ISO 9001, EN ISO 13485) and our ongoing development of modern manufacturing processes ensure high-quality products and compliance with international quality standards.



## **Bioassay – Bioanalytical Contract Laboratory Profile**

Bioassay GmbH is an independent bioanalytical contract laboratory, specializing in the development, validation and routine performance of bioanalytical assays in the area of Pharmacology and Toxicology. We carry out qualified analytical services on the sound basis of our GMP & GLP certification, which provides an excellent framework for successful projects and routine bioanalysis. Key global players as well as start-up companies in the pharmaceutical and chemical industries trust in the experience and dedication of our bioanalytical experts.

Bioassay GmbH is specialized in the development, validation and execution of biological assays within the framework of Development & Quality Control of pharmaceutical and chemical products. Our portfolio contains 4 focus areas: BioPharma Potency, BioPharma Efficacy, BioPharma Safety & Chemicals / Cosmetics Safety. In our in-vivo and in-vitro facilities we are running state-of-the-art-equipment and our analytical experts will welcome you to visit us in our laboratories located directly in the Heidelberg Technology Park (Germany).



## **Bioassay - Labor für biologische Analytik GmbH**

Im Neuenheimer Feld 515  
69120 Heidelberg

Phone: +49 (0) 6221 433 88 90  
Telefax: +49 (0) 6221 433 88 99  
info@bioassay-online.de  
www.bioassay-online.de

### **Contact person:**

Dr. Sven-Michael Cords,  
Managing Director

**Employees:** 20

**Founding year:** 2002

### **Fields of Activity:**

#### **Business model**

- Contract research
- Service provider

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Analytics

### **Production range, services:**

- Potency Assays (GMP):  
Antibodies, Vaccines & Hormones
- Assay Development & Validation  
(ICH-guidelines)
- Safety studies (GLP)

## BioCat GmbH

Im Neuenheimer Feld 584  
69120 Heidelberg

Phone: +49 (0) 6221 7 14 15 16  
Telefax: +49 (0) 6221 7 14 15 29  
info@biocat.com  
www.biocat.com

## Contact person:

Dr. Michael Ehret, CEO

**Employees:** 18

**Founding year:** 2000

## Fields of Activity:

### Business model

- Custom production
- Service provider
- Supplier

### Biotech sector

- Red biotechnology

### Experts in

- Analytics
- Cells/Cell Lines
- DNA/RNA
- Proteins/Peptides

## Production range, services:

- Genomics
- Proteomics
- Cell Biology
- Tissue-related Applications

## BioCat GmbH

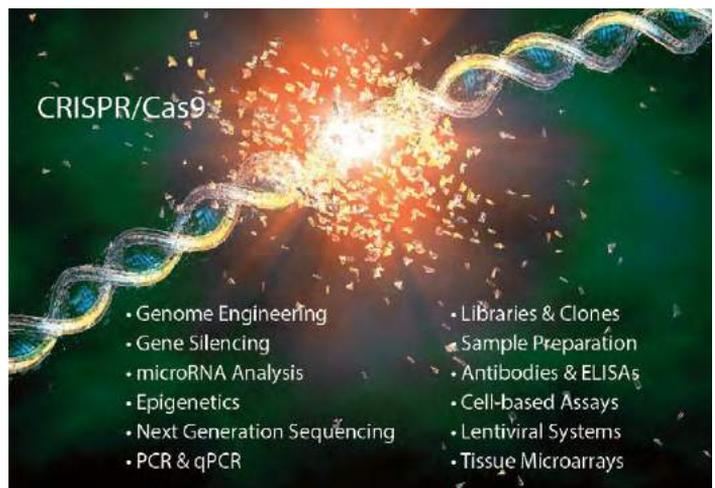
BioCat GmbH, located in the Heidelberg Technology Park in close proximity to the German Cancer Research Center, is a privately held company founded in 2000 to market innovative products and services for life science research.

BioCat offers a wide range of high-quality research reagents as well as cutting-edge technologies in the fields of genomics, proteomics, and cell biology. For tissue-related applications, tissue microarrays as well as RNA, cDNA and proteins isolated from a wide variety of common and hard-to-obtain tissues are available. The product portfolio is grouped by applications and research areas making it easy to find the optimal solution for a research project.

The product offering comprises a large selection of antibodies, ELISA kits, cell-based assays, PCR and next generation sequencing reagents as well as tools for genome engineering (CRISPR/Cas9), gene silencing, microRNA analysis, exosome research, epigenetics and stem cell research.

The products and services provided have been developed by our partners in Canada, Germany, Korea, Russia and the US. They are made available through BioCat to researchers in academia as well as in pharma and biotech industry.

While continuously striving to complement our product portfolio with novel products and technologies, BioCat is aiming at the co-development of new products based on innovations generated in Germany, such as SYSTASY's splitSENSOR technology.





**BioCopy GmbH**

79110 Freiburg

Phone: +49 (0) 176 81 06 88 83

info@biocopy.de

www.biocopy.de

**Contact person:**

Dr. Günter Roth, CEO

**Employees:** ns

**Founding year:** 2016

**Fields of Activity:**

**Business model**

- Contract research
- Research & development
- Service provider

**Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

**Experts in**

- Analytics
- DNA/RNA
- Proteins/Peptides
- Therapeutics

**Production range, services:**

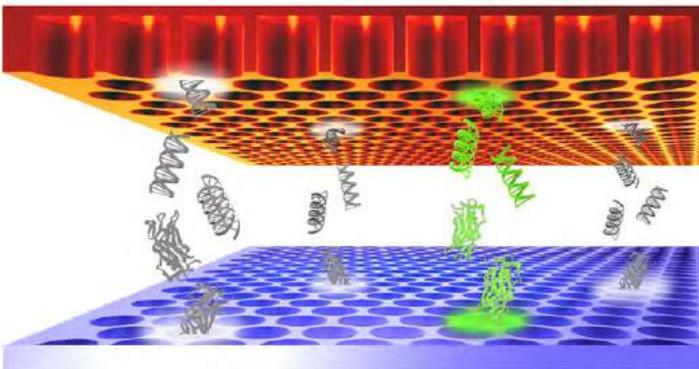
- Microarray copying
- Label-free microarray analysis
- Vaccine candidate development

BioCopy is a spin-off of the University of Freiburg and winner of Elevator Pitch BW 2015. At the moment we are on the edge of leaving the University, building a Start-Up – looking for investors, money and partners.

But what is BioCopy? Basically we are the inventors of a Biomolecule Copier. Just imagine a photocopier, but instead using colors – we use DNA, instead of paper – we use glass slides and instead of ink – we apply standard biochemistry like PCR or cell-free expression. The biomolecule copying process, which we optimize and apply at the moment will open up a complete new world in biochemistry with dozens of new applications and hundreds of old simply improved – improved by a factor of 10 in speed and a 100 in terms of throughput. All realized in a palm sized copier generating thousands of DNA pixels on the size of a thumbnail, which then can be analysed all in parallel label-free for binding interactions. The label-free detection system was developed in close collaboration with Biometrics (Tübingen).

Our applications? Many, but at the moment we focus on two – immune2day and AptaSWIFT. AptaSWIFT will replace SELEX, by being 5x cheaper, 10x faster and 100x hits, simply replacing old technology. But our most charming application is immune2day. Imagine that you take the DNA of a virus, copy it in our device into according proteins and simply add a drop of blood of a survivor. What will happen? The antibodies providing immunity and protection against the virus will bind to distinct pixels of protein – each of these pixels is a potential vaccine candidate – found in 2 days. Nice, isn't it?

So have a look on our homepage for career opportunities and updates.



**biomers.net GmbH**

Söflinger Str. 100  
89077 Ulm

Phone: +49 (0) 731 70 396 0  
Telefax: +49 (0) 731 70 396 11  
info@biomers.net  
www.biomers.net

**Contact person:**

Dr. Matthias Resmini,  
Managing director

**Employees:** 30

**Founding year:** 2002

**Fields of Activity:**

**Business model**

- Custom production

**Biotech sector**

- White/Industrial biotechnology

**Experts in**

- DNA/RNA

**Production range, services:**

- Biopolymer synthesis
- Oligonucleotide synthesis
- Biotechnological services

**biomers.net GmbH-  
the oligonucleotide factory**

biomers.net is your partner for all aspects concerning oligonucleotides. We offer a broad product range from DNA primers over single- and multi-modified complex oligonucleotides to RNA synthesis in various scales. With more than 10 years of experience in the fields of nucleic acid chemistry and oligonucleotide production, our interdisciplinary team of synthesis specialists and experienced staff in technical support will be pleased to assist you with your questions around selection and use of oligonucleotides from the very beginning of your research.

**Oligonucleotide custom synthesis**

Take advantage of modern synthetic technology: You have the option to choose from a variety of modifications, purifications and scales in order to design your individual oligo perfectly fitting to your experimental setup. A highly automated production, a quality control lab, a state-of-the-art computer and a database systems assure fast order processing. As a fully independent company managed by its owners, we can give a maximum of flexibility and efficiency due to lean hierarchies and fast decision making processes.

**100% Quality control**

Ensuring consistently high quality, each oligo is controlled by a multi-stage procedure in a highly automated production and quality control process. Since our focus has always been on the quality and reliability of our oligos, our quality management system was certified by TÜV and by constant re-evaluation and improvement of our system, we can guarantee high quality products that are indispensable for your research.



BIOMEVA GmbH is a reliable and experienced provider of CMO services in the biopharmaceutical industry, for the production of microbially expressed protein products. Since 1993 BIOMEVA has been producing more than 400 batches of cGMP-compliant material for over 35 customers worldwide. Partners benefit from BIOMEVA's track-proven operational expertise in the transfer, development, optimization, scale-up and validation of cGMP processes.

### **Large-scale production of Active Pharmaceutical Ingredients**

Manufacture of API expressed in microbial systems. Recombinant material at clinical and commercial scale in batches of up to 100 L or up to 1,000 L in two separate manufacturing lines. Laboratories for E. coli cell bank production, characterization and storage, suites for fermentation, chromatography, bulk filling and QC laboratories.

### **Production and purification systems**

Fermenters with working volumes of 10 L, 100 L, and 1,00 L. Continuous centrifugation/High-pressure homogenization. Protein micro-/ultra-/sterile-filtration. Column chromatography. Bulk product filling.

### **Microbial Cell Banking**

Master and working cell banks are manufactured, characterized and tested in state-of-the-art laboratories according to FDA and ICH requirements.

### **Quality Control and Quality Assurance**

The quality control (QC) group ensures that all facilities, equipment and critical materials are under control and cGMP-compliant. All manufacturing at BIOMEVA fulfills cGMP requirements. Our QA group takes care of inspection, auditing and monitoring of all production activities.



### **BIOMEVA GmbH**

Czernyring 22  
69115 Heidelberg

Phone: +49 (0) 6221 90 26 0  
Telefax: +49 (0) 6621 90 26 90  
t.pultar@biomeva.com  
www.biomeva.com

### **Contact person:**

Dr. Thomas Pultar, CEO

### **Employees:** 70

### **Founding year:** 1993

### **Fields of Activity:**

#### **Business model**

- Contract research
- Custom production

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Production Organisms
- Proteins/Peptides
- Therapeutics

### **Production range, services:**

- Contract manufacturing (cGMP)
- Microbial fermentation
- Strain development
- Cell banking
- Process validation
- Process development

## **Biomex GmbH**

Siemensstr. 38  
69123 Heidelberg

Phone: +49 (0) 6221 89 46 69 0  
Telefax: +49 (0) 6221 89 46 69 90  
info@biomex.de  
www.biomex.de/

## **Contact person:**

Dipl.-Chem., Dipl.-Kfm.  
Oliver Bosnjak, CEO

**Employees:** 75

**Founding year:** 1989

## **Fields of Activity:**

### **Business model**

- Production
- Service provider
- Supplier

### **Biotech sector**

- Red biotechnology

### **Experts in**

- Analytics
- Diagnostics

### **Production range, services:**

- Disease State Plasma
- Negative Plasma
- Patient Samples
- Panels
- Validation Services for IVD's
- Reagents for ELISA

## **Biomex GmbH – All In One Service Provider**

Biomex is an experienced and leading supplier of human based raw-material for the diagnostic industry for ongoing 25 years. Certified according to DIN EN ISO 13485, our main focus is the supply and identification of human blood components and patient samples for specific diagnostic problems. Over 95% of our provided blood components are sourced in our own self operated plasma donation centers in Europe, the U.S. and Africa.

## **We support our diagnostic partners in the fields of**

- Research and Development
- Validation/Implementation
- Quality Control
- Production

Biomex offers various human disease state plasma as well as negative plasma in bulk or as panels for validation purposes in order to determine the analytical and diagnostic sensitivity/specificity, and cut-off values, of diagnostic test systems. Additionally, we offer QC release panels for precision, stability and lot to lot testing. Moreover, we provide services and corresponding products for CE marking of HIV, HBV and HCV diagnostics.

The wide range of products and services available by Biomex not only enables IVD manufacturers to excel in their approach of validation, quality assurance and approvals of their test systems, but also provide first class expertise in this line of work. All for the sole purpose of improving the diagnostic capabilities of health care providers.



BioRepair® founded 1997 in the innovative BioRegio Rhein Neckar close to Heidelberg.

In cooperation with Universities and private institutes we develop and produce diagnostics for immunological, mikrobiological and parasitological detections. Our own research and development department guarantees for the output of new technics and innovative diagnostics.

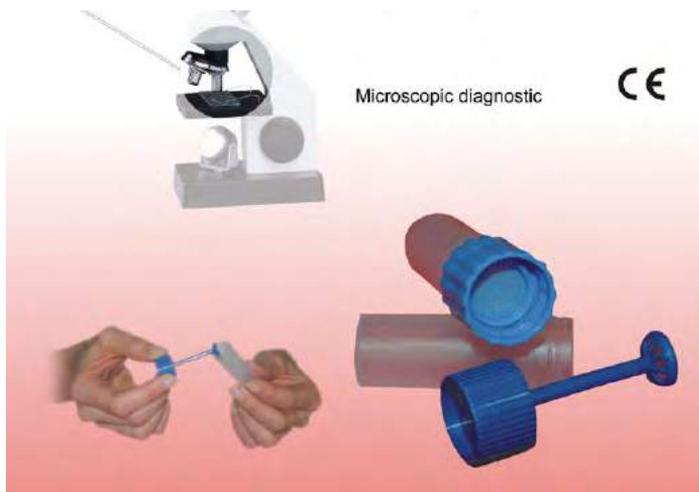
Our parasite concentration system (see picture) is one of the leading products in Europe to detect parasites, larves and their eggs out of stool samples from human and animals.

BioRepair® offers diagnostics for human and vet. labs.

Our main products are:

- Parasite concentration system
- Conservation medium for parasites
- Staining reagents
- Pregnanca rapid tests
- Point of Care Testing
- Rapid Tests
- Diagnostics for Parasitologie and Microbiologie
- Western Blots for Parasitologie
- Products for veterinary diagnostic
- Research products (Acute phase proteins)

BioRepair® is ISO 9001 certified – All our products are CE-marked



## BioRepair GmbH

Kirchenstr. 5  
74889 Sinsheim

Phone: +49 (0) 7261 97 17 60  
Telefax: +49 (0) 7261 97 17 61  
info@biorepair.com  
www.biorepair.com

## Contact person:

Martin F. Trinkner, CEO

**Employees:** 6

**Founding year:** 1997

## Fields of Activity:

### Business model

- Production
- Sales & trade

### Biotech sector

- Red biotechnology

### Experts in

- Diagnostics

## Production range, services:

- Microbiology
- Parasitology
- Rapid Tests

## **biosyn Arzneimittel GmbH**

Schorndorfer Str. 32  
70734 Fellbach

Phone: +49 (0) 711 57 53 200  
Telefax: +49 (0) 711 57 53 299  
info@biosyn.de  
www.biosyn.de

### **Contact person:**

Lena Haspel, Assistant to the CEO

### **Employees:** 70

### **Founding year:** 1984

### **Branches:**

Salzburg, AUT  
Balzers, LIE  
Carlsbad, California, USA

### **Fields of Activity:**

#### **Business model**

- Production
- Research & development
- Sales & trade

#### **Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

#### **Experts in**

- Analytics
- Therapeutics

#### **Production range, services:**

- Selenase
- Food supplements
- Laboratory analysis

## **biosyn is world market leader for high-dose selenium drug products**

Founded in 1984, biosyn Arzneimittel GmbH is one of the first German biotechnology companies in Germany and subsidiaries in Liechtenstein, Austria and USA. The product line comprises about 30 products which extend from biotechnologically produced medications to chemotherapeutics up to complementary drug products and food supplements with a main focus in the intensive care and oncology field.

In focus are thereby the patient in his / her entirety. biosyn invests, as researching pharmaceutical company, up to 25 percent of its revenue in research. Goal is the research, development and the sales of highly effective drug products with practically no side effects based on new molecular biological findings.

As the first and presumably still the only company in the world, biosyn Arzneimittel GmbH since 2009 is in the position to produce the active ingredient sodium selenite-pentahydrate in internationally prescribed GMP quality – thanks to a production process especially developed and patented by biosyn. Its cleaning procedure and crystallization technologies permit the sterile production of high-grade trace element compounds under clean room conditions.

biosyn currently produces sodium selenite pentahydrate and sodium selenite free of water for oral and parenteral preparations.

For biosyn, “we are research” stands not only for the medical-pharmaceutical research. It also stands for the development of innovative production processes. The company markets its selenium drug products worldwide under the trade name selenase®.





**BioTeSys**

**BioTeSys GmbH**

Schelztorstr. 54-56  
73728 Esslingen

Phone: +49 (0) 711 31 05 71 50  
Telefax: +49 (0) 711 31 05 71 51  
bts@biotesys.de  
www.biotesys.de

**Contact person:**

Dr. Jürgen Bernhardt, CEO

**Employees:** 20

**Founding year:** 1999

**Fields of Activity:**

**Business model**

- Research & development
- Service provider

**Biotech sector**

- Agriculture/Food

**Experts in**

- Analytics
- Cells/Cell Lines

**Production range, services:**

- CRO (food/cosmetics)
- Cell-based testing
- Analytics
- Bioinformatics

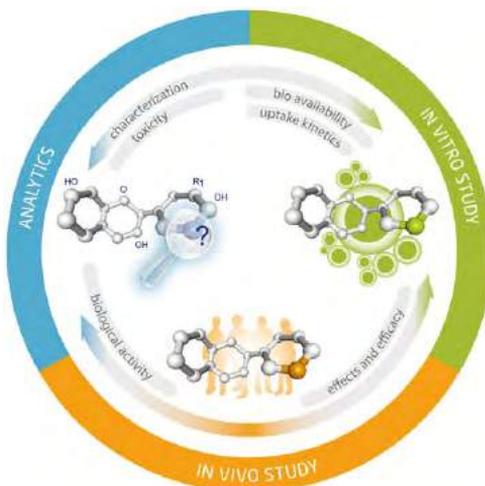
## BioTeSys – Nutritional CRO & Test laboratory

For over 15 years BioTeSys GmbH has been supporting companies in the fields of food, cosmetics and medical devices. With a longstanding expertise the Nutritional CRO and Test laboratory checks and secures biological and chemical products and supports customers in questions related to bioactive ingredients. BioTeSys is a certified service provider with an accredited testing laboratory (certified according to DIN ISO 9001:2008, accredited according to DIN EN ISO/IEC 17025:2005).

The customer is always in the focus of BioTeSys' activities. The team of biologists, dieticians, chemists and sport scientists find quickly and efficiently an appropriate answer to the customer's analytical, in vitro or clinical question. The team's complementary skills and a wide range of methods ensures a high quality and reduces the number of project partners required. If necessary, BioTeSys includes a collaboration partner of his broad network. The service provider also offers full adherence to costs and schedules with maximum flexibility.

BioTeSys is member of the German Federation of Food Law and Food Science e.V. (BLL), Bioeconomy Network for Generating Bio-based Products, Bayern Innovativ – Society for innovation and knowledge transfer, and of the In Vitro Testing Industrial Platform (IVTIP).

BioTeSys was founded in 1999 as a spin-off from the Institute for Biological Chemistry and Nutrition at the University of Hohenheim. Since then it has been located in the Life Science Centre Esslingen.



**BMG LABTECH GmbH**

Allmendgrün 8  
77799 Ortenberg

Phone: +49 (0) 781 969 68 0  
Telefax: +49 (0) 781 969 68 67  
headquarters@bmglabtech.com  
www.bmglabtech.com

**Contact person:**

Sabine Schillinger, Office manager

**Employees:** 110

**Founding year:** 1990

**Branches:**

Mornington, Victoria, AUS  
Champigny s/Marne, FRA  
Saitama, JPN  
Aylesbury, GBR  
Cary, North Carolina, USA

**Fields of Activity:**

**Business model**

- Production

**Biotech sector**

- Red biotechnology

**Experts in**

- Analytics
- Cells/Cell Lines
- DNA/RNA
- Proteins/Peptides

**Production range, services:**

- Dedicated and innovative multi-mode microplate readers
- Over 25 years expertise in microplate reading technology
- Worldwide sales and support network

Since its establishment in 1990, BMG LABTECH has become a world leader in microplate reading due to continuous development of innovative and unique technologies. BMG LABTECH's devices are able to perform many types of bioanalytical measurement techniques including fluorescence intensity, fluorescence polarization, luminescence, time-resolved fluorescence, UV/Vis absorbance, AlphaScreen®, and nephelometry.

With the CLARIOstar® multi-mode microplate reader, the company offers unique and revolutionary LVF monochromators™ which provide filter-like performance and increased sensitivity over conventional monochromators. The LVF monochromators™, along with filters and a UV/Vis spectrometer, can be used for a variety of applications in up to eight different detection modes. Thanks to its new Atmospheric Control Unit, the CLARIOstar® can easily provide the physiological environment for any cell type, enhancing cell-based microplate assays.

The PHERAstar® FSX is BMG LABTECH's most sensitive multi-mode reader for high-throughput screening (HTS). Thanks to the unique optic Module system, Simultaneous Dual Emission, UV/Vis spectrometer, and dedicated AlphaScreen® and TRF Lasers, the PHERAstar® FSX will perform any application with ease and speed, even in 3456-well microplates.

All microplate readers are manufactured and tested at BMG LABTECH's headquarters in Ortenberg, Germany, which guarantees their precision, reliability, and robustness. BMG LABTECH continuously works with all of the leading reagent companies to handle the increasingly challenging requirements of popular microplate assays.



CLARIOstar with revolutionary LVF monochromator technology.



The new gold standard for high-throughput screening.

## **Boehringer Ingelheim BioXcellence™**

The Boehringer Ingelheim group is one of the world's 20 leading pharmaceutical companies. Headquartered in Ingelheim, Germany, it operates globally with 145 affiliates and more than 47,500 employees. Since it was founded in 1885, the family-owned company has been committed to researching, developing, manufacturing and marketing novel medications of high therapeutic value for human and veterinary medicine. In 2015, Boehringer Ingelheim achieved net sales of about 14.8 billion euros.

