



20 YEARS OF RESEARCH – MANY REASONS TO CELEBRATE



On June 13th and 14th, IMBA celebrated 20 years of scientific advancement with a two-day event attended by over 400 guests including scientists, politicians, and academic figures. The celebration highlighted the institute's accomplishments in various fields such as chromosome and RNA biology, as well as stem cell and organoid research.

the anniversary party

Keynote speakers at the event included Maria Leptin, president of the European Research Council, and Tony Hyman, director of the Max Planck Institute of Molecular Cell Biology and Genetics, who are or were on IMBA's scientific advisory board. Discussions at an art salon focused on a project initated by founding director Josef Penninger.

To memorialize the occasion, IMBA commisioned an exhibit featuring high-resolution images from its research groups that provide an accessible glimpse into the world of science at IMBA. Visit the brand new exhibit in their lobby or get a preview of it on Youtube. View more photographs from the event in their news coverage.

VBC ASSOCIATION

The VBC Association is happy to welcome a new member!

THT Biomaterials GmbH ellular platform technology The Human Touch

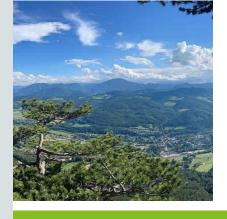
THT Biomaterials GmbH develops and commercializes human-derived biomaterials to replace animal-derived materials in science and to improve the translation of research into clinical applications.

SPORTS INITIATIVES ON VBC CAMPUS

VBC Sports is a campus-wide sports initiative to connect colleagues through their interest and passion for sports. All employees of VBC members have access to a wide range of sports activities through VBC sports.

To find out more, visit sports.vbc.ac.at and login via your institute. Employees at UBB follow these instructions and employees at VBC companies follow these instructions to register first with their work email address. Access to VBC Sports will be granted after successful approval of the registration.

Participation in VBC Sports activities is generously subsidized through membership fees of VBC association members. Thus, participation in most sports activities is free; however, some courses require partial or full coverage of the costs by the participants.



VBC Hiking Club

Join the VBC Hiking Club to enjoy hiking together with other colleagues from the VBC! There will be hikes in and outside Vienna. The hikes will start from sites reachable by public transport. If you are interested, please check the VBC Sports website or contact Helena.

VBC SCIENTIFIC TRAINING

Annual Vienna BioCenter PhD program student retreat 2023

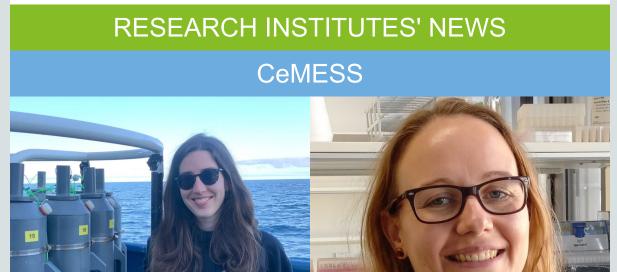


The annual Vienna BioCenter PhD program student retreat took place at the Jufa Hotel Vulkanland in Gnas, Styria. Around 120 students took part in the event which ran from 10-12 May. 40 PhD students were selected to give flash talks to their colleagues, and this was followed by a poster session in which all students explained their projects. There was also a workshop on Well Being in Academia led by Desiree Dickerson as well as guest speakers, Nikki Popper (TU Vienna) and Tecumseh Fitch (University of Vienna).

Vienna BioCenter Leadership Program Participants in the inaugural cohort of the

Vienna Biocenter Leadership program attended an effective communication workshop this month as part of Base 2 of the year-long programme. They expanded on topics taught during the March retreat and had the opportunity

to practice critical communication skills in groups. Conversations among participants were continued at the monthly meet-up, enhancing the peermentoring.



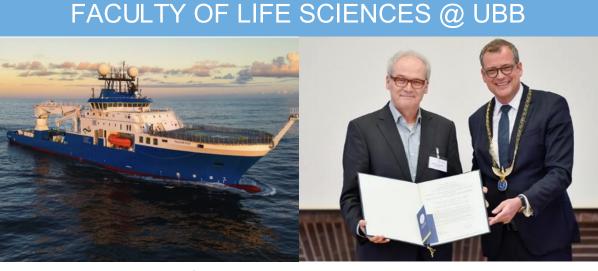
Barbara Bayer wins coveted FWF **START Award**

The Austrian Science Fund FWF announced this year's START award winners in June. Environmental microbiologist Barbara Bayer was one of only eight scientists to receive the coveted prize. A postdoc at DOME, Bayer will use her generous research budget to apply innovative methodologies to explore how methane

is emitted from our lakes and oceans.

Anouk Willemsen appointed **Assistant Professor**

Anouk Willemsen was promoted to the position of Assistant Professor, and will start a new ERC-funded research group at DOME. Willemsen's research focuses on the genomic evolution of giant viruses. She joined CeMESS as a postdoc in 2020 with a Marie Curie Fellowship, and together with group leader Matthias Horn, has been making waves ever since.

