# Whitepaper:

## **Overview of European Medtech Clusters**



## **European Medtech Clusters Overview**

This blogpost gives an overview of the biggest and most significant Medtech clusters within Europe, who are collaborating with worldwide known medical brands and institutions that are doing researches in medical sphere.

The overview also includes the list of partners of those clusters together with the upcoming events that are held on behalf of them.

## 1. BioValley (Locations: Switzerland/France/Germany)

- BioValley The Life Science Network was founded in 1996. The vision of the founders was to bring together **Alsace (France)**, **South Baden (Germany) and Northwestern Switzerland**. It was one of the first European initiatives for the promotion and development of life sciences.
- The three border regions Alsace, northwest Switzerland and South Baden stood out individually in the mid-90s for their outstanding potential in the field of life sciences:

#### Companies

- Outstanding scientific facilities (four universities, specialised colleges of higher education, research centres, etc.).
- Headquarters of global players Novartis and Roche as well as CIBA, Clariant, Lonza and Syngenta.
- Branches of large pharmaceutical companies, such as DSM, Johnson & Johnson, Eli Lilly, Pfizer, Sanofi and Moderna.

#### **The Cluster**

- Today, the BioValley cluster compromises three associations (Alsace BioValley, BioValley Deutschland and BioValley Basel) and the BioValley Platform in Germany. Our joint mission:
- A network of competences and know-how which includes companies, research institutes, universities as well as economic development agencies and public organizations the field of Life Sciences.
- The BioValley Cluster accompanies businesses and laboratories in the Life Sciences sector looking to innovate, grow or locate in the trinational BioValley region



## 2. **BioRN** (Location: Heidelberg (Germany))

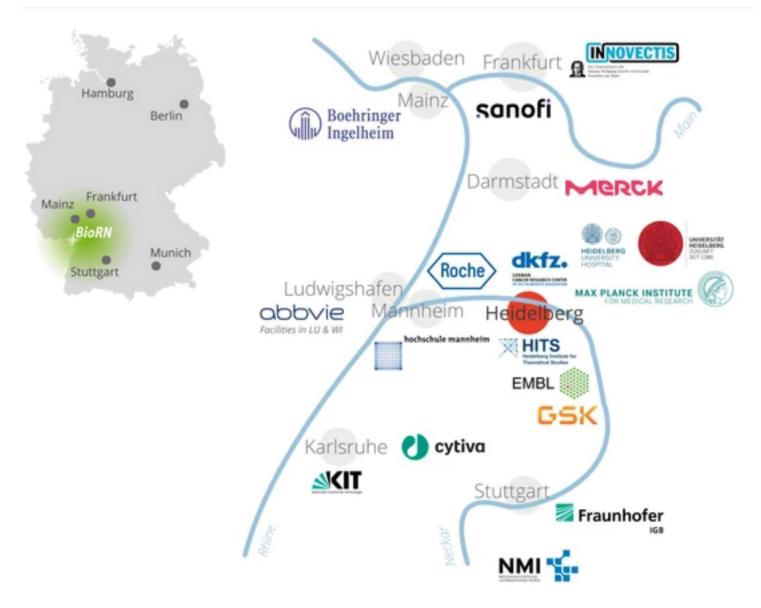
- It is a science and industry innovation cluster based on the constant interaction between academia, industry and government for the production, transfer and application of knowledge in the Life Sciences.
- Founded in 1996, BioRN is the unique combination of all these relevant innovation stakeholders in the Life Sciences around Heidelberg at the border between Baden-Württemberg, Rhineland-Palatinate and Hesse, and connected by the rivers Rhein, Main and Neckar.

#### Members

- BioRN is a non-profit network counting more than **140 members**. It includes top universities, research institutions and Technology Parks. Ten global pharmaceutical companies have R&D sites or are active in the BioRN network. The ecosystem is completed by a large range of small and medium-sized enterprises as well as local government organizations and interest groups.
- BioRN establishes initiatives to nurture and extend networks between the key regional innovation stakeholders and towards other innovative ecosystems worldwide, with regular networking events and working groups. It stands for the promotion and visibility of the Life Science region at national and international level. Through a proactive dialog with public (health) authorities, BioRN influences policies, attracts investment and establishes new infrastructures in the biotechnology and healthcare field. BioRN is the central point of contact for external enquiries regarding Life Science topics and support inter-institutional initiatives to facilitate applied biosciences in the region, to foster health innovations and to create a rich translational ecosystem. BioRN especially leverages the unique combination of global pharmaceutical companies and leading academic institutions. BioRN initiates and manages different programmes to support the development of (academic) research ideas through all necessary development stages
- Member List