Boehringer Ingelheim Contract Manufacturing is represented by its brand Boehringer Ingelheim BioXcellence™, your dedicated biopharmaceutical contract manufacturer. As a leading biopharmaceutical contract manufacturer with more than 35 years of experience it has brought more than 25 biopharmaceutical products to market.

Boehringer Ingelheim BioXcellence™ offers tailor-made contract development and manufacturing services to the biopharmaceutical industry, providing the entire production technology chain from DNA to fill and finish under one roof at its facilities in Biberach (Germany), Vienna (Austria), Fremont (USA) and Shanghai (China). Boehringer Ingelheim BioXcellence™ can secure product supply throughout the entire product lifecycle transferring customer projects at any stage, delivering to almost any scale.

We make outsourcing easy and offer reliable world-class biopharmaceuticals contract manufacturing to the pharmaceutical and biotechnology industry.



## **Boehringer Ingelheim Biopharmaceuticals GmbH**

Birkendorfer Str. 65  
88397 Biberach

Phone: +49 (0) 6132 77 0  
bioxcellence@boehringer-  
ingelheim.com  
www.bioxcellence.com

### **Contact person:**

Pauline Bronzel,  
Marketing & Communication

**Employees:** 47500

**Founding year:** 1885

### **Branches:**

Vienna, AUT; Biberach, GER  
Shanghai, CHN  
Fremont, California, USA

### **Fields of Activity:**

#### **Business model**

- Custom production
- Production
- Service provider

#### **Biotech sector**

- White/Industrial biotechnology

#### **Experts in**

- Analytics
- Cells/Cell Lines
- DNA/RNA
- Proteins/Peptides
- Therapeutics

#### **Production range, services:**

- Cell Culture Technology
- Quality Control & Assurance
- Fill & Finish
- Large-scale cGMP Manufacturing
- Up- and Downstream
- Microbial Technology



## candidum TGU / TTI GmbH

Allmandring 31  
70569 Stuttgart

Phone: +49 (0) 160 70 57 467  
s.benson@candidum.de  
www.candidum.net

### Contact person:

Dr. Sven Benson, Founder

### Employees: 5

### Founding year: 2016

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Red biotechnology
- White/Industrial biotechnology

#### Experts in

- Analytics
- Bioinformatics
- DNA/RNA
- Diagnostics
- Proteins/Peptides

### Production range, services:

- Enzyme library design
- Computational inhibitor screening
- Feasibility studies

### Who we are

candidum is a biotechnology spin-off associated with the University Stuttgart, Germany. We apply a proprietary bioinformatics toolset in combination with laboratory screening to design focused combinatorial enzyme libraries or to condense inhibitor panels. We deliver combinatorial libraries tailored to available screening capacities that cover comprehensive regions of sequence space and diverse evolutionary pathways. We are looking for partners to expand our technology to inhibitor panel prescreening and the design of interfacial disruptors.

### Our Exclusive Technology

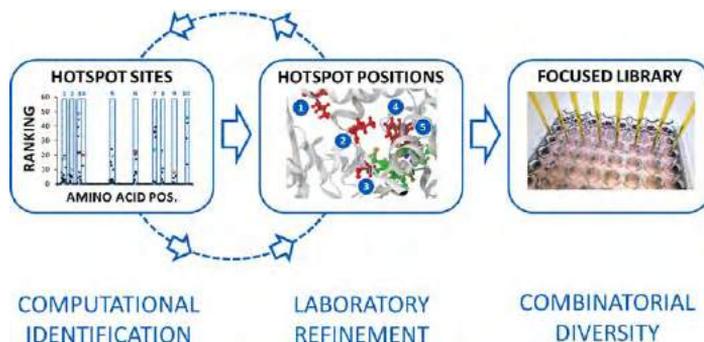
We apply proprietary computational methods that combine accelerated molecular dynamics with unique methods of hotspot evaluation. With massive parallel computing, we achieve the precision of traditional molecular dynamics simulations, while maintaining statistical significance comparable to high-throughput methods such as molecular docking.

### Benefits at a Glance

- Greatly reduced R&D costs
- Exceptional library quality
- Short development time
- Increase success rate
- Enable complex projects

### candidum Enzyme Design

- Holistic analysis of enzyme-substrate interactions
- Full dynamics characterization by 1000+ simulations
- Mapping of biochemical function to hotspot areas
- Specific hotspot position profiles and ranking
- Comprehensive mutability and evolvability studies
- Full combinatorial diversity with highly focused library sizes



**CANDOR Bioscience GmbH**  
**The ELISA Experts**

CANDOR Bioscience GmbH is an internationally oriented, innovative and profitable enterprise.

CANDOR develops, produces and distributes a comprehensive selection of premium solutions for immunoassays.

CANDOR offers more than 50 different products including optimizers, blockers, stabilizers and buffer solutions for immunoassays. By using these solutions the reliability of results can be improved, the assay can be simplified and process times can be reduced.

CANDOR quality comprises highest product quality, highest quality standards and demanding quality control in production in addition to comprehensive product support and customer service.

The company is certified according to DIN EN ISO 9001:2008.



**CANDOR Bioscience GmbH**

Simoniustr. 39  
88239 Wangen

Phone: +49 (0) 7522 79 52 70  
Telefax: +49 (0) 7522 79 52 729  
info@candor-bioscience.com  
www.candor-bioscience.com

**Contact person:**

Dr. Tobias Polifke, CEO

**Employees:** 12

**Founding year:** 2004

**Fields of Activity:**

**Business model**

- Custom production
- Production
- Supplier

**Biotech sector**

- Agriculture/Food
- Red biotechnology

**Experts in**

- Analytics
- Diagnostics
- Proteins/Peptides

**Production range, services:**

- Antibody stabilizers for ELISA kit production
- Optimizers and buffer solutions for immunoassays
- ELISA development, optimization and validation

## CeGaT GmbH

Paul-Ehrlich-Str. 23  
72076 Tübingen

Phone: +49 (0) 7071 565 44 55  
Telefax: +49 (0) 7071 565 44 56  
info@cegat.com  
www.cegat.com

### Contact person:

Dr. Dirk Biskup,  
Managing Director

**Employees:** 60

**Founding year:** 2009

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Bioinformatics
- DNA/RNA
- Diagnostics

#### Production range, services:

- Genetic Diagnostics
- Diagnostic Panels
- Exome Diagnostics
- Tumor Diagnostics
- Single Gene Testing
- Sequencing Service

CeGaT, Center for Genomics and Transcriptomics, is a sequencing and diagnostics company. As such we offer the decoding of genetic information and its medical interpretation. CeGaT's top priority is to identify disease-causing variants in patients. In 2010 we became the first company to establish high-throughput sequencing in human genetic diagnostics, enabling us to perform the analysis of many regions of the genome simultaneously.

Our portfolio ranges from single exon interpretation using Sanger sequencing to next-generation sequencing-based whole genome analysis, and can be complemented using deletion/duplication testing by MLPA, qPCR, and Array-CGH. Our area of expertise is in the use of large Diagnostic Panels that cover all disease-specific genes; for instance all 639 genes associated with epilepsy, metabolic and brain developmental disorders. All steps are carried out by our interdisciplinary team of experts. The medical report provides the referring physician with a detailed diagnosis and support for further treatment decisions. In addition, the report provides a basis for patient and family genetic counseling.

Aside from our diagnostic endeavors, we offer numerous services for research organizations, and are contributing to publicly funded research projects, both nationally and internationally. Using various automated platforms, distinct sequencing platforms and various established laboratory protocols, in combination with custom bioinformatics analysis options, we can provide an individual solution for each request. All of our services are fully accredited according to DIN EN ISO 15189:2014 and College of American Pathologists (CAP).



### The 3-D Life Technology: Cell Environment Design at Your Fingertips!

Cellendes is a life science company offering a comprehensive technology for the controlled design of cell environments in 3-D cell culture. This technology serves the increasing demand for cell-based assays with a closer resemblance to the environment in the living organism. Areas of application include basic research, drug development and biomedical engineering.

Cellendes' 3-D Life products are a toolbox of reagents which provides high flexibility to the user in composing hydrogels with biomimetic modifications as desired for each specific cell culture. Due to the inert nature of the basic material and its high capacity for modification with bioactive factors, 3-D Life hydrogels achieve high performance to suit many applications.

Cellendes seeks collaborations with academic and industrial partners to explore the application of the 3-D Life technology in complex cell-based assays and tissue models for drug screening as well as in biomedical engineering.

#### Main Features of 3-D Life Hydrogels:

- Defined composition of biologically inert synthetic polymers and biopolymers
- User-controlled biomimetic modifications (e.g. peptides, proteins)
- Wide range of ligand density
- Tunable gel strength and injectable cell delivery with in situ gel formation
- Choice of non-degradable, user-degradable and cell-degradable gels
- Amenable to automation for multi-well plate dispensing

#### Applications:

3-D cell cultivation in basic research, 3-D cell-based assays and tissue models for drug screening, development of 3-D biomaterial for regenerative medicine and medical engineering



### Cellendes GmbH

Markwiesenstr. 55  
72770 Reutlingen

Phone: +49 (0) 7121 159 40 0  
Telefax: +49 (0) 7121 159 40 99  
info@cellendes.com  
www.cellendes.com

#### Contact person:

Dr. Brigitte Angres,  
Managing Director

**Employees:** 3

**Founding year:** 2009

#### Fields of Activity:

##### Business model

- Production
- Research & development
- Supplier

##### Biotech sector

- Red biotechnology

##### Experts in

- Cells/Cell Lines
- Tissue Engineering

#### Production range, services:

- Biomimetic hydrogels for 3-D cell culture
- Custom production of hydrogel reagents
- 3-D cell-based assay development

**CellGenix GmbH**

Am Flughafen 16  
79108 Freiburg

Phone: +49 (0) 761 88 88 90  
Telefax: +49 (0) 761 88 88 98 30  
info@cellgenix.com  
www.cellgenix.com

**Contact person:**

Prof. Dr. Felicia Rosenthal, CEO

**Employees:** 50**Founding year:** 1994**Branches:**

Portsmouth, New Hampshire, USA

**Fields of Activity:****Business model**

- Production
- Sales & trade
- Supplier

**Biotech sector**

- Red biotechnology

**Experts in**

- Proteins/Peptides

**Production range, services:**

- Recombinant Human Cytokines
- Serum-free Media
- Bioprocessing Container

CellGenix is a leading global supplier of high quality reagents and tools in the expanding market of cell and gene therapy and regenerative medicine.

As the first company to obtain a GMP manufacturing authorization for cell processing in Europe, CellGenix has more than 20 years of expertise in the development and GMP manufacturing of cell therapy products. Our products are used worldwide in clinical trials by academia and industry partners.

To ensure a seamless transition from research to commercialization we offer our customers a comprehensive product portfolio together with expert regulatory and technical support. Included in our product portfolio are cytokines, serum-free media and closed cell culture systems. Our products combine a maximum of quality and safety with excellent performance due to the state-of-the-art production, stringent in-house quality control and comprehensive documentation. All these factors help to simplify qualification and validation for a market authorization.

CellGenix operates a state-of-the-art GMP facility for production of recombinant proteins and cell processing in Freiburg, Germany. A subsidiary is located near Boston in Portsmouth, NH/USA.

For more information, visit [www.cellgenix.com](http://www.cellgenix.com)

Safe | GMP Compliant | Reliable



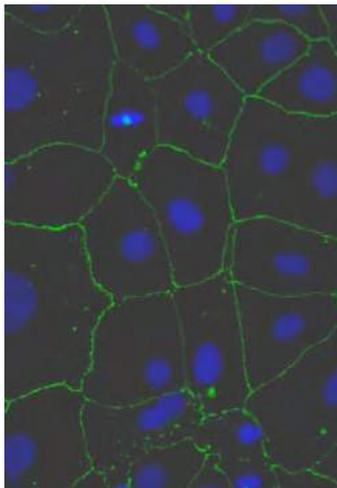
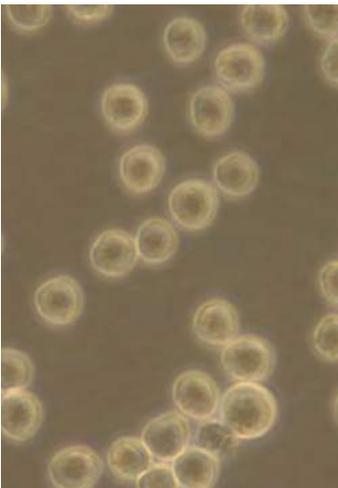


CLS Cell Lines Service supports the scientific community in conserving valuable cell lines. The CLS cell bank (cell repository) covers about 500 cell lines, which have been isolated from various tissues, tumors, and species, with the focus on human cell lines. Every year, new cell lines are deposited in the cell bank, mostly by licensing in or as a result of new cooperations. As the cell lines are controlled on a daily basis by microscopy, many data have emerged which resulted in the publication of the 'Atlas of Living Cell Cultures' in May 2013. This comprehensive atlas is a co-production with Prof. Toni Lindl.

Additionally, due to the conservation and quality control of the cell lines CLS GmbH has extended its skills and therefore offers a couple of services such as Mycoplasma testing or conducting transfections. Furthermore, CLS manufactures products making use of the cell lines such as genomic DNA, RNA, whole cell lysates and snap frozen cell pellets.

Permanent as well as primary cell lines are recognized as a major part in fundamental research. The increasing comprehension and knowledge of the manifold of processes going on inside each single cell enhances the understanding of the molecular processes of diseases such as cancer. Only then new therapies and drugs can be developed. Furthermore, the usage of cell cultures *in vitro* to clarify fundamental questions can replace an increasing number of *in vivo* experiments. We at CLS GmbH aim to support the scientists who are working in the Life Sciences, Biology, Biochemistry, Biotechnology and Medical Diagnostics in the daily routine using cell cultures.

CLS Cell Lines Service serves the international scientific community and has distributors in many countries.



## **CLS Cell Lines Service GmbH**

Dr.-Eckener-Str. 8  
69214 Eppelheim

Phone: +49 (0) 6221 70 07 99  
Telefax: +49 (0) 6221 70 07 17  
info@clsgmbh.de  
www.clsgmbh.de

### **Contact person:**

Dr. Rosemarie Steubing, CEO

### **Employees: 7**

### **Founding year: 2004**

### **Fields of Activity:**

#### **Business model**

- Custom production
- Production
- Service provider

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Cells/Cell Lines
- DNA/RNA
- Proteins/Peptides

### **Production range, services:**

- Continuous cell lines
- gDNA, cell lysates
- Services in cell culture

## Computomics GmbH

Christophstr. 32  
72072 Tübingen

Phone: +49 (0) 7071 56 83 995  
info@computomics.com  
www.computomics.com

### Contact person:

Dr. Sebastian J. Schultheiss,  
Managing Director

**Employees:** 11

**Founding year:** 2012

### Branches:

Davis, California, USA  
Madison, Wisconsin, USA

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Agriculture/Food
- Environmental biotechnology

#### Experts in

- Bioinformatics

#### Production range, services:

- Genome Assembly
- Genome Annotation
- Genomic Selection
- Metagenomics
- Large-Scale Phenotyping
- Custom Data Visualization

## Advanced Sequencing Data Analytics for Crops

Computomics was founded to bring the latest bioinformatics discoveries directly and efficiently to industry applications. Our machine learning methods elucidate higher-order correlations in ever-growing data.

We deliver insights from large-scale datasets to enable data-driven decisions in plant breeding and plant protection companies. This allows our clients to focus on domain-specific and accelerate their development.

Our results, visualizations and interpretations are used by researchers, by bioinformaticians and by quality managers. Computomics helps them navigate the complexities of grain, vegetable, fruit and other genomes.

Sequencing and other high-throughput methods have become affordable even for large, complex crop genomes, but data interpretation remains a challenge. Our expert scientists help our clients obtain the information they need from large datasets to accelerate their breeding pipeline that normally takes 12-18 years for a new variety to be market-ready by taking 3-6 years off this development time when our methods are used throughout. An earlier time-to-market grants our customers a competitive advantage.

We also help clients understand the complex interactions between plants and their surrounding microbial communities. Microbes support plants in the soil to take up essential nutrients and are also present above the ground on leaves and fruits. We characterize the gene space of the metagenome and provide our clients with answers about plant-pathogen interactions and nutrient uptake.

Computomics embraces the social, ethical and environmental principles of the United Nations Global Compact.



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Curetis N.V. is a commercial-stage molecular diagnostics company with principal place of business located in Holzgerlingen, Germany. On November 11, 2015, Curetis N.V. has been successfully listed on Euronext Amsterdam and Euronext Brussels under the ticker symbol "CURE", raising EUR 44.3 Mio through its IPO.

Founded in 2007, Curetis focuses on simple-to-use, accurate and rapid solutions for diagnosing infectious diseases in critically ill, hospitalized patients. To this end, Curetis has developed the highly-automated sample-to-answer molecular diagnostics platform Unyvero, which makes diagnostic test results available within a few hours compared to time frames ranging between 24 hours and several weeks by conventional diagnostic approaches. The broad syndromic test panels of the Unyvero Cartridges enable a timely detection of a wide variety of relevant pathogens and antibiotic resistance mechanisms.

Current applications target severe cases of pneumonia, implant and tissue infections; and blood culture infections. An application for intra-abdominal infections and a cartridge for sepsis host response are under development. Curetis plans to continuously expand its product pipeline by new Unyvero Cartridges.



### **Curetis N.V.**

Max-Eyth-Str. 42  
71088 Holzgerlingen

Phone: +49 (0) 7031 49 195 10  
Telefax: +49 (0) 7031 49 195 19  
contact@curetis.com  
www.curetis.com

### **Contact person:**

Elena Christina Billig,  
Investor Relations

**Employees:** 75

**Founding year:** 2007

### **Fields of Activity:**

#### **Business model**

- Production
- Research & development
- Sales & trade

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Diagnostics

#### **Production range, services:**

- Unyvero System and tests for Pneumonia
- Implant and Tissue Infections
- Blood Culture Infections

**CureVac AG**

Paul-Ehrlich-Str. 15  
72076 Tübingen

Phone: +49 (0) 7071 98 83 0  
Telefax: +49 (0) 7071 98 83 11 01  
info@curevac.com  
www.curevac.com

**Contact person:**

Verena Lauterbach,  
Senior Manager Communications

**Employees:** 285

**Founding year:** 2000

**Branches:**

Frankfurt am Main, DEU  
Cambridge, Massachusetts, USA

**Fields of Activity:**

**Business model**

- Production
- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- DNA/RNA
- Therapeutics

**Production range, services:**

- Development of mRNA-based drugs
- Production of mRNA-based drugs

Founded in 2000 as a spin-off from the University of Tuebingen in Germany, CureVac is the most advanced company focused on the development of drugs that are based on the molecule Messenger RNA (mRNA). „the RNA people“ have more than 16 years of expertise in handling and optimizing this versatile molecule for medical purposes and have the most advanced product pipeline and IP portfolio in the industry.

The basic principle of CureVac’s proprietary technology is the use of mRNA as a data carrier to instruct the human body to produce its own proteins capable of fighting a wide range of diseases.

The company has several active ingredients in R&D for the treatment of cancer, the protection against infectious diseases and for protein replacement. Until today, CureVac has tested its mRNA-based products in eight clinical studies with about 450 human patients and healthy volunteers. Its lead product, CV9104, is currently the subject of a Phase IIb clinical trial in metastatic prostate cancer.

In 2006, CureVac successfully established the first GMP facility worldwide for the manufacturing of mRNA. In 2016, CureVac expects to begin the construction of an industrial scale production facility.

Since its inception, CureVac has received approximately €300 million in equity investments. In 2016, the company value is €1.5bn. CureVac has entered into various collaborations with multinational corporations and organizations, including agreements with Boehringer Ingelheim, Sanofi Pasteur, the Bill & Melinda Gates Foundation and IAVI.



*Get information from raw data:* da-cons GmbH offers individual data acquisition, analysis, data management, archiving and visualization of special imaging data. da-cons consults their customers in the difficult task of data acquisition and designs individual solutions for the customers' needs, in such different fields as science, digital out of home, internet of things, smart home automation or industry 4.0.

*Flexible image data analysis:* The high technology service developed by da-cons allows tailored combinations of existing processing workflows and algorithms in order to analyze imaging data. Customers acquire data sets with different sensors (cameras, thermometers, x-ray based etc.). Wanted information, contained in the image raw data, is extracted and given back to the customer. Via analysis of data sets, da-cons is able to obtain temporal and spatial resolution of an object as well as an enormous richness of detail in images.

*Plant phenotyping:* Climate change, population growth or desertification lead to challenging tasks in the design, development, culturing and cultivation of new crops. da-cons helps seed producers, plant breeders, scientists and greenhouse owners facing these task. Our modular phenotyping system helps you to understand what your plants are doing right now.

*Customer benefit:* Customers do not have to adjust to hardware and software requirements, they can focus principally on their individual problem and the corresponding experiments. They save invest in hardware, software and manpower.



## **da-cons GmbH**

Hermann-von-Helmholtz-Platz 1  
76344 Eggenstein-Leopoldshafen

Phone: +49 (0) 721 75 40 80 40  
Telefax: +49 (0) 721 75 40 80 49  
info@da-cons.de  
www.da-cons.de

## **Contact person:**

Dagmar Paris, Organisation

## **Employees:** 5

## **Founding year:** 2013

## **Branches:**

Karlsruhe, DEU

## **Fields of Activity:**

### **Business model**

- Contract research
- Custom production
- Sales & trade

### **Biotech sector**

- Agriculture/Food
- Environmental biotechnology

### **Experts in**

- Analytics
- Bioinformatics

### **Production range, services:**

- Data analysis
- Data management
- Data archiving
- Data visualization
- Phenotyping
- Consulting

**DIARECT AG**

Bötzing Str. 29 B  
79111 Freiburg

Phone: +49 (0) 761 47 979 0  
Telefax: +49 (0) 761 47 979 29  
info@diarect.com  
www.diarect.com

**Contact person:**

Dr. Katharina Bonfig,  
Head of Product Management

**Employees:** 30**Founding year:** 1998**Fields of Activity:****Business model**

- Production
- Supplier

**Biotech sector**

- White/Industrial biotechnology

**Experts in**

- Diagnostics
- Proteins/Peptides

**Production range, services:**

- Recombinant autoantigens
- Native autoantigens
- Infectious disease antigens
- Recombinant allergens
- Protein stabilizers / blockers
- Immunoassay substrates

DIARECT AG is a privately owned biotech company established in 1998. The company has long-standing expertise in the development, standardized large-scale production and worldwide distribution of recombinant and native proteins.

