

Newsletter

01/2014

And the winner is...

... **Ottobock!**

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Life Science City Vienna:

**Gold Standard
in Manufacturing**

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5 Years of 7-Tesla in Vienna

Medical Imaging is one of the 5 research clusters at the Medical University of Vienna. Research results obtained with the 7-Tesla MRI scanner installed 5 years ago, reveal high potential for clinical applications.

At the end of 2013, the **Centre of Excellence for High-Field MR** at the Medical University of Vienna celebrated 5 years of patient studies with the 7-Tesla scanner. Since November 2008, over 700 patients have been investigated with this high-field scanner. The Centre of Excellence combines groundbreaking basic research and development of methods with a strong focus on applications in neuroscience, musculoskeletal research, oncology and metabolism. The goal is to validate the potential of ultra-high field MRI in clinical applications.

New 3D map of veins in the brain

As part of a multi-disciplinary pilot project carried out by the University Departments of Neurology, Radiology and Nuclear Medicine, and the Centre for Brain Research, scientists are using high-resolution, susceptibility-weighted imaging at 7-Tesla to investigate focal areas of inflammation in the brains of patients with multiple sclerosis. The blood oxygen-dependent imaging method particularly allows veins and iron deposits to be visualised. During this collaboration, a 3D map of the veins in the



© MedUni Vienna

brain was produced at the MedUni Vienna. The map could be useful for understanding various types of disease, including brain tumours and strokes.

Siemens International Reference Centre

In 2013, Siemens AG, declared the Vienna Centre of Excellence as its international reference centre for ultra-high-field MR. According to Siemens, the strength of the site lies in its close collaboration network. The Vienna General Hospital (AKH), one of the largest hospitals in the world, is located right next door. This is perfect for patients interested in participating in clinical studies. Additionally, Vienna has a strong network of about 100 scientists including clinicians, physicists, psychologists and neuroscientists, which work closely together with the Centre's core group of approximately

45 people. These conditions have prompted Siemens to form a close research collaboration to jointly work on new technologies for advancing MR diagnostics.

Hardware and Software for MR systems

The Centre of Excellence for High-Field MR has developed into one of the leading test sites worldwide for ultra-high-field coil manufacturers. All versions of this highly expensive hardware can therefore be applied at the MedUni Vienna first. MR-compatible peripheral devices like ergometers, components such as electrodes or sensors and dedicated software for 3T and 7T MR systems are being developed and tested as well.

www.meduniwien.ac.at
www.siemens.com

Dear readers!

Vienna again tops Mercer's quality of living rankings and we are happy to provide you with the hottest life sciences news from the most attractive city in the world.



To begin however, let us first take a brief look back: in 2004, our first newsletter was published. It has been adapted ever since and reflects both the dynamic developments in biotech, pharma and medtech as well as the continuous advancement of LISAvienna's scope of services. The celebration of its 10th anniversary coincides with a new level of communication at LISAvienna. To respect today's working habits we now also produce an e-newsletter that keeps you updated every two months.

At the end of 2013 we hosted BIO-Europe in Vienna. More than 3,200 participants from 56 countries attended Europe's largest biotech partnering conference. Welcoming the leading dealmakers from biotech, pharma and finance in Vienna has been great honor. Many thanks again to EBD Group, as well as to the City of Vienna, Austria Wirtschaftsservice, the Federal Ministry of Economy, Family and Youth, Life Science Austria and ZIT – the Technology Agency of the City of Vienna – for their support.

This year, LISAvienna will attend meetings in China, Japan, Dubai, the USA, Israel and Germany. In parallel, we offer special partnering services for Investors and large biotech, pharma and medtech firms in Vienna. Please contact us for your customized meeting schedule of promising partners from Vienna!

BOB, the business plan competition operated by Austria Wirtschaftsservice, is about to enter its next round. LISAvienna will again provide € 10,000 in sponsorship for the best medtech project. Please also note that ZIT – the Technology Agency of the City of Vienna – will provide another € 2 million for R&D projects from life science companies this year.

Enjoy reading the next pages and remember: Starting-up at the heart of Europe and expanding to Vienna pays off!