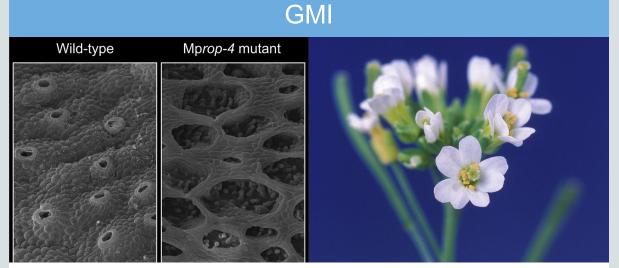


Upcoming Research Cruise to the Pacific Ocean funded by the Schmidt Ocean Institute

A research cruise lead by Monika Bright of the Department of Functional and Evolutionary Biology, Faculty of Life Sciences will take place on the new R/V Falkor (too) in summer 2023. The team will sail from Central America to the Pacific Fire Ring to study all benthic lifeforms.

Ulrich Technau elected member of the Leopoldina

Ulrich Technau (Department of Neuroscience and Developmental Biology) has been elected to the German National Academy of Sciences Leopoldina. Members of the Leopoldina are recognized experts in their field and are appointed for life. Currently, researchers from more than 30 countries worldwide are represented, covering almost all scientific disciplines.

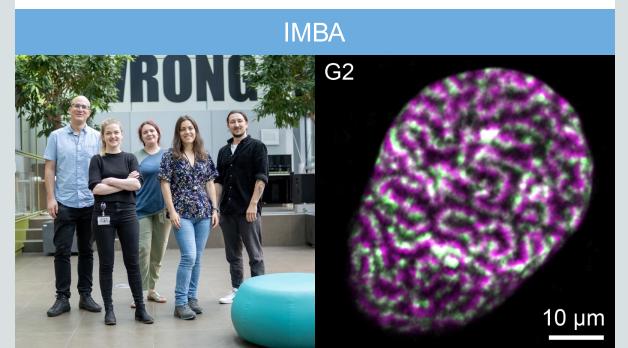


Signaling molecules that shape plant growth uncovered

RHO GTPases, a group of conserved signaling molecules, define where growth occurs on the surface of eukaryotic cells. The Dolan group at <u>GMI</u> discovered that "RHO GTPase of plants" - called ROP proteins for short - coordinate cell growth and division during tissue development and organ formation in land plants. The findings were published on in Current Biology.

New paper on epigenetic memory

Arabidopsis thaliana shows striking natural variation in the epigenetic modification called gene-body methylation. In a new paper in <u>PLoS</u> Genetics, researchers from the Nordborg group at the GMI sought to uncover what causes this variation. They show that a strong interplay between genetics and the environment may play an important role.



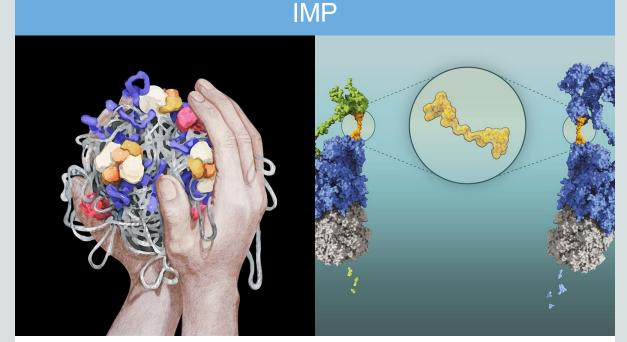
Virus-like transposons wage war on the species barrier

Scientists have known for decades that genes can be transferred from one species to another, both in animals and plants. However, how such an unlikely event occurs remained unknown. In a new study, researchers from Alejandro Burga's lab at IMBA identify a vector of horizontal gene transfer (HGT) in worms. The findings, published in Science, could lead to the discovery of further vectors of HGT in eukaryotes and might find applications in pathogen control.

A cohesin-regulated tug-of-war inside chromosomes

Cohesin, a ring-shaped protein complex, tethers the two DNA copies contained in each replicated chromosome such that they can be properly moved during cell division. A subset of cohesin complexes, known for its ability to extrude DNA loops, also facilitates the separation of duplicated DNA molecules, a new study by the Gerlich lab, published in The EMBO Journal, shows. These findings support the notion that DNA loop extrusion is an evolutionarily conserved mechanism, promoting the segregation of replicated genomes into daughter cells.

