ASSOCIATION BIOTECH AUSTRIA FOUNDED

The aim of BIOTECH AUSTRIA is to join forces to strengthen the cooperation between politics, science and the biotech industry. Therefore, the foundation of BIOTECH AUSTRIA is intended to establish an independent, autonomous representation of interests of the Austrian biotechnology industry and thus to promote this innovative and financially strong branch of industry within the Austrian economy. Among the 30 founding members are numerous companies based at the Vienna BioCenter.

Consequently, BIOTECH AUSTRIA is also concerned with further raising the profile of Austrian biotechnology both nationally and internationally, thus close cooperation with other associations and clusters in Austria as well as with biotech organizations in Europe and the USA is planned.

„The biotech industry is a very important economic sector in Austria,“ said BIOTECH AUSTRIA President and APEIRON Biologics CEO Peter Llewellyn-Davies. „Biotechnology plays an immense role in people’s well-being, public health and therefore also in the economy - the current Corona pandemic has once again highlighted how vital biotech innovations are.“

BIOTECH AUSTRIA is looking forward to welcome new members!

The founding board of BIOTECH AUSTRIA (from left to right):
Reinhard Kandera - CFO HOOKIPA Pharma GmbH
Alexander Seitz - CINO Lexogen GmbH
Georg Casari - CEO Haplogen GmbH
Peter Llewellyn-Davies - CEO Apeiron Biologics AG
VIENNA BIOCENTER CAMPUS IN FIGURES

RESEARCH
- 4 Research Institutes
- 91 Research Groups
- 1500 scientists
- 360 Publications/Year
- 56 ERC Grants
- 25 EMBIO members
- 2 Breakthrough Prizes
- 1 Nobel Prize

EDUCATION
- 3 Universities
- 1,300 Bachelor’s and Master’s Students
- International Training Programmes: PostDoc, PhD, Summer School, Internships
- 10,000 Visitors/Year to Vienna Open Lab

BUSINESS
- 34 Biotech Companies
- Focus on Vaccines, Immunology and Disease Diagnostic
- 2 Business Incubators
- 4 Service Companies
- 1 Scientific Association

FACTS
- 2,000 Employees
- 79 Nationalities
- 90,000 m² Lab and Office Space
- 13 Core Facilities
- 1 Child Care Center
- Vienna #1 city in quality of life

Number of employees at different entities

Core Facilities 97
Other Members 92
BioTech Companies 772
Research Institutes 1,072

Scientists at Vienna BioCenter

Undergraduate 85
Graduate Students 93

Science Support 402
Staff Scientists 467
PHD 270
Postdocs 170

Nationalities at Vienna BioCenter 2021

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HOW VERTEBRATES CONQUERED LAND
A team of researchers sequenced the giant genome of the Australian lungfish, one living relative of first land explorers, unveiling the species’ unique evolutionary history and striking similarities to land-dwelling vertebrates. The study, published in the journal „Nature“, sets a record for the largest animal genome ever sequenced.

DENISE P. BARLOW AWARD FOR M. MUHAR
Matthias Muhar, IMP alumnus from the lab of Johannes Zuber and now postdoc at the ETH Zurich, received the Denise P. Barlow Award 2019 in recognition of his doctoral studies. In his PhD project, Matthias addressed this fundamental challenge by combining CRISPR genome engineering, targeted protein degradation, and SLAM-seq.

HOW TO TELL GOOD FROM BAD
How do we learn whether to approach or avoid something? Using functional brain imaging in mice, scientists from the lab of Wulf Haubensak and collaborators discovered a neuronal loop between the brain regions insular cortex and amygdala, which tags a stimulus as good or bad. This network could underly intolerance to uncertainty.

A new method developed by researchers of the Vienna BioCenter, SARSseq, will allow testing of thousands of samples for SARS-CoV-2 and other pathogens in just 15 to 24 hours. One area of application could be the monitoring of large groups of people, for example in companies, tested at regular intervals. The work, driven by Luisa Cochella and Alexander Stark of the IMP as well as Ulrich Elling of IMBA, can be found as preprint on medRxiv.
ERC CONSOLIDATOR GRANT TO N. RIVRON

Group leader Nicolas Rivron has received the ERC consolidator grant to develop \textit{in vitro} models of early development solely from stem cells. These models are powerful in revealing molecular and multicellular behaviors that naturally happen in the womb.