Peter Halwachs and Johannes Sarx
LISAvienna Executive Board



LISAvienna – Connecting Life Sciences

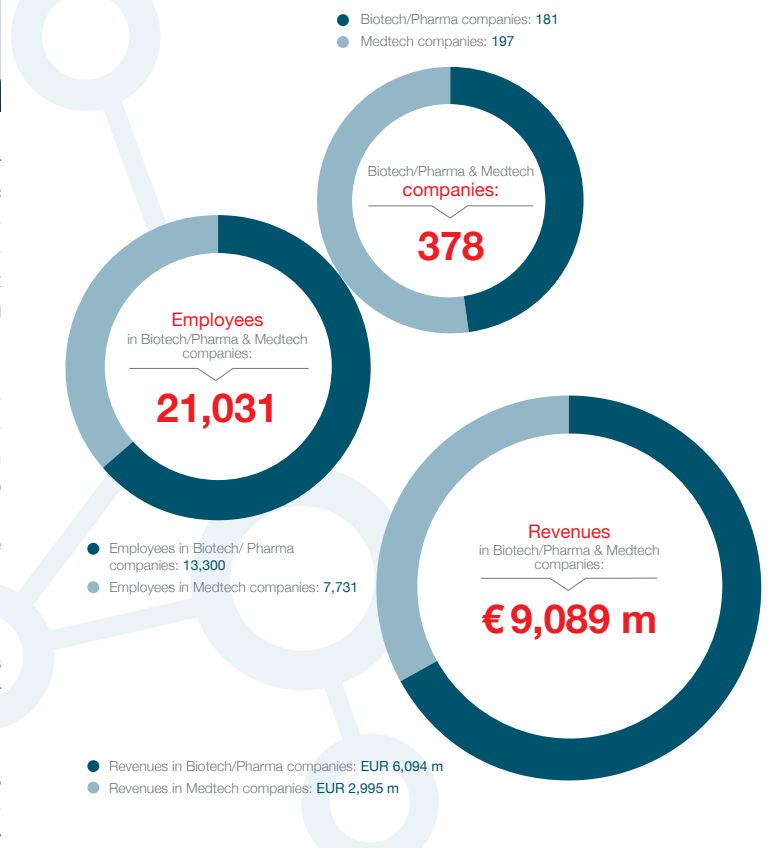
LISAvienna – Life Science Austria Vienna is the life science cluster organization of the City of Vienna, serving all stakeholders in the areas of biotechnology/ pharmaceuticals and medical technology.

Whether you are an entrepreneur, an investor or a researcher, LISAvienna can provide you with essential services in Austria's largest life sciences location. Please visit our website www.LISAvienna.at to learn more about Vienna as a top location for life sciences!

NEW: LISAvienna e-Newsletter

keeps you updated on hottest news from the life science city Vienna every two months. Subscribe at www.LISAvienna.at or via e-mail to office@LISAvienna.at

Life Sciences in Vienna



➔ Statistics on the smart life science city Vienna!

Download the Vienna Life Science Report at www.LISAvienna.at and be invited to order your free print copy at office@LISAvienna.at.

www.lbg.ac.at

Three new chairs for cancer research endowed in Vienna

To sustainably install already established expertise three new chairs for cancer research were endowed in Vienna recently. All chairs have been donated by the Ludwig Boltzmann Gesellschaft (LBG) – a non-profit association for the promotion of scientific research. "Through establishing new chairs we strengthen basic research for the benefit of society and lay the foundation for further success in the field of cancer research", emphasizes Reinhold Mitterlehner, Federal Minister of Science, Research and Economy, whose ministry provides substantial funds for the LBG.

Richard Moriggl, Lukas Kenner and Emilio Casanova-Hevia appointed

These researchers cover research topics from laboratory animal medicine and pathology to translational methods and transgenic models in cancer research. All of them established their expertise through their work at the Ludwig Boltzmann Institute for Cancer Research. Casanova-Hevia is appointed to a professorship at MedUni Vienna and Moriggl and Kenner receive a double appointment for both MedUni Vienna and Vetmeduni Vienna.

Double appointments foster interdisciplinary research

"Double appointments are ideal for securing an inter-university and interdisciplinary knowledge transfer.", explains Sonja Hammerschmid, Rector of the Vetmeduni Vienna. Wolfgang Schütz, Rector of the MedUni Vienna, agrees: "The interdisciplinary exchange of knowledge between human and veterinary medicine is affecting research in a solely positive way".

And the winner is... ... Ottobock!

ottobock.

Ottobock is market leader in medical technology focusing on arm and leg prostheses. The company continuously invests in expanding and modernizing its Vienna site. Its microprocessor-Genium knee joint won the Austrian National Design Award. Ottobock's C-Brace orthotic system is now also nominated for the Austrian National Innovation Award.



