

VIENNA Highlights Autumn 2017

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**Looking Beyond the
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Digital Health at the Heart of Europe



Counting more than one million users globally, mySugr is one of the leading mobile diabetes platforms in the market. Roche has acquired mySugr to make it an integral part of Roche's new patient-centered digital health services platform in diabetes care.



Vienna is one of the most attractive cities in the world and the economic and political center of Austria. The city has a strong economy, excellent infrastructure and a unique quality of life. The combination of these factors makes Vienna an ideal starting point for commercial success. Each year, some ten life science start-ups open their offices, studios and labs in Vienna. **mySugr** is one of the amazing examples that hit the headlines internationally.

An incredible journey

The mySugr founders had the vision to make diabetes less cumbersome and realized that this might be achieved with an app - one that simplifies the daily chores of living with diabetes, solves basic therapy problems and is fun

to use. In April 2012, the mySugr GmbH was founded in Vienna to launch the first version of the app. Today, over one million people with diabetes trust in mySugr. This confirms the company's strategy of combining many different disciplines in craft and science. A key issue has been to integrate new technologies while paying close attention to a clear and empowering user experience. Following a long-lasting strategic partnership, mySugr has joined the Roche family. mySugr remains a separate legal entity with an open platform for all diabetes devices and services.

Going further

Roche is a global pioneer in pharmaceuticals and diagnostics focused on advancing science to improve people's lives. Its Roche Diabetes Care unit is a long-standing expert in the development of blood glucose monitoring systems and a frontrunner in diabetes management. A fresh strategy for Roche Diabetes Care is currently taking shape, which puts those who live with diabetes and digital technology at center stage. mySugr will become an integral part of Roche's new patient-centered digital health services in diabetes care. Users will continue to have the ability to automatically upload blood glucose data from their preferred device into the mySugr logbook app as well as the facilitated data sharing with healthcare professionals and caregivers.

Vision for the future

New technologies including continuous glucose monitoring, big data and artificial intelligence hold many promises for transforming diabetes care in the future. Together, mySugr and Roche will explore these spheres to tap their potential for diabetes care. mySugr plans to hire some 150 additional people over the next two years to develop products and services that allow patients to shift even more of their attention from coping with their disease to simply live their lives.

mySugr: Facts & Figures

- Founded in 2012
- 50 employees, most of them in Vienna
- >1 million mySugr app users
- Available in 52 countries and 13 languages

Roche: Facts & Figures

- Founded in 1896
- 94,000 employees worldwide, thereof 410 in Austria
- CHF 50.6 billion sales in 2016
- CHF 9.9 billion investments in R&D



Vienna is a great city for biotech, the pharmaceutical industry and for developing medical devices.

Vienna has been “The Mecca of Medicine” in the 19th century. Today, the Medical University of Vienna and the General Hospital form one of the largest medical centers in Europe. Furthermore, Vienna is highly attractive for talent and educates the largest number of students in the German-speaking region. We are proud of hosting a vibrant international research community and a growing number of start-ups in Vienna. Success stories like mySugr and Marinomed as well as major investment decisions by Boehringer Ingelheim, Octapharma and Ottobock prove that the city is a perfect business location. Find out more details on these companies in the articles we include in this folder.

Various grants, loans and guarantees as well as free consulting services and flexible start-up offices are available in Vienna. A new investment bonus system, the refunding of non-wage labor costs when creating jobs and the increased research premium of 14% will make our country even more attractive. We strongly recommend considering Vienna when planning to start-up or growing your company at the heart of Europe! Our technology experts are available to talk about all the support that is available here for developing tomorrow's products, processes and services. Please contact us to find suitable lab space including the most modern start-up labs.

Did you know that Austria has made a bid for attracting the European Medicines Agency (EMA) to Vienna? Vienna is perfectly suited to become the new home for all the experts ensuring that the medicines available on the EU market are safe, effective and of high quality. The Vienna Business Agency acts as the first point of contact for EMA employees and offers individual counseling in 12 languages.

We hope you enjoy reading our biannual Highlights folder.

Have a fruitful trade fair, partnering and conference season!