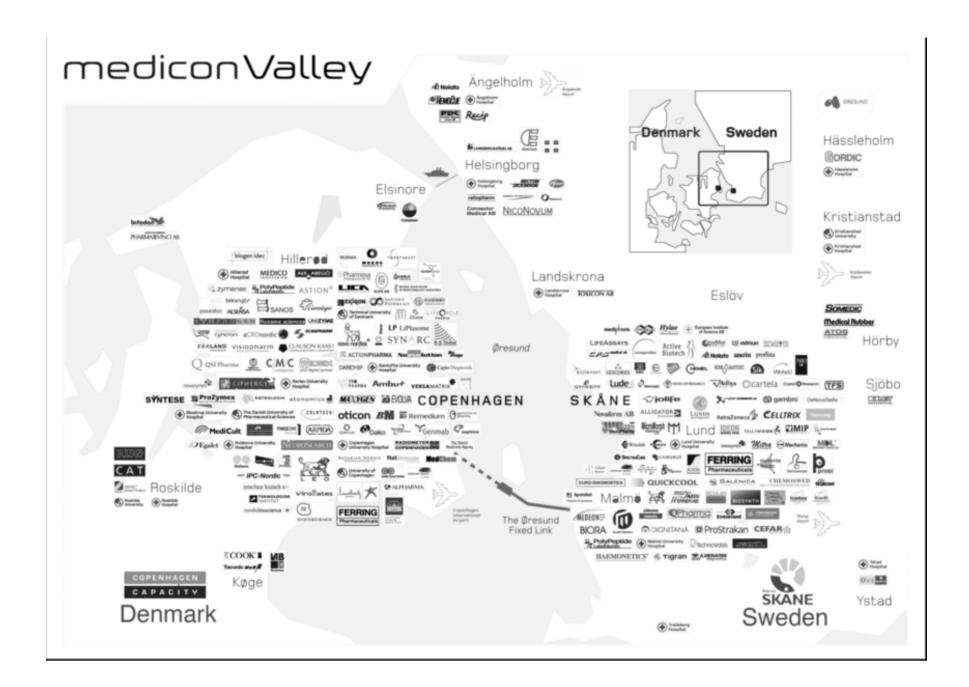




## 3. MEDICON VALLEY ALLIANCE (Locations: Denmark, Sweden)

- Medicon Valley Alliance (MVA) is a non-profit membership organization in the Danish-Swedish life science cluster Medicon Valley. Our +300 members represent the region's triple helix and include universities, hospitals, human life science business, regional governments, selected municipalities and service providers. We create value for our members by co-hosting, launching and driving meetings, networks, seminars, conferences and projects, that strengthen the collaboration, networking and knowledge-sharing in the regions life science community, create critical mass and help realizing the full potential of Medicon Valley.
- Our vision is to be a well-known and respected member driven contributor to the realization and
  positioning of Medicon Valley as the most competitive and vital life science cluster in northern
  Europe. We are always searching for innovative ways to make Medicon Valley an even more
  integrated and attractive bi-national life science cluster. Synergy is the key to this.
- Medicon Valley as a whole is greater than the sum of its parts. Our distinct focus on the entire
  cluster enables us to spot synergies and use our events and activities to create a regional
  "market place" for the exchange of ideas, knowledge and services. As the only representative of
  the region's life science community, we are in a unique position to explore and help our
  members realize these synergies. We work tirelessly to bridge borders, disciplines and the
  public private divide.
- Michael E. Porter from the Harvard Business School wrote, "a cluster allows each member to benefit as if it had greater scale or as if it had joined with others without sacrificing its flexibility" in his seminal article "Clusters and the New Economics of Competition" from 1998. It is this exact synergy effect, which we continuously seek to unleash for our members through our strategic initiatives and day-to-day activities.
- Member list