DENISE P. BARLOW AWARD FOR J. BATKI

Julia Batki, PhD, alumna from the Brennecke lab, has been awarded the Denise P. Barlow Award 2019. Results from her PhD thesis on small RNA-guided silencing of transposable elements in D. melanogaster were published in Nature Structural and Molecular Biology. Currently, Julia is a PostDoc at MPI for Molecular Genetics in Berlin.

SUPERCOMPUTER CLUSTER STARTS OPERATIONS AT IMBA

A High-Performance Computing (HPC) team of GMI, IMBA, IMP and Institute of High Energy Physics (HEPHY) joined forces at the Vienna BioCenter to establish the cloud infrastructure platform "CLIP". CLIP is the country’s largest non-university supercomputer cluster and serves scientists from fields as diverse as physics, maths, sound mechanics, space exploration and life sciences.

Researchers from the Burga lab have discovered selfish elements that could facilitate populations becoming distinct species. Together with the Kruglyak lab at the University of California, Los Angeles, the Burga lab shows that these elements are more common in nature than first thought and have evolved a wide range of mechanisms to force their inheritance and propagate in populations - a parasite within the genome. The results are published in the journal \textit{Current Biology}. 
TEARING DOWN WALLS FOR A NEW BEGINNING

The first impression counts – not only with people. The Max Perutz Labs are rebuilding key parts of the institute. The opening of the new entrance, reception, and study space for students marks a first milestone of this project.

DOCTORAL PROGRAM RECEIVES 4Y FWF FUNDING

The Austrian Science Fund (FWF) has granted a second four-year funding period for the Doctoral Program “Signaling Mechanisms in Cellular Homeostasis” (SMICH), allocating a total of more than 2 million Euros. The program will recruit students through the Vienna BioCenter PhD selection and will provide structured training and a scientific framework for students interested in cellular homeostasis.

ERC CONSOLIDATOR GRANT TO J. MATOS

Max Perutz Labs group leader Joao Matos has been awarded an ERC Consolidator Grant. The funding will help Joao and his team to decipher the molecular controls that ensure a balanced exchange of genetic material during meiosis.

UV LIGHT TO TELL TIME OF YEAR

In Nature Ecology and Evolution, an international collaboration of scientists led by Kristin Tessmar-Raible shows that, in addition to daylength, marine bristle worms sense seasonal intensity changes of UVA/deep violet light to adjust the levels of important neurohormones and their behavior.

THE GENETIC CODE OF RIBOSOMAL RNAs

The lab of Peter Schlögelhofer has, for the first time for any organism, sequenced and assembled large parts of the rDNA-encoding nucleolus organizing region of the model plant Arabidopsis thaliana. In their study, published in Nature Communications, the scientists also identified several tissue-specific rRNA variants.
**VIENNA BIOCENTER CORE FACILITIES**

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### ELECTRON MICROSCOPY

**3D PRINTING OF EM STRUCTURES**

Cryo-EM delivers high resolution protein structures. Often it helps to hold a physical model in your hands to understand how domains are organized and where ligands might bind. Therefore, the EM Facility is now offering 3D printing of EM structures as a service. Interested?

**CONTACT US**

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### PLANT SCIENCES

**INTERVIEW IN DIE PRESSE**

How will crops in southern Italy grow differently from today in the year 2050, when the soil will be drier and the temperatures hotter? Will they still produce enough yield? The Plant Sciences Facility was interviewed in the Austrian daily newspaper Die Presse about its high-tech research into stress-resistant crops.

**MORE**

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### AUSTRIAN BIOIMAGING/CMI

**NEW PUBLICATIONS**

Austrian BioImaging/CMI are publishing several of their novel multimodality imaging pipelines to showcase their huge potential and benefits for biomedical research and diagnostics. Two publications on correlated multimodal imaging in the life sciences are available online.