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**LISVienna
Business Treff
at Ottobock**
April 8, 2014, 9.30 a.m.
Brehmstrasse 16, 1110 Vienna
Registration at
www.LISVienna.at



© Ottobock

Outstanding design from Vienna for the world's best knee

People living with a physical disability are no different to others when it comes to their aesthetic needs. That's why it is clear to Ottobock that design demands for medical devices need to be just as high as those for other industrial products. Receiving the Austrian National Design Award 2013 for Genium shows recognition for the achievements of its developers and designers and honors this conviction. The Genium microprocessor-controlled knee joint is based on extensive practical experience, many years of cooperation with users and technicians as well as on-going research and development. Together with Ottobock, product designer Nik Pelzl from studio novo developed the design for the Genium electronically-controlled leg prosthesis system. They were looking for new solutions, designs and colors as well as the ultimate symbiosis of form, function and quality to optimize everyday life with a prosthesis.



© Ottobock

Made in Vienna: Trailblazing innovation in orthopedics

Ottobock's C-Brace is another example of the company's world-class innovations that are being developed in Vienna. People with a lame leg significantly profit from the battery-powered orthotic system as it allows them to walk instead of using a wheelchair. C-Brace is the world's first mechatronic system in orthotics that allows dynamic control of the entire gait circle in real time. It responds intelligently to each situation: whether it involves slow or fast walking, dynamic heel impact, walking on uneven terrain, going down stairs step-over-step, flexion under load while sitting down, the C-Brace makes it possible. It offers the required safety and gives the user the freedom to take in his or her surroundings unhindered without permanently concentrating on the orthosis. C-Brace won the Vienna Innovation Prize "Mercur" in the Life Sciences category last year and is now nominated for the Austrian National Innovation Award. Market launch of C-Brace in Austria is scheduled after May.

Dynamic growth requires more space

More and more high tech prostheses made in Vienna serve people worldwide. Ottobock's Austrian subsidiary, Otto Bock Healthcare Products GmbH, is one of the group's most important research and development centers that is continuously extended. Investments of € 16.6 million allowed the construction of a modern eco-friendly manufacturing facility with up to 80% of heating and cooling needs being covered by geothermal energy. Ottobock employs some 590 employees in Vienna (>130 in R&D) and annual sales amounted to € 110.5 million in 2013. Currently a new building for R&D is in development.

www.ottobock.at
www.studio-novo.com

Why Vienna?

© Ottobock / Mischa Erben



Hans Dietl,
Managing Director of
Ottobock in Austria

“Our Vienna site is the locomotive for innovation in our company and one of the growth engines. Vienna provides the necessary proximity to research institutions and clinics and is an attractive location for high potentials.”

www.ottobock.at

Bulletin Board

New Christian Doppler Labs open doors

- Johannes **Grillari**, BOKU and Chanel Parfums Beaute: **Biotechnology of skin ageing**
- Stefan **Kubicek**, CeMM, Boehringer Ingelheim RCV GmbH & Co KG and Haplogen GmbH: **Chemical epigenetics and antiinfectives**
- Peter **Rossmann**, Vetmeduni Vienna and LEU Anlagenbau AG, Merck KGaA as well as Berglandmilch eGen: **Monitoring of microbial contaminants**
- Leopold **Schmetterer**, MedUni Vienna and Croma-Pharma GmbH: **Thiomeres in ophthalmology**
- Ursula **Schmidt-Erfurt**, MedUni Vienna and Novartis Pharma AG: **Ophthalmologic image analysis**

Christian-Doppler-Labs focus on application-orientated research to foster technology transfer between academia and industry.

www.cdg.ac.at



Christian Doppler
Forschungsgesellschaft

Vienna strengthens scientific community

Vienna Science and Technology Fund grants **€5 million** for life sciences projects that establish new ventures beyond established frontiers. These are run by Irina **Druzhinina** (TU Wien), Christian **Gruber** (MedUni Vienna), Hans-Peter **Kiener** (MedUni Vienna), Ortrun **Mittelsten Scheid** (GM), Christian **Schmeiser** (University of Vienna), Gerhard **Schütz** (TU Wien) and Susanne **Zeilinger** (TU Wien).

www.wwf.at

Zytoprotec raises €2.5 million in financing from Baxter Ventures

Zytoprotec GmbH, a company developing novel peritoneal dialysis solutions and other treatments based on active cytoprotection, announced that it has raised €2.5 million in financing from Baxter Ventures. Baxter Ventures is an investment initiative established by Baxter International in 2011 to invest up to USD 200 million in promising companies. As a result of the financing Marcus Schabacker, MD, PhD, Vice President R&D and Medical Affairs Medical Groups, Baxter International Inc. joins Zytoprotec's Supervisory Board.

