Why You Should Research in Austria: Life Sciences
The Best Contact Partner for Business Location Issues

ABA – Invest in Austrian offers you comprehensive service – from funding and market opportunities to tax regulations. Experienced ABA experts provide you with unbureaucratic support, putting their know-how at your disposal – at no charge at all.

Are you considering setting up business operations in Austria or intensifying your research activities? ABA – Invest in Austria assists you with a complete range of cost-free services, including competent consulting in selecting an optimal site, support in dealing with public authorities and funding bodies, on tax and labor issues or in identifying contact partners. In addition, ABA supports you with its broad-based network of experts and cooperation partners.

More information at: investinaustria.at
Why You Should Research in Austria

Innovative companies from across the globe enjoy optimal conditions in Austria

Strong funding
14% research tax credit for large companies and SMEs

Tax advantages
e.g. 30% tax deduction for migrants working as scientists and researchers

Stability
Security and quality of life for your company and employees

Top researchers and specialized employees
Excellent specialized employees thanks to technical schools and top international researchers

Close-meshed networking
Close ties between the scientific and business communities

Multifaceted ecosystem
Fascinating ecosystem featuring a highly interdisciplinary approach and diversity
Cross-Linked Creativity

Strategic partnerships create an ideal environment for growth

Innovation optimally thrives in creative, interdisciplinary ecosystems. Diversity and strong networking have always characterized the Austrian life sciences community. Top researchers and “serial entrepreneurs” work side by side, whereas companies and intellectual property come together via idea portals. Clusters and competence centers with regional priorities in red, green and white biotechnology promote a lively cooperation between science and business, university-level and non-university research.

Companies and startups in the therapeutic, medical technology and diagnostic sectors and providers of key technologies create a dynamic environment for research. Every second biotech company is located in the hot spot of Vienna, including the Campus Vienna Biocenter, one of the leading biomedical research centers in Central and Eastern Europe. The focal points of the research being conducted include oncology, neurology, vaccines and immunology as well as precision medicine and e-health.
INVEST IN AUSTRIA

Regional centers
Life Sciences

**Vienna**
- LISA Vienna
- 434 companies, 18 research institutions, 33,000 students

**Upper Austria**
- MTC
- 94 companies, 3,583 staff

**Lower Austria**
- Technopole
- 70 companies, 4,324 staff

**Tyrol**
- Cluster Life Sciences
- 50 companies, 5,267 staff

**Styria**
- human.technology.styria
- 70 companies, 4,324 staff

**Vorarlberg**
- 8 companies, 332 staff

**Salzburg**
- 29 companies, 3,917 staff

**Carinthia**
- 15 companies, 748 staff

**Burgenland**
- 5 companies, 72 staff

**Vienna Medicine**
- MedTech, e-health

**Tyrol Medicine**
- MedTech, e-health

**Upper Austria Medical technology**
- MedTech, e-health, production

**Styria Medical technology**
- e-health, diagnostics, production, plant engineering

**Lower Austria Medical technology**
- MedTech, agricultural and food biotechnology, production

---

**Vienna**
- Medicine, medical technology/e-health, production

**Tyrol**
- Medicine, medical technology/e-health, production

**Upper Austria**
- Medical technology

**Styria**
- Medical technology/e-health, diagnostics, production, plant engineering

**Lower Austria**
- Medical technology, agricultural and food biotechnology, production
Broad-Based “Flagship” Projects

Application-oriented education and training ensures an ongoing supply of specialists

Top researchers as well as highly-qualified specialized personnel are required for practical implementation in order to make innovations marketable. The life sciences business location of Austria offers both. There is a long tradition here of application-oriented education, whether at the numerous technical colleges (HTL), schools featuring practical technical training or at the universities and universities of applied sciences offering more than 550 different courses of study. The Vienna Biocenter campus represents an outstanding example of the alliance forged between science and the business world. It is one of the leading biomedical research hubs in Central and Eastern Europe. About 30 biotech companies and startups with some 500 employees work here side by side, along with more than 1,700 researchers from 40 nations. A total of 1,300 students learn at the university institutes and the campus of the university of applied sciences. The Research Institute for Molecular Pathology (IMP) comprises the core of the Vienna Biocenter. Founded by Boehringer Ingelheim and Genentech in 1985, IMP is devoted to non-application-specific basic research in molecular biotechnology. Another flagship is the Institute for Molecular Biotechnology (IMBA) belonging to the Austrian Academy of Sciences (ÖAW). For example, it conducts research into the fundamental causes of various diseases. 72 laboratory workplaces of particular importance to startups will be offered here on an additional space of 1,000 m² starting in 2019.