The goal is to provide a constant source of antigens for the serological diagnostics of autoimmune diseases, infectious diseases as well as allergies. The company is not only a leading manufacturer of antigens, but also the European distributor of SurModics' protein stabilization reagents, blockers and BioFX substrates, thus providing the key components for the development of diagnostic end products..

Today DIARECT serves customers in more than 40 countries worldwide. Making products and services of constantly high quality available to customers is one of the cornerstones of DIARECT's philosophy. Therefore, all products are developed, produced and distributed according to a Quality Management System that is certified for compliance with ISO 9001 and 13485 standards.



## Dispendix GmbH

Dispendix GmbH, located in Stuttgart, develops, produces and sells systems and consumables for non contact nanoliter dispensing applications.

At the Fraunhofer Institute for Manufacturing Engineering and Automation IPA, a novel liquid handling technology, called I-DOT („Immediate-Drop-On-Demand technology“) has been developed. Goal was to find an efficient, flexible alternative non-contact solution for liquid handling tasks for nano- and microliter volumes. I-DOT consists of an instrument (I-DOT One) and associated consumables (I-DOT Silica Plate). Our vision is to establish a simple and elegant gold-standard in non-contact liquid handling.

There is increasing cost pressure in the life science industry, and the trend in liquid handling towards smaller sample volumes. No dispensing or pipetting systems are on the market, which meet the requirements regarding quality, robustness, speed and flexibility. Due to the low processing speed and the cost of consumables of existing systems, an alternative to existing technologies on the market is sought.

The I-DOT system for the first time allows the simple and robust handling of volumes below one microliter. Due to the scalability of the technology, the use of common laboratory standards and the small size of the device, I-DOT can be used in every laboratory, but it is also suitable for integration into fully automated screening systems.



## Dispendix GmbH

Meitnerstr. 9  
70563 Stuttgart

Phone: +49 (0) 7141 97 29 93 6  
Telefax: +49 (0) 7141 23 91 26 9  
info@dispendix.com  
www.dispendix.com

### Contact person:

Harry Boeltz, CEO

**Employees:** 2

**Founding year:** 2016

**Fields of Activity:**

### Business model

- Supplier

### Biotech sector

- Red biotechnology

### Experts in

- Analytics
- DNA/RNA

### Production range, services:

- Dispensing devices
- Lab automation
- Liquid Handling

**EMC microcollections GmbH**

Sindelfinger Str. 3  
72070 Tübingen

Phone: +49 (0) 7071 40 74 0  
Telefax: +49 (0) 7071 40 74 22  
emc@microcollections.de  
www.microcollections.de

**Contact person:**

Dr. Renate Spohn,  
Senior Vice President

**Employees:** 15

**Founding year:** 1996

**Fields of Activity:**

**Business model**

- Custom production
- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Analytics
- Proteins/Peptides

**Production range, services:**

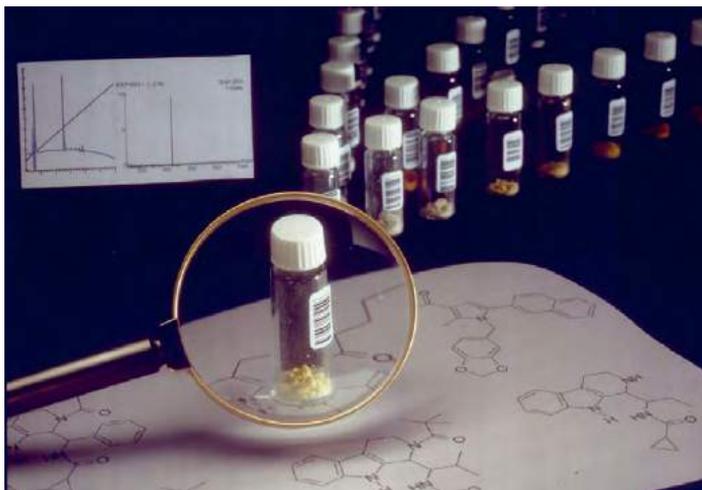
- Custom peptide chemistry
- Organic chemistry  
(solid phase and solution)
- Peptides and peptidomimetics,  
immunochemicals

EMC microcollections GmbH is a biotech company focused on the generation and biochemical investigation of biologically and pharmacologically relevant organic compound collections. Based on bioorganic chemistry, chemical biology and immunochemistry EMC holds a leading position in the areas of methods development and high throughput synthesis of drug like compounds. Furthermore, the company provides a powerful spectrum of custom specific peptide- and peptidomimetic synthesis and biochemicals for basic research (e.g. tools for Toll-like receptor research, bioactive peptides, anti-infectives).

EMC's business objective is to develop and provide novel strategies for the drug discovery process. Our strong knowledge in chemistry and the commitment to drug-like quality accelerate the identification of hits, lead optimisation and up-scaling. EMC offers the full range of products along the drug discovery process on a servicing or partnership basis:

- Customer designed compound collections
- Protocols for high throughput synthesis
- Analytically validated purified compounds
- Lead structure design and optimisation
- Nanobiotechnology
- Regenerative biology and medicine
- Third generation vaccines
- Peptide chemistry
- Immunochemicals

EMC was founded in 1996 by Prof. Dr. Günther Jung, Prof. Dr. Jörg Metzger, Dr. Friedrich Stracke and Prof. Dr. Karl-Heinz Wiesmüller based on year-long expertise in automated high-throughput synthesis and medicinal chemistry, assay development, peptide and protein chemistry, bioorganic chemistry, immunochemistry and combinatorial compound libraries.



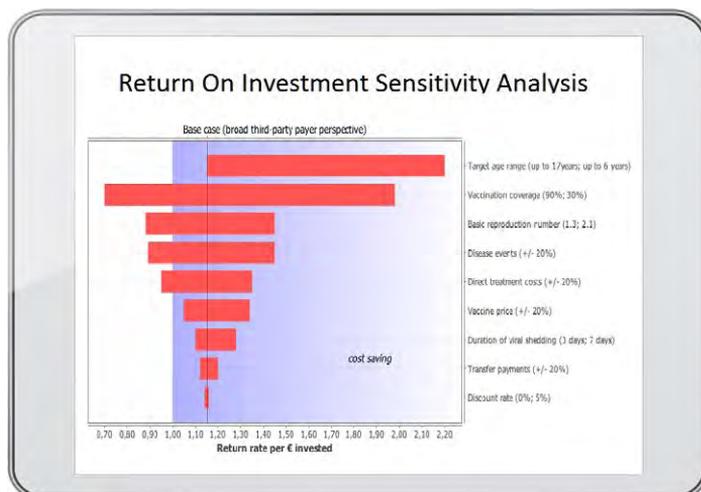
ExploSYS GmbH and its Institute for Exploratory Systems was founded in 2005 with the aim to provide services on the edge between research and its applications.

## Health economics and outcome research

ExploSYS brings together mathematics, statistics, informatics and economics to develop cutting edge mathematical and stochastic models capable of realistically assessing problems in biotechnology, epidemiology and health. The interactive and high performance simulators are used for comparative effectiveness analysis and risk assessment, helping to achieve optimal impact on health economics and outcomes. The ExploSYS experts assist pharmaceutical and biotechnology decision makers on a high scientific level, acting „what-if“ scenarios to the end. This results in reliable planning, lower costs and higher margins of safety.

## Exploratory modelling and visualisation

ExploSYS research and services is centred around the concept of exploratory modelling. This iterative and adaptive model development requires a set of advanced software tools: Domain specific languages and graphic editors help to express and revise models. Parallel and cloud-based simulation and sampling algorithms reduce execution time. Exploratory visualisation, data mining and reporting help to translate simulation results into arguments for policy making, market access and pricing. Results are frequently delivered as mobile or web applications for easy access by the clients. ExploSYS has successfully applied its exploratory tools to health- and biotechnology-related problems, e.g. for pandemic intervention planning, for economic evaluation of vaccination policies and for network meta analyses of treatment alternatives.



## ExploSYS GmbH

Otto-Hahn-Weg 6

70771 Leinfelden-Echterdingen

Phone: +49 (0) 711 756 08 01

Telefax: +49 (0) 711 758 50 11

markus.schwehm@explosys.de

www.explosys.de

## Contact person:

Dr.-Ing. Markus Schwehm,

Managing Director

**Employees: 2**

**Founding year: 2005**

## Fields of Activity:

### Business model

- Contract research
- Research & development

### Biotech sector

- Red biotechnology

### Experts in

- Bioinformatics

## Production range, services:

- Dynamic exploratory modeling
- Parameter sensitivity analysis
- Optimisation and planning
- Network meta analysis
- Interactive visualisations
- Mobile and web applications



## **GATC Biotech AG**

Jakob-Stadler-Platz 7  
78467 Konstanz

Phone: +49 (0) 7531 81 60 68  
Telefax: +49 (0) 7531 81 60 81  
customerservice@gatc-biotech.com  
www.gatc-biotech.com

### **Contact person:**

Anita Burkhardt, Director Inside  
Customer Care & Logistics

**Employees:** 150

**Founding year:** 1990

### **Branches:**

Mülhausen, FRA  
London, GBR  
Solna, SWE

### **Fields of Activity:**

#### **Business model**

- Research & development
- Service provider

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- DNA/RNA
- Diagnostics

#### **Production range, services:**

- Exome sequencing
- Transcriptome sequencing
- Epigenetics
- Sanger sequencing
- Next generation sequencing
- Liquid-biopsy based services

Founded in 1990, GATC Biotech has established itself as a leader in DNA and RNA sequencing. More than 10,000 researchers worldwide rely on the company's services for processing any number of samples from any kind of starting material. GATC Biotech offers all leading sequencing technologies in its own laboratories. The company's proprietary workflows deliver ready-for-diagnostics results backed by ISO 17025 accreditation and ISO 13485 certification. From Sanger to next generation sequencing, GATC Biotech offers unmatched flexibility to customers interested in any kind of genomics such as transcriptome, epigenome, exome or whole genome analysis.

GATC Biotech has a proven record of publicly funded projects by the EU and other national agencies. The company has formed numerous successful collaborations with world-renowned universities, academic institutions, pharmaceutical and biotechnological companies. Together with its partners, GATC Biotech is currently devoted to the development of novel molecular diagnostics approaches for the realisation of personalised medicine.

Please visit [www.gatc-biotech.com](http://www.gatc-biotech.com) for more information about genomic innovation – Made in Germany.



Genaxxon bioscience GmbH is a privately held company founded in the year 2002 by Dr. Norbert Tröndle. Genaxxon sees itself as a competent partner for life science customers offering them a broad range of standard and highly innovative products from the molecular biology segment in a customer oriented way. With the combined knowledge of Genaxxon and its Partners we are able to offer a wide range of high quality molecular biology products, with a focus on qPCR and RT-PCR kits.

Our product offering includes a wide range of high-quality research reagents and cutting edge technologies in the genomics field. While our product focus is on molecular biology products we and our partners have been able to develop new kits that make work for our customers much easier as the HotScriptase RT-PCR kit which is up to 50% faster compared to kits available from others as it does not need an isothermal transfection step anymore. Other PCR master mixes have been optimized to work with crude samples like tissue, plant leaves, spores, yeasts, etc. without the need for isolation or purification of DNA or RNA. One of the next co-developments will be a lyophilised PCR master mix that can be shipped and stored at room temperature which will make it possible to add this master mix to PCR based 96-well diagnostic kits.

Besides PCR and related products the peptide synthesis service and amino acid analysis service grew to an important part of Genaxxon bioscience's business showing that quality, accuracy and customer orientation is important and well recognized by our customers around the world.

Products and service quality are „made in Germany“- a high quality standard that is proven by our ISO 9001:2008 certification that we do have implemented since the year 2010.



## **Genaxxon bioscience GmbH**

Söflinger Str. 70

89077 Ulm

Phone: +49 (0) 731 36 08 123

Telefax: +49 (0) 731 36 08 962

ntroendle@genaxxon.de

www.genaxxon.com

### **Contact person:**

Dr. Norbert Tröndle, CEO

### **Employees:** 5

### **Founding year:** 2002

### **Fields of Activity:**

#### **Business model**

- Custom production
- Sales & trade
- Supplier

#### **Biotech sector**

- Environmental biotechnology

#### **Experts in**

- DNA/RNA
- Proteins/Peptides

#### **Production range, services:**

- PCR master mixes
- qPCR master mixes
- dNTPs
- Growth factors
- Amino acid analysis service
- Peptide synthesis service

**Gene Bridges GmbH**

Im Neuenheimer Feld 584  
69120 Heidelberg

Phone: +49 (0) 6221 13 70 811  
Telefax: +49 (0) 6221 13 70 829  
contact@genebridges.com  
www.genebridges.com

**Contact person:**

Dr. Marlen Schmidt, BDM

**Employees:** 10

**Founding year:** 2000

**Fields of Activity:**

**Business model**

- Contract research
- Service provider
- Supplier

**Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

**Experts in**

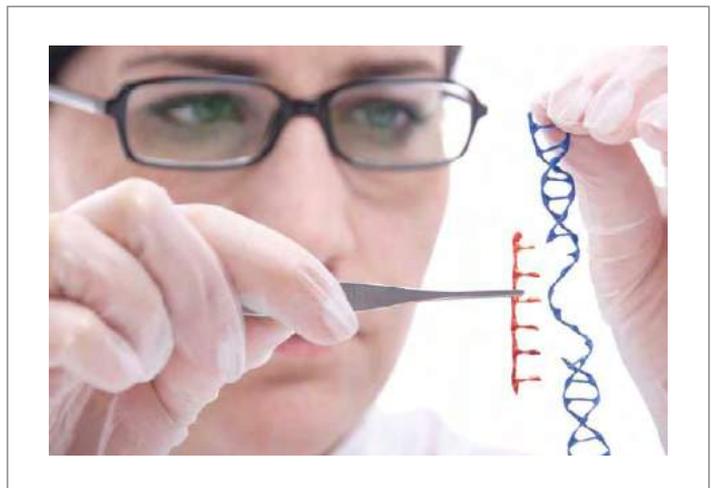
- DNA/RNA
- Production Organisms

**Production range, services:**

- DNA engineering services
- DNA engineering kits

Gene Bridges GmbH, founded 2000 as a spin-off of the European Molecular Biology Laboratories (EMBL), commercializes the patented „Red/ET Recombination“ technology. „Red/ET Recombination“, also referred to as „recombineering“ or „λ-mediated recombination“, allows fast and cost-effective modification of DNA molecules. E. coli cells which express phage-derived protein pairs, either RecE/RecT from the Rac prophage or Redα/Redβ from λ phage, can precisely alter target DNA by homologous recombination using short (50bp long) homology arms for the reaction.

In May 2004, Gene Bridges opened its Commercial Centre in the Technology Park in Heidelberg to offer customers the possibility to outsource DNA modification projects. Since its opening our team of DNA engineering specialists performed more than 600 customer projects for a great number of pharma and biotechnology companies as well as academic institutes. The main business areas are „E. coli strain modification/ White Biotech“ and the preparation of complex tailor-made DNA targeting constructs and BAC transgenes which are necessary for the preparation of „transgenic mouse models“ in order to analyze the molecular mechanism of diseases like cancer or neurodegenerative disorders. Companies can alternatively license the technology for in-house use.



**GeneWerk GmbH**

Im Neuenheimer Feld 582  
69120 Heidelberg

Phone: +49 (0) 6221 42 16 01  
Telefax: +49 (0) 6221 42 16 10  
contact@genewerk.de  
www.genewerk.de

**Contact person:**

Dr. Annette Deichmann, CEO

**Employees:** 6

**Founding year:** 2014

**Fields of Activity:****Business model**

- Contract research
- Service provider

**Biotech sector**

- Red biotechnology

**Experts in**

- Bioinformatics
- DNA/RNA

**Production range, services:**

- Integration Site Analysis
- Gene Editing on-/off-Target Analysis
- Immune Repertoire Analysis

Gene therapy approaches are increasingly used for the treatment of life-threatening human diseases. The GeneWerk GmbH, a spin-off of the German Cancer Research Center in Heidelberg and founded in July 2014 by Prof. Christof von Kalle, Dr. Manfred Schmidt und Dr. Annette Deichmann offers custom tailored service based on 20 years of experience in the field of gene therapy, gene editing, immunotherapy and related areas. The team has long-lasting experience in the area of hematology, oncology and virology with focus on integration site analysis, high throughput sequencing, whole genome sequencing and bioinformatics.

The service concerns the experimental work and particularly the bioinformatical analysis of the data. The data of the customers do not only run through GeneWerk's standard analysis pipelines but additionally they will be analyzed intensively by the highly qualified team members.

**Analyses and services GeneWerk can provide:**

- Integration site analysis of viral vectors with (nr)LAM-PCR – The standard analysis
- Integration site analysis of viral vectors with Target Enrichment Sequencing (TES): This new method will provide the results much faster and more reliable.
- Gene editing on-/off- target integration analysis
- Immune repertoire analyses by sequencing the hypervariable region of the T- cell receptors to characterize the clonality and the functional status of a T cell population
- Quantitative PCR (qPCR) for subsequent amplification and quantification of DNA and RNA fragments
- Gene expression analyses
- Development of bioinformatics analysis tools for next-generation-sequencing-projects



**GoSilico GmbH**

Haid-und-Neu-Str. 18  
76131 Karlsruhe

Phone: +49 (0) 721 754 016 90  
info@gosilico.com  
www.gosilico.com

**Contact person:**

Dr.-Ing. Tobias Hahn,  
CEO and Co-founder

**Employees:** 7**Founding year:** 2016**Fields of Activity:****Business model**

- Contract research
- Service provider

**Biotech sector**

- Red biotechnology

**Experts in**

- Bioinformatics
- Proteins/Peptides

**Production range, services:**

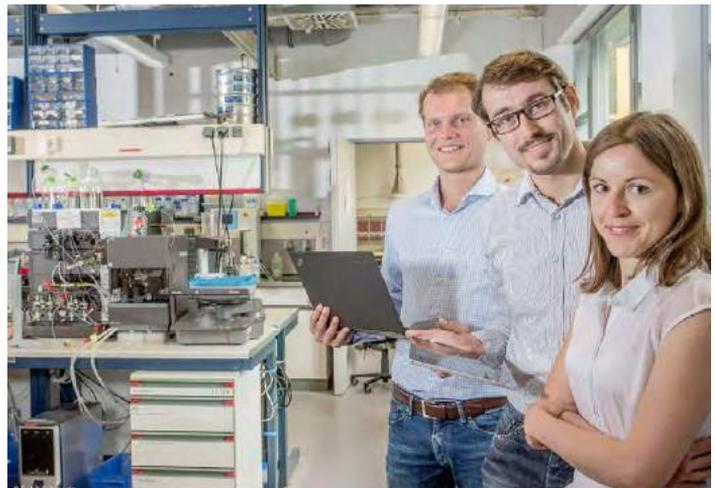
- In-silico process development and process characterization
- Development of simulation software
- Consulting services

GoSilico is a spin-off of the Karlsruhe Institute of Technology (KIT) that develops software and methods for computer-aided – in silico – bioprocess development. We are a team with a collective experience of 10000+ hours in both lab work and software development. We have worked on more than 25 purification projects big and small. Our experience motivated us to create software tools and methods that will be useful for users and technically feasible. The key idea is to remove all the trouble and obstacles that we faced as academics while working with our industrial partners. We are driven by the motivation of developing solutions that we would want to use ourselves.

We strive to substitute elaborate wet lab experiments with computer simulations that are not only a lot faster but also significantly cheaper. At the same time, our physico-chemical models allow to obtain a deeper understanding of the processes and to facilitate fulfilling quality-by-design demands of regulatory instances.

To this, GoSilico developed a unique simulation platform for chromatography, the workhorse of bioseparation engineering. „ChromX“ aims to integrate into standard laboratory workflows and to make model-based process development available to process engineers that relied on Design-of-Experiments in the past. While putting usability first, the high performance, flexibility and extensibility are reasons why ChromX is meanwhile used in more than 15 countries.

In silico bioprocess development can therefore help enterprises to save time and money while allowing to improve the prospect of success in the development of new drugs or other bioproducts.



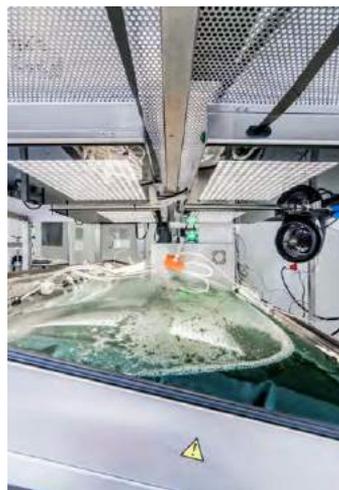
## Development of highly efficient biopharmaceuticals

We at Greenovation develop next generation therapeutics using our proprietary BryoTechnology platform.

Our core competency is optimization and effective production of highly-efficient glycoproteins for the treatment of orphan diseases.

GMP compliant manufacturing of our products is performed in Greenovation's state-of-the-art facility operated by our partners BIOMEVA and BIBITEC.

Greenovation is a privately owned biopharmaceutical company based in Heilbronn, Germany, that was founded in 1999 by Prof. Dr. Ralf Reski and Prof. Dr. Gunter Neuhaus. Today, Zukunftsfonds Heilbronn and L-EigenkapitalAgentur, Karlsruhe, are main owners of the Greenovation Biotech GmbH.



## Greenovation Biotech GmbH

Inselwiesenstr. 10  
74076 Heilbronn

Phone: +49 (0) 761 470 99 0  
Telefax: +49 (0) 761 470 99 191  
info@greenovation.com  
www.greenovation.com

### Contact person:

Manon Bartusel,  
Head of Business Development

**Employees:** 23

**Founding year:** 1999

### Branches:

Freiburg im Breisgau, DEU

### Fields of Activity:

#### Business model

- Custom production
- Production
- Research & development

#### Biotech sector

- Red biotechnology

#### Experts in

- Cells/Cell Lines
- Production Organisms
- Proteins/Peptides
- Therapeutics

#### Production range, services:

- Therapeutics for Rare Diseases
- Contract Manufacturing
- Cell Line Development
- Process Development
- Technology Transfer



# greiner bio-one

## Greiner Bio-One GmbH

Maybachstr. 2  
72636 Frickenhausen

Phone: +49 (0) 7022 94 80  
Telefax: +49 (0) 7022 94 85 14  
info@de.gbo.com  
www.gbo.com

### Contact person:

Simone Schafstein, Marketing Manager

### Employees: 360

### Founding year: 1868

### Branches:

Vilvoorde, BEL; Americana - São Paulo, BRA; Peking, CHN; Les Ulis, FRA; Tokyo, JPN; Alphen aan Den Rijn, NLD; Stonehouse, GBR; Monroe, North Carolina, USA

### Fields of Activity:

#### Business model

- Custom production
- Production
- Research & development

#### Biotech sector

- White/Industrial biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines
- Diagnostics

#### Production range, services:

- CELLSTAR®, Advanced TC, and CELLMASTER cell culture products
- Microplates for high-throughput screening applications
- Cryo.s cryogenic storage tubes and biobanking tubes

Greiner Bio-One specialises in the development, production and distribution of high-quality plastic laboratory products. The company is a technology partner for hospitals, laboratories, universities, research institutes, and the diagnostic, pharmaceutical and biotechnology industries. Greiner Bio-One is part of Greiner Holding, which is based in Kremsmünster (Austria).

