

# COREnews

JUNE 2024



Dear colleagues,

On the occasion of the 75th anniversary of the Basic Law, the legal scholar and President of Leibniz University, Professor Epping, spoke at TWINCORE about Article 5 of the Basic Law, which guarantees freedom of research. This point is of crucial importance for the sustainable development of young researchers. This is why we only made room for young researchers to speak at the TWINCORE symposium, which took place the following day. The audience was significantly younger than at previous symposia, but at least as keen to engage in discussion. This positive experience encourages us to give the next generation more opportunities to speak at future TWINCORE symposia.

Yours



Ulrich Kalinke



Prof Volker Epping

## 75 YEARS OF ACADEMIC FREEDOM

**THIS YEAR, THE BASIC LAW OF THE FEDERAL REPUBLIC OF GERMANY CELEBRATES ITS 75TH BIRTHDAY. ARTICLE 5 (3) DEFINES FREEDOM OF RESEARCH AND TEACHING. TO MARK THE OCCASION, PROF. VOLKER EPPING, CONSTITUTIONAL LAW EXPERT AND PRESIDENT OF LEIBNIZ UNIVERSITÄT HANNOVER, GAVE A LECTURE AT TWINCORE ON THE EVE OF THE TWINCORE SYMPOSIUM ON 29 MAY. PREVIOUSLY, DR. JAN GRABOWSKI ASKED HIM A FEW QUESTIONS ABOUT ACADEMIC FREEDOM.**

### **What is special about academic freedom in Germany?**

In their primary function, fundamental rights are first and foremost rights of defence of the citizen against the state. So Article 5(3) of the Basic Law is also first and foremost a right of defence. Scientists can defend themselves against the state in the event of encroachments on academic freedom. Moreover, the fundamental rights laid down in Article 5 (3) are not restricted by a legal reservation, i.e.

they are fundamentally guaranteed without limits in the sense that they can only be restricted by other constitutional rights.

### **Does this mean that the limits of academic freedom are also defined?**

Yes, exactly. Wherever other fundamental rights in particular are affected, academic freedom can find its limits. This could be, for example, the freedom of education of students under Article 12 of the Basic Law. Against this



&gt;&gt; CONTINUATION OF THE INTERVIEW

constitutional background, a university can oblige an appointed professor to teach according to the curriculum. Another example is the constitutional ban on the development of offensive weapons. Even if development is in principle subject to freedom of research, Article 26 of the Basic Law sets clear and unambiguous limits to academic freedom. Perhaps another interesting example: animal welfare.

*'Art and science,  
research and teaching  
are free. Freedom of  
teaching does not  
release from loyalty  
to the Constitution'*

Basic Law of the Federal Republic of Germany,  
Article 5, Paragraph 3

Before the implementation of animal protection in Article 20a of the Basic Law, it was theoretically possible to do what one wanted with animals under the seal of scientific freedom,

because there was no constitutional right to restrict scientific freedom.



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THE FULL INTERVIEW IS AVAILABLE  
ONLINE ON OUR WEBSITE



<https://is.gd/xBUtIt>

## NEW SAFETY OFFICER AT THE TWINCORE

By Silke Hartmann

It is not easy to arrange an appointment with Dr Annett Ziegler at short notice. She is very busy. Since 1 January 2024, she has been the Biological Safety Officer (BBS) for TWINCORE and also deals with all safety issues at our centre - a responsible and varied role!

Annett seems to feel at home in her new position. She talks animatedly about her day-to-day work. As a BBS, she deals with all issues relating to genetic engineering. First and foremost, she has an advisory role to the management, the staff council and the works council. Once a month, she takes part in a safety meeting with the management and the occupational safety specialist Stefan Gerstel. In between, she supports the employees at TWINCORE with all questions relating to genetic engineering and safety, as well as with filling out forms.

She gets an idea of how processes are or can be organised so that they are practicable and still meet all legal requirements. This requires creativity and flexibility. 'I'm learning a lot at the moment,' explains Annett. What she particularly likes about her new job is the extensive dialogue with colleagues. She needs to be well informed about what the project managers are planning in their research projects and laboratories so

that everyone knows what documents need to be prepared for the authorities. She benefits from the fact that she was a project manager herself for six years.