**PAPER 1**

**PAPER 2**

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### NATIONAL REPRESENTATIVE IN EURO-BIOIMAGING

Austrian BioImaging/CMI has been selected among 15 competitors as national representative of the European Research Infrastructure consortium (ERIC) Euro-BioImaging. The unit constitutes 35 open-access imaging facilities offering national and international scientists a variety of state-of-the-art and innovative imaging technologies (more than 35 imaging modalities) and their correlation for life sciences research, as well as image analysis and imaging consulting.

**PRESS RELEASE**
A:HEAD CLOSES 7-DIGIT € FINANCING ROUND

a:head bio AG closed a second round of financing to fuel its revolutionary approach in combating neurological disorders. a:head closed another 7-digit EUR equity round with a consortium of investors including red-stars.com data AG, the company’s seed investor.

SARS-COV2-SCREENING

COVID TEST STATISTICS

Almost 2,300 people from all VBC academic institutions and 30 VBC companies participate in the SARS-CoV2 screening. Since April 2020, a total of 88,000 samples were analysed. Of these, 84 individuals were tested positive. Thus, the collaborative effort of VCDI successfully prevented Covid19 cluster formation and continues to keep the VBC campus a safe place to work.

COMPANY NEWS

NEW DEMO REEL

Biolution is showcasing highlights as well as inspirations from past and ongoing projects in a new demo reel. Biolution’s ambition is to support researchers in their communication tasks with dynamic representations of their favourite molecules or cellular processes. The company is continuously expanding its toolset to visualise the incredible mechanisms of the invisible nanoworld.

YOUTUBE

CONTACT US
MANUFACTURING OF COVID-19 VACCINE STARTS
Valneva commences production of its inactivated, adjuvanted COVID-19 vaccine candidate in parallel to the ongoing clinical studies to optimize the timeline for potential deliveries of the vaccine.

SUPPLY OF COVID-19 VACCINE CANDIDATE DISCUSSED WITH EC
Valneva is in advanced discussions with the European Commission (EC) for the supply of up to 60 million doses of its COVID-19 vaccine, VLA2001. VLA2001 is currently the only inactivated vaccine candidate in clinical trials against COVID-19 in Europe.

UK EXERCISE OF OPTION FOR 40 MILLION DOSES OF COVID-19 VACCINE
The UK Government has exercised its option to order 40 million doses of Valneva’s inactivated, adjuvanted COVID-19 vaccine candidate for supply in 2022. This brings the total volume of the Valneva vaccine ordered by UK Government to 100 million doses and the UK Government retains options over a further 90 million doses for supply between 2023 and 2025.
COMPANY NEWS

COLLABORATION WITH BI ON GLUE DEGRADERS

Proxygen and Boehringer Ingelheim have entered into a collaboration and license agreement to enable the identification of molecular glue degraders against various oncogenic targets. The collaboration combines Proxygen’s unique molecular glue degrader discovery platform and its expertise in targeted protein degradation with Boehringer Ingelheim’s long-term strategy to provide first-in-class, breakthrough therapies for cancer patients.

TOXPHACTS VERSION 2.0 RELEASED

Phenaris is delighted to announce that ToxPHACTS version 2.0 has been released. Besides improvements in target-toxicity associations and chemical structure representation, it offers conformal prediction models for a set of off-targets. Phenaris will hold a webinar on March 9th, 2021 showing an online demo of the tool and its new features and enhancements.

HIGH QUALITY SRNA BIOMARKER ANALYSIS

TAmiRNA GmbH has expanded its offer for high quality small RNA biomarker analysis from biofluids to extracellular vesicles and space-resolved analysis in complex tissues. Analytical methods include NGS, RT-qPCR, as well as customer-tailored assay development.
COMPANY NEWS

NEW MANAGING DIRECTOR AND CEO

Dr Arne Materna has been appointed Managing Director and CEO of Ares Genetics effective January 1, 2021. Dr. Materna brings a wealth of experience in the development and commercialization of leading-edge bioinformatics platforms and products with a particular focus on microbiology and next-generation sequencing. Dr. Andreas Posch, founding CEO of Ares Genetics, will continue to support Ares Genetics as a special advisor to facilitate a smooth transition into its next growth phase in 2021.