## 4. <u>High-Tech Gründersfonds (HTFG)</u> (Location: Germany)

- High-Tech Gründerfonds is a German venture capital firm that focuses on early-stage startups in the high-tech sector, including medical technology. They provide funding and support to innovative companies developing medical applications, helping them bring their products to market and scale their businesses.
- The HTGF is a venture capital investor for innovative technologies and business models. We successfully support the best founders whose ideas can revolutionize entire industries and improve people's lives. From foundation to exit.
- The founding of the High-Tech Gründerfonds (HTGF) was the result of a working group made up of representatives from the Federal Ministry of Economics, industry and industry experts in 2005. Their goal: to revitalize the market for start-up financing, which was completely idle at the time. In the aftermath of the bursting of the New Economy Bubble, financing in the seed phase came to an almost complete standstill due to the high risks. Then as now, the focus of the initiative was on tech start-ups with significant growth potential, whereby the decision as to whether the HTGF invests in a start-up or not is made according to purely market criteria.

#### Members

- Success proved the initiators right. In the first year, the HTGF financed 40 high-tech start-ups that was twice as much financing of this type as there had been in Germany the year before.
  The HTGF has successfully launched a total of four funds to date, financing 700 companies, of
  which more than 160 have already been successfully sold or listed on the stock exchange. In
  addition to the seed investments, a total of over 4.5 billion euros in private funds have flowed
  into the portfolio companies of the HTGF via follow-up financing.
- The HTGF is the outstanding example of a successful public-private partnership in the start-up ecosystem in Europe. With our funds, their investors and our personal commitment, we make a significant contribution to the consistent further development of the start-up ecosystem in Germany and throughout Europe.
- The HTGF has around 1.4 billion euros under management from the four funds. The proportion
  of private companies increased from fund to fund. 45 private companies are invested in HTGF
  IV. Your stake in the fund is more than 30 percent. The result: the HTGF can act as flexibly as
  private funds.
- The headquarters of the High-Tech Gründerfonds is in Bonn. Since 2018 he also has a branch in Berlin.



## 5. MedTech Twente (Location: Netherlands)

- Within MedTech Twente, businesses and health care institutions work together closely with researchers from the knowledge institutions to develop the health care innovations of tomorrow. Innovations are developed, validated and implemented in close collaboration between parties, facilitated and accelerated by supporting organizations such as Novel-T, OostNL, VitaalTwente, HIP, WTC and HealthValley. There is a reason why many successful MedTech companies - including Demcon, Medspray, Micronit, Lipocoat and IAMFluidics - were established and have grown in Twente.
- Large network with (inter)national partnerships
- From validation and support programs to steady business
- Access to high-grade labs and innovation centers

The Upcoming Events

## Organizing partners













### Our content partners



















## 6. BioM Biotech Cluster Development GmbH (Location: Germany)

- The BioM company database includes all biotechnology stakeholders in Bavaria: biotechnology companies, service providers, suppliers, consultants, investors and many more.
- BioM has been the development and management organization of the Munich Biotechnology Cluster since 1997. The BioM Cluster encompasses the Greater Munich area and today includes around 340 biotechnology and pharmaceutical companies as well as associated service providers. The core competence of the region is the development of innovative therapeutics, diagnostics, and underlying technologies, especially for personalized medicine.

#### Members

- BioM also coordinates the network of Bavarian biotechnology regions in the Cluster
  Biotechnology Bavaria as part of the Cluster Initiative Bavaria. In this association of Bavarian life
  science locations, BioM connects interest groups and companies, and represents them
  internationally.
- BioM supports Bavarian biotech companies at every stage of setting up their business. For this, BioM has developed a unique support program, tailor-made for aspiring start-ups and entrepreneurs in the life sciences sector - the virtual incubator BioM inQlab. In total, BioM has supported more than 250 start-up companies over the last 25 years.

#### Partners

#### **Munich Bavaria**

- All Bavarian biotech regions in the Bavarian Biotechnology Cluster.
- The Bavarian Research Alliance supports Bavarian scientists from Bavarian universities and players from the economy in the competition for European research funds and offers an overview of the Bavarian research associations.
- The Bavarian Research and Innovation Agency offers integrated funding advice, especially for EU funding.
- The Bavarian Patent Alliance is the central patent and marketing agency for 28 Bavarian universities.
- Bayern International The Bavarian Society for International Economic Relations mbH promotes the export business of small and medium-sized companies and does location marketing for Bavaria.
- BayStartUP! offers support for founders throughout Bavaria from the central locations in Nuremberg and Munich and organizes the Bavarian business plan competitions in the tried and tested form.
- Chemie Cluster Bayern network of research institutions and companies in the chemical industry.
- Cluster Nutrition Bavaria Network of the Bavarian agriculture and food industry
- The Bavarian Nanotechnology Cluster brings together nanotechnology skills from business, science, politics and teaching.
- Gründerland Bayern is an initiative of the Bavarian State Ministry for Economic Affairs, Regional Development and Energy. With its offers, it supports (prospective) founders in all sectors and in every start-up phase.