<table>
<thead>
<tr>
<th>Technical colleges (HTL)</th>
<th>Biomedicine, health and food technology, chemistry: Vienna (3), Salzburg, Innsbruck, Dornbirn, Klagenfurt, Hollabrunn, Wieselburg, Wels, Leonding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities of applied sciences</td>
<td>University of Applies Sciences FH Campus Wien (molecular biology), University of Applied Sciences Technikum Wien (e-health, biomedical engineering), University of Applied Sciences Wiener Neustadt (medical technology), University of Applied Sciences Upper Austria (medical technology, medical informatics), Carinthia University of Applied Sciences (medical technology, medical informatics), University of Applied Sciences FH Joanneum (e-health), FH Vorarlberg University of Applied Sciences (AAL)</td>
</tr>
<tr>
<td>Universities</td>
<td>Medical University of Vienna, University of Vienna (24 life sciences departments), University of Veterinary Medicine Vienna, University of Natural Resources and Life Sciences, Vienna (applied biotechnology), Vienna University of Technology, Graz University of Technology, Medical University of Graz, Karl Franzens University of Graz (materials sciences, biomedicine), Medical University of Innsbruck, MCI Innsbruck, Danube University Krems, Private University for Health Sciences, Medical Informatics and Technology (UMIT)</td>
</tr>
</tbody>
</table>
**Strong research networks**

In addition to research carried out at top-notch universities, non-university research in Austria also enjoys a worldwide reputation. For example, in the field of life sciences, the Research Center for Molecular Medicine (CeMM) belongs to the Austrian Academy of Sciences (ÖAW). The Austrian Institute of Technology (AIT) is Austria’s largest research and technology organization. Many research facilities are university spin-offs or were co-founded by companies, such as the Institute for Molecular Pathology (IMP) in Vienna. Moreover, five Competence Centers for Excellent Technologies (COMET centers) involved in the field of life sciences bundle the competencies of business and science in the fields of biomarker research, industrial biotechnology and big data analytics. Christian Doppler (CD) laboratories are devoted to application-oriented basic research. In this case, the research issue of a company is handled by a university or university of applied sciences.

<table>
<thead>
<tr>
<th>Lower Austria</th>
<th>Institute of Science and Technology (IST)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>COMET centers Austrian Center for Medical Innovation and Technology (ACMIT)</td>
</tr>
<tr>
<td>Vienna</td>
<td>Campus Vienna Biocenter, Institute for Molecular Pathology (IMP), Institute of Molecular Biotechnology (IMBA), CeMM Research Center for Molecular Medicine, Ludwig Boltzmann Society, Max F. Perutz Laboratories (MFLP), Austrian Institute of Technology (AIT)</td>
</tr>
<tr>
<td>Tyrol</td>
<td>Onkotyrol Center for Personalized Cancer Therapy, CD Laboratory Innsbruck: CD Laboratory for Viral Immunotherapy of Cancer, I-CARE Laboratory</td>
</tr>
<tr>
<td>Styria</td>
<td>Joanneum Research Forschungsgesellschaft, Biobanking and BioMolecular Resources Research Infrastructure (BBMI-ERIC), COMET centers: Austrian Centre of Industrial Biotechnology (ACIB), Austrian COMET K1 Center for Biomarker Research (CBMed), Research Center Pharmaceutical Engineering (RCPE), Research Center for Data-Driven Business &amp; Big Data Analytics</td>
</tr>
<tr>
<td>Salzburg</td>
<td>CD Laboratory for Biosimilar Characterization</td>
</tr>
</tbody>
</table>
14 Euros Tax Credit for Every 100 Euros in R&D Investments

Suitable funding for good ideas

Research takes place in many places. For this reason, small and medium-sized enterprises (SMEs) as well as large companies are equally supported. Thanks to the generous research tax credit, 14% of R&D expenditures incurred by research-based firms can be deducted for tax purposes. The research tax credit comprises an effective complement to direct research funding.

Furthermore, Austria offers attractive tax advantages.

There is a tax deduction for migrants working as scientists and researches applying to 30% of research-related income, and can be utilized for a period of up to five years. The tax-exempt apprenticeship allowance, tax loss carryforwards and the possibility to transfer hidden reserves are also among the tax incentives available to companies. Austria with its average effective tax burden of 22.4% ranks in the middle of the pack in the EU.

Direct funding programs for R&D champions

The Austrian Research Promotion Agency FFG and Austria Wirtschaftsservice (aws) support research-based companies through direct funding programs. FFG funds application- and business-oriented research. A total of EUR 615 million was invested in 2016, and 3,307 new projects were approved. As a funding bank, aws supports entrepreneurs and established companies in all phases of their corporate life cycle, providing loans, grants, guarantees as well as participation and equity capital. In 2016, financing amounted to about EUR 811 million.

In addition, the Austrian Science Fund (FWF) supports fundamental research. The FFG startup Funding program assists startups by providing project financing comprising up to 70% of total costs. The aws startup Center offers an extensive support package to new companies.