More IMBA News

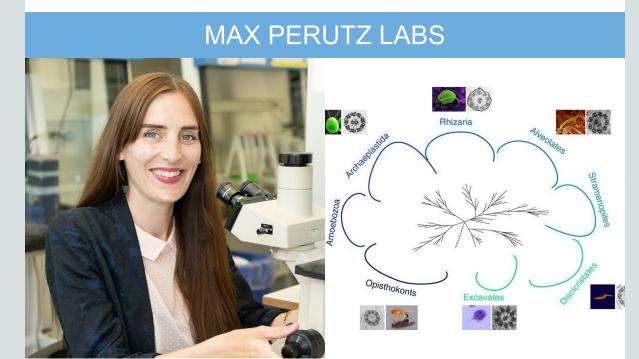


IMP scientists reshape our understanding of messenger RNA

In a study published in the journal Nature in April, scientists in the lab of Clemens Plaschka investigated how correct mRNAs are identified and prepared for nuclear export. Their study also shows that mRNAs form compact globules before they exit the nucleus. These findings revise our understanding of mRNA and pave the way for further investigations of the life cycle of mRNA.

Fighting tuberculosis with bacterial self-sabotage

Scientists of Tim Clausen's lab at the IMP and collaborators have harnessed the BacPROTAC technology to develop an antimicrobial agent that forces targeted bacterial proteins into suicide, taking aim at the often antibiotics-resistant cause of tuberculosis, Myobacterium *tuberculosis*. Their study, published in the journal <u>Cell</u> in May, brings new hope to combat bacterial pathogens.



Stephanie Ellis awarded START grant

Max Perutz Labs group leader Stephanie Ellis has been awarded a START grant

New study on cilium biogenesis genes

Cilia are hair-like projections on the surface of eukaryotic cells that perform

totaling € 1.05 million by the Austrian Science Fund FWF. Together with the Wittgenstein Award, the FWF START grant is one of the most prestigious and highly endowed scientific awards in Austria. The funding will support Stephanie's work on cell competition over the next five years.

essential sensory and motile functions. Defects in cilia are associated with a wide range of human diseases, collectively known as ciliopathies. In work published in The EMBO Journal, the lab of Alex Dammermann has identified the core set of genes associated with cilium biogenesis and function, which includes an additional 152 previously uncharacterized genes. The authors' compendium of ciliogenesis factors provides an invaluable inventory for the further investigation of this important cellular organelle.



Vienna 🔍 BioCenter



Valneva Announces Publication of its Chikungunya Vaccine Candidate Phase 3 Data in The Lancet



Valneva announced that the Company's pivotal Phase 3 data for its single-shot chikungunya vaccine candidate, VLA1553, have been published in The Lancet, the world's leading peer-reviewed medical journal.

Valneva celebrated its first 10 years as a specialty vaccine company

A LinkedIn post and short video created in celebration of the

company's 10 year anniversary are available here.



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X4 Pharmaceuticals announced new data from its global, pivotal, 4WHIM Phase 3 clinical trial of once-daily, oral mavorixafor in individuals with WHIM syndrome. It showed a reduction in the rate, severity, and duration of infections in trial participants. Read more

X4 Pharmaceuticals announces positive phase 3 results for mavorixafor

X4 Pharmaceuticals Announces \$65 Million Private Placement Priced At-the-Market

X4 Pharmaceuticals announced that it has agreed to sell an aggregate of 42,784,203 shares of common stock (or pre-funded warrants in lieu thereof) to certain institutional accredited investors in a private investment in public equity (PIPE) financing. Read more

EVENTS



WHAT: Workshop for children aged 10-12: "Alleskönner des Körpers? Zellen und ihre Aufgaben im Menschen" WHEN: **13 July** 2023, 10 am – 12 pm

WHERE: UZA II Josef-Holaubek-Platz 2, 1090 Wien

Click here to register

WHAT: Workshop for children aged 10-12: "The Amazing Cookbook of Life - From Simple DNA to Complex Protein" WHEN: **20 July** 2023, 10 am – 12 pm WHERE: IMBA Dr. Bohr-Gasse 3, 1030 Wien

Click here to register

GMI goes Kinderuni



WHAT: Workshop for children aged 10-12: "Wilde Eltern, zahme Kinder: Warum haben Bananen keine Kerne? Wir entdecken, wie Wildfrüchte zu modernen Genüssen wurden und lernen Pflanzenzüchtung kennen" WHEN: 21 July 2023, 1:30 pm - 3 pm WHERE: ÖAW Dr. Ignaz Seipel-Platz 2, 1010 Wien

Click here to register





The Health Science Forum Vienna is a joint initiative of the Institute of Molecular Biotechnology (IMBA) and Merck. The lectures on current topics give a lot of space to creativity and allow real understanding. The goal is a lively forum that promotes networking and creates understanding for the different roles between researchers, representatives of the pharmaceutical industry and health policy. Next talk: Innovationen für individualisierte Medizin: Neue Wege in der Forschung und Medikamentenentwicklung (in German)

19.September 2023, from 5:30 pm, IMBA, Dr. Bohr-Gasse 3, 1030 Vienna



Five different food trucks expand the culinary offerings on VBC campus. You can choose from daily changing, varied options. Already found your favorite? Food trucks stop at VBC Campus daily (Mon to Thu from 11 am to 2 pm) in front of the Globe Wien (at the corner of Karl-Farkas-Gasse and Maria-Jacobi-Gasse). The Wrap Stars food truck stops in front of the Marxbox.



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