Peter Halwachs and Johannes Sarx
LISAvienna Executive Board

Planned trade shows & exhibitions

BIO-Europe 2017 Berlin, November 6-8, 2017	BioTrinity 2018 London, April 23-25, 2018
MEDICA & COMPAMED 2017 Duesseldorf, November 13-16, 2017	BioEquity Europe 2018 Ghent, May 14-16, 2018
Arab Health 2018 Dubai, January 29 – February 1, 2018	HIMSS Europe 2018 Barcelona, May 27-29, 2018
HIMSS 2018 Las Vegas, March 5-9, 2018	BIO International Convention Boston, June 4-7, 2018
BIO-Europe Spring 2018 Amsterdam, March 12-14, 2018	MD&D East 2018 New York, June 13-15, 2018

in cooperation with:



LISAvienna Partnering

Tailor-made schedule to meet all the Vienna based biotech and medical device start-ups you are interested in

One day in Vienna, for global players and investors only

LISAvienna – Connecting Life Sciences

We offer core services at no charge

Joint life science platform for the advancement of life sciences in Vienna



Personalized support for innovative biotech, pharmaceutical and medical technology companies

- in Vienna,
- that develop and market
- new products, services and processes

Connecting companies with development partners and key customers.



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Your partners at LISAvienna (ltr): Andrea Jan Coleselli (Administration, Controlling and Events), Johannes Sarx (Managing Director), Brigitte Tempelmaier (Project Manager Marketing & PR), Peter Halwachs (Managing Director), Martin Mayer (Technology Expert Medtech), Jürgen Fuchs (Technology Expert Biotech & Pharma)

Contact us and benefit from our services



Information & Consulting:

Tips and contacts relating to sponsorship, private financing options, lab space in Vienna, development partners, leading customers and internationalization



Networking & Matching:

Contacts for an improved exchange of experiences and knowledge transfer as well as contact with development partners, leading customers and investors worldwide



Expertise:

Analyses, background information, reports and studies relating to life sciences in Vienna



Marketing:

Electronic and printed news items from the field of life sciences in Vienna

Newsletter & Tweets

Stay updated on the hottest news from the life science city Vienna!

Subscribe to our newsletter at www.lisavienna.at/en/e_newsletter

Follow us on Twitter: @lifesciencevie

Growing in Vienna



The international life sciences community appreciates Vienna as a strategic location at the heart of Europe. Almost all globally active biopharmaceutical companies operate a presence in the city. Did you know that Vienna is a great place for manufacturing biopharmaceuticals and innovative medical devices? Read on for an update on players upgrading their facilities in Vienna.

EUR 700 million to be invested in a new production plant by Boehringer Ingelheim

Boehringer Ingelheim is constructing a production facility for manufacturing cell culture based biopharmaceuticals in Vienna. The EUR 700 million investment represents the largest single corporate investment in the city for almost 40 years. 500 new jobs will be created. Currently, Boehringer Ingelheim employs some 1,600 people in Vienna. | boehringer-ingelheim.at



Octapharma to construct a new lab and office building as well as a new pilot production line

Octapharma is a privately owned global human protein manufacturer providing products derived from human plasma and cell lines. Currently, Octapharma is investing EUR 20 million in the construction of a new lab and office building in Vienna. Furthermore, Octapharma is building a new production line for pilot production on site. The company employs more than 1,000 highly skilled employees in Austria. | octapharma.at



Ottobock is investing in its R&D and manufacturing facility in Vienna

Ottobock is a world-leading manufacturer and supplier of prosthetic limbs, orthotic supports and wheelchairs that facilitate independence. In its subsidiary in Vienna, 660 employees manufacture products worth some EUR 123.5 million per year. The company's 25,000 m² site is continuously being expanded. Last year, R&D investments have totaled EUR 27.8 million. | ottobock.at



Boosting Innovation



A service offered by the City of Vienna

The Republic of Austria and the city of Vienna provide support for start-ups, growth and internationalization to boost innovation. Consult LISAVienna to learn more about funding opportunities that might fit your needs. Here we only introduce some examples.

aws Employment Bonus

Apply at aws for a refund of 50% of non-wage labor costs (so-called employer social security contributions) for each newly created job over a period of up to three years.

aws Investment Bonus

Large companies are invited to apply for up to EUR 1 million to increase their investments in their premises in Austria including facilities for the manufacturing of new products.

Research Premium

As of January 2018, companies conducting research and development in Austria can claim a tax credit amounting to 14 percent of their R&D expenditures.

Vienna Business Agency: Calls for R&D projects

Business R&D projects are supported with up to EUR 500,000 by the Vienna Business Agency. A EUR 10,000 bonus is granted to projects managed by women.