Greiner Bio-One ranks among the leading providers of specialised products for the cultivation and analysis of cell and tissue cultures. Drawing on decades of experience with cryogenic sample storage, Greiner Bio-One also offers solutions for automated storage systems in biobanks. In addition, we continue to utilise our expertise in the development and production of microplates for high-throughput screening, thereby allowing extremely fast and efficient drug screening for both industrial and research applications. The entire development, manufacturing and sales operations are controlled from the German headquarters in Frickenhausen.

Greiner Bio-One also performs contract work for customers from the life science and medical sectors using injection moulding. The portfolio ranges from basic consumables to custom-made products as part of a system partnership. Greiner Bio-One handles the entire development and manufacturing process from the initial idea right through to the finished product and can call on production facilities in Europe, the United States, South America and Asia. Greiner Bio-One is certified to DIN EN ISO 9001 and EN ISO 13485, the international standard for medical product manufacturers.



Hain Lifescience GmbH is based in Nehren, in the district of Tübingen, and develops, manufactures and distributes molecular genetic diagnostic test systems and instruments for laboratories. With these test systems definite statements can be made, for example about the presence of pathogens such as MRSA, tuberculosis bacteria and their antibiotic drug resistances as well as risk factors for various hereditary diseases. The company was originally founded by David and Tobias Hain in 1986 as a mail order company offering laboratory supplies. Today more than 100 employees work at the headquarters in Nehren. Hain Lifescience has subsidiaries in Spain, the United Kingdom, France, South Africa and Kenya as well as a global distribution network.

**Hain Lifescience GmbH**

Hardwiesenstr. 1  
72147 Nehren

Phone: +49 (0) 7473 94 51 0  
Telefax: +49 (0) 7473 94 51 31  
info@hain-lifescience.de  
www.hain-lifescience.de

**Contact person:**

Dr. Viktoria Rönnefarth,  
Communication Division Diagnostics

**Employees:** 110

**Founding year:** 1986

**Branches:**

- Vigo, ESP
- Byfleet, GBR
- Bandol, FRA
- Midrand, ZAF
- Nairobi, KEN

**Fields of Activity:**

**Business model**

- Production
- Research & development
- Sales & trade

**Biotech sector**

- Red biotechnology

**Experts in**

- Diagnostics

**Production range, services:**

- Microbiology
- Human Genetics
- Virology



**HB Technologies AG**

Paul-Ehrlich-Str. 5  
72076 Tübingen

Phone: +49 (0) 7071 976 111  
Telefax: +49 (0) 7071 976 190  
hbt@h-net.com  
www.h-net.com

**Contact person:**

Dr. Steffen Huettner, CEO

**Employees:** 26

**Founding year:** 1992

**Branches:**

Cologne, DEU  
Chicago, Illinois, USA

**Fields of Activity:**

**Business model**

- Custom production

**Biotech sector**

- Environmental biotechnology
- White/Industrial biotechnology

**Experts in**

- Bioinformatics
- DNA/RNA
- Proteins/Peptides

**Production range, services:**

- Workflow Management Software
- Embedded Software
- Lab Automation Software
- Software for Instruments
- Custom Peptides
- Liquid Handling Solutions

HB Technologies AG is one of the most well known companies in developing customized software in the fields of medtech and biotech. Based in Tübingen, the company has expertise in consulting and developing technical software solutions. HB Technologies has a wealth of experience in the mentioned fields through the successful implementation of over 530 projects since its foundation.

We are a reliable partner and a software expert for automated manufacturing processes in industry and research laboratories, as well as laboratory instruments in general. Moreover, HB Technologies AG is a competent partner for questions about development, programming and testing of software and electronic components. A separate unit was established for more than over four years, covering microcontroller and programming in C/C ++.

Since 2008 the INTAVIS Bioanalytical Instruments AG, located in Cologne belongs to the HB Technologies AG as a subsidiary. The product lines of INTAVIS AG include laboratory equipment with a focus on peptide synthesis and in situ hybridization. Furthermore INTAVIS AG offers custom peptide services and distributes resins from their laboratories in Tübingen.

**HB Technologies covers the following modules**

- Production Software, Process Optimization for industrial research and production facilities e.g. for Oligonucleotide, Peptides and Antibodies
- Workflow Management Software for industrial and research labs to optimize the existing processes
- Engineering and Manufacturing for instruments and devices together with a partner network
- OEM-Software Partner for different challenges and applications on the Life Sciences sector



**Workflow  
Management  
Software**



**Software  
for Instruments  
and Devices**



**Testing  
Software  
Solutions**

Heidelberg Pharma GmbH is a pharmaceutical company with a hybrid business model combining an ADC technology platform and a preclinical service business. The company is a wholly-owned subsidiary of WILEX AG, which is listed on the Frankfurt Stock Exchange.

### ATAC technology platform

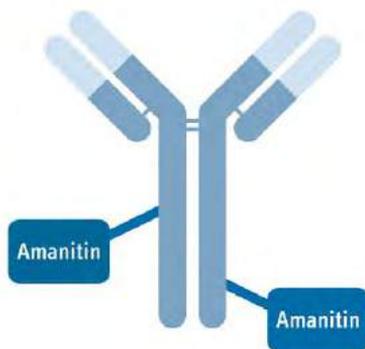
The ADC technology platform is Heidelberg Pharma's own R&D flagship consisting of its proprietary Antibody Targeted Amanitin Conjugate (ATAC) technology for more effective and specific anti-cancer drugs. Heidelberg Pharma works with the toxin Amanitin and an ADC technology with the goal of coupling this highly effective agent with various antibodies to make it usable for treating cancer. This innovative technology platform is progressively being developed for therapeutic antibody drug conjugates for use in proprietary projects and partnerships. The goal is to develop own Antibody Targeted Amanitin Conjugates (ATACs) and prepare them for early clinical development.

### Contract research services

The company comprises departments for *in vivo* pharmacology, bio-analytics, biochemistry, molecular biology and chemistry. Our services focus on processes during lead optimisation and preclinical drug profiling. Besides offering a wide range of validated and routinely used models and techniques, we are able to investigate your compound in a more exploratory way. To profile your compound for anti-tumour or anti-inflammatory efficacy *in vitro*, proliferation assays in various forms are routinely in use. Our flexibility also permits customised experimental designs and the development and validation of new models.

## Antibody Targeted Amanitin Conjugates

Drug development for innovative cancer therapies



### Heidelberg Pharma GmbH

Schriesheimer Str. 101  
68526 Ladenburg

Phone: +49 (0) 6203 10 09 45

Telefax: +49 (0) 6203 10 09 19

info@hdpharma.com

www.heidelberg-pharma.com

### Contact person:

Prof. Dr. Andreas Pahl,  
Head of R&D

**Employees:** 45

**Founding year:** 2004

### Fields of Activity:

#### Business model

- Research & development
- Service provider

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines
- Proteins/Peptides
- Therapeutics

### Production range, services:

- ATAC technology platform
- Provider of preclinical services
- Drug development

## HERBRAND

### PharmaChemicals GmbH

Brambachstr. 31  
77723 Gengenbach

Phone: +49 (0) 7803 96 87 0  
Telefax: +49 (0) 7803 96 87 40  
info@herbrand-hpc.de  
www.herbrand-hpc.de

### Contact person:

Dr. Martin Erhardt, CEO

**Employees:** 20

**Founding year:** 1946

### Fields of Activity:

#### Business model

- Contract research
- Production
- Research & development

#### Biotech sector

- White/Industrial biotechnology

#### Experts in

- Therapeutics

#### Production range, services:

- Active Pharmaceutical Ingredients (APIs)
- Contract Manufacturing (liquids)
- GMP, Manufacturing licence, Regulatory network

### Quality made in Germany

HERBRAND PharmaChemicals GmbH, founded in 1946 in Gengenbach, is a manufacturing plant, specialised in fine chemicals, primarily for the application in pharmaceutical industries. Thanks to important investments by the new owners, Braun Beteiligungs GmbH, HPC has extended its activities to the pharmaceutical sector.

### Strengths

- Full GMP in the chemical synthesis for Pharma-APIs
- Own R&D capabilities
- Enzymatical Reactions
- Small quantities also (from g to max. 10 tons per year)
- Green production
- Responsible care
- Contract manufacturer for liquids (small batch sizes)
- Marketing authorisation holder (Propylthiouracil tablets)
- Certified quality





highQu assists life science by fueling it with laboratory research tools of premium quality. Our product portfolio includes professionally simplified reagents for PCR, qPCR, molecular cloning, NA electrophoresis, protein science and other fields of life sciences.

Our dedication to the molecular biology field has enabled us to deliver outstanding reagents to the life science market in Europe and worldwide. In our commitment to science, we combine excellence with simplicity in order to provide the solutions that scientists constantly seek.

We support researchers whose professionalism makes science come alive. highQu honors people who have a higher respect for humanity itself than for anything invented by humans. We are devoted to deliver intelligent products and services that render a better life for all.



professionally simple

## **highQu GmbH**

Nelkenstr. 5  
76703 Kraichtal

Phone: +49 (0) 7250 33 13 401

Telefax: +49 (0) 7250 33 11 413

info@highqu.com

www.highqu.com

### **Contact person:**

Rasa Sehlmeier, M. Sc.,  
Managing Director

**Employees:** 10

**Founding year:** 2013

### **Fields of Activity:**

#### **Business model**

- Production
- Sales & trade
- Supplier

#### **Biotech sector**

- White/Industrial biotechnology

#### **Experts in**

- DNA/RNA
- Proteins/Peptides

#### **Production range, services:**

- Products for molecular biology and life sciences
- Reagents for PCR, qPCR, cloning, electrophoresis
- Supporting genomics, proteomics and cellomics

**HiSS Diagnostics GmbH**

Tullastr. 70  
79108 Freiburg

Phone: +49 (0) 761 389 49 0  
Telefax: +49 (0) 761 389 49 20  
hiss@hiss-dx.de  
www.hiss-dx.de

**Contact person:**

Georg Klopfer, General Manager

**Employees:** 10

**Founding year:** 1989

**Fields of Activity:**

**Business model**

- Production
- Research & development
- Sales & trade

**Biotech sector**

- Agriculture/Food
- Red biotechnology

**Experts in**

- Bioinformatics
- Cells/Cell Lines
- DNA/RNA
- Diagnostics

**Production range, services:**

- Next Generation Sequencing
- Oncology Diagnostics
- Microarray
- Proficiency Material for QC
- RNA/DNA Extraction
- Cell Separation

HiSS Diagnostics is offering a wide range of products in diagnostics as well as in life science. HiSS Diagnostics GmbH was founded in 1989, is privately held and located in Freiburg, Germany. We are qualified for DIN EN ISO 13485 since 2005.

**Main focus in diagnostics are products** for molecular testing (NGS and qPCR) for leukemia and lymphoma. Additionally, we offer PCR and ELISA assays for microbiology and virology. Our portfolio is completed by quality control material for blood banks, transfusion centers and virology labs.

**For life sciences HiSS Diagnostics offers:**

- Next Generation Sequencing kits (amplicons, gDNA, mRNA, small RNA) compatible with Illumina and Ion PGM platforms.
- Customized probe libraries for FISH analysis, oligonucleotide microarrays and targeted sequencing.
- ELISA kits for human, mouse and rat cytokine detection as well as recombinant cytokines, chemokines and growth factors.
- Enzymes and master mixes for PCR, RT-PCR, qPCR and other reagents for molecular biology, western blot detection and protein biochemistry.
- Transfection reagents for DNA, siRNA and peptides for *in vitro* and *in vivo* applications.
- Antibody and filtration based kits for gentle, fast and simple cell separation from whole blood, buffy coat or cell suspensions without magnetic beads or centrifugation
- Non-toxic immunization adjuvant as alternative to Freund's complete adjuvant.



## HS-Analysis Software for Digital Histology

HS-Analysis develops software for automatic tissue analysis to researchers and Pharmaceutical Industry. They use the software to find answers about crucial questions in diseases. New drugs can be found much more time effective and diseases can be treated more efficient with the application of image analysis modalities in the HS-Analysis Software. In this way, the technology finally contributes to a better life of patients.

State of the art technology in the area of artificial intelligence allows automatic interpretation of tissue biopsies. Slide Scanners, a kind of microscope robot, acquire digital images that are processed with Deep Learning based analysis steps. Result of the analysis is a reliable and fast quantitative answer about effects of drug candidates on the ill tissue.

HS-Analysis GmbH offers highly specialized and customized software solutions and consulting for automatic image analysis.



## HS-Analysis GmbH

Hermann von Helmholtz Platz 1  
76344 Eggenstein-Leopoldshafen

Phone: +49 (0) 7247 93 42 99 80

Telefax: +49 (0) 7247 93 42 99 89

info@hs-analysis.com

www.hs-analysis.com

### Contact person:

David Haumann,  
Co-Founder / CEO

**Employees:** 10

**Founding year:** 2015

### Fields of Activity:

#### Business model

- Research & development

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Bioinformatics

#### Production range, services:

- Automatic recognition of tissue structures (e.g. tumor)
- Manual & automatic annotation to define regions of interest
- Deep Learning for image analysis in histology & life science

## Hydrotox GmbH

Bötzingen Str. 29  
79111 Freiburg

Phone: +49 (0) 761 455 12 0  
Telefax: +49 (0) 761 455 12 34  
info@hydrotox.de  
www.hydrotox.de

### Contact person:

Dr. Stefan Gartiser, Manager

### Employees: 12

### Founding year: 1989

### Fields of Activity:

#### Business model

- Contract research
- Research & development

#### Biotech sector

- Environmental biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines

#### Production range, services:

- GLP-studies
- Environmental risk assessment
- Biodegradation, ecotoxicology  
mutagenicity

## Hydrotox GmbH

Hydrotox GmbH, founded in 1989, is a GLP-certified contract laboratory for carrying out studies involving biodegradability, ecotoxicity and genotoxicity of substances, complex mixtures and environmental samples. Beside routine studies for chemical registration, e.g. in compliance with EU and OECD standard guidelines and directives as well as EN and national standards, Hydrotox also performs research projects for industry and public institutions and is board of expertise for environmental labels. The main focus of research activities is on the environmental risk assessment of chemical substances, products and wastewater as well as on the integration of laboratory tests in product development, the optimization of processes and material flow management. Hydrotox also offers support in regulatory affairs such as water hazardous classes, classification and labeling, and biocides. Our clients are chemical industry, pharmaceutical companies, textile industry, construction material manufacturers and others.

Coordinating closely with our clients and the regulatory authorities and agencies, Hydrotox works out the right solution for the task in hand. Systematic investigation strategies based on comprehensive research, the scientific and economic assessment of all parameters and extensive documentation lead to ecologically and economically convincing results.



Founded in 1996 as a spin-off of the Neuropharmacology section at the University Freiburg, IBAM is a privately owned laboratory for contract research in (phyto-)pharmacology. Our expertise includes customised binding assays, cellular and tissue assays for various enzymes, transporters, receptors and ion channels.

### Pharmacological investigation of drugs

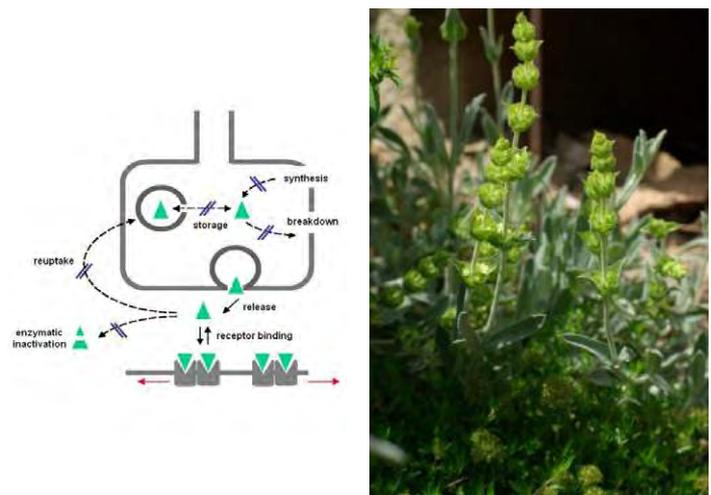
We offer the characterisation of the pharmacological profiles of chemical substances and plant extracts. Based on this knowledge, drug effects may be explained and new drugs and indications may be found.

IBAM provides several models to study drug-induced modulation of hormone and neurotransmitter release and uptake. We perform experiments into binding of substances (drugs, plant extracts, etc.) to specific binding sites at receptors, other proteins and biopolymers like melanin.

### Screening for pharmacologically active plant extracts

Medicinal plants are used in folk medicine for centuries. The rejection of synthetic or biomedical products has become a growing trend in Western society since the turn of the century and allowed for a rise in the demand for natural medicines. Most medicinal plants are used traditionally without the knowledge of their pharmacological action.

We test plant extracts for their potential physiological or pharmacological activity by studying their effects on hormone or neurotransmitter turnover, receptor binding or enzyme activities. Several plant extracts with pharmacologically confirmed medicinal benefit were identified.



### IBAM GbR

Ferdinand-Porsche-Str. 5  
79211 Denzlingen

Phone: +49 (0) 7666 88 45 758  
Telefax: +49 (0) 7666 88 45 760  
info@ibam.de  
www.ibam.de

### Contact person:

Dr. Rainer Knörle, General Manager

### Employees: 2

### Founding year: 1996

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Agriculture/Food
- Red biotechnology

#### Experts in

- Analytics

### Production range, services:

- Drug mode of action
- Melanin affinity of drugs
- Receptor binding assays
- Functional assays
- Enzyme inhibition assays
- CNS active plant extracts

## **Immatics**

Paul-Ehrlich-Str. 15  
72076 Tübingen

Phone: +49 (0) 7071 53 97 0  
Telefax: +49 (0) 7071 53 97 900  
info@immatics.com  
www.immatics.com

## **Contact person:**

Dr. Nikola Wiegeler,  
Senior Executive Assistant

**Employees:** 150

**Founding year:** 2000

## **Branches:**

Planegg-Martinsried, DEU  
Houston, Texas, USA

## **Fields of Activity:**

### **Business model**

- Research & development

### **Biotech sector**

- Red biotechnology

### **Experts in**

- Therapeutics

### **Production range, services:**

- Cancer immunotherapies

Immatics is a leading cancer immunotherapy company and the global leader in the discovery of novel targets for various types of cancer immunotherapies.

Such immunotherapies have the potential to revolutionize cancer treatment and offer patients significant improvements in the length and quality of their lives compared to today's therapies. Our goal is to deliver a step change in cancer treatment through the introduction of novel and highly innovative new therapies that use the body's own immune system to fight cancer.

Our products work by specifically activating and redirecting a patient's immune system to recognize and kill cancer cells through the recognition of our novel and proprietary targets.

In designing our immunotherapies we employ a unique and rational approach based on novel, relevant and highly specific cancer immunotherapy targets identified using our world-leading target discovery engine XPRESIDENT®. This platform enables the discovery of targets from amongst the full and vast array of cell-surface and intra-cellular proteins expressed by a cancer cell.

Thus, Immatics is in a pivotal position in the rapidly evolving cancer immunotherapy field and uniquely positioned to take advantage of all high-potential opportunities in cancer immunotherapy.

Immatics currently has a broad pipeline of cancer immunotherapies in clinical and pre-clinical development for the treatment of a range of solid tumor types with high unmet medical need.



## Insilico Biotechnology AG

Meitnerstr. 9  
70563 Stuttgart

Phone: +49 (0) 711 460 594 19  
Telefax: +49 (0) 711 460 594 10  
dirk.rathfelder@insilico-biotechnology.com  
www.insilico-biotechnology.com

### Contact person:

Dirk Rathfelder,  
Head of Business Development

**Employees:** 25

**Founding year:** 2001

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Red biotechnology
- White/Industrial biotechnology

#### Experts in

- Analytics
- Bioinformatics
- Cells/Cell Lines
- Production Organisms
- Proteins/Peptides

#### Production range, services:

- Predictive simulations for process and cell line development
- Automated process data integration and performance analysis
- Software and training for bioprocess optimization

Insilico Biotechnology is a market-leading company providing predictive solutions for the Bioeconomy. An interdisciplinary team of experts offers mechanistic models, customized software, and a high performance computing platform for the simulation of living cells.

Our aim is to leverage the knowledge in our customer's data and enable them through know-how transfer. Based on our expertise in reconstructing and validating genome-based network models, we use data from our customer's process to generate and customize a model that represents the customer's specific producer organism. Using this model we simulate how cells behave in a bioprocess to identify the best conditions. Our simulations significantly reduce the experimental effort required during bioprocess development and analysis and foster improvements in the following areas:

- Automated time-resolved process analysis in manufacturing
- Media design and optimization in process development
- Clone analysis and clone selection in cell line development

Customers can benefit from our technology either as a service performed by our experts, or by licensing our software solutions. To promote knowledge transfer, we provide expert training, consulting and software customization.

For world-leading pharma and biotech companies Insilico's technology lowers time, risk and costs of process development. Founded in 2001, Insilico is a privately held company based in Stuttgart, Germany.



Photo: Tom Bässler

**Intavis AG**

Waldhäuser Str. 64  
72076 Tübingen

Phone: +49 (0) 7071 96 51 725  
Telefax: +49 (0) 7071 96 51 727  
maisch@intavis.com  
www.intavis.com

**Contact person:**

Dr. Daniel Maisch,  
Laboratory Director

**Employees:** 23

**Founding year:** 2000

**Branches:**

Cologne, DEU

**Fields of Activity:**

**Business model**

- Custom production
- Production

**Biotech sector**

- White/Industrial biotechnology

**Experts in**

- Proteins/Peptides

**Production range, services:**

- Custom Peptides
- Peptide Libraries
- Spot Synthesis
- Peptide Synthesizer
- CelluSpots
- Resins and Amino Acids

Intavis AG is manufacturing high quality custom peptides tailored for your particular needs! With strong roots in the scientific area and longtime experience in peptide synthesis, Intavis will support you in areas like signal transduction, proteomics, epigenetics, immunology (e.g. epitope mapping) and many more. We cover a wide range of applications: From the use of purified peptides for quantitative studies, fluorescently labeled peptides for localization assays, peptide libraries for economic screening purposes and CelluSpots™ peptide arrays that are based on SPOT-synthesis. Our Intavis peptide services group offers TCP-resins for solid phase peptide synthesis.