She also benefits from her long experience at the centre for her other tasks. 'I've been here since 2011 and know the structures and key contacts very well,' says Annett. She tries to keep an eye on everything and coordinates that important safety-related tasks are completed. She also implements some measures herself and is pleased that the sense of achievement usually shows up much more quickly than when working as an active researcher.



THIS AND THAT

### Future Day at TWINCORE



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This year's Future Day for boys and girls took place on 25 April. Twelve pupils obtained an insight into our work and also had the opportunity to carry out an experiment in the laboratory.

### Diversity Day



For this year's Diversity Day on 28 May, we organised a joint lunch break. Twelve employees followed the invitation and shared their favourite dishes with each other. Over lunch, we had a relaxed exchange on intercultural topics.

### Summer party and symposium



The 16th TWINCORE Symposium was held under the motto 'The next generation of scientists' approach to translational infection research'. Excellent invited speakers and many young scientists from our own ranks gave exciting presentations.

The evening before, we celebrated our traditional summer party with friends and family.

## HZI ONE LAB RETREAT UNITES HZI SITES

By Sonja T. Jesse

This year's HZI-wide retreat under the motto 'One Lab' on 22 and 23 April brought together members of all HZI sites in Germany, including members of TWINCORE. This year's retreat took place in Berlin under new leadership. Research group leaders, the respective administrative heads and scientific advisers from all sites were invited to participate in this collaborative event.

The retreat addressed the past, present and future of HZI: Day one centered on the upcoming scientific evaluation for the current program-oriented funding (POF) phase (2021-present). HZI members received a comprehensive explanation of the Helmholtz Association's POF process and evaluation timeline aimed to inform new members of HZI, who might not be particularly familiar with the process. Scientific talks showcased the center's achievements since 2021, highlighting success stories. The day ended in interactive brainstorming sessions, where researchers collaboratively refined their approach to showcasing HZI's achievements for the May 2025 evaluation.

Day two pivoted towards charting a new course for HZI's future. A key element of this day was the introduction and concept development of the "Four Challenges" framework: Pandemic Resilience, Climate Change and Infection, Antimicrobial Resistance and Anti-Infectives, and Precision Infection Medicine. This new strategic concept aims to unify HZI's efforts in tackling the most pressing future challenges in infection research. Dedicated talks by representatives from each challenge area highlighted key areas of focus. Breakout sessions then delved deeper, identifying HZI's strengths and potential contributions to each challenge.

Beyond the formal agenda, the retreat offered a valuable opportunity for PIs from all HZI sites to network and reconnect. The change of scenery to Berlin added a touch of informality, fostering a positive and collaborative atmosphere. Critically, the retreat also provided a platform to showcase the breadth and excellence of ongoing research at HZI, sparking discussions about potential future collaborations and how existing ones can be strengthened.

Motivated by a renewed sense of collaboration, HZI is well-positioned to address the upcoming 2025 scientific POF evaluation and its future endeavors.

### WHAT IS POF?

Programme-oriented funding (POF) is the funding system of the Helmholtz Association of German Research Centres, Germany's largest research organisation. The HZI programme 'Infection Research' also benefits from this long-term support. After seven years, these programmes undergo an evaluation process and compete for funding. The evaluation focuses on research quality and impact, but also on the programme objectives, the work programme and potential future effects.



## MODULAR CONSTRUCTION AS A PLACE TO REST AND WORK

TWINCORE has a new quiet room for pregnant employees and breastfeeding mothers. The uninviting construction container previously used for this purpose in the car park has now been replaced by a modular building in the centre's garden. This is much better insulated against heat and cold, can be fully heated and air-conditioned and offers more comfort.

In cases where expectant mothers need to rest, the room offers an undisturbed retreat. A recliner is available as well as a resting lounge. In addition to this primary purpose for pregnant and breastfeeding women, the room can also be used as a parent-child office. The room is equipped with a fully-fledged office workspace with a height-adjustable desk, monitor, do-

cking station and network connections, as well as all kinds of play options for the little ones.