www.zytoprotec.com

AFFIRiS goes football

Frank Mattner, co-founder of AFFIRiS, recently joined the Supervisory Committee of the First Vienna Football Club 1894. He plans to promote women in football, just as it is done every day in the R&D department at AFFIRiS.



www.affiris.com

Egon Ogris: MedUni Vienna Inventor of the year 2013

The Medical University of Vienna honours MFPL researcher Egon Ogris for developing monoclonal antibodies and new methods for antibody production. In 2013, 10 antibodies were successfully licensed to 8 different companies and a new patent application was filed. Ogris was also awarded a PRIZE prototype funding recently.

www.mfpl.ac.at
www.meduniwien.ac.at

TissueGnostics establishes its position in the European top field

TissueGnostics celebrates its 10-year anniversary with the admission in the elite group of companies formed around leading universities whose objectives are to redefine the European Digital Pathology and Diagnostics.

www.tissuegnostics.com



“Vienna provides a right combination of factors necessary for the successful startup of new biotech companies: strong governmental support in the early company founding stages, access to prominent research institutes and universities and a hub of small biotechs with complementary research expertise. Moreover, Vienna’s social services and infrastructure are among the best in the world. An additional value is added by its multiculturalism which attracts high profile researchers and biotech professionals from all over the world, so it is relatively easy to find mentors, collaborators and employees.”

Sanja Selak, CEO Origimm Biosciences e.U.
www.origimm.com

Vienna invests in the future

The Technology Agency of the City of Vienna (ZIT) supports 4 new life science R&D projects:

- **Dr. Grossegger & Drbal GmbH:** Video-based analysis of movement patterns in sleep laboratories
- **Nabriva Therapeutics AG:** Extended spectrum pleuromutilins system
- **Siemens AG Österreich:** Autonomous fermentation control
- **Valneva Austria GmbH:** Development of a novel prophylactic Lyme borreliosis vaccine

zit.co.at

New ERC grants in Vienna!

- An ERC **Advanced Grant** goes to Josef **Penninger** (IMBA)
- An ERC **Consolidator Grant** goes to Fumiyo **Ikeda** (IMBA)
- ERC **Starting Grants** go to Stefan **Ameres** (IMBA), Armin **Djamei** (GMI), Luisa **Cochella** (IMP), David **Keays** (IMP), Kristin **Teßmar-Raible** (MFPL), Kikue **Tachibana-Konwalski** (IMBA) and Johannes Zuber (IMP)

erc.europa.eu

mySugr:
XLHealth invests 7digit sum

According to mySugr, diabetes can be a troublesome and annoying monster. That is why the Vienna-based start-up company has created motivating and fun diabetes management apps that help tame that monster.

Following investments by the Business Angel Johann Hansmann and Austria Wirtschaftsservice the E-Health investor XLHealth has invested in mySugr.

mysugr.com

Hookipa Biotech closes € 20 Million (USD 27.5 Million) in Series B Financing

Hookipa Biotech AG, a company pioneering a new class of vaccines, announced that it has raised €20 million (USD 27.5 million) in a series B equity financing. Existing investors Sofinnova Partners and Forbion Capital Partners led the financing with 3 new investors, Boehringer Ingelheim Venture Fund, Takeda Ventures and BioMedPartners joining the round. Funds will be used to progress the viral vaccine pipeline and to explore applications in cancer immunotherapy.

www.hookipabiotech.com

Miracor discloses positive interim data for its PICSO® System

Miracor Medical Systems GmbH announced the completion of a 4 months follow-up of heart attack patients enrolled in a clinical trial of its PICSO® (Pressure-controlled Intermittent Coronary Sinus Occlusion) Impulse System. Patients treated with PICSO after successful pPCI (primary Percutaneous Coronary Intervention, or angioplasty) showed a more than 50% larger reduction in infarct size as compared to a control group not treated with PICSO. The PICSO® technology provides cardioprotection by improving microcirculation and reducing reperfusion injury after pPCI.

www.miracormedical.com



More news

For more news please visit our website
www.LISAVienna.at

Your news placed here

Vienna-based organizations are invited to e-mail news and press releases to news@LISAVienna.at to contribute to LISAVienna’s digital and print media. Our online bulletin board is the right place to post your job offers, find lab space or information about seminars and workshops in Vienna.