**Custom Peptides**

Custom peptide synthesis are typically provided for peptides with a length between 5 and 60 residues. Synthesis is carried out on state-of-the-art fully automated instruments on solid phase. All peptides are HPLC purified, analysed by MALDI-TOF mass spectrometry and shipped with detailed quality control documentation including HPLC and MS spectra. Quantities usually range from 1mg to gram scale at a purity of up to 98% (HPLC).

**CelluSpots™ – Kinase Substrate Arrays**

Ready to screen kinase arrays with tyrosine- and serine/threonine-kinase substrates from annotated phosphorylation sites. Three different arrays are available, each with 384 spots in duplicate surrounded by red colour marks. These arrays are perfect tools to characterize substrate specificities of kinases, to compare kinases, to identify autophosphorylation sites or to analyze kinase inhibitors.

**Synthesis Resin**

We offer preloaded TCP resin as well as Rink-Amide-resin for the routine production of peptide acids and amides.



**intavis Peptide Services**

**Peptides . . . At Your Service!**

**Purified Custom Peptides**

High quality purified peptides for all applications:

- Epitope mapping
- Cell stimulation
- Enzyme substrate libraries
- Peptide arrays
- Antibody generation
- Structure determination
- NMR peptides™
- from 1mg up to 1g

**Available modifications**

- Glynylation, fluorescent dyes
- Phospho-, D-, acetylated and isotopic labeled amino acids
- Cyclization, disulfide bridges
- Lipopeptides, branched peptides, hydroxyamide peptides
- C-terminal of peptides to K, H, DGA or DNV
- more modifications on request

**Peptide Libraries**

Economic alternative for screening approaches:

- Epitope mapping
- Proteases
- Enzyme substrate libraries
- and many other biochemical or immunological questions

**Peptide sets specifications**

- Modifications of amino acids available
- Crude peptides
- Delivery in 384 well plate wells
- Choice of different levels of quality control

**CelluSpots™ Arrays**

Custom arrays & pre-made kinase substrate arrays:

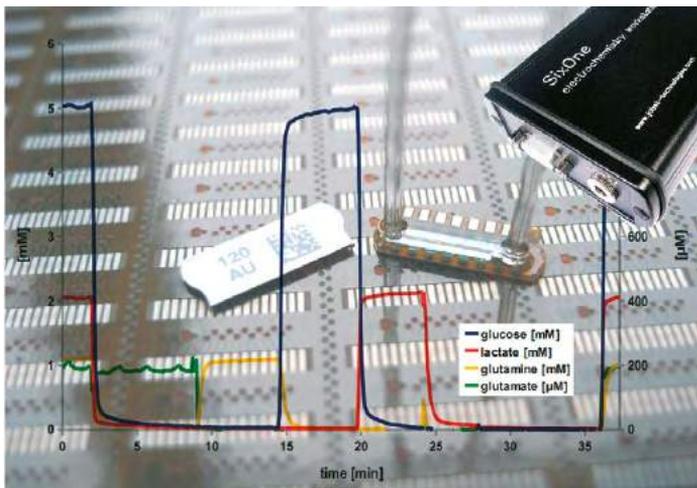
- Epitope mapping
- Peptide-antibody interaction studies
- Determination of antibody specificity
- Substrate chromogenic, fluorimetric or radioactivity detection systems
- Characterisation of kinase / enzyme substrates

More information: Please contact us at [peptides@intavis.com](mailto:peptides@intavis.com) or visit [www.intavispeptides.com](http://www.intavispeptides.com)

Jobst Technologies GmbH ([www.jobst-technologies.com](http://www.jobst-technologies.com)) was founded in 2002 at IMTEK, University of Freiburg and moved to Freiburg's Biotech Park & Innovation center in 2007 where it has set up numerous R&D and production processes clustering around polymer layer technologies and polymer synthesis and processing. Among them are also processes for polymers used in biosensing and other functional membranes like filters.

Strategic company development is inspired by the slogan: "Rational technology integration aiming at bio- micro convergence." The company's major activity segments are OEM manufacture of multi-biosensing nanofluidic devices like for the first of its kind glucose/lactate monitor on the market (approved in 2013), with the applications in intensive care units and operation theaters. Further company activities are rapid prototyped BioMEMS, contract development work on in vivo biosensors, sensors for clinical analysers (biosensing technology used in clinical and biotech analyzers), sensing and control microsystems for biotechnology monitoring, enabling microfluidics technologies for bioanalytical microsystems and nanofluidic biosensor-arrays. Just emerging products encompass real-life operational micropumps and low power low cost flow rate sensors, also integrated within Jobst Technologies' micro-analyzers.

Recently the majority of Jobst Technologies was acquired by the Swiss sensor manufacturer Innovative Sensor Technology IST AG, which itself is part of Endress+Hauser, a large European group focused around process control and reaching far into the analytical field.



## Jobst Technologies GmbH

Engesserstr. 4b  
79108 Freiburg

Phone: +49 (0) 761 55 77 520  
Telefax: +49 (0) 761 55 77 522  
[info@jobst-technologies.com](mailto:info@jobst-technologies.com)  
[www.jobst-technologies.com](http://www.jobst-technologies.com)

### Contact person:

Gerhard Jobst, CEO

### Employees: 5

### Founding year: 2002

### Fields of Activity:

#### Business model

- Contract research
- Production
- Research & development

#### Biotech sector

- Red biotechnology
- White/Industrial biotechnology

#### Experts in

- Analytics
- Diagnostics

#### Production range, services:

- Biosensors for glucose, glutamine, L-lactate
- Flow- through or dip-in format
- Micro-pumps
- Micro-fluidics
- OEM manufacture

## Labor Dr. Merk & Kollegen GmbH

Beim Braunland 1  
88416 Ochsenhausen

Phone: +49 (0) 7352 91 19 30  
Telefax: +49 (0) 7352 91 19 40  
info@labormerk.de  
www.labormerk.de

### Contact person:

Dr. Ingrid Rapp, CEO

**Employees:** 60

**Founding year:** 1971

### Fields of Activity:

#### Business model

- Custom production
- Service provider

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines

#### Production range, services:

- Biosafety testing (GMP and GLP)
- Virus clearance studies
- Microbial validation studies
- Cell based bioassays
- In vitro toxicity testing

Labor Dr. Merk & Kollegen GmbH (LMK) was founded in 1971 and holds excellent expertise in biosafety testing for virology, microbiology, cell based bioassays and toxicity from pharmaceutical industries or medical device manufacturers. A wide range of GMP and GLP compliant methods for preclinical and clinical studies or quality control of final product testing is available.

Final release testing and stability testing of veterinary vaccines is an additional service for pharmaceutical industries.

Validation of manufacturing process steps for virus elimination or inactivation, testing of substances for antiviral activity or extraneous agent testing of materials of animal or cell culture origin are available with a broad range of human or animal pathogenic virus/cell systems.

Since 2005, as member of the expert committee "virus disinfection" of the DVV (German Association for the Control of Virus Diseases) and the DIN, LMK offers antiviral efficacy testing of disinfectants for human and veterinary use.

LMK cooperates with companies, universities and research institutions to generate expert experience and exchange of know-how. With our well experienced team we are prepared to meet the customers' needs with appropriate and innovative solutions.



## Labor für DNA-Analytik

Labor für DNA-Analytik was founded in 1993. It supports scientists involved in molecular biology and medicine in their research. It offers more than 25 years of experience in DNA- analysis and research in molecular biology. Main activities are focused on: PCR based pathogen detection in human samples, cloning, development of new PCRs according to the customer's need, DNA sequencing including primer design and mutation analysis, cDNA synthesis, cloning, fluorescent in situ hybridisation (FISH), STR-based analysis of human samples, paternity testing, species identification by DNA barcoding.

## Labor für DNA-Analytik

Klarastr. 66  
79106 Freiburg

Phone: +49 (0) 761 40 79 56  
Telefax: +49 (0) 761 40 79 56  
alt-moerbe@dna-analytik.de  
www.dna-analytik.de

### Contact person:

Dr. Juliane Alt-Mörbe, CEO

### Employees: 1

### Founding year: 1993

### Fields of Activity:

#### Business model

- Service provider

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- DNA/RNA
- Diagnostics

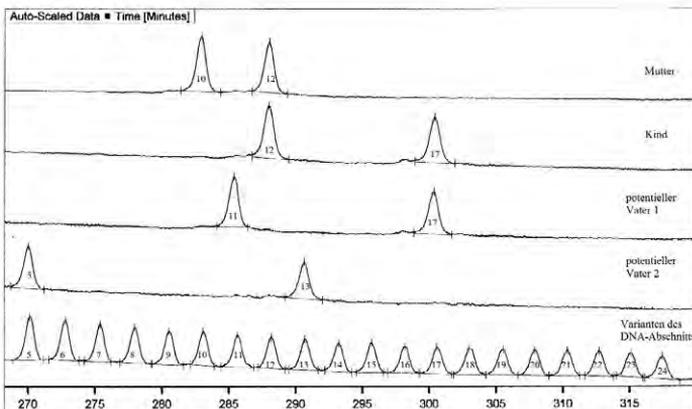
### Production range, services:

- Services in molecular biology
- PCR
- STR-profiles
- Paternity tests
- DNA barcoding

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Pharmacia DNA Fragment Manager V1.2

Page 1



## Mediagnost GmbH

Aspenhastr. 25  
72770 Reutlingen

Phone: +49 (0) 7121 51 48 40  
Telefax: +49 (0) 7121 51 48 410  
contact@mediagnost.de  
www.mediagnost.de

### Contact person:

Dr. Lutz Pridzun, CEO

**Employees:** 24

**Founding year:** 1985

### Fields of Activity:

#### Business model

- Custom production
- Production
- Service provider

#### Biotech sector

- Red biotechnology

#### Experts in

- Cells/Cell Lines
- Diagnostics
- Production Organisms
- Proteins/Peptides

#### Production range, services:

- Diagnostic / Research Tests:
- Development, Validation,
- Manufacturing, Distribution,
- Reagents and Raw Material.
- Cell Culture Services
- Biotech Services

## The Mediagnost Company

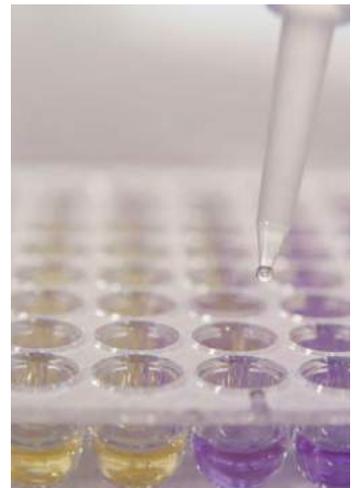
Mediagnost, Gesellschaft für Forschung und Herstellung von Diagnostika GmbH, founded in 1985, is a research based company dedicated to the development and manufacture of in-vitro diagnostic test systems and cell culture derived biological reagents (viral antigens and antibodies). Main focus lies on designing innovative diagnostic tools (Endocrinology, Virology, Diagnostic of Infections, Nucleic Acid Technology) in a swift transfer from the scientific research base directly to the customer.

Mediagnost has established state-of-the-art laboratories, certified by the German authorities and in conformity with the laws relating to medical devices, pathogens and genetic engineering. The laboratories in two security levels (L1/S1+L2/S2) are approved for handling human pathogens.

The manufacturing processes, adhering to the GLP and GMP standards, are managed by scientists with qualified expertise in immunology, endocrinology, virology and infectiology.

Mediagnost is certified according to ISO 13485. All test systems for clinical diagnostics are in compliance with the European Medical Device Directive 98/79/EC and are CE-labeled.

The entire company expertise is available as service!





**menal GmbH**

Im Hausgrün 15  
79312 Emmendingen

Phone: +49 (0) 7641 93 33 46

Telefax: +49 (0) 7641 93 33 89

info@menal.de

www.menal.de

**Contact person:**

Tobias Engelmann, CEO

**Employees:** 13

**Founding year:** 1992

**Fields of Activity:**

**Business model**

- Contract research
- Research & development
- Service provider

**Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

**Experts in**

- Analytics

**Production range, services:**

- GLP bioanalytics
- GMP bioanalytics
- GCP bioanalytics
- Biomarker Laboratory
- PK Laboratory
- Coagulation Laboratory

menal was founded in 1992 by Dr. Peter Engelmann to support the pharmaceutical industry in their research and development. menal established to one of the leading bioanalytical laboratories. The special focus Biomarker assay or Coagulation assays complemented by the GMP/GCP/ GLP environment makes menal a highly sought-after partner of small start-up companies and the big pharma groups. The quality management system is one of the supporting pillar of success and was praised by the outcome of the 2015 US FDA audit.



**MetaSystems GmbH**

Robert-Bosch-Str. 6  
68804 Altlussheim

Phone: +49 (0) 6205 39 610  
Telefax: +49 (0) 6205 32 270  
info@metasystems-international.com  
www.metasystems-international.com

**Contact person:**

Dr. Christian Schunck, Marketing

**Employees:** 80

**Founding year:** 1986

**Branches:**

Hongkong, HKG  
Boston, Massachusetts, USA  
Bangalore, Karnataka, IND  
Mailand, ITA

**Fields of Activity:**

**Business model**

- Production
- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Diagnostics

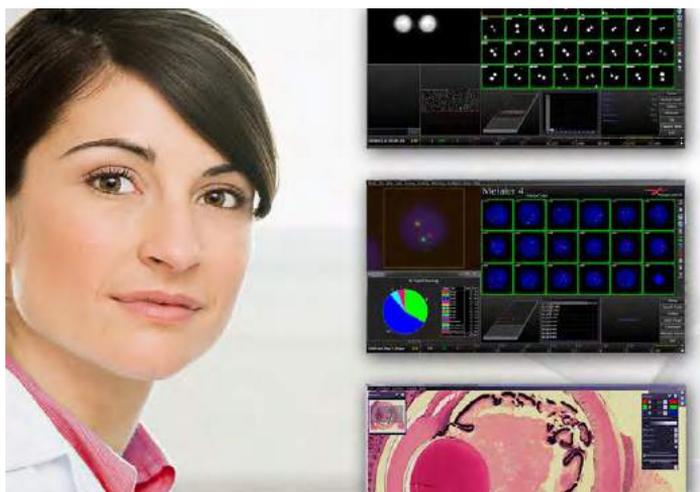
**Production range, services:**

- Metafer Slide Scanning Platform
- Neon Case and Image Data Management System
- DNA FISH Probes

Since 1986, MetaSystems has been developing and manufacturing systems for automated microscope based imaging for cytogenetics, pathology, toxicology, microbiology, forensics, and other fields of applications. Our close communication and relationships with our customers have been an essential part of the MetaSystems philosophy; the last 30 years have proven that this is a successful strategy. From humble beginnings, MetaSystems has grown into a leading solutions provider while still being connected to our roots as an employee-owned, innovation-driven company.

MetaSystems takes pride in the fact that it has been independent from sponsors and external investors for the entirety of its existence. As a result, we now look back on a history of unrivaled continuity. Our products are subject to constant advancement, and our customers benefit from uninterrupted update and upgrade paths – even for installations completed in the early years of the company’s operation.

More than 7,200 MetaSystems devices, installed in over 2,000 laboratories, in 92 countries, are being used to optimize the workflow of our customers. Our global presence has only been made possible with the help of the many dedicated MetaSystems’ business partners who are established across a number of subsidiary offices outside of Germany to support our clients in their regions.



## AquaSpec™

### New Analytics of Liquids and Digitization for many industries

Each liquid has a specific infrared spectrum, individual as a fingerprint or a DNA. With AquaSpec™ any liquid is analysed with previously unattained reproducibility of measurements, accuracy and detection sensitivity. All compounds are detected at once and digitized. The information is stored in a BIG DATA Storage for further evaluations. The analyse is *easy* (no special skills required, no sample preparation), *fast* (result in less then 3 minutes), *reliable* (one liquid -> ten AquaSpec™ analyzer -> one result), *flexible, automated* and *best in class* price performance ratio.

Liquids with concentration in ppm range can be analysed. By sample preparation results in the sub ppm range can be achieved. The usage can be on-line, at-line or off-line and is suitable to solve quality problems at many places in the processes and development in many industries.

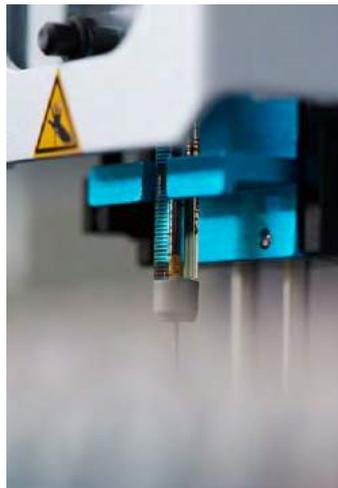
### Digitization of Liquids

An absolut must for the digitization of liquids is: the measurement method must be location independent reproducible, comparable and device-independent results and the detection of complex mixtures without sample preparation.

AquaSpec™ fulfills the conditions completely and will enable setting up Big Data. These capabilities offer completely new possibilities in the control and optimization of processes and costs.

### Areas of Application

PAT & Manufacturing QC, Pharmaceuticals, Industrial Liquids, Food, Fermentation, Anti Counterfeiting, Toxicology, Galenics, Process Control, Quality Control of Raw Materials, Protein-ligand Interaction, Environmental Protection, Doping Control, Animal Experiments and Consumer Goods.



### micro-biolytics GmbH

Schelztorstr. 54-56

73728 Esslingen

Phone: +49 (0) 711 90 12 11 00

Telefax: +49 (0) 711 90 12 11 90

info@micro-biolytics.com

www.micro-biolytics.com

### Contact person:

Andreas Wolf, CEO

### Employees: 12

### Founding year: 2001

### Fields of Activity:

#### Business model

- Service provider
- Supplier

#### Biotech sector

- Environmental biotechnology

#### Experts in

- Analytics

### Production range, services:

- AquaSpec™ Analyser MIRA
- Application
- Consulting
- Service measurements
- Feasibility studies
- Customized Solutions

**MicroMol GmbH**

Am Hubengut 3  
76149 Karlsruhe

Phone: +49 (0) 721 941 52 13  
Telefax: +49 (0) 721 941 52 14  
info@micromol.com  
www.micromol.com

**Contact person:**

Dr. Wolfgang Rudy, CSO

**Employees:** 25

**Founding year:** 1997

**Fields of Activity:**

**Business model**

- Contract research
- Custom production
- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Analytics
- Cells/Cell Lines
- Production Organisms
- Proteins/Peptides
- Therapeutics

**Production range, services:**

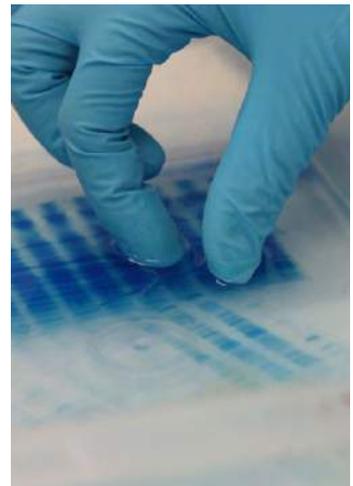
- Preclinical development
- Microbiology
- Cell and tissue culture
- 3-D Culture systems
- Phage detection
- Test implementation

Founded in 1997 the independent Biotech Company MicroMol combines highly qualified technical expertise in microbiology, cell biology and immunology with special competence in preclinical project development. Based on this expertise MicroMol has implemented a platform to lead highly potent research projects through the preclinical development phase up to a stage where they can enter into clinical phase I trials.

Providing deeper insight into its portfolio MicroMol finds itself as one of the rare specialists combining microbiological know-how with cell culture, immunology and cancer biology. The „TrueGut Culture System“ is a three dimensional in vitro system comprising gut microbiome and primary immune cells separated by a stable epithelial enterocyte barrier to test the effects of nutraceuticals and pharmaceuticals. MicroMol provides a service platform for the evaluation of the immune response in preclinical animal studies as well as in clinical samples (ELISpot, ADCC, ELISA).

Since many years MicroMol is one of the rare specialists for CMC tests like MCB characterization for purity, absence of bacteriophages, plasmid copy number and stability, and identity (16 S, IS1/2). We construct expression cell lines (prokaryotes and metazoan), express proteins at lab scale, purify and characterize them and develop e.g. ELISAs. We do not stop with E. coli! We can handle even strict anaerobs. Moreover we immortalize primary cell lines.

MicroMols Lab Services are accredited according to the standard ISO 17025:2005 and GMP-certified. We can work up BSL 3\*\*. We are very familiar with regulatory requirements (EMA, FDA) and develop our customers' ideas even in very complex projects.



The success of Multi Channel Systems is based on its constantly growing highly-specialized work force. The majority of the creative team holds a Ph.D. in physics, biology, electronics, computer sciences or engineering. The wide variety of experiences is incorporated in the development of innovative high-tech products.

Multi Channel Systems MCS GmbH was founded in 1996 & is based in the Science and Technology Park in Reutlingen in Southwest Germany, from where it operates globally (assisted by 10 distribution partners worldwide). Since October 2014, MCS has been a division of Harvard Bioscience, Inc. The main focus of our company is the development of precise scientific measuring instrumentation and equipment in the field of electrophysiology for research groups at universities & for the pharmaceutical industry. Because of their modular principle, our products can be extended & adjusted to specific experimental needs.

Our goal is the consequential implementation of customer-oriented & innovative technologies. The development according to customers' needs means development near to the specific applications. Our team has research experience & knows the daily work in laboratories and its problems. Thus, we can develop products researchers really need.

Furthermore, we are in permanent dialog with scientists & strive to be at the cutting edge of technology. This opens up our high innovation potential. Additionally, we are constantly involved in several national & international projects & developing innovations constantly.

All this, as well as over 20 years of experience & over 1,000 satisfied MEA-System users worldwide make us the global market leader in the field of non-clinical microelectrode array electrophysiology.



**Multi Channel Systems**  
**MCS GmbH**

Aspenhastr. 21  
72770 Reutlingen

Phone: +49 (0) 7121 909 25 0  
Telefax: +49 (0) 7121 909 25 11  
info@multichannelsystems.com  
www.multichannelsystems.com

**Contact person:**

Karl-Heinz Boven,  
Managing Director

**Employees:** 60

**Founding year:** 1996

**Fields of Activity:**

**Business model**

- Custom production
- Supplier

**Biotech sector**

- Red biotechnology

**Experts in**

- Analytics
- Bioinformatics

**Production range, services:**

- Recording systems for in vitro & in vivo electrophysiology
- Automated patch-clamp & Xenopus oocyte injection & recording
- Stimulation, data acquisition & microelectrode arrays



## myPOLS Biotec GmbH

Universitätsstr. 10  
78457 Konstanz

Phone: +49 (0) 7531 88 46 54  
Telefax: +49 (0) 7531 83 310  
info@mypols.de  
www.mypols.de

### Contact person:

Dr. Ramon Kranaster, CEO

### Employees: 5

### Founding year: 2014

### Fields of Activity:

#### Business model

- Contract research
- Custom production
- Research & development

#### Biotech sector

- Red biotechnology

#### Experts in

- Cells/Cell Lines
- DNA/RNA
- Diagnostics

#### Production range, services:

- DNA polymerases
- Contract research
- Engineered DNA polymerases
- Directed evolution
- PCR
- Isothermal amplifications

myPOLS Biotec is specialised on DNA polymerases, reagents, applications and services thereof.