MONITORING OF COVID19 INJECTION SITE REACTIONS

Injection Site Reactions (ISRs) are a constellation of symptoms, such as erythema, swelling, pain, and induration that can occur at the site of an injection. The SARS-CoV-2 pandemic has pushed the scientific communities to develop a vaccine in a record time. One of the key issues is patient safety and tracking of side effects: to this purpose, Scarletred’s digital solution is currently being used in clinical trials around the world by leading pharmaceutical companies for the development of a safe SARS-CoV-2 vaccine by enabling effective, reliable, and time-efficient documentation and monitoring of ISRs.
PAST EVENT

VBC PHD PROGRAM OPENING EVENT

The Vienna BioCenter PhD Program is now a fully approved Doctoral School of the University of Vienna and Medical University of Vienna, in collaboration with the research institutes on campus. The joint program celebrated its official start with a virtual welcome event that drew interest from hundreds of participants across the campus. The event also marked the launch of the new program website.

PRESENT EVENTS

FINAL LIFE SCIENCE TUESDAYS:

- #11: Translational Oncology on March 09th 2021
- #12: Production Systems of the Future on March 23rd 2021

ÖGMBT LIFE SCIENCE CAREER FAIR

- 19 March 2021 - Online tour in pharmaceutical industry with Boehringer Ingelheim in cooperation with jGBM.
- CV check-up
- Online Career Fair booths

LIFE SCIENCE CAREER FAIR

BY ÖGMBT

KICK OFF: SEPT. 23, 2020
SEPT. 2020 - MAR. 2021
ONLINE AND FREE
VIENNA BIOCENTER PHD PROGRAM IS NOW ACCEPTING APPLICATIONS

The mission of the Vienna BioCenter PhD Program is to promote interdisciplinary research in the Life Sciences at the highest level, and to help excellent PhD students develop into tomorrow’s leading scientists through a comprehensive training program. Call is open until April 15th 2021.

APPLY FOR THE POST-DOCTORAL PROGRAM AT VBC

VIP² is a three-year postdoctoral fellowship program at the Vienna BioCenter (VBC) that is open to candidates with backgrounds in biology, chemistry, physics, medicine, engineering, computer science, and bioinformatics. The program operates under a two-mentor scheme. Call is open until April 15th 2021.
Cafeteria

Opening Hours and Covid Regulations

- Monday - Friday: 8:30 - 14:30
- Weekends & Holidays: 11:30 - 15:00

Enzi and his motivated team are offering three warm meals, fresh salads, sandwiches, sweets, ice cream, coffee and tea.

Due to COVID regulation, please observe the following Cafeteria rules:

- **Registration for Lunch**: It is absolutely necessary to register for your lunch in advance. Enzi sends out an email every morning with a link to the registration form.
- **Bring the Confirmation**: When you have registered online, you will get an automatic confirmation. This confirmation has to be presented at the Cafeteria entrance.
- When a timeslot is fully booked, you are not allowed to come and eat unregistered.
- Stay within your booked time slot and make sure you leave in time.
- It is not allowed to add extra chairs to the tables.
- If you plan to get your food as take-away, please bring your own container.

We kindly ask all VBC colleagues to stick to and respect these measures! Thank you!

Bridge Café

Come Over and Get Your Treat

- Monday - Thursday: 14:00 - 18:30
- Friday: 14:00 - 18:00

Ingrid and Lewis will indulge you with a daily changing menu of sandwiches, pastries, burger or pizza. For those in need of a sugar rush, Lewis prepares delicious cheesecakes, shortbread, various muffins, cookies and energy balls (also vegan options available). Fresh fruit juices, fruits, ice cream, chocolate bars and of course coffee and tea are available.

Lewis offers to prepare private cakes, brownies, cheesecakes and all sorts of other sweets and/or pastries.

Get in Touch!

Instagram: Lewis@British_Bites

Contact Person for the VBC Newsletter: Michaela.Thoss@VBCF.ac.at