ZIT: Another € 2 Million for life sciences

Life sciences are clearly at the centre of science and technology policy in Vienna. To encourage R&D at biotech, pharma and medtech companies, ZIT – The Technology Agency of the City of Vienna, regularly invests in this sector. This year, another life sciences call is launched with an overall budget of **€ 2 million**. Vienna-based companies are invited to submit proposals for R&D projects from **June 16 to September 17**. Projects managed by female experts will be awarded an extra € 10,000 bonus.

Stream of success stories

ZIT looks back to a whole load of success stories in its funding portfolio of applied research in life sciences: Topics range from immune therapy of allergies at Biomay AG and the development of a vaccine against acne vulgaris at OrigImm e.U. to a mobile device for disinfection to avoid nosocomial infections by Braincon Handels GmbH. For details on projects that have been successful in the past and further information on the new life sciences call please visit www.zit.co.at.

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2.6. - 27.11.2014
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10,000 Euro
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1. 15,000 Euro
2. 10,000 Euro
3. 5,000 Euro
Business Plan
Phase 2
28.11.2014 - 6.5.2015

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International Biotech & Medtech
Business Plan Competition

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Meet LISAVienna

- **IHE-Europe Connectathon**
Vienna, April 7–11, 2014
- **austropharm**
Vienna, April 24–26, 2014
- **conhIT**
Berlin, May 6–8, 2014
- **EuroMedtech™ ***
Linz, May 7–8, 2014
- **ChinaBio® Partnering Forum**
Suzhou, May 7–8, 2014
- **Sino-Euro Bio-partnering Forum**
Shanghai, May 9, 2014
- **Austrian Showcase Biotech and Pharma**
Osaka and Tokio, May 11–13, 2014
- **eHealth 2014**
Vienna, May 22–23, 2014
- **BIO International Convention ***
San Diego, June 23–26, 2014
- **WKO Delegation Trip to Israel**
Tel Aviv, September 21–24, 2014
- **BIO-Europe 2014 ***
Frankfurt, November 3–5, 2014
- **Medica and Compamed ***
Düsseldorf, November 12–15, 2014

* in cooperation with: **LISA** LIFE SCIENCE AUSTRIA

Life Science City Vienna: Gold Standard in Manufacturing

The production of pharmaceuticals has many interesting dimensions ranging from process engineering and plant construction, to quality control and contract manufacturing. Connect to Vienna's experts in manufacturing and applied industrial science!

Vienna has a long tradition in industrial biotechnology. The **Austrian Centre of Industrial Biotechnology (ACIB)** groups the respective expertise in both academia and businesses. The **University for Natural Resources and Life Sciences Vienna** and the **Vienna University of Technology** are 2 of ACIB's 80+ international partners that joined forces to address core future challenges. Its agenda includes new production processes and products with improved ecological efficiency, new production processes with higher economic efficiency, products with higher quality and purity and innovative functional products for everyday use and for the health care industry.

Large-scale manufacturing: Large-scale pharma in Vienna

Baxter produces 22 pharmaceutical products in the Vienna region, and 98 percent thereof is exported worldwide. 18 products are plasma-based as Baxter runs one of the biggest and most efficient plasma fractionation facilities worldwide in Vienna. Austria's largest R&D-driven biotech and pharma company also produces recombinant products and vaccines, here. The **Boehringer Ingelheim Regional Center Vienna** on the other hand offers tailor-made contract development and manufacturing services to the biopharmaceutical industry. Under the brand name **Boehringer Ingelheim BioXcellence™** it provides the entire production technology chain from DNA to fill and finish – therapeutically active proteins, protein scaffolds, antibody fragments and plasmid DNA as well as other products.

APIs: From recombinant biologicals to chemical synthesis

The allergy vaccines specialist **Biomay** offers cGMP contract manufacturing services for the production of recombinant biologicals as active pharmaceutical ingredients (APIs). Biomay's multi-

product GMP facility allows the manufacturing of amounts going from milligrams to 10 grams of microbial-based proteins and plasmid DNA for clinical phase I-III trials and market supply.

Sanochemia on the other hand is a highly-experienced partner for the chemical synthesis of APIs on an industrial scale. The company specialises in the manufacture of sterile and semi-sterile liquid and semi-liquid presentations, including antibiotics, according to GMP standards. Also stereo-selective synthesis of naturally-occurring substances is offered.