Our expertise for you:

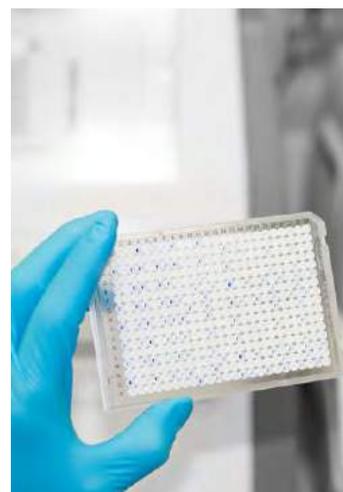
Having worked in the field of DNA and RNA polymerases for decades, we offer our expertise to you! Our expertise is in polymerase assay designs and engineering of DNA polymerases with new properties. We are continuously exploring new approaches and applications. We will help to establish your experiments using our wide knowledge. With our access to large libraries of different mutated polymerases and high-throughput screenings we can find the best polymerase for your needs.

We can:

- ASSIST you with your assay design
- OPTIMIZE your special application with custom-made DNA polymerases
- SHAPE and ENGINEER polymerases to fulfill your assay needs
- DNA polymerases – 100% made in Konstanz

All myPOLS Biotec DNA polymerases and their ready-to-use mixes are produced in-house, in our laboratories in Konstanz. We are exclusively using certified suppliers in Germany for components of our products such as ultra-pure dNTPs and buffer reagents. Our production is freely scalable from a few milliliters up to several liters of expression cultures yielding up to milligrams of DNA polymerases.

Expressed and purified DNA polymerase batches are routinely tested for their purity, activity, and potential contaminations. All myPOLS products must pass specified quality tests, before they are offered for sale. Hereby we are testing for purity, activity, functionality and for contaminations of each product-lot.



nadicom is a leading international operating GMP-certified biotech company specialising in the identification and characterisation of bacteria and fungi in pure cultures, environmental samples and complex mixed cultures. Our company is active for the pharmaceutical, food, cosmetics, chemical and agricultural industries.

For the identification of micro-organisms, the most modern genetic methods are applied. Qualitative identification of pure cultures is carried out via PCR-based methods. To exactly identify micro-organisms, nadicom's exclusive validated database "tree by nadicom" containing more than 45,000 entries, is applied.

For the root-cause analyses of microbial contaminants we offer Genotyping. In this sector we have established various validated methods of DNA-fingerprints for bacterial and fungal strains.

In recent years, nadicom has also expanded into the agricultural and horticultural sectors and has applied its in-house microbiological expertise to work on the stimulation of plant-microbe interactions and develop yield enhancing composts and nitrogen-fixing organisms.

nadicom has been working on the development of rhizobia strains specific for different legumes and plant growth-promoting bacteria. Our microbial products are currently sold under the brand name rhizo power® and are used as organic fertilizers and legume seed coatings by seed suppliers in Europe.

Our services are completed with educational seminars for laboratory personnel in industry and secondary education and consultation in the field of microbiology and environmental monitoring.



## **nadicom GmbH**

Hertzstr. 16  
76187 Karlsruhe

Phone: +49 (0) 721 60 84 44 81  
Telefax: +49 (0) 721 60 84 46 18  
info@nadicom.com  
www.nadicom.com

### **Contact person:**

Dr. Bernhard Nüßlein, CEO

**Employees:** 14

**Founding year:** 2002

### **Branches:**

Marburg, DEU

### **Fields of Activity:**

#### **Business model**

- Contract research
- Research & development
- Service provider

#### **Biotech sector**

- Agriculture/Food
- Environmental biotechnology

#### **Experts in**

- Analytics
- Bioinformatics

#### **Production range, services:**

- GMP-compliant identification of microbial isolates
- DNA fingerprinting
- Development of yield-increasing bio fertilizers

**nanoTools Antikörpertechnik GmbH & Co. KG**

Tscheulinstr. 21  
79331 Teningen

Phone: +49 (0) 7641 455 670  
Telefax: +49 (0) 7641 455 671  
info@nanotools.de  
www.nanotools.de

**Contact person:**

Dr. Petra Schüßler, CEO

**Employees:** 24

**Founding year:** 1994

**Fields of Activity:**

**Business model**

- Contract research
- Custom production
- Service provider

**Biotech sector**

- Red biotechnology

**Experts in**

- Cells/Cell Lines
- Proteins/Peptides

**Production range, services:**

- Custom monoclonal antibody development & production
- Hybridoma libraries
- Antibody catalogue

nanoTools Antikörpertechnik GmbH & Co. KG is a privately owned German company providing custom monoclonal antibody development services for the international pharmaceutical and biotech industry. Founded in 1994, we have longstanding technical experience and an advanced technological platform of our own. We are well-qualified to solve the most ambitious technical challenges for our customers and to provide large numbers of functionally well-characterized, high affinity antibody hits.

Our technological platform includes our proprietary High Responder Mouse Strains, a sophisticated vaccine and immunization strategy as well as a comprehensive range of high throughput screening formats. Among these are Luminex, EnSpire Alpha, RTCA, Flow Cytometry, Western Blot and diverse cellular assay formats. Full characterization of fusion products including functional screening and determination of KD values is performed prior to subcloning of cell lines. This drastically reduces the customer's inhouse effort for selection of suitable drug candidates or research tools.

Besides custom antibody development, we are also offering an inhouse manufactured portfolio of monoclonal antibodies for the worldwide research market. We are particularly specialized on Autophagy, Alzheimer and Signal Transduction tools, such as phosphorylation specific monoclonal antibodies that show high specificity and selectivity for the respective phosphoepitope.



**Novis is specialized in utilizing bacteria for material upgrading.**

We are specialized in Bioleaching to recover precious metals from incineration slag (MSW bottom ash). We are covering the whole value chain from R&D up to the design and implementation of industrial scale installations. Research and up-scaling we are doing in our own labs in Tübingen, including the cooperation with two universities. We are focussing on metal recovery and utilization of the remaining minerals as supplement to concrete.

This holds true for wood ashes (bottom ash / IBA) from wood incineration.

The other process is taking cocoa shells and is upgrading them with bacterial additives towards food graded cocoa. The first ever plant is being under construction with the industrial start end of 2016. The cocoa shell to food graded cocoa powder is a new developed process which could as well be utilized for other industrial waste streams such as rice husk or agro industrial waste streams.



**Novis GmbH**

Vor dem Kreuzberg 17  
72070 Tübingen

Phone: +49 (0) 7071 795 25 00  
Telefax: +49 (0) 7071 795 25 09  
info@novis.com  
www.novis.com

**Contact person:**

Dr. Thomas Helle, CEO

**Employees:** 7

**Founding year:** 2012

**Fields of Activity:**

**Business model**

- Research & development
- Supplier

**Biotech sector**

- Agriculture/Food
- White/Industrial biotechnology

**Experts in**

- Analytics
- Production Organisms

**Production range, services:**

- Food upgrading
- Bioleaching

**npi electronic GmbH**

Bauhofring 16  
71732 Tamm

Phone: +49 (0) 7141 973 02 30  
Telefax: +49 (0) 7141 973 02 40  
support@npielectronic.com  
www.npielectronic.com

**Contact person:**

Dr. Martin Weskamp,  
Application Scientist

**Employees:** 9

**Founding year:** 1989

**Fields of Activity:**

**Business model**

- Custom production
- Sales & trade
- Supplier

**Biotech sector**

- Red biotechnology

**Experts in**

- Cells/Cell Lines

**Production range, services:**

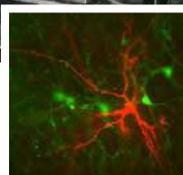
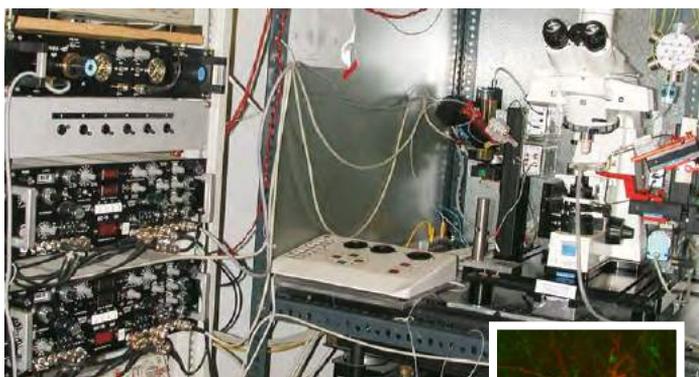
- Patch/Voltage Clamp Amplifiers
- Extracellular Amplifiers
- Micromanipulators
- Perfusion Systems
- Temperature Controllers
- Substance Application Systems

The company npi electronic GmbH develops and produces measurement equipment for use in the life sciences (physiological and pharmacological basic research). The company npi electronic GmbH was founded in 1989. Based on developments of Hans Reiner Polder during his diploma thesis in 1984, existing intracellular measurement procedures could be improved enormously.

By the years, a complete appliance portfolio for the registration of bio-electrical signals was developed, expanded by systems for high resolution fluorescence microscopy, substance applications, micromanipulators, recording chambers and supported by a software for data acquisition and experiment control.

Today the product and service offer includes development of new measurement processes, custom specific equipping of laboratories as well as training of the employees. Instruments from npi electronic GmbH combine modern electronics and control theory and make them available for researchers in life sciences. One of the most ambitious projects was the development of the ScreeningTool for high-quality automated drug screening using *Xenopus* oocytes.

npi electronic GmbH is also an industry partner in the DFG Research Centre on the Molecular Physiology of the Brain (CMPB) at the University of Göttingen, of the Bernstein Center for Computational Neuroscience in Munich and in the ZIM KA project "NeuroNavi".



Since the founding of Octapharma Biopharmaceuticals GmbH in 1997, our experience in the area of research and development in the field of human cell lines has evolved extensively, resulting in the maturation of an effective, product-oriented biotechnology firm.

Our core competence is the development of recombinant pharmaceuticals as a modern alternative to plasma products.

Octapharma Biopharmaceuticals GmbH is a subsidiary company of the Octapharma AG. With approximately 6500 employees Octapharma is one of the largest human protein products manufacturers in the world and has been committed to patient care and medical innovation for 30 years.



**Octapharma  
Biopharmaceuticals GmbH**

Im Neuenheimer Feld 590  
69120 Heidelberg

Phone: +49 (0) 6221 18 52 500  
Telefax: +49 (0) 6221 18 52 510  
info-heidelberg@octapharma.com  
www.octapharma.com

**Contact person:**

Christoph Färber, HR Manager

**Employees:** 130

**Founding year:** 1997

**Fields of Activity:**

**Business model**

- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Analytics
- Cells/Cell Lines
- Proteins/Peptides
- Therapeutics
- Tissue Engineering

**Production range, services:**

- Therapeutic recombinant proteins

**Phenex Pharmaceuticals AG**

Waldhofer Str. 104  
69123 Heidelberg

Phone: +49 (0) 6221 65 28 20  
Telefax: +49 (0) 6221 65 28 210  
info@phenex-pharma.com  
www.phenex-pharma.com

**Contact person:**

Dr. Claus Kremoser, CEO

**Employees:** 28

**Founding year:** 2002

**Fields of Activity:**

**Business model**

- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Therapeutics

**Production range, services:**

- Small Molecule Drugs
- Drug Discovery
- Liver Diseases, Intestinal Diseases, Cancer

Phenex Pharmaceuticals AG, founded in 2002, is a privately held Drug Discovery & Development company based in the Biotech Cluster Rhine-Neckar. We are located in the southwest of Germany with labs & offices in Ludwigshafen & Heidelberg.

The company focuses on small-molecule Drug Discovery in disease areas with a huge and unmet medical need. These areas are:

- Liver diseases
- Intestinal diseases
- Cancer

We aim in identifying novel therapeutic principles, i.e. novel molecular mechanisms or targets that provide the basis for the identification of novel drugs with “game changing” capabilities. Historically, Phenex has identified two of such novel mechanisms from the literature and has translated them into proprietary small molecules as a basis for a novel therapeutic. The first program, ROR $\gamma$ t inverse agonists in inflammation and autoimmune diseases was partnered with Janssen Biotech in a deal valued at 135 M USD in late 2012. The FXR program geared towards a drug to treat Non-Alcoholic Steatohepatitis (NASH), Primary Biliary Cholangitis (PBC) and other severe liver diseases has been acquired by Gilead Sciences, Inc. in late 2014 in a 465 M USD deal.

Since both companies, Janssen and Gilead, have progressed our development candidates towards or into the clinic, Phenex can expect further significant milestone payments to come over the next few years. Phenex has used the proceeds from these deals to invest into novel proprietary drug discovery programs in the three areas Liver diseases, Intestinal diseases and Cancer. The first of these new drug discovery projects have reached a state of maturity which will allow for selecting clinical candidates by late 2016 / early 2017.



## Research antibody pioneer

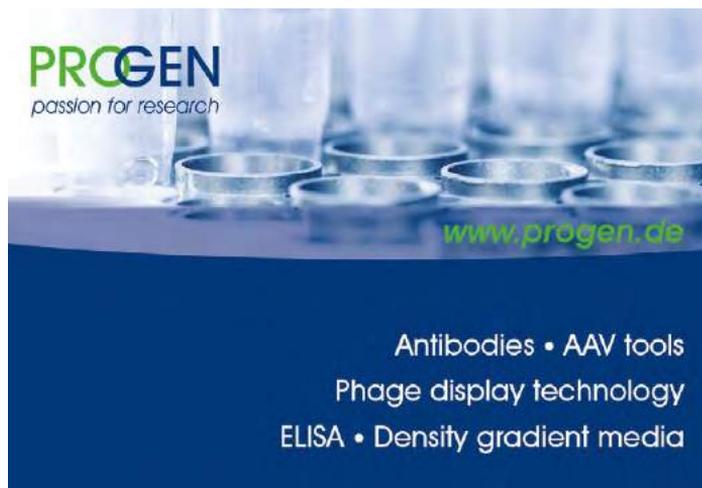
Since 1983, PROGEN has been an established manufacturer and supplier of premium antibodies, *in vitro* diagnostics, and reagents for the global life science research community. The company's portfolio attracts and serves a well-diversified clientele in research institutes and universities, pharmaceutical and biotech companies as well as private and clinical laboratories. While PROGEN's antibodies are among the most published antibodies in biomedical and cell biology literature, its ELISA kits aim at niche markets in microbiology, infectious diseases and immunology.

## Expanding business

Building on its extensive core-competency and experience in immunochemistry, the company has advanced its product and service portfolio in recent years to include recombinant antibody engineering, density gradient media, and adeno-associated virus (AAV) test kits for gene therapy research.

## Collaborations welcome

PROGEN intends to broaden its extensive network in academia and industry that has been established over the past 33 years: the company is actively seeking strong collaborators to develop novel antibody-based technologies and applications in order to strengthen its pipeline of life science reagents. Together with its partners, PROGEN aims to enter new markets.



## PROGEN Biotechnik GmbH

Maaßstr. 30  
69123 Heidelberg

Phone: +49 (0) 6221 82 78 0  
Telefax: +49 (0) 6221 82 78 24  
info@progen.de  
www.progen.de

## Contact person:

Dr. Sven Kuhlendahl,  
General Manager

**Employees:** 22

**Founding year:** 1983

## Fields of Activity:

### Business model

- Production
- Research & development
- Sales & trade

### Biotech sector

- Red biotechnology

### Experts in

- Diagnostics
- Proteins/Peptides

## Production range, services:

- Research antibodies
- AAV tools for gene therapy
- Phage display technology
- Density gradient media
- ELISAs
- Research reagents

## ProQinase GmbH

Breisacher Str. 117  
79106 Freiburg

Phone: +49 (0) 761 76 99 96 0  
Telefax: +49 (0) 761 76 99 96 1781  
info@proqinase.com  
www.proqinase.com

## Contact person:

Dr. Christoph Schächtele,  
Managing Director

**Employees:** 37

**Founding year:** 2001

## Fields of Activity:

### Business model

- Contract research
- Research & development
- Service provider

### Biotech sector

- Red biotechnology

### Experts in

- Cells/Cell Lines
- Proteins/Peptides

### Production range, services:

- Recombinant Proteins and Biochemical Assay Services
- Cell-based Assay Services
- Syngeneic & Xenogeneic In Vivo Models

## Company Focus

ProQinase is a leading biology contract service provider (CRO) dedicated to support pharmaceutical and biotech companies in the development of novel therapies for cancer treatment.

## Products & Services

ProQinase has established a comprehensive Cancer Drug Discovery Platform which comprises the following products and services:

- More than 350 recombinant protein kinases
- Screening services with more than 400 protein kinases (HTS, IC50 and large scale profiling) with rapid turnover in high speed robotic systems
- Cellular assays: target-specific and phenotypic assays, e.g. proliferation and colony formation assays
- In vivo studies: subcutaneous and orthotopic mouse models
- In vivo immuno-oncology platform
- Angiogenesis assays: cellular assay and in vivo model based on spheroids from human endothelial cells
- *Integrated Drug Discovery Projects* together with chemistry partners.

## Business and Deals

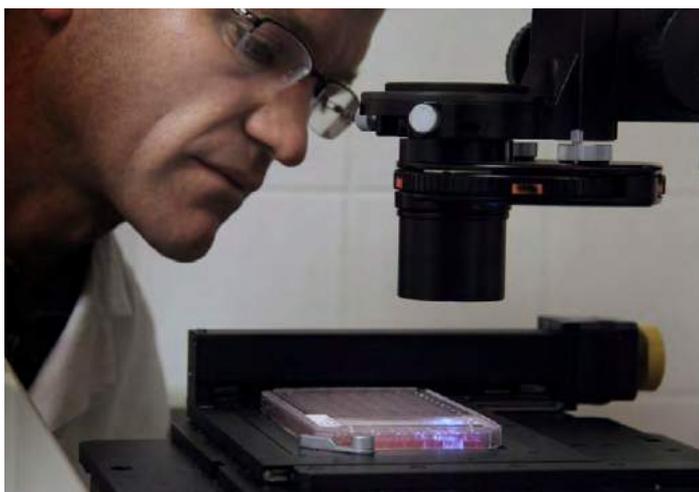
Most of the largest pharma companies are among our customers.

We are offering

- Single project services
- Frame work contracts for the service business
- FTE-based *Integrated Drug Discovery Project* deals

## Background

Our team of internationally trained scientists owns more than 20 years of scientific expertise in protein kinase and signal transduction research.



The Q-bios GmbH was founded in 2009 as a spin-off out of the Institute for Molecular and Cell Biology, Department of Biotechnology of the Mannheim University of Applied Sciences. Q-bios provides products and services for the the Life Sciences including the biotechnology, pharmaceutical and diagnostic industries. The success and competence of Q-bios is based on the two company co-founders broad knowledge and long time experience in microbiology, molecular and cell biology, genetics, medical genetics and protein analytics. This allows for customer specific solutions and consultancy.

Q-bios offers custom made recombinant peptides and proteins produced in bacteria, yeast, insect cells or mammalian cells. Recombinant proteins are available at purity grades of at least 98% and are well suited for antibody development or biological assays. Further services are cell line development and cell line amplification, the development of protein or nucleic acid based assays (i.e. ELISA, IFT, PCR, cell culture assays) or kit developments.

Q-bios major product line are variant Taq DNA polymerases of highest quality, including DNA-free polymerases and various PCR Master Mixes for regular PCR, HotStart PCR and qPCR/RealTime-PCR. Taq DNA polymerase is sold in bulk in 5U/ $\mu$ l formulations or in high concentrations ranging from 15U/ $\mu$ l up to 50U/ $\mu$ l. We also offer glycerol-free DNA polymerases. All polymerases and Master Mixes can be purchased as OEM products.

Many of our products are intermediates and are used by nationally and internationally acting diagnostica companies. Furthermore, Q-bios offers teaching and training in molecular and cell biology and different relevant techniques.



## **Q-bios GmbH Biotechnology**

Paul-Wittsack-Str. 10  
68163 Mannheim

Phone: +49 (0) 621 29 26 537  
Telefax: +49 (0) 621 43 95 532  
contact@q-bios.com  
www.q-bios.com

### **Contact person:**

Dr. Andreas Lux, CEO

### **Employees:** 3

### **Founding year:** 2009

### **Fields of Activity:**

#### **Business model**

- Production
- Research & development
- Supplier

#### **Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

#### **Experts in**

- Cells/Cell Lines
- DNA/RNA
- Diagnostics
- Production Organisms
- Proteins/Peptides

#### **Production range, services:**

- Biotechnological Services
- Proteins, Peptides
- DNA, RNA
- Cells/Cell lines
- Diagnostics
- Supplier, OEM

**Expertise in  
Neuroimmunology**

ravo Diagnostika  
Oltmannsstr. 5  
79100 Freiburg

Phone: +49 (0) 761 40 74 88  
Telefax: +49 (0) 761 40 74 77  
info@ravo.de  
www.ravo.de

**Contact person:**

Dr. Christiane Rasiah,  
General Manager

**Employees:** 9

**Founding year:** 1995

**Fields of Activity:**

**Business model**

- Production
- Research & development
- Supplier

**Biotech sector**

- Red biotechnology

**Experts in**

- Diagnostics

**Production range, services:**

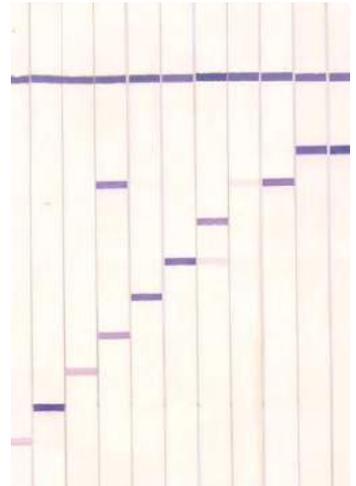
- Neuroimmunology
- Line Assays
- IHA
- ELISA
- ISAGA and DIFA
- Antigens

ravo Diagnostika is a privately held company which was founded in 1995 by Prof. Dr. med. Arnold Vogt, former director of the Department of Immunology in the Institute of Medical Microbiology and Hygiene, Albert-Ludwigs-University in Freiburg, Germany, and two of his coworkers, Dr. rer. nat. Christiane Rasiah and Prof. Dr. med. Sebastian Rauer. Our team focusses on the development and production of immunoassays for the diagnosis of infectious and autoimmune diseases. We lay great value on good quality and support. Our customers are medical laboratories all over the world.