- IBB The IBB Netzwerk GmbH is a network and service organization in the field of industrial biotechnology.
- The Chamber of Industry and Commerce for Munich and Upper Bavaria is the largest German IHK. It works as an organization for all companies in industry, trade and services.
- Invest in Bavaria International investor and location marketing, source of information about settling in Bavaria or cooperation with companies
- IZB The Biotechnology Innovation and Start-Up Centers (IZB) offer state-of-the-art laboratory units and office space for young biotechnology companies.
- Munich Network offers active support for the establishment, growth and long-term success of technology companies. Munich Network connects the companies with the regional innovation forces and connects them with the most important technology regions worldwide.
- You can find out everything about the location factors in the region and the easiest way through the administration in the Department for Labor and Economics in the City of Munich.
- Bavarian State Ministry for Economics, Media, Energy and Technology
- Bavarian State Ministry for Science, Research and Art
- Center for Digitalization.Bavaria bundles activities in the area of digitalization in Bavaria, including the topic platform Digital Health/Medicine.

#### Germany

- Bio Germany German biotechnology industry organization
- The German Patent and Trademark Office (DPMA) based in Munich is the central authority in the field of industrial property protection in Germany.
- The German Biotechnology Industry Association (DIB) is the biotechnology association of the German Chemical Industry Association (VCI).
- Association of German Biotechnology Companies (VBU) of Dechema
- The German Research Foundation is the central self-governing scientific institution for the promotion of research at universities and publicly funded research institutions in Germany.
- The DGPharMed is a scientific society with about 1300 members an association of doctors and scientists. The members work in the pharmaceutical industry, in contract research institutes or other research institutions. DGPharMed has been promoting pharmaceutical medicine since it was founded in 1973.
- The Association of Biology, Biosciences and Biomedicine in Germany eV (VBIO, formerly vdbiol) is a non-profit, scientific association for the promotion of biology and biomedicine in science, teaching and practice. The vast majority of life sciences societies are organized there.

- Association of Biological Technical Assistants (VBTA)
- Association of the Chemical Industry (VCI)
- The Biotechnological Student Initiative (btS eV) is an independent student association with the aim of providing an insight into practice and facilitating the transition to the world of work.
- International
- European Commission Biotechnology
- EuropaBio is an association of the European biotech industry and does lobby work.
- European Federation of Biotechnology (EFB) is an association for the promotion of European biotechnology.
- European Biotechnology Foundation
- EurOffice Services Network (EOS)
- Biotechnology Industry Organization (BIO) is the largest biotech industry association in the world.
- miscellaneous
- Funding database Information on funding programs and financial aid from the federal government, the states and the EU
- GMP Navigator Information service on the subject of Good Manufacturing Practices





## 7. BioRegion of Catalonia (Location: Spain)

- The BioRegion is the life sciences and healthcare innovation ecosystem in Catalonia, meaning the group of companies, research groups and bodies, hospitals, universities, administrations, researchers and entrepreneurs, innovation and knowledge-transfer support structures working in Catalonia in this strategic sector.
- With a population of more than 7.5 millions and territory comparable to that of European countries like Belgium or the Netherlands, Catalonia has the most dynamic life sciences ecosystem in Spain and one of the most active in Europe. Biocat is the body responsible for dynamizing and promoting the BioRegion of Catalonia.
- Members
- The BioRegion of Catalonia is made up of more than **1,300 companies and 91 research entities** and represents 8.7% of GDP and 8% of employment in Catalonia. In the last three years, the number of international investors who have opted for start-ups in the BioRegion of Catalonia has almost doubled.
- The start-ups of the BioRegion of Catalonia, the Catalan ecosystem of life sciences and health, have attracted in 2020 a total of 226 million euros in financing, 84% more than the previous year.
- For the third time in a row, the Financial Times has recognized Catalonia as the best region to invest in southern Europe for the period 2020-2021.
- Network