Vienna Business Agency: Location Initiative

Up to EUR 500,000 grant money is available for companies that are newly located in Vienna, significantly extend their location or transfer their business location within Vienna.

aws.at
viennabusinessagency.at

Bulletin Board

EQ-BOKU GmbH: 3 New Core-Facilities

- Biomolecular Analysis
- Preservation and Aseptic Processes
- Bioengineering

Check out eq-vibt.boku.ac.at for details!

Themis Bioscience: Prophylactic vaccines in clinical development

- **Chikungunya:** Phase II clinical studies ongoing in Puerto Rico (chikungunya fever endemic area), the USA and Austria/Germany
- **Zika:** First clinical phase I study worldwide of a live attenuated recombinant Zika vaccine ongoing in Vienna

I ❤️ Vienna

Amazing Vienna

Austria makes a bid for attracting the European Medicines Agency to Vienna.

The Vienna Business Agency is your first point of contact!
amazingvienna.at



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Apeiron Biologics: Children's cancer immunotherapy approved in the EU

The EC has granted marketing authorization for a promising new antibody-based immunotherapy for the rare pediatric cancer neuroblastoma.

Arsanis: \$45.5 million series D financing led by Bill & Melinda Gates Foundation

The investment will advance the pipeline of monoclonal antibodies for serious infectious diseases, including the lead Phase II program ASN100 for the prevention of *S. aureus* pneumonia in high-risk ICU patients.

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(@lifesciencevie)



I found partners in Austria.

Austrian Life Sciences DIRECTORY

www.lifesciencesdirectory.at

LISA+
LIFE CONNECTIONS



Vienna Biocenter Core Facilities

vbcf.ac.at



TAmiRNA partners with Biomedica to open up international markets

- Exclusive agreement confers worldwide distribution rights to osteomiR™ test and CRO services
- Local subsidiaries in CEE countries and Switzerland and distribution partners world wide to boost sales

Grapevine World to advance global IT standardization

Are you interested in a manufacturer-independent initiative bringing together IT providers, suppliers and integrators? Join Grapevine World to establish a global standardization in data exchange! This will enable the interoperability of IT systems and boost networking of medical data.



Coming soon

The Vienna Business Agency's
Vienna Biocenter Start-up Labs

Life Science City Vienna: Looking Beyond the Medical Arena



The life sciences hold many promises that go beyond medicine. Its benefits will fundamentally advance numerous industrial branches and boost the development of a future circular and more sustainable economy. This requires carving out a specific business goal linked to major societal and economic problems. Several Vienna based companies have managed to develop suitable business cases and succeed in coming down with the inherent technological risks.

To strengthen pre-competitive research and technology development, the Austrian government is funding an initiative for advancing white biotech together with the provinces of Styria, Lower Austria, Tyrol and Vienna. At the **Austrian Centre of Industrial Biotechnology (acib)**, more than 150 partners from science and industry collaborate to lay the foundation for new processes and products. The exclusive network of methodological expertise and comprehensive knowledge has access to both the most modern academic infrastructure and to high-level business knowledge. Some 250 researchers address key issues that are expected to fundamentally change the chemical, clothing, cosmetics, detergents, feed, food, pharmaceuticals and plastics industries. In Vienna, acib builds

on a broad expertise especially at the **University of Natural Resources and Life Sciences (BOKU Vienna)**, **TU Wien**, the **University of Vienna** and at **FH Campus Wien**. Game-changing approaches can however also originate in smaller units as the four companies introduced below prove.

Acticell GmbH is dedicated to develop innovative solutions for emerging trends in the textile industry. What makes the company's products unique is that they are all safe and non-toxic. Tailor-made solutions allow manufacturers of denim fabrics and denim clothes to bleach and dye jeans without harming the environment or the people handling the fabrics. Products include chemicals for novel dyeing effects, for localized bleaching by laser and ozone technology, and enzyme boosters for pre-treatment.

Eucodis Bioscience GmbH delivers high-performance enzyme solutions for industrial applications. Its portfolio consists of over 50 enzymes including innovative lipases, beta-lactamases and peroxidases. Eucodis provides custom-tailored enzyme engineering, strain and bioprocess development, and fermentation in various host expression systems. Contract manufacturing of recombinant proteins is carried out under ISO 9001 up to a fermentation volume of 1000 L.

Evologic Technologies GmbH has set out to make agriculture more sustainable with the help of special soil microorganisms. Special symbiotic fungi, co-called AMF, are expected to decrease the need for chemical fertilizers and pesticides. To date, AMF products are simply too expensive. A new production method developed by Evologic Technologies will overcome this issue and make the AMF technology available to the worldwide market at a highly competitive price.