**The product range comprises:**

- Indirect haemagglutination assays (IHA)
- ELISA
- ISAGA
- DIFA
- Line Assays (manual and fully automated versions available)

We have established a Quality Management System according to DIN EN ISO 13485 and the Council Directive 98/79/EC, Annex IV. Periodically audits help to maintain and improve our system. All our tests are produced based on the directive 98/79/EC on in vitro diagnostic medical devices. Our quality management system and hence our success are supported by our highly qualified team.



innovative  
start-up  
idea



Renovatum Therapeutics develops and commercializes medical products for the support and regeneration of damaged tissues. We are developing one protein-based pharmaceutical product with multiple applications, currently focused on heart regeneration post acute myocardial infarction. Coronary heart disease (CHD) kills over 7 million people a year worldwide and costs the EU15 over \$106 billion in lost economic productivity. CHD causes cardiac ischemia, which is the reduction of blood flow to the heart that can cause cell and tissue damage to the point of cardiac arrest (heart attack). The cardiac ischemia market is a \$50 billion market for a disease that has no known cure.

We have identified and are patent pending on key proteins involved in the development of the human heart that we have translated to a clinical therapy. We have shown that these proteins double the amount of vascularization and increase cell survival in the infarct region, reduce scar size and significantly improve heart function after infarct in mouse and rat pre-clinical test models. Biocompatibility studies have been performed on our proteins, which resulted in determining a safe and ideal therapeutic dosage, increasing the safety profile of our therapeutic.

Co-founders Prof. Dr. Katja Schenke-Layland, Mr. Shannon Layland and Prof. Dr. Ali Nsair lead Renovatum Therapeutics. Prof. Schenke-Layland is currently the Director of the Fraunhofer IGB and Professor of Biomedical Technology and Regenerative Medicine at the University Hospital Tuebingen. Shannon Layland holds an M.B.A. from the Technical University Munich. Prof. Nsair M.D. is a Cardiologist and Assistant Professor at UCLA.



## Renovatum Therapeutics

Nobelstr. 12  
70569 Stuttgart

Phone: +49 (0) 711 97 04 28 3  
Telefax: +49 (0) 711 97 04 00 9  
shannon.layland@renovatumtx.com  
www.renovatumtx.com

### Contact person:

Shannon Layland, Founder

### Employees: ns

### Founding year: 2017

### Fields of Activity:

#### Business model

- Research & development

#### Biotech sector

- Red biotechnology

#### Experts in

- Proteins/Peptides
- Therapeutics
- Tissue Engineering

#### Production range, services:

- Therapeutic Development
- Regenerative Medicine
- Tissue Engineering

## Rentschler Biotechnologie GmbH

Erwin-Rentschler-Str. 21  
88471 Laupheim

Phone: +49 (0) 7392 701 0  
Telefax: +49 (0) 7392 701 300  
info@rentschler.de  
www.rentschler.de

### Contact person:

Dr. Marion Schrader,  
Senior Director Marketing

**Employees:** 650

**Founding year:** 1927

### Fields of Activity:

#### Business model

- Custom production

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines
- Proteins/Peptides
- Therapeutics

#### Production range, services:

- Bioprocess development
- cGMP biomanufacturing
- Aseptic filling
- Quality control
- Project management
- Regulatory support

Rentschler is a Contract Development and Manufacturing Organization (CDMO) focused on the bioprocess development and manufacturing of biopharmaceuticals. The company supports its global clients through to market approval of their products. Thanks to many years of experience and to be excellent in finding solutions, Rentschler is among the best in the industry and make an essential contribution to the global availability of biopharmaceuticals.

Rentschler, founded in 1927, is an owner-managed, medium-sized company which preserved its independence. The company has a team of about 650 highly qualified employees. The corporate culture is characterized by sense of responsibility, mutual respect and an open, communicative nature. This enables efficient decisions and guarantees smooth-running processes.

The full-service offering covers the bioprocess development, cGMP manufacturing and filling of recombinant proteins. Rentschler has experience with over 200 molecules and over 250 batches in drug substance manufacturing. The state-of-the-art facilities and processes allow to manufacture material for clinical phases and commercial supplies. cGMP certified suites with stainless steel bioreactors with volumes of up to 3,000 L and single-use bioreactors with volumes of up to 2,000 L, support the flexible and cost-efficient manufacturing. In addition, Rentschler's experience in development approval strategies and in the creation of approval documents at an international level ensures that your product is documented in accordance with regulatory requirements.

Our success as a CDMO is underpinned by our focus on product quality, on-time delivery as well as expert project management.

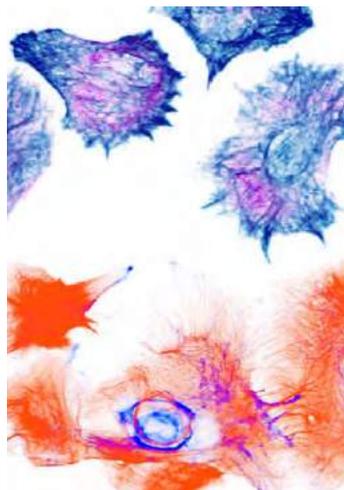


Founded in 2012 RHEACELL, as a subsidiary of TICEBA GmbH, is dedicated to the development of human pharmaceuticals based on ABCB5-positive mesenchymal skin stem cells. For selected indications RHEACELL strives for the improvement of quality of life as well as abatement and healing of patients' ailments.

RHEACELL is obligated to meet the requirements of the European law throughout the whole development process of stem cell based pharmaceuticals. Similarly, latest international findings of science and technology as well as in-house know-how of RHEACELL's qualified staff play a key role in realizing the mission. The requirements of Good Manufacturing Practice will be met throughout the entire process.

As a licensee of a number of patents of Harvard University, Cambridge/ USA, RHEACELL has worldwide exclusive rights to this technology. RHEACELL can make use of this technology when developing pharmaceuticals. Professor Markus Frank, Professor of Pediatrics and Dermatology at the Harvard Medical School, is assisting RHEACELL as scientific advisor. He has particular expertise in stem cell research.

Since mid-April 2016 RHEACELL is recruiting patients with the indication chronic venous ulcer (CVU) for the clinical study in phase 1/2a. The effect that ABCB5-positive cells from the skin have in the damaged tissue of CVU patients is studied multicentric at the University Hospital Würzburg.



## **RHEACELL GmbH & Co. KG**

Im Neuenheimer Feld 517  
69120 Heidelberg

Phone: +49 (0) 6221 71 833 0  
Telefax: +49 (0) 6221 71 833 29  
office@rheacell.com  
www.rheacell.com

### **Contact person:**

Dr. Christoph Ganss, CEO

**Employees:** 5

**Founding year:** 2012

### **Fields of Activity:**

#### **Business model**

- Custom production
- Research & development
- Supplier

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Cells/Cell Lines
- Tissue Engineering

### **Production range, services:**

- Drug development based on ABCB5+ mesenchymal stem cells



**Roche**  
 Sandhofer Str. 116  
 68305 Mannheim

Phone: +49 (0) 621 759 0  
 Telefax: +49 (0) 621 759 28 90  
 mannheim.allgemein@roche.com  
 www.roche.de

**Contact person:**  
 Dr. Monika Mölders,  
 Head of Communications Mannheim

**Employees:** 8000

**Founding year:** 1896

**Branches:**  
 Penzberg, DEU

**Fields of Activity:**

- Business model**
- Production
  - Research & development
  - Sales & trade

- Biotech sector**
- Red biotechnology

- Experts in**
- Analytics
  - DNA/RNA
  - Diagnostics
  - Proteins/Peptides
  - Therapeutics

- Production range, services:**
- Diagnostics
  - Therapeutics
  - Diabetes Management

Roche, headquartered in Basel, Switzerland, is a global pioneer in pharmaceuticals and diagnostics focused on advancing science to improve people's lives.

Roche is the world's largest biotech company, with truly differentiated medicines in oncology, immunology, infectious diseases, ophthalmology and diseases of the central nervous system. Roche is also the world leader in in vitro diagnostics and tissue-based cancer diagnostics, and a frontrunner in diabetes management.

Employing some 8,000 plus staff, Mannheim is Roche's third largest site worldwide. Situated in the heart of the Rhine-Neckar Metropolitan Region, this high-tech location benefits from the dense network of research institutions, universities and biotech companies in the region. Being involved in research, development, production, logistics and sales, the Mannheim site is an integral part of the overall supply chain and helps to ensure that diagnostics and pharmaceuticals from Roche reach patients around the world.

This is where innovative products and solutions are developed for people with diabetes and cardiovascular diseases. In addition, important products for in-vitro diagnostics are produced in Mannheim. These include liquid reagents, test strips for point-of-care diagnostics in addition to blood glucose monitoring systems and test strips. Within the global network of the Roche Group, the Mannheim site also holds a top position in therapeutic agents. Mannheim is one of three centres of excellence for parenterals within the Roche Group. These are pharmaceuticals that are administered by injection or infusion. What is more, Mannheim is also home to the global logistics centre of Roche Diagnostics, from where Roche products are shipped to 170 countries.



Sartorius Stedim Cellca is a leading provider of cell line and upstream process development services for large-scale protein production of biopharmaceuticals in mammalian (CHO) cells.

### Competitive technology platform:

Based on its in-depth expertise, know-how and intellectual property, Cellca has established a unique technology platform, which is one of the most competitive systems available. It is characterized by high efficiency regarding quality, quantity and short development time, robustness and direct process scalability. So, customers and partners benefit from reduced cost of goods, reduced risks and a faster time-to-clinic / market.

### Products and services:

Cellca offers the following products and services:

- Fee for service for Cell line & process development
- Technology Platform Licensing
- Media

### Benefits:

- Speed: Within 4-6 months Cellca can deliver high-titer research cell bank starting from DNA.
- Performance: 95 % of our developed cell lines deliver protein titers exceeding 3 g/L in a 12-14 day standard fed-batch process.
- Scalability: Processes can be easily transferred and scaled-up to a range of bioreactors up to 1000L.
- Track record: More than 40 successfully completed projects.
- Customer focus: Committed project teams and dedicated client manager's make it their purpose to deliver service excellence and meet our clients' requirements.



## Sartorius Stedim Cellca GmbH

Erwin-Rentschler-Str. 21  
 88471 Laupheim

Phone: +49 (0) 7392 96 64 810  
 Telefax: +49 (0) 7392 96 64 829  
 info.laupheim@sartorius-stedim.com  
 www.cellca.de

### Contact person:

Hugo de Wit, CEO

**Employees:** 70

**Founding year:** 2005

### Fields of Activity:

#### Business model

- Contract research
- Custom production

#### Biotech sector

- Red biotechnology

#### Experts in

- Cells/Cell Lines
- Production Organisms
- Proteins/Peptides
- Therapeutics

### Production range, services:

- Cell line & process development
- Technology Platform Licensing
- Media

**Sciomics GmbH**

Im Neuenheimer Feld 583  
69120 Heidelberg

Phone: +49 (0) 6221 42 94 830  
Telefax: +49 (0) 6221 42 94 834  
info@sciomics.de  
www.sciomics.de

**Contact person:**

Dr. Christoph Schröder, CEO

**Employees:** 11

**Founding year:** 2013

**Fields of Activity:**

**Business model**

- Custom production
- Research & development
- Service provider

**Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

**Experts in**

- Analytics
- Bioinformatics
- Cells/Cell Lines
- Diagnostics
- Proteins/Peptides

**Production range, services:**

- Protein and phosphorylation status analysis
- Discovery and verification of protein biomarker signatures
- Protein and antibody microarray production and analysis

Sciomics is active in the early-phase development of novel diagnostic means for precision medicine with a focus on cancer as well as organ failure. These activities are based on our antibody microarray platform technology developed by the founders at the German Cancer Research Center (DKFZ) during the past 15 years. This platform is used for identifying novel protein biomarkers as well as for a highly-parallel verification.

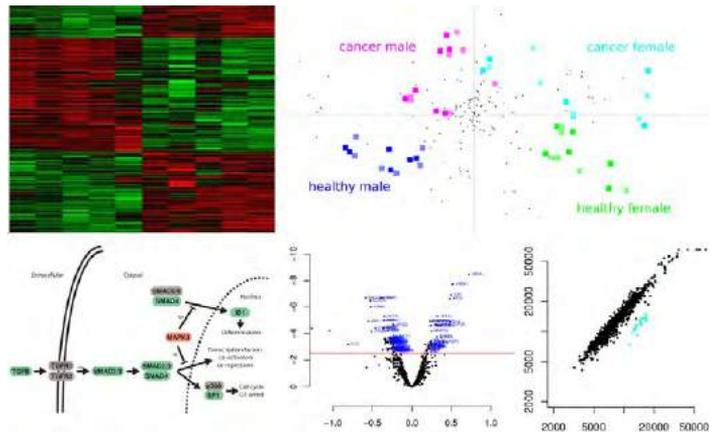
In addition to the internal development activities, Sciomics offers multiplex protein analysis services for

- protein expression profiling
- combined phosphorylation and protein analysis
- drug target and biomarker discovery
- custom antibody microarray production

The service portfolio is based on the scioDiscover platform covering 900 different highly relevant proteins with more than 1,100 antibodies. This is currently the world's most comprehensive commercially available immuno-based platform for a multiplexed protein analysis. The microarray based analysis is robust (CV < 10%), cost-efficient and only minute amounts of precious samples (e.g. 10µL plasma) are required.

Our complete sample-to-result service covers

- study design consultation
- protein extraction
- microarray experiments
- data analysis adapted to individual needs
- a study report presented in a publication ready format





Smart Imaging Solutions

## Sensovation AG – OEM partner for Smart Imaging Solutions

Sensovation is a world leading OEM partner for the design and production of Smart Imaging Solutions. Many years of experience and outstanding expertise have made Sensovation to a one stop supplier of Research and In-Vitro-Diagnostics instruments, such as Automated Digital Microscopes and Microarray Analyzers for multiplexed diagnostics.

A platform for automated, digital microscopes is provided by Sensovation: A selection of functional modules can be combined to implement bright-field and/or fluorescence microscopes, using an upright or inverted architecture. Together with the customer the right product is identified and implemented, tailored to the needs of the application and the market. For example Sensovation's SensoScope® Brightfield is an innovative microscopy system for the pathology market. As a fully integrated, motorized digital microscope, it combines the advantages of conventional microscopy and the digital world in one desktop instrument.

For the field of Diagnostics and clinical research Sensovation offers solutions for Multiplexed Diagnostics to enable simultaneous detection of several parameters in one sample. The SensoSpot® product line includes Microarray Analyzers for colorimetric and fluorescence detection in 96-well plates, on microscopy slides, biochips and other formats.

These microarray readers are remarkably compact and affordable, dedicated for routine applications. The instrument concept enables the easy transition of microarray applications from research to clinical routine. Thus, Sensovation offers a new dimension in multiplexed imaging for diagnostics, point-of-care, and biotechnology.



[www.sensovation.com](http://www.sensovation.com)

## Sensovation AG

Markthallenstr. 5  
78315 Radolfzell

Phone: +49 (0) 7732 302 78 20  
Telefax: +49 (0) 7732 302 78 39  
[info@sensovation.com](mailto:info@sensovation.com)  
[www.sensovation.com](http://www.sensovation.com)

### Contact person:

Dr. Denise Dietrich,  
Global Marketing & Sales Manager

**Employees:** 30

**Founding year:** 2000

### Fields of Activity:

#### Business model

- Custom production
- Service provider
- Supplier

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Bioinformatics
- Diagnostics

#### Production range, services:

- Custom Imaging Solutions
- Customized Digital Microscopes
- Microarray Analyzers

## SERVA Electrophoresis GmbH

Carl-Benz-Str. 7  
69115 Heidelberg

Phone: +49 (0) 6221 13 84 00  
Telefax: +49 (0) 6221 13 84 010  
info@serva.de  
www.serva.de

### Contact person:

Dr. Barbara Müller,  
General Manager

**Employees:** 55

**Founding year:** 1953

### Fields of Activity:

#### Business model

- Research & development
- Supplier

#### Biotech sector

- Red biotechnology
- White/Industrial biotechnology

#### Experts in

- Proteins/Peptides
- Tissue Engineering

#### Production range, services:

- Supply of reagents and equipment for life sciences research
- Supply of reagents in bulk quantities
- Supply of customized solutions

SERVA offers products of highest quality since 1953 to customers in industry and academic research departments. The main business areas include development and marketing of reagents for electrophoresis and tissue engineering, as well as selling fine and biochemical. As a special service SERVA offers the supply of bulk chemicals as well as production of buffers, ready-made gels, and more according to customer demand.

In Heidelberg SERVA develops and produces a broad choice of ready-made gels (horizontal and vertical), in particular SERVALYT™ PRECOTES™ and FocusGel for isoelectric focusing of proteins and SERVAGel™ PRiME mini vertical gels for SDS PAGE (1D, 2D) or native PAGE, also for Blue Native PAGE. For 2D gel electrophoresis SERVA produces IPG-Strips for the first dimension in lengths from 7 to 24 cm, as well as horizontal 2D gels (25.5 x 20 cm and 25 x 11 cm) under the seal of quality „High Performance Electrophoresis“ (HPE™) for the HPE-BlueTower and HPE-BlueHorizon flatbed systems for high resolution electrophoresis in the second dimension. In addition to the reagents SERVA supplies high value electrophoresis equipment like flatbed and vertical chambers, blotters, power supplies, scanner and camera systems for gel documentation and image analysis.

For tissue engineering there are several different qualities of SERVA Collagenase NB available, which are optimized for the isolation of differing cell types like island cells, hepatocytes, oocytes, stem cells and more. For special demands SERVA can supply Collagenase NB as well as the supplementary Neutral Protease NB in GMP and animal-free GMP-AF quality.

SERVA Electrophoresis GmbH is a medium sized company located in Heidelberg, Germany.



SpinDiag develops an easy-to-use, compact and automated point-of-care system for the screening for drug resistant pathogens. The device detects the most prevalent antibiotic resistances; lab-grade results are delivered in less than 30 minutes from swab samples. This allows targeted isolation of infected or colonized patients to avoid spread of resistant pathogens in hospitals.

## SpinDiag GmbH

Engesserstr. 4  
79108 Freiburg

Phone: +49 (0) 761 203 732 46  
Telefax: +49 (0) 761 203 732 99  
info@spindiag.de  
www.spindiag.de

## Contact person:

Dr. Daniel Mark, CEO

**Employees:** ns

**Founding year:** 2016

**Fields of Activity:**

## Business model

- Production
- Research & development

## Biotech sector

- Red biotechnology

## Experts in

- DNA/RNA
- Diagnostics

## Production range, services:

- Point-of-care-testing of infectious diseases



**Subitec GmbH**

Julius-Hölder-Str. 36  
70597 Stuttgart

Phone: +49 (0) 711 365 402 90  
Telefax: +49 (0) 711 365 402 910  
info@subitec.com  
www.subitec.com

**Contact person:**

Dr. Peter Ripplinger, CEO

**Employees:** 12

**Founding year:** 2000

**Fields of Activity:**

**Business model**

- Research & development
- Service provider
- Supplier

**Biotech sector**

- White/Industrial biotechnology

**Production range, services:**

- Cultivation Systems
- Process engineering
- Expertise and Services

Subitec GmbH is a German biotech company headquartered in Stuttgart, specialized in process engineering, equipment and services for the cultivation and industrial scale production of microalgae.

Established as a spin off from the Fraunhofer Institute, Subitec looks back at more than 20 years of experience with microalgae. Subitec is developer and technology owner of the unique and patented photobioreactor technology – the Flat Panel Airlift Reactor (FPA). The FPA-reactor prevents disadvantages based on their design of conventional photobioreactors. The systematic technology advantage leads to a range of benefits. Hereby, the patented stream guidance induced by static mixers depicts the key for the success of the FPA-reactor. Subitec's photobioreactor is available in sizes of 6, 28 and 180 Liter.

Subitec's track record includes the supply of equipment and services to major laboratories and research institutes and the design and construction of pilot plants and large scale production plants for commercial customers. Subitec's equipment is used for cultivating high value microalgae that find application in e.g. aquaculture, cosmetics and healthcare.

Subitec cooperates with established national and international customers in diverse projects.



Synovo GmbH is a German-based pharmaceutical discovery company. Synovo has a dual model of services to the Pharmaceutical industry and internal discovery. Synovo provides services for in vitro and in vivo pharmacology, has a strong expertise in the fields of Cell biology/oncology, medicinal chemistry and formulation. New is the department of medical devices (diagnostics) and Bio-Analytics. Synovo was founded in 2004 with 3 employees and has steadily grown since then. Synovo currently occupies modern laboratories and animal facilities in two technology parks in Tübingen, and employs 40 people, including researchers (chemists, pharmacologists, biologists and engineers). Synovo has ca. 25 patent applications granted or in process. Two products from its research efforts are licensed and in development by major firms.

### Significant infrastructure

Synovo's chemistry infrastructure includes 3 HPLC coupled Mass Spectrometers for bioanalysis and, UV and fluorescence HPLC, NMR, IR, Plate readers, dryers and reaction vessels. Its Biology infrastructure includes animal facilities for ca. 4000 mice, rats and hamsters, cell culture, flow cytometry, fluorescence microscopy, clinical chemistry and PCR.

### Strengths

- Medicinal Chemistry and reagents
- Customer-friendly processes

Expertise in pharmacokinetics, preformulation, immuno-oncology, Liver and metabolic diseases (Diabetes, NASH models), Inflammatory diseases (GI, muskulo-skeletal, CNS), Airway models and Alzheimer's models. A new development is an increasing capacity for Ophthalmology studies.



### Synovo GmbH

Paul-Ehrlich Str. 15  
72076 Tübingen

Phone: +49 (0) 7071 96 43 25  
Telefax: +49 (0) 7071 96 43 26  
contact@synovo.com  
www.synovo.com

### Contact person:

Dr. Michael Burnet,  
Managing Director

**Employees:** 40

**Founding year:** 2004

### Fields of Activity:

#### Business model

- Contract research
- Research & development
- Service provider

#### Biotech sector

- Red biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines

#### Production range, services:

- Pharmacokinetics
- Preformulation
- Immuno-oncology studies
- Nash models
- Alzheimer models
- Medicinal Chemistry

## Teva GmbH

Graf-Arco-Str. 3  
89079 Ulm

Phone: +49 (0) 731 402 02  
Telefax: +49 (0) 731 402 78 32  
info.teva-deutschland@teva.de  
www.teva.de

### Contact person:

Ulrike Krieger-Ballhausen,  
Senior Communications Manager

**Employees:** 3000

**Founding year:** 1901

### Fields of Activity:

#### Business model

- Production
- Research & development
- Sales & trade

#### Biotech sector

- White/Industrial biotechnology

#### Experts in

- Analytics
- Cells/Cell Lines
- Proteins/Peptides
- Therapeutics

#### Production range, services:

- Innovative medicines
- OTC products
- Generics

## Teva – Manufacturer of biotechnological substances

In Germany, Teva supplies innovative medicines, branded products, generics and over-the-counter medications, all under one umbrella. This is unusual in the pharmaceuticals industry and therefore makes the company stand out from the rest. At its sites in Ulm and Blaubeuren/Weiler, Teva boasts state-of-the-art production facilities both for chemical goods and for the manufacture of biotechnology medicines. The company's headquarters are in Ulm.