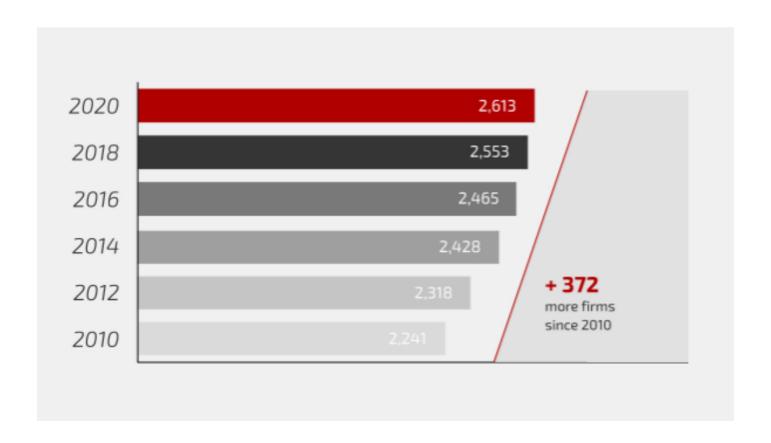
## 8. BioCity: Science Park (Location: United Kingdom)

- Helping foster innovation at the UK's largest life science incubation hub
- Established in 2002, BioCity was one of the first (and now the largest) Bioscience incubators offering state of-the-art laboratories alongside commercial office space to support both early stage and established companies in the life sciences sector. A former MSD research facility, BioCity Glasgow is a 20-acre biotech incubator and is nestled amongst landscaped gardens where companies based at the site are able to enjoy benefits often considered only available within high-end coworking environments. BioCity's occupiers have access to a stylish coffeehouse and restaurant 'Nowhere', air hockey, pool tables, a gym, and numerous cozy breakout spaces, offering a place for collaboration between companies and helping BioCity's brand stand out in a competitive time for the industry.

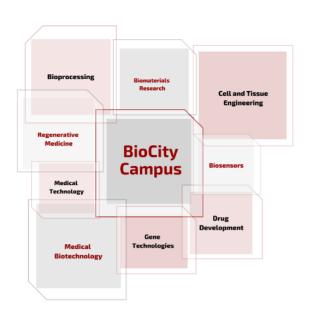
#### Adapting for innovation

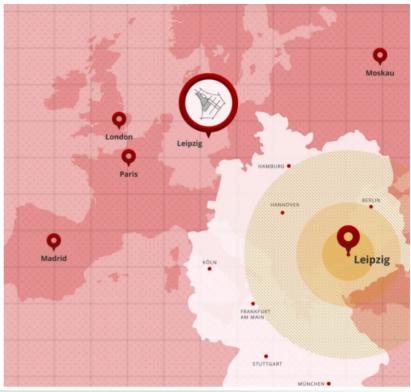
- With the sector becoming increasingly competitive and science park members able to choose from a wealth of locations, the industry is adapting to ensure that operators are able to offer a wide range of needs for a diverse set of occupiers. Mission-critical software that underpins a dynamic flex-space, innovation hub or science park operation ensures
- that providers can offer an environment where startups and large business alike are empowered to drive innovation.

#### Members:











- University of Leipzig Medical Center
   German National Library
   Max Planck Institute

- 3 Max Planck Institute
  4 Max Planck Institute
  5 Veterinary Medical Hospital
  6 BIO CITY LEIPZIG
  7 BioCube
  8 Fraunhofer IZI
  9 Life Science Space in use by the State of Saxony

  10 Innovation Center
- **11** German Centre for Integrative Biodiversity Research (iDiv)
- 12 Orthopädie- & Reha-Technik-Wolf (orthopedic and rehabilitative technology)
- 13 Haema AG
- 14 Analysen Service GmbH15 Town archives Leipzig
- 16 P2 Office
- 17 BioSquare
  18 CLL CityLab Leipzig
  19 LAB\_1