Indispensable: Quality and safety management

The growing market of biological, biopharmaceutical and cell therapy products generates an increased need for expertise in the area of biosafety assurance in compliance with regulatory requirements. **Virusure** offers GLP-certified virus and prion safety testing of biopharmaceutical products and GMP-certified cell banking and biosafety testing services. **Vela Laboratories** is your GMP-certified partner when it comes to in-depth analytical characterization services for proteins; in particular biologics, biopharmaceuticals and biosimilars.

Innovative production plants: Know-how from Vienna

Vogelbusch Biopharma – an independent company in the Vogelbusch Group – stands for efficient engineering and well-conceived construction of biotechnology-based pharmaceutical plants. Vogelbusch Biopharma covers all aspects necessary for new plant construction and remodelling of existing plants including upstream and downstream processing. The scope of services includes engi-



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neering, equipment procurement, plant assembly with an optional prefabrication, automation, site supervision, commissioning, start up and qualification.

www.acib.at
www.baxter.at
www.boehringer-ingelheim.at
www.biomay.com
www.sanochemia.at
www.virusure.com
www.vela-labs.at
www.vogelbusch-biopharma.com

Vienna tops Mercer's quality of living rankings

1. Vienna, Austria
2. Zurich, Switzerland
3. Auckland, New Zealand
4. Munich, Germany
5. Vancouver, Canada

Mercer has released its 2014 Quality of Living rankings. Analyzing 39 factors important for expatriates, Mercer ranked 223 cities based on data from its Quality of Living Survey. According to Mercer, Vienna is the most attractive city in the world.

Innovation in Vienna: Baxter's Hemopatch

Baxter

As a global, diversified healthcare company, Baxter applies a unique combination of expertise in medical devices, pharmaceuticals and biotechnology to create products that advance patient care. Baxter BioScience R&D worldwide is managed from Vienna.



Hemopatch was launched in the European Union at the end of 2013. The novel collagen-based haemostatic device is a soft, thin and flexible collagen pad coated with NHS-PEG. It has been developed for surgical procedures when control of bleeding by pressure, ligature, or conventional procedures is either ineffective or impractical. The pad shows a dual-method mechanism of action, in which 2 components interact to achieve haemostasis by sealing off the bleeding surface and initiating the body's own clotting mechanisms.

Developed and manufactured in Vienna

Both Hemopatch R&D and manufacturing for the markets worldwide, are achieved in Vienna. The development of Hemopatch combined Baxter's expertise in collagen, internal coagulation processes, and PEG technology platforms. Furthermore, the close proximity of R&D and manufacturing at Baxter in Austria has been a big advantage in the innovation process. It optimally integrates customer expertise and leverages optimisation potentials in a feasible way. This has been especially important as the development of Hemopatch included multiple improvement loops on the basis of

the evaluation of more than 400 prototypes by more than 200 surgeons.

Success in biosurgery dates back to the 1990s

Biosurgery expertise at Baxter began with the acquisition of the Vienna-based Immuno International AG in the 1990s and the first launch of a haemostatic device in the US in 1998. Today, Baxter's biosurgery portfolio consists of a range of biological and synthetic products and devices used for haemostasis, tissue sealing, adhesion reduction, hard tissue regeneration, as well as soft tissue repair and microsurgery products. These products advance surgical care for surgeons and their patients in more than 60 countries across the world.

One new product on the market each year

Baxter wants to launch one new product each year. According to Andreas Kronberger, Managing Director Baxter Austria, this goal can be reached in Austria. In November last year a recombinant factor IX for the treatment and prophylactic use in patients with haemophilia B was registered for approval at EMA. This drug is produced in Austria. Both the recombinant factor IX and haemopatch belong to the product portfolio of Baxter's BioScience division. Today, about 80% of the products in this business division closely relate to Austria: Either research and development or manufacturing is carried out here – and in many cases both.

www.baxter.at

Baxter in Austria

- 4,400 employees
- Largest research division outside the USA
- Around 2.3 million liters of human plasma processed annually
- 22 products manufactured
- 98 % export share

Why Vienna?

© Petra Spöck



Markus Reinhard,
Vice President Global
Human Resources,
Baxter Healthcare
Corporation
(Deerfield, IL, USA)

“Vienna's infrastructure and overall stability are excellent. Baxter employees here are superbly trained in areas important to the company. Baxter cooperates very well with universities, colleges and research institutions on a number of projects in Vienna and throughout Austria. Not least of all, Vienna offers an excellent quality of life – a factor that is highly appreciated by our staff from around the world. Throughout Vienna and Austria in the future, Baxter expects to find the optimal preconditions for successful growth that would not otherwise be possible without public policy support.”

www.baxter.com

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