### Biotechnological preparations are part of Teva's future

Since 2006, at the plant in Ulm the company has its own multi-purpose facility for producing biotechnological substances. Teva has established itself as a specialist in the development and production of animal cell cultures. Four biotechnologically-manufactured medicines have been introduced to the German market in the last six years. Teva build on this biotech expertise. In 2016 the company has an investment of a high million sum in the construction of a biotech facility for the production of the latest generation biotechnological agents. Teva will be in a position to manufacture monoclonal antibodies for a broad spectrum of indications. And with the new biotechnological manufacture plant the company has the best qualifications for developing biotechnologically manufactured original products or biosimilars. In Germany Teva Biotech GmbH take the responsibility for all biotechnological activities.

### An international global player

Internationally, Teva is a leading global pharmaceutical company and the world's largest generic medicines producer. Headquartered in Israel, Teva achieved a turnover of US Dollars 19.7 billion in 2015.



As the ImmunoDiagnostic experts within Thermo Fisher Scientific, formerly known as Phadia with headquarter in Uppsala, Sweden, we develop, manufacture and market complete blood test systems to support the clinical diagnosis and monitoring of allergy, asthma and autoimmune diseases. For almost 40 years, we have been the global leader in allergy testing and have become one of the world's leading autoimmune disease test providers. Our 1,500 employees world-wide serve more than 3,000 laboratories in more than 70 countries.

The center of excellence in Freiburg, Germany, is the home of research, development, production and marketing of our autoimmunity tests.

Thermo Fisher Scientific – the leader in serving science – solves complex analytical issues, improves diagnostics and increases productivity. We enable our customers to make the world healthier, cleaner and safer.



## **Thermo Fisher Scientific Phadia GmbH**

Munzinger Str. 7  
79111 Freiburg

Phone: +49 (0) 761 47 805 0  
Telefax: +49 (0) 761 47 805 338  
autoimmunity@thermofisher.com  
www.thermoscientific.com/phadia

### **Contact person:**

Heiko von Bachmann, MD

**Employees:** 200

**Founding year:** 1983

### **Fields of Activity:**

#### **Business model**

- Production
- Research & development
- Sales & trade

#### **Biotech sector**

- White/Industrial biotechnology

#### **Experts in**

- Analytics
- Diagnostics
- Proteins/Peptides

#### **Production range, services:**

- Allergy diagnostics incl. allergen components
- Autoimmune diagnostics
- Automated instrument platform

**TICEBA GmbH  
Tissue & Cell Banking**

Im Neuenheimer Feld 517  
69120 Heidelberg

Phone: +49 (0) 6221 71 833 0  
Telefax: +49 (0) 6221 71 833 29  
office@ticeba.com  
www.ticeba.com

**Contact person:**

Dr. Christoph Ganss, CEO

**Employees:** 40

**Founding year:** 2003

**Fields of Activity:**

**Business model**

- Production
- Research & development

**Biotech sector**

- Red biotechnology

**Experts in**

- Cells/Cell Lines
- Tissue Engineering

**Production range, services:**

- Tissue & Cell Banking
- Cell production for drug development

In 2003, TICEBA, the first state-of-the-art tissue bank for stem cells derived from the skin worldwide was founded and since then has developed into one of the leading laboratories for tissue and stem cell banking as well as for developing stem cell based therapies worldwide.

Today, TICEBA does not only provide a unique health care measure by enabling everyone to individually store their healthy stem cells for later use at the highest possible standards under Good Manufacturing Practice (GMP) conditions, but is also one of the leading laboratories in Europe and worldwide for stem cell expansion and isolation as a powerful tool for developing stem cell based therapies for numerous indications in the field of organ regeneration.

TICEBA possesses the necessary permission from the responsible authority in accordance with §13 of the German Medicines Act (AMG) for the preparation of a biological medicinal product as well as the license within the meaning of §20b (1 and 2), §20c, and §72b of the AMG (authorization for the extraction of tissue, the treatment or processing, preservation, testing, storage, import of tissue or tissue preparations) in accordance with the authoritative European directives. All described activities are carried out by TICEBA in accordance with the authoritative European and German instructions in compliance with GMP. Under these strict conditions, the stored skin cells can be used in the case of need as raw material for the manufacturing of an autologous (from the patient himself) medicine.

Together with our daughter company RHEACELL, we also push forward the development of pharmaceuticals based in ABCB5-positive mesenchymal stem cells.



trenzyme GmbH is a privately owned German Contract Research Organization (CRO) offering a wide range of highly customized services in cell line development and recombinant protein production.

For more than 16 years, trenzyme acts as preferred research partner for its national and international clients, ranging from academy, biotech up to big pharmaceutical companies.

Since the establishment in 2000, trenzyme's scientific experts have been continuously developing new and comprehensive solutions to provide reliable support for the individual and demanding projects of its clients.

Whether the needs are in development of stable cell lines for cell based assays, in GMP compliant production cell lines or in recombinant protein production and purification, trenzyme delivers the ideal solution by always following its clear mission:

Accelerating innovation and save valuable research time & budget!



**trenzyme GmbH**

Byk-Gulden-Str. 2  
78467 Konstanz

Phone: +49 (0) 7531 12 29 00  
Telefax: +49 (0) 7531 12 29 011  
contact@trenzyme.com  
www.trenzyme.com

**Contact person:**

Dr. Reinhold Horlacher,  
CEO & Founder

**Employees:** 16

**Founding year:** 2000

**Fields of Activity:**

**Business model**

- Contract research
- Research & development
- Service provider

**Biotech sector**

- Red biotechnology
- White/Industrial biotechnology

**Experts in**

- Cells/Cell Lines
- DNA/RNA
- Production Organisms
- Proteins/Peptides

**Production range, services:**

- Stable Cell Line Development
- GMP compliant Production Cell Line Development
- Recombinant Protein Production and Purification

## **varionostic GmbH**

Lise-Meitner-Str. 8  
89081 Ulm

Phone: +49 (0) 731 36 08 07 56  
Telefax: +49 (0) 731 36 08 07 54  
info@varionostic.de  
www.varionostic.de

### **Contact person:**

Uwe Gerstenmaier, CEO

### **Employees:** 6

### **Founding year:** 2006

### **Fields of Activity:**

#### **Business model**

- Production
- Research & development
- Service provider

#### **Biotech sector**

- Red biotechnology

#### **Experts in**

- Analytics
- Cells/Cell Lines
- DNA/RNA
- Diagnostics

#### **Production range, services:**

- Epigenetics
- Genetics

## **varionostic – the DNA Methylation Expert**

varionostic is Europe's leading expert for DNA methylation analysis using different platforms, e. g. MassArray, pyrosequencing, NGS, qPCR, Sanger. We offer our customers from industry and academia outstanding tailored services from assay design to data analysis. Scientists can profit from methylation assays developed within our own research facilities. Our unique specialised competence is the basis for highest quality in epigenetic research and service to oncology. In the field of molecular oncology we serve our clients with reliable and qualified data for e.g. RAS, EGFR and other genes of high importance. Additional services for R&D include genotyping, allele quantification and short read sequencing. Facilities and processes are accredited by highest DIN EN ISO/IEC 17025:2005 standard.

### **Epigenetics: DNA methylation and gene activity**

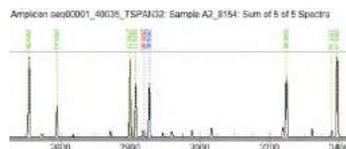
Quantitative DNA methylation analysis gives valuable information on the gene activity in human genome under certain conditions. The methylation level of specific regions of the DNA is esp. important for cancer research. varionostic, as THE methylation expert, gives you quantitative data on the methylation of the CpG regions and single CpGs you are interested in.

### **Research & Development**

Together with partners from clinical research, varionostic is performing own epigenetic research. Our objective is to continuously improve our service. Varionostic's subsidiary, Cygenia GmbH, is focused on epigenetic diagnostics to provide a choice of treatment options for patients.

### **Clin.-chem. blood tests**

Beside DNA analytical services in addition clinical-chemical rapid tests are produced according to MPG regulations.



We serve clients  
in both academic and  
commercial R&D.

**Epigenomics and  
Genomics**

VAXIMM is a privately held, clinical stage, Swiss/German biotech company developing oral T-cell immunotherapies for patients suffering from cancer. VAXIMM's technology is based on first-in-class oral T-cell activators using modified attenuated bacteria that can be readily adapted to target a wide range of cancer-related antigens.

The Company's lead product candidate, oral VXM01, currently in clinical trials, activates killer T-cells targeting tumor vasculature and certain immunosuppressive cells and causes increased inflammation in solid tumors. VAXIMM completed a Phase I/II trial of VXM01 in advanced pancreatic cancer. Clinical trials are currently ongoing in metastatic colorectal cancer and in recurrent glioblastoma (brain cancer). The Company has several additional product candidates at various stages of preclinical development. These candidates can be developed as stand-alone therapies or in combination with other immunotherapies, including VXM01.

Investors in our company include: BB Biotech Ventures, Merck Serono Ventures, Sunstone Capital and BioMed Partners. VAXIMM GmbH is located in Mannheim (Germany), from where the Company's development activities are orchestrated, and owns a laboratory in Regensburg, Germany.

The platform is based on the live attenuated bacterial vaccine strain Ty21, which has been administered to millions of people as a prophylactic vaccine to temporarily protect them from typhoid fever. This strain has been proven to be very safe and well tolerated. All immunotherapies resulting from this platform are taken orally by the patient.



## **VAXIMM GmbH**

Julius-Hatry-Str. 1  
68163 Mannheim

Phone: +49 (0) 621 83 59 68 70  
Telefax: +49 (0) 621 83 59 68 799  
info@vaximm.com  
www.vaximm.com

## **Contact person:**

Dr. Heinz Lubenau,  
General Manager

**Employees:** 7

**Founding year:** 2008

## **Branches:**

Regensburg, DEU

## **Fields of Activity:**

### **Business model**

- Research & development

### **Biotech sector**

- White/Industrial biotechnology

### **Experts in**

- DNA/RNA
- Therapeutics

### **Production range, services:**

- Developing oral T-cell immunotherapies against cancer

## Venneos GmbH

Nobelstr. 15  
70569 Stuttgart

Phone: +49 (0) 711 71 53 02 0  
Telefax: +49 (0) 711 71 53 02 20  
info@venneos.com  
www.venneos.com

## Contact person:

David Wehner, Co-Founder  
& Co-Managing Director

**Employees:** 10

**Founding year:** 2014

## Fields of Activity:

### Business model

- Research & development

### Biotech sector

- Red biotechnology

### Experts in

- Cells/Cell Lines

### Production range, services:

- Label-free cell analysis
- Product: CAN-Q
- Technology: CAN-Spectroscopy

Venneos GmbH is a German high-tech startup, which develops and markets the ,CAN-Q', the world's first silicon-chip-based imaging system for the analysis of biological cells (see image below).

## Product

Based on the technology ,CAN-Spectroscopy' the ,CAN-Q' allows customers

- to analyze up to several thousand cells on a single cell level
- in a label-free manner
- with a minimal cell count per measurement
- in a controlled measurement environment (temperature, etc.).

That makes the CAN-Q the ideal analysis tool for valuable cells such as primary or stem cells.

## Applications

CAN-Spectroscopy enables a large spectrum of cell-based assays. The first offered application is the analysis of cell adhesion. Additional applications such as proliferation, viability, etc. will come soon. Researchers in the areas of tumor biology, dermatology and immunology as well as pharma and biotech companies are among Venneos' first customers.

## Technology

Venneos' products build upon the new technology 'CAN-Spectroscopy', that uses a natural phenomenon: If a cell attaches to any kind of surface, a tiny gap remains between cell membrane and surface. The Venneos technology makes use of this effect. The gap causes electrical signals that the chip's measuring pixels detect. During an experiment these electrical signals are captured and transformed into a color scheme. As a measuring pixel is much smaller than a single cell, one cell covers several measuring pixels, leading to an image of the cell (on the image below the cells appear in yellow on the display of the CAN-Q).





**Vetter Pharma  
International GmbH**

Eyvwiesenstr. 5  
88212 Ravensburg

Phone: +49 (0) 751 37 00 0  
info@vetter-pharma.com  
www.vetter-pharma.com

**Contact person:**

Oskar Gold, SVP Key Account  
Management and Marketing/  
Corporate Communications

**Employees:** 3600

**Founding year:** 1950

**Branches:**

Langenargen, DEU  
Skokie, USA  
Singapore, SGP  
Tokyo, JPN

**Fields of Activity:**

**Business model**

- Custom production
- Service provider

**Biotech sector**

- White/Industrial biotechnology

**Experts in**

- Proteins/Peptides
- Therapeutics

**Production range, services:**

- Fill & Finish of syringes, vials and cartridges
- Parenteral contract manufacturing
- From clinical development to Commercial production

**Your partner in aseptic filling and packaging**

A premier contract development and manufacturing organization (CDMO), Vetter is a global leader in the fill & finish contract manufacturing of aseptically prefilled syringe systems, cartridges, and vials. We are a family-owned, independent company with facilities both in Germany and the US, as well as offices in Singapore and Japan. Our focus is on providing state-of-the-art manufacturing, from early clinical development and scale-up to commercial filling and packaging of parenteral drugs. We support you every step of the way, guiding your product through development, regulatory approval, launch, and life cycle management. Vetter offers you a foundation of experience spanning more than 35 years including dozens of product approvals for novel pharmaceutical and biotech compounds.

**Facts and figures**

- Headquarters in Ravensburg, Germany
- Additional clinical development facility in Chicago, US
- A Representative office for Asia Pacific in Singapore and a subsidiary in Japan
- Worldwide specialist in the aseptic production of prefilled drug delivery systems
- Global experience and expertise with regulatory authorities including FDA, EMA, PMDA (Japan), and RP (Germany), in multiple countries, including Canada, Russia, Brazil, Mexico, and Saudi Arabia
- More than 25 customer products with FDA approval
- Numerous patents including technologies for protection against tampering and counterfeiting
- Lyophilization (freeze-drying) and siliconization specialist



## Viscofan BioEngineering

Badeniastr. 13  
69469 Weinheim

Phone: +49 (0) 6201 86 358  
Telefax: +49 (0) 6201 86 226  
contact@bio.viscofan.com  
www.viscofan-bioengineering.com

### Contact person:

Dr. Lluís Quintana Frigola,  
Business Unit Manager

**Employees:** 9

**Founding year:** 2008

### Fields of Activity:

#### Business model

- Production
- Research & development
- Supplier

#### Biotech sector

- Red biotechnology

#### Experts in

- Proteins/Peptides
- Tissue Engineering

#### Production range, services:

- Collagen membranes
- Collagen suspensions
- Soluble Collagen
- Collagen tubes
- Tissue Engineering
- Medicinal Products

## Viscofan BioEngineering

Viscofan BioEngineering is a business unit of Naturin Viscofan GmbH, centre of excellence for collagen within the multinational company Viscofan. With a background of more than 80 years of experience in the extraction and processing of collagen from bovine skin, our activities are focused on the industrial-scale production of materials based on collagen type I for biomedical applications.

### Product Portfolio

Viscofan BioEngineering has established a unique production process which allows us to offer very native-like bovine-derived collagen type I fibres within our product portfolio.

- Collagen Cell Carrier® membranes with excellent stability, biocompatibility and performance in regenerative medicine, tissue engineering and cell culture.
- Viscolma® collagen mass, also with high percentage of collagen suitable for e.g. coating, functionalization of medical devices or other surfaces.
- Soluble collagen suitable for coating of cell culture vessels and 3D cell culture models.
- Collagen BioTubes for cell culture in tubular systems.

Viscofan BioEngineering provides R&D collagen materials to develop medicinal products and offers the same materials in medical grade quality to facilitate their clinical translation.

### Quality & Safety

Viscofan BioEngineering is certified according to ISO 9001:2008 and is implementing a quality management system according to ISO 13485. Moreover, bovine raw materials for medical products are sourced in New Zealand, with negligible BSE risk.



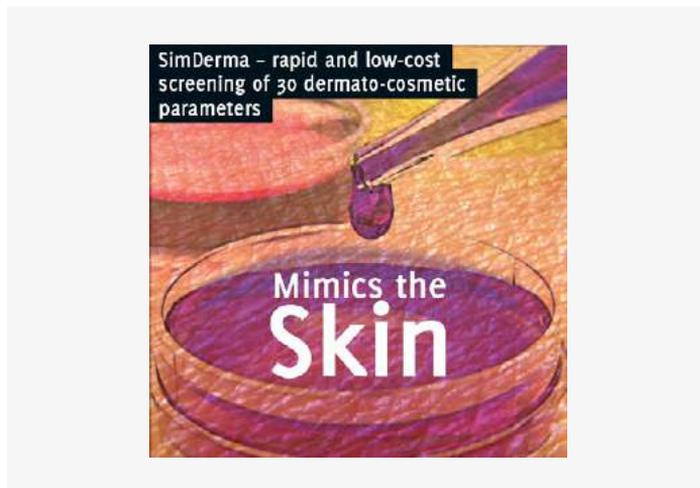
Vivacell Biotechnology GmbH is a privately owned contract-based research organisation (CRO) that provides specialised in vitro and in vivo models. VivaCell Biotechnology GmbH was founded in 1999 as a spin-off of the University of Freiburg. In 2003 Vivacell moved to his own facility in Denzlingen. VivaCell's preclinical services include standard protocols and protocols adapted to the needs of the customers.

In the past our main activities was in the field of phytopharmaceuticals, drugs, nutraceuticals cosmetics and oral care. Now we've enlarged our portfolio with respect to cosmetics e.g. we can offer a screening of 30 targets at once. Examples of some recent activities:

- Immunomodulation/anti-inflammatory/wound healing/sinusitis/bronchitis (metabolic activity, proliferation, cytokines, leukotrienes, humane monocytes, chondrocytes, keratinozytes etc.)
- Receptor binding studies, neurotransmitter-reuptake (anxiety, depression, memory effects, dyspepsia etc.)
- Viral entry model, inhibition viral neuraminidase (common cold)
- Inhibition 5alpha-reductase (hair growth, prostatic hyperplasia)
- Vanilloid (=Capsaicinreceptor) and menthol receptor (pain, warming, cooling, hair growth)
- Histamine-release (allergy), histamine induced inflammation
- Lipolyse in human primary adipocytes

Apart of these drug efficacy studies we offer preclinical studies (e.g. Ames Test etc.)

At VivaCell we offer you complete research projects from basic R&D up to pre-clinical research (GLP) in one hand. Our clients do not have to gather the research data from various CROs.



**Vivacell Biotechnology GmbH**

Ferdinand-Porsche-Str. 5  
 79211 Denzlingen

Phone: +49 (0) 7666 90 28 77  
 Telefax: +49 (0) 7666 90 28 78  
 info@vivacell.de  
 www.vivacell.de

**Contact person:**

Dr. Kurt Appel, CEO

**Employees:** 5

**Founding year:** 1999

**Fields of Activity:**

**Business model**

- Contract research
- Research & development
- Service provider

**Biotech sector**

- Agriculture/Food
- Red biotechnology

**Experts in**

- Analytics
- Cells/Cell Lines
- DNA/RNA

**Production range, services:**

- Immunomodulation / inflammation
- CNS studies
- Dermatology / cosmetics
- Oral Care
- Nutraceuticals
- ADME, toxicity

## WITec GmbH

Lise-Meitner-Str. 6  
89081 Ulm

Phone: +49 (0) 731 14 07 00  
Telefax: +49 (0) 731 14 07 02 00  
info@witec.de  
www.witec.de

## Contact person:

Harald Fischer, Marketing Director

**Employees:** 53

**Founding year:** 1997

## Branches:

Knoxville, Tennessee, USA  
Singapur, SGP  
Peking, CHN  
Barcelona, ESP  
Tokyo, JPN

## Fields of Activity:

### Business model

- Production
- Supplier

### Biotech sector

- Red biotechnology

### Experts in

- Analytics

### Production range, services:

- 3D Raman Imaging / Confocal Raman Microscopy
- Scanning Probe Microscopy: AFM, SNOM
- Correlative Microscopy: Raman-SEM, Raman-AFM, Raman-SNOM

WITec is a manufacturer of high-resolution optical and scanning probe microscopy solutions for scientific and industrial applications. Focusing on innovations and constantly introducing new technologies, WITec is the leading expert for a wide variety of optical, structural, and chemical imaging tasks. Areas of application for WITec's Imaging systems include life science, biomedical research, polymer sciences, pharmaceuticals, geo-science, and nanotechnology.

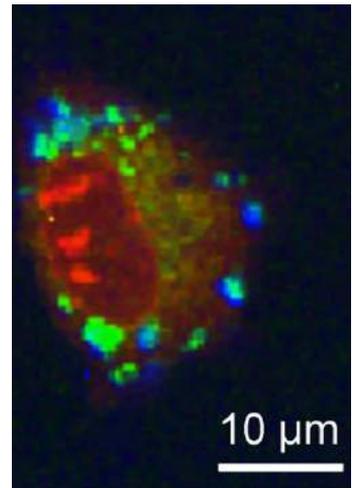
### alpha300 microscope series

The alpha300 series for high-resolution 3D Raman imaging and Scanning Probe Microscopy is one of the most advanced and flexible nano- and macro-analytical research tools available. A modular setup allows for a variety of configurations or extensions to meet individual scientific requirements or budget environments. For high-resolution chemical imaging the WITec Confocal Raman Microscope alpha300 R provides the ability to perform in-situ Raman imaging at a lateral resolution down to 200 nm. Confocal Raman Microscopy allows imaging of the chemical properties of a sample nondestructively while requiring no labeling and only minimal sample preparation if any.

The alpha300 *access* is a micro-Raman single-spot analysis and mapping microscope. It was specifically engineered for budget-conscious customers with high demands on instrument performance.

### Correlative Microscopy

A modular product line allows the combination of different microscopy techniques such as Raman, SEM, NSOM, Profilometry or AFM in one instrument for high-performance correlative microscopy.



# Imprint

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BIOPRO Baden-Württemberg GmbH  
Breitscheidstraße 10 | 70174 Stuttgart/Germany  
Phone: +49 (0) 711 21 81 85 00 | Fax: +49 (0) 711 21 81 85 02  
E-mail: [info@bio-pro.de](mailto:info@bio-pro.de) | [www.bio-pro.de](http://www.bio-pro.de)  
[www.gesundheitsindustrie-bw.de](http://www.gesundheitsindustrie-bw.de) | [www.biooekonomie-bw.de](http://www.biooekonomie-bw.de)

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