## 9. The Oxford Science Park (Location: United Kingdom)

- One of Europe's leading science parks, The Oxford Science Park is majority owned by Magdalen College Oxford in strategic partnership with an affiliate of global investor GIC. With the partners sharing a long-term outlook, they are focused on the development of the Park to support the ambitious growth of new and existing science and technology occupiers from the UK and abroad.
- The overall development concept for The Oxford Science Park derives from a master plan, which seeks to provide a quality environment for research and business activities. The concern with quality extends beyond the buildings and the facilities they offer, and the plan calls for the integration of buildings, car parks and roads into an attractive landscape providing pleasant surroundings for work and relaxation.
- Since development began in 1991, the Park has evolved into a dynamic and vibrant community in which companies of all sizes enjoy a high quality and attractive working environment. Over a half a million square feet of business and laboratory accommodation has been completed and work on a new phase of developments is currently underway.
- The 'HUB' is a suite of small offices within the original Magdalen Centre, and offers smaller sized (80 125 sq ft) furnished office space suitable for one or two person companies on convenient and flexible terms.



## 10. Medtech - Technology for health (Location: Germany)

#### 750 companies and a strong research landscape

A camera-based visual aid that reads aloud and describes the surroundings to the blind and visually impaired, a robotic suit that helps people learn to walk again after a serious illness, or continuously improved pacemakers – medical technology can maintain and restore health and significantly improve the quality of life of many people. A modern healthcare system would be inconceivable without medical technology, whose products have long since become indispensable for the diagnosis and treatment of diseases. Many of these innovative products are developed, produced and continuously improved in North Rhine-Westphalia.

Well-known large corporations as well as many small and medium-sized enterprises (SMEs) are active in NRW. A total of around 750 medical technology companies generate sales of over two billion euros a year. A large number of these companies also actively conduct research. While the large players are dedicated to broad engineering and scientific research topics, the SMEs pursue highly specialized projects.

In medical technology in particular, new developments determine market success. Companies in Germany generate a third of their sales with products that are no more than three years old. In NRW, they benefit from a strong research landscape with numerous Max Planck, Fraunhofer and Leibniz institutes as well as over 60 technology and start-up centers. Close cooperation between industry and research is considered one of the recipes for success in the development of new medical technologies. NRW is thus a growth and innovation engine for medical technology.

#### Cutting-edge research and a broad range of studies in NRW

As these examples show, the industry benefits from highly specialized research in North Rhine-Westphalia. These include the Institute for Applied Medical Engineering at RWTH Aachen University (AME), the Fraunhofer Institute for Microelectronic Circuits and Systems (IMS) in Duisburg, the Fraunhofer Institute for Software and Systems Engineering (ISST) in Dortmund and the Institute for Artificial Intelligence in Medicine (IKIM) in Essen.

For research-intensive products and services, companies in the sector also need highly qualified young people. Universities and colleges in Aachen, Bonn, Bochum, Düsseldorf, Essen, Cologne and Münster ensure this with a wide range of technical courses. Seven medical faculties, six statewide university hospitals and 80 teaching hospitals complement the training infrastructure for the healthcare industry.

North Rhine-Westphalia is home to a large number of university and non-university research institutions, numerous university clinics and hospitals, as well as innovative start-ups, hidden champions from the SME sector and globally active companies. With this diverse landscape, NRW offers the perfect environment for research, development and clinical testing of innovative medical technology and medical devices.

750
medical technology
companies
are active in NRW

billion euros in sales are generated annually by medtech companies

More than 42,000 students
in medical subjects

of all German hospitals
are located in NRW

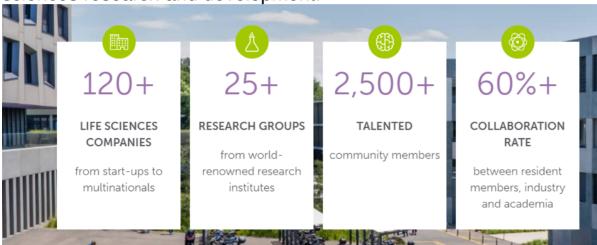


## 11. Biopôle (Location: Switzerland)

Founded in 2004 by the canton of Vaud public authorities, Biopôle SA is a private, not-for-profit
organisation, which owns, manages and promotes the life sciences campus. We believe that
interpersonal and inter-company relationships are the key to successful innovation. That's why
we focus on creating an environment in which you and your teams can prosper by collaborating
with the Biopôle community and beyond.

#### Members

Our campus might have impressive facilities and an ideal location, but it's the cluster of 130 multinationals, scale-ups, start-ups, SMEs, foundations and research institutes that make Biopôle one of the most attractive hubs of innovation in Europe. Biopôle is the home of leading companies, prestigious research institutes, clinical research departments and dozens of other research entities – all collaborating, inspiring and learning from each other. With diverse skill sets, priorities and business approaches, the Biopôle community works together to advance life sciences research and development.