→ www.aws.at
→ www.ffg.at
Precision medicine, known also as “personalized medicine”, is the most important trend impacting the field of medicine in the 21st century. Instead of using a “watering can” figuratively speaking, it involves customized treatment of individual patients. The “right therapy for the right patient at the right time” is based on research findings from diagnostic testing as well as investigations into the genetic material of people. It is designed to sustainably improve the chances of recovery from cancer and rare diseases.

The Center for Precision Medicine, which should house Europe’s leading program in the field of personalized medicine, is to be established in the Vienna General Hospital (AKH) by the year 2025. Together with the Medical University of Vienna, the hospital will comprise a closed large campus enabling the increasing convergence of basic research, translational and clinical research as well as teaching.
A Decision in Favor of Austria

International players are convinced of the advantages of Research Location Austria

Foreign life sciences companies in Austria (selection)

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Activity Description</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boehringer Ingelheim</td>
<td>Vienna</td>
<td>Regional Center Vienna (RCV), global cancer research center</td>
<td>boehringer-ingelheim.at</td>
</tr>
<tr>
<td>Shire (earlier: Baxalta BioScience)</td>
<td>Vienna, Orth/Donau</td>
<td>Development and production Biopharmaceuticals for rare and undertreated diseases (hematology, oncology and immunology). Austria is Baxalta's most important location outside of the USA.</td>
<td>shire.at</td>
</tr>
<tr>
<td>Otto Bock</td>
<td>Vienna</td>
<td>Research &amp; development as well as the production of high-tech prostheses for the global market</td>
<td>ottobock.at</td>
</tr>
<tr>
<td>Sandoz (Novartis)</td>
<td>Tyrol</td>
<td>Global competence center for biotechnology research and production of generic drugs</td>
<td>sandoz.at</td>
</tr>
<tr>
<td>Bionorica</td>
<td>Tyrol</td>
<td>Research into medicinal plants focusing on analytics, development and production</td>
<td></td>
</tr>
<tr>
<td>Octapharma</td>
<td>Vienna</td>
<td>Development and production of medicines from human plasma</td>
<td>octapharma.at</td>
</tr>
</tbody>
</table>

Production:
- Merck
- Takeda
- Pfizer (Impfstoffe)
- Octapharma

Clinical research:
- Bayer
- Janssen-Cilag
- GlaxoSmithKline
- Sanofi Aventis
- Eli Lilly
- Pfizer

Diagnostic and imaging methods:
- Siemens
- GE Healthcare
- Agfa Healthcare
- Bender MedSystems
- Fresenius
- Carl Zeiss
- MED-EL
The Business Location with Added Value

How do you rate the basic conditions for conducting research in Austria?

The family-owned German company Boehringer Ingelheim ranks among the top 20 companies in terms of carrying out research. The Regional Center Vienna (RCV) is the site of biopharmaceutical research, development and production and the global center for cancer research. In 2016, ViraTherapeutics and Boehringer Ingelheim signed a long-term cooperation agreement in order to jointly develop a next-generation oncolytic virus therapy platform.

There is a broad spectrum of funding opportunities for university spin-offs, for example in the early stage, or mezzanine capital, in which one only pays back if the venture is successful. Austria Wirtschaftsservice is doing quite a lot to support young companies in large medical centers. There is a vigorous startup culture and very lively research activity, even though many pharmaceutical companies do not have their headquarters here. We have a pool of outstanding employees from across the globe. It is not difficult to get qualified staff and also to attract them to Austria from Europe. It is a pleasure to work here in the field of innovation.

German-born Dorothee von Laer is a medical doctor and Head of the Section for Virology at the Medical University of Innsbruck. Her research work particularly focuses on oncolytic viruses. She is a co-founder of ViraTherapeutics.

The economic and political conditions are stable, and the quality of life is excellent. The attractive research tax credit raised from 12% to 14% is a special bonus for this research location. The cultural environment enhances the overall attractiveness of the business location as a workplace, also for our international experts. In principle we have a relatively high level of education in Austria and we also get the specialists we need. Nevertheless, there is still room for improvement despite the high educational level, especially in the field of science. An optimization of the economic framework would also be desirable.
The Surgical Robot for the Brain

Innovative solutions for even more precise neurosurgery

From Tyrol: The Tyrolean medical technology company iSYS Medizintechnik has presented a new type of robotic system for minimally invasive surgery. It aims to enhance the precision of such surgical procedures in the brain and reduce operation times. The miniature robot is expected to be launched on the marketplace by the end of 2018, requires very little space compared to previous systems and can be easily used by the respective surgeons. The acquisition costs should be considerably lower than large, commonly used surgical robots in order to enable broad-based deployment in clinical routines. On balance, the developmental time for the system amounted to almost 15 years. The basic system is conceived as a platform and has already been certified in Europe and the USA. iSYS concluded a joint venture with Medtronic, the largest American medical technology company.
Ideas Plus Courage = Success

Startups find fertile ground in Austria for effective growth

The biotech scene in Austria is extremely lively, is well networked in manifold ways and has gained international recognition. Every second life sciences startup has set up operations in the Vienna life sciences hotspot. More than half of all Austrian life sciences companies were established over the past two decades, many as spin-offs from academic institutions. Vaccines and oncological research have a long history in Austria. Many startups in these areas still bear witness to this today.