Syconium Lactic Acid GmbH is developing a production process for lactic acid operating at significantly lower costs compared to currently established production processes. The start-up combines the newest knowhow in metabolic engineering of yeast strains with innovative approaches in bioprocess engineering to reach this goal. Syconium expects to bring about clear benefits for the environment by shaking up the market for biodegradable plastics with its innovative solutions.

Why Vienna?



© Petra Spöck

“ Vienna is a first class biotech location: you can find highly qualified personnel from local universities and technical colleges, funding and support from public agencies for start-up companies, and it has an ideal location in the heart of Europe. And on top of that, Vienna offers the highest quality of life in the world.”

Dr. Karl Hübler,
CEO Eucodis Bioscience
GmbH

- acib.at
- acticell.at
- eucodis.com
- evologic-technologies.com
- syconiumlacticacid.com



Award-winning Enterprises

Vienna is proud to host highly innovative companies.

Contextflow: Innovation Award for Digital Solutions

Radiology Explorer, a radiology image search powered by deep learning to access the knowledge encoded in millions of medical images and reports

contextflow.com

Evologic Technologies: Science2Business Award 2017

Bioprocesses for white biotech products using advanced technologies from red biotech; novel production process for mycorrhizal fungi

evologic-technologies.com

ImageBiopsy Lab: WKO Born Global Champion Award

Computer-vision and artificial intelligence technology for standardized radiographic image analysis of osteoarthritis, osteoporosis and rheumatoid arthritis

imagebiopsylab.com

SCARLETRED: Austrian State Prize Digital Solutions

SCARLETRED@Vision revolutionizes dermatology through standardized digital documentation and objective digital assessment of visual skin changes

scarletredvision.com

Transforming Health Care Facilities

“Did you know that Agfa HealthCare is developing enterprise imaging IT solutions and clinical information systems in Vienna?”

agfahealthcare.de

Health care requires high-tech facilities. Vienna-based suppliers and developers offer huge expertise on this end and provide innovative solutions worldwide.



The planning, construction and operating of hospitals is one of the most complex tasks in healthcare. Expertise in medicine, construction work, building technology, medtech and management needs to be combined to master the challenge. Here we present potential partners from Vienna that have succeeded in making their mark.

AME International GmbH (AME) – healthcare technology solutions: AME is a global, independent integrator for complex health care technology projects. The company takes a comprehensive and integrated approach to client needs and offers custom tailored solutions. Services include health system studies, feasibility studies, consulting, hospital engineering, equipment planning, medical package solutions and eHealth solutions for hospitals, regions and entire countries.

Bartosek Projektbetreuung GmbH – construction specialist: The company is a highly specialized planning and general building contractor for construction projects. Standardized workflows and tight project management guarantee that all projects meet highest quality requirements. Aside from conventional construction methods, also innovative building techniques are applied. Modular construction allows planning and delivering ORs, laboratories and clinical buildings in record time.

Ing. Sumetzberger GmbH – pneumatic tubes: This globally leading developer of high-quality pneumatic tube systems is supplying customer-specific solutions worldwide. These ensure fast, efficient and reliable on-demand transport of lab samples, medicines and prescriptions or results. An auto un-load station allows you to automatically take out lab samples from its carriers at the hospital lab for high throughput analysis. Sumetzberger is also your partner when it comes to lab automation.

Medical University of Vienna International GmbH (MUVI) – healthcare consulting: MUVI offers unique consulting services on all healthcare related areas based on the medical expertise and the scientific know-how of the renowned Medical University of Vienna and its broad international network. Services include sophisticated, customized hospital management, medical education and training programs as well as international R&D projects.

VAMED – integrated healthcare provider: VAMED is a global provider for hospitals and other facilities in the healthcare sector. The VAMED portfolio ranges from project development, planning and turnkey construction via maintenance, technical, commercial and infrastructure services to the total facility management of healthcare facilities. VAMED covers all areas of healthcare, from prevention and wellness to acute care, rehabilitation and nursing.

ame-international.com
bartosek.com
muv-international.com
sumetzberger.at
vamed.com

Develop and test your innovative solution for operating rooms in Vienna! The FH Campus Wien Operating Theatre Innovation Center will be complemented with an ICU soon.

fh-campuswien.ac.at

Extend your life sciences network and get connected!