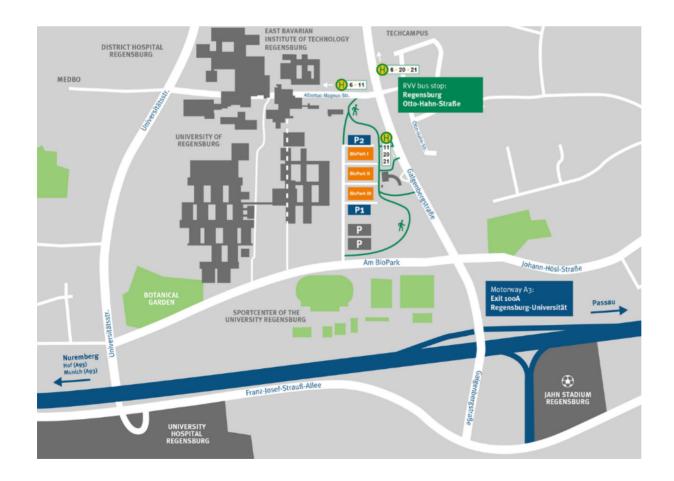


## 12. BioPark Regensburg (Location: Germany)

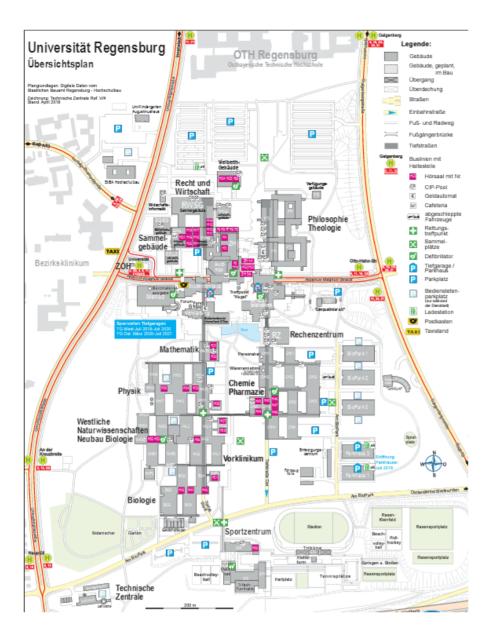
BioPark Regensburg GmbH is an enterprise of the City of Regensburg and part of the promotion of the economy. Our key task is promoting biotechnology, medical engineering, diagnostics and analytics as well as healthcare at the location and in the region. To do this for one we operate a three laboratory building with an area of a total of 18,000 m2 on the grounds of the University of Regensburg, in which there are currently 35 leaseholders with 676 employees. For another we coordinate the active cluster management of the Regensburg Bioregion from here with at this time 66 companies and 5,340 employees in East Bavaria.

In 2019, BioPark Regensburg celebrated its 20th anniversary. During this time, 661 million euros, including 154 million euros in venture capital, 326 million euros in equity and 180 million euros in subsidies, have been invested in the development of the life sciences, 42 million euros of which in the three BioPark buildings alone. Today, 35 companies and institutes with 676 employees are active here on an area of 18,000 m2. The BioPark supports start-up activities at the Regensburg location with special offers, such as Startup Weekend, Career Day or the personal interview. In the last 20 years, 64 life science start-up teams from Eastern Bavaria participated in the Northern Bavaria Business Plan Competition, including very successful companies such as Geneart, today part of the US company Thermo Fisher Scientific with 310 employees.

In the field of life sciences and health care, Regensburg has a lot to offer on a campus with the university here, the East Bavarian Technical University (OTH), the university hospital, the medbo distric hospital and the two municipal start-up and technology centers BioPark and TechBase. The main areas of research include immunology, cell therapy, transplantation medicine, neurology, oncology and medical technology. With the project "Healthcare Regensburg - managed by BioPark", a new cluster initiative of the city of Regensburg was launched in the field of healthcare management. In 2020, 21,600 employees with social security insurance worked in this sector in the Regensburg region, with the industry turning over a total of €2.7 billion at the location.







## **Members**

66 companies and 5,340 employees in East Bavaria.









We enable global growth for medical device companies

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