The modular building can also be used as a meeting room or as a flexible workplace. However, only on a call-off basis: if the room is needed by a pregnant employee, this has absolute priority, to which all other users must subordinate themselves. Breastfeeding mothers also have priority over other users.

To complete the equipment, the administration also accepts donations of toys or furniture. The contact person for this is Lena Apholz (jg)

# One Lab RETREAT

2024

Berlin  
22. + 23. April, 2024

# WELCOME AT TWINCORE!

## NEW EMPLOYEES:

### Research Group Biomarkers for Infectious Diseases:

Xiangqin Xu, PhD student

### Helmholtz Young Investigator Group Antiviral Antibody Omics:

Talina Simara, Bachelor student

### Institute for Experimental Virology:

Nico Kowitz, Master student

### Junior Research Group Translational Virology:

Carola Kaienburg, Administration

### RESIST Junior Research Group Computational Virology:

Sergej Ruff, Master student

### Research Group Pathogenesis of Bacterial Infections:

Elena Zukina, Master student

### Institute for Molecular Bacteriology:

Manja Jain, Intern

### Research Group Systems Biology of Microbial Communities:

Jenny Fiebig, Master student

### Data-driven Clinical Microbiology:

Dr Leonard Knegendorf, Clinician Scientist

### Administration:

Michael Mäckeler, Technical Services

### CiiM Group Bioinformatics of Individualised Infection Medicine:

Xiaoyi Zheng, PhD student  
Alina Ahrens, Master student

### CiiM Group Personalised Immunotherapy (PERI):

Prof Dr Kathrin de la Rosa, Group leader



## EXCELLENT DOCTORAL THESES

This year, both the Doctoral Prize of the Friends of the MHH and the Doctoral Prize of the Friends of the HZI go to TWINCORE, both to postdocs from the Institute for Experimental Infection Research headed by Prof Ulrich Kalinke.

Dr Bibiana Costa received the prize at the MHH on 24 May for her dissertation entitled 'Delineation of pro- and anti-viral responses of cytomegalovirus-exposed human monocyte-derived dendritic cells', in which she was able to clarify, among other things, which mechanisms the human cytomegalovirus (HCMV) uses to survive for life in the bodies of infected people. Costa recently published these findings in the renowned journal Nature Communications.



Ulrich Kalinke with the two awardees Bibiana Costa and Matthias Bruhn (from left to right)

Dr Matthias Bruhn was awarded the doctoral prize of the HZI Sponsors' Association on 13 June in Braunschweig. His doctoral thesis is entitled 'Analysis of vaccine-induced immunity: Impact of post-translational modification and somatic hypermutation on antibody responses'. He was able to show that the combination of infection and subsequent vaccination in the case of the SARS-CoV-2 coronavirus even protects against future variants of the virus, as the memory cells virtually predict the future. He has described how this works in the Journal of Infection and in the European Journal of Immunology.

'These two excellent doctoral theses were written under difficult conditions during the coronavirus pandemic,' says Ulrich Kalinke. 'This shows that outstanding work has been carried out despite the crisis. We are all very proud of our two award-winning colleagues and I am personally delighted for Bibiana and Matthias, who have been recognised in this way.' (jg)

## NEW CLINICAL JUNIOR RESEARCH GROUP

Since May 2024, the Institute for Molecular Bacteriology has also had a clinical junior research group. Microbiologist Dr Leonard Knegendorf has taken up a position as a physician scientist and will be investigating what additional insights can be gained from the data collected in clinical diagnostics and how diagnostics can be improved through more precise characterisation of bacteria using whole genome sequencing.

The special thing about this is that it does not require any additional diagnostic tests. 'The analyses carried out in the clinic are intended to help group the genome data and thus provide new information for optimal treatment. But we can learn even more from the data,' says Knegendorf. 'Whether and how we can derive prognoses or risk assessments from the findings is one of the questions that interests me the most.'



Knegendorf is in the last year of his further training as a specialist in microbiology, virology and infection epidemiology. 'I am pleased that I can now take on this interface function between research and clinical practice,' says Knegendorf. (jg)

### IMPRINT

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