SIMCharacters: B&C Foundation's Houska Award 2017

Paul: the world's most advanced and realistic preterm baby simulator for the scenario-based training of healthcare professionals

simcharacters.com

Technoclone: WKO to honor CEO Veronika Binder with "Women Award 2017 – Export"

World leading manufacturer focusing on research reagents and fully automated instruments for coagulation analysis

technoclone.com

Tiani Spirit: IHE Connectathon Venice 2017

The most comprehensive standard-based Health Information Exchange solution for clinical documents and images which has been implemented across the globe

tiani-spirit.com

Vacteria BioTech: aws Best of Biotech business plan competition – Winner in phase 1

The company's award-winning business idea includes the development of a universal flu vaccine and an oncolytic flu virus to treat solid cancer

vacthera.com

Innovation made in Vienna: Marinomed's MARINOSOLV® Technology Platform

Marinomed is a biopharmaceutical company discovering and developing anti-viral and immunological treatments. Its MARINOSOLV® platform enables novel stable aqueous formulations of hardly soluble compounds such as corticosteroids, allowing a faster onset of action and a better bioavailability.

Marinomed Biotech AG is located in Vienna, Austria and was founded in 2006 as a spin-off from the University of Veterinary Medicine, Vienna. Marinomed has a strong track record with a marketed OTC product portfolio targeting viruses causing common cold and flu-like infections. These products are based on the company's MAVIREX® platform that involves a polymer from red algae, known as CarrageLOSE®. The polymer is extraordinarily effective in treating viral infections of the upper airways. CarrageLOSE® works by unspecifically covering the viruses and thereby preventing them from docking to the cells of the nasal mucosa. At the same time, the polymer forms a soothing and moisturizing protective film in the nose. Several partnerships with renowned pharmaceutical companies are in place. The patent protected CarrageLOSE® containing nose-

Marinomed at a glance

- Founded in 2006 in Vienna
- 27 employees
- MAVIREX® platform against respiratory viral infections
- MARINOSOLV® platform for aqueous solutions of poorly soluble organic molecules

and throat sprays as well as the lozenges are available in all five continents by now. Limited rights for certain countries are still available for partnering.

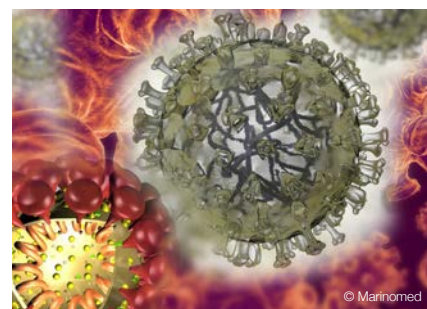
MARINOSOLV®

MARINOSOLV® enables the production of stable aqueous solutions from poorly soluble organic molecules. This means that numerous active components in pharmaceuticals are available to the body faster and more efficiently as compared to suspensions currently in use. The patented MARINOSOLV® technology opens up far-reaching business opportunities for a wide range of different substances including steroids and macrolide immunosuppressants. Application areas include the eyes, nose, and lungs. Dissolved compounds hold many advantages as compared with a suspension. These include a fast onset of action, the reduction of the total dose, sterile production processes without using preservatives and the combination with other APIs. For intranasal application a low systemic availability compared with high local activity has been demonstrated.

Vienna Stock Exchange

Mid of 2017, Marinomed raised EUR 7 million by issuing a convertible bond on the Third Market (MTF) of the Vienna Stock Exchange. The company plans to use the funds to validate the patented MARINOSOLV® technology platform in a clinical setting and to prepare the company for the public market. The

"We are convinced that Marinolv is an important step forward in the development of hardly soluble compounds for the application onto sensitive tissues such as nose or eyes. It will allow higher efficacy with reduced doses of the active ingredient and thereby creates an additive value to the new developments."



convertible bond is scheduled to mature in 2021 and Marinomed will pay a coupon of 4 percent. In the event of a public offering, the investors will have the right to convert the bond to shares.



Suspension

Solution

marinomed.com



Why Vienna?



Eva Prieschl-Grassauer,
CSO Marinomed
Biotech AG

"Vienna is the life science hotspot in central Europe. The city bears excellent infrastructure in general and a set of universities with outstanding life science research develops the talents for the future. This is flanked by a life science friendly political environment that provides both financial and logistic support."

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LISAvienna is the joint life science platform operated by austria wirtschaftsservice and the Vienna Business Agency. On behalf of the Austrian Federal Ministry of Science, Research and Economy and the city of Vienna, LISAvienna contributes to the advancement of life sciences in Vienna.