Life sciences startups (selection)

### Vaccines

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Year</th>
<th>Focus</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themis Bioscience</td>
<td>Vienna</td>
<td>*2009</td>
<td>Vaccines against infectious diseases</td>
<td>themisbio.com</td>
</tr>
<tr>
<td>Affiris</td>
<td>Vienna</td>
<td>*2003</td>
<td>Vaccines against chronic diseases such as Alzheimer’s and Parkinson</td>
<td>affiris.com</td>
</tr>
<tr>
<td>Valneva Austria</td>
<td>Vienna</td>
<td>*1998 as Intercell</td>
<td>Vaccines against infectious diseases</td>
<td>valneva.com</td>
</tr>
</tbody>
</table>

### Oncology

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Year</th>
<th>Focus</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apeiron</td>
<td>Vienna</td>
<td>*2006</td>
<td>Spin-off IMBA, focus on cancer immunotherapies for children</td>
<td>apeiron-biologics.com</td>
</tr>
<tr>
<td>ViraTherapeutics</td>
<td>Tyrol</td>
<td>*2013</td>
<td>Spin-off Medical University of Innsbruck, innovative virotherapy against cancer</td>
<td>viratherapeutics.com</td>
</tr>
<tr>
<td>Hookipa Biotech</td>
<td>Vienna</td>
<td>*2011</td>
<td>Immunotherapies for infectious diseases and oncology</td>
<td>hookipabiotech.com</td>
</tr>
</tbody>
</table>
# Life sciences startups (selection)

## Viral infections

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Year</th>
<th>Description</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marinomed</td>
<td>Vienna</td>
<td>*2006</td>
<td>Spin-off University of Veterinary Medicine Vienna, therapies against viral infections of the respiratory tract</td>
<td>marinomed.com</td>
</tr>
<tr>
<td>Haplogen</td>
<td>Vienna</td>
<td>*2010</td>
<td>Spin-off CeMM, drugs against viral infections</td>
<td>haplogen.com</td>
</tr>
</tbody>
</table>

## Peptid-Wirkstoffe

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Year</th>
<th>Description</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apeptico</td>
<td>Vienna</td>
<td>*2008</td>
<td>Develop of a new peptide ingredient for therapy and prophylaxis for life-threatening diseases</td>
<td>apeptico.com</td>
</tr>
<tr>
<td>Cyprumed</td>
<td>Tyrol</td>
<td>*2013</td>
<td>Dosage technology for therapeutic polypeptide substances such as insulin</td>
<td>cyprumed.net</td>
</tr>
</tbody>
</table>

## Medizintechnik

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Year</th>
<th>Description</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>mySugr</td>
<td>Vienna</td>
<td>*2010</td>
<td>Diabetes management, acquisition by Roche in 2017</td>
<td>mysugr.com</td>
</tr>
<tr>
<td>iSYS Interventional Systems</td>
<td>Tyrol</td>
<td>*2010</td>
<td>Robotic solutions for minimally invasive interventions</td>
<td>interventionalsystems.eu</td>
</tr>
<tr>
<td>Heart Regeneration Technologies</td>
<td>Tyrol</td>
<td>*2015</td>
<td>Spin-off Medical University of Innsbruck, shock wave therapy for heart operations</td>
<td>heart-regeneration.com</td>
</tr>
<tr>
<td>Cubile Health</td>
<td>Tyrol</td>
<td>*2015</td>
<td>Contactless monitory systems</td>
<td>cubilehealth.com</td>
</tr>
</tbody>
</table>
Viennese Cancer
Immunotherapy for children

25 m. Euro loan from the European Investment Bank

The Viennese biotech company Apeiron was founded in 2003 by the geneticist Josef Penninger, Scientific Director of the Institute for Molecular Biotechnology (IMBA) in Vienna. Apeiron develops innovative projects in the field of immunoncology with a particular focus on cancer immunotherapy for children. In May 2017, the European Commission granted the company market approval for an immunotherapy for neuroblastoma. This therapy is designed to increase the chances of survival and recovery for the serious disease neuroblastoma which breaks out in early childhood. Neuroblastoma is a rare cancerous disease. However, it is responsible for up to 10% of solid tumors arising in childhood, affecting some 1,200 children each year in the EU and USA.

→ www.apeiron-biologics.com
→ www.imba.oeaw.ac.at