



June 2023

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The TWINCORE Corporate Culture

The TWINCORE faculty and management place great value on the identification of all staff with the centre. This identity is based on common values and behaviours, which are shared amongst all staff and guide our mutual interactions and our multidisciplinary research approach. Together, they define how we act and interact with each other and set the path on which we strive towards our goals. They form the corporate culture of TWINCORE, on which all management and leadership decisions are based.

The corporate culture at TWINCORE is summarised in the following statements:

- We work together in a collaborative manner and make use of the synergies that result from the combination of different talents.
 - We strictly maintain our scientific integrity and apply the principles of Good Scientific Practice.
 - We maintain a strong culture of constructive feedback and respectful accountability.
 - We recognise and appreciate all individual contributions to our common goals.
 - We align our behaviour with our mission and our shared values.
 - We treat all employees with respect, tolerance and empathy.
 - We create an atmosphere of trust and transparency amongst each other, particularly between supervisors and their team members.
 - We place great value on the health of our staff and maintain a safety culture to preserve and foster it.
- We meet our challenges with a positive and open attitude.
 - We offer and use opportunities for individual growth through advanced training and professional education.
 - We facilitate a healthy life-domain balance for all staff and support flexible work conditions.
 - We guarantee psychological safety in the interaction with each other.
 - We rely on diverse, tolerant and inclusive teams.
 - We align our actions with a sustainable development of our institution and its environment.



Dear colleagues,

TWINCORE celebrates its 15th anniversary this summer. Looking back, it is hard to believe how much TWINCORE has developed and also changed during this time. The building is very well equipped and serves as a workplace for a considerable number of scientists. For some years now, and until the new research building is completed, TWINCORE is also used by colleagues from the Centre for Individualised Infection Medicine (CiIM). That's a good thing, because we want to have a strong neighbour when the new centre goes into operation. But this also requires compromises. In the next few months, we will make more use of flexible workplaces. This will allow us to reduce the acute occupancy of office space. This measure is an important building block for the sustainable operation of TWINCORE.

With best wishes,

Yours, Ulrich Kabi

New head of animal facility

TWINCORE's laboratory animal facility is getting a new manager. On 1 July, veterinarian Dr Inken Waltl, postdoctoral researcher at the Institute for Experimental Infection Research, will take over. The previous head of the Animal Experimental Unit at the HZI and also of the TWINCORE animal house, Dr Bastian Pasche, is moving to the University Medical Center Göttingen.

Dr Waltl, what are your first specific projects for the TWINCORE animal house?

Since the animal house has been run excellently by Bastian Pasche so far, not so much will fundamentally change. We want to continue to implement new findings on animal welfare and protection as far as possible. Another project is the integration of a new hygiene unit into the already existing quarantine facility of the animal house. Then we will be able to take wildling mice, special laboratory animals that carry the microbiome of wild mice in nature, into this facility. This is not trivial, as very special and strict hygiene measures apply to these animals in order to maintain our SPF housing.

Will the cooperation with the HZI be different in the future due to the new staff?

We will continue to work closely with the new animal house management at the HZI and remain in constant exchange. This is also necessary, as all of our parent breeds are located at the HZI.

How are animal experiments planned and carried out at TWINCORE?

At the beginning, there is the scientific hypothesis and the question of whether this can only be answered by an animal experiment. If this is the case, the project must be planned very precisely. This ensures that the animal experiment project will really bring new findings. Then an animal experiment application can be submitted, which explains precisely these points in great detail and is submitted to the Lower Saxony State Office for Consumer Protection and Food Safety as the competent authority for approval. Ultimately, only specially trained personnel who are experienced in handling the animals and can ensure the animals' welfare in the best possible way are allowed to carry out the experiment.

What influence do changed legal requirements have on this?

The legal changes have hardly any influence on the actual performance of animal experiments. Experimenters have always been obliged to avoid unnecessary pain, suffering or harm to



Veterinarian Dr Inken Waltl,
postdoctoral researcher at the Institute
for Experimental Infection Research

the animals. Only the documentation of the care of the animals has become more detailed in recent years. The same applies to the application for the animal experiment. Due to the implementation of the new legal changes, the forms are much more extensive and even more detailed information is required. Ultimately, however, this also helps to critically question the extent to which certain projects could still be improved in terms of animal welfare.

Thank you for talking to us

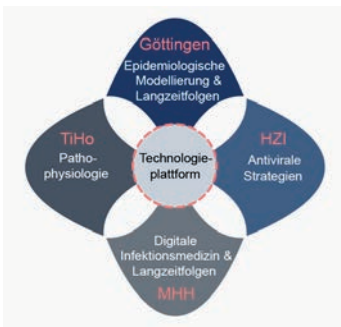
The interview was conducted by Jan Grabowski.

11th German Diversity Day



23 May 2023 was the 11th German Diversity Day. „As a signatory of the Diversity Charter, we would like to use this day to show what great importance is attached to the diversity of the workforce, including in terms of origin, nationality and gender,“ says Dr Albrecht Goetz, head of administration at TWINCORE.

As a colourful hands-on activity, TWINCORE collected coloured handprints from its staff on Diversity Day. In addition, employees had the opportunity to put their knowledge of the various dimensions of diversity to the test in a quiz. Around 80 people took part. The banner created during the event was used for a large group photo. Meanwhile, it decorates the entrance hall of TWINCORE and highlights how colourful things are at the research centre. (jg)



COFONI supports research on long-term consequences of COVID-19 with a total of 7.5 million euros

by Olivia Luise Gern

After the WHO declared the end of the international public health emergency of the SARS-CoV-2 pandemic in May 2023, the time of lockdowns is over. However, SARS-CoV-2 has carved a place for itself in the population with recurrent waves of infection and long-term consequences.

Long-COVID is defined as symptoms that persist for at least four weeks after COVID-19; post-COVID begins three months after the acute illness. However, because symptoms vary widely, only estimates are available regarding the number of people affected (1-30 %). Consequently, the development of treatment options is also difficult.

In order to gain clarity of the many uncertainties, the COVID-19 Research Network Lower Saxony (COFONI) will soon fund interdisciplinary research on basic and translational medicine as well as mental health in the context of long-term consequences of COVID-19.

A joint proposal between TWINCORE, the Department of Cardiology and Angiology of the MHH, the Department of Pathology of the University of Hannover and the animal experimental platform of COFONI has convinced the committees. It is already established that human cardiomyocytes can be infected by SARS-CoV-2, but not whether inflammatory responses in the heart can contribute to long- or post-COVID. Co-applicant Ulrich Kalinke sees the highest priority in the delineation of the long-term consequences of the affected organs; only in this way causal therapies can ultimately be developed.

Future-proof IT

Since 1 February, TWINCORE has a new IT coordinator. Lucas Hüffner is in full-time charge of the network, all computer systems and advises users on all questions regarding programmes and hardware.



„To speed up the transfer of large data packets between systems in the centre, we first upgraded neuralgic points in the network to fibre optics,” says Hüffner. These are now connected at a speed of 50 gigabits, which significantly reduces waiting times when analysing research data. „And because the accumulating data volumes keep growing, we have also started to expand our storage system,” says Hüffner. This so-called cluster is incrementally scalable and future-proof. „We can easily expand the storage space to several petabytes,” says Hüffner.

The next step is to improve the email infrastructure. A new mail system, running on a completely new software basis on a dedicated server at our premises, should both increase the speed of receiving and sending e-mails and provide better fail-safety.

In addition, security precautions are improved. „Through frequent and automatic updates, we hope to be better equipped against future cyber attacks,” says Hüffner. „Furthermore, better spam filters will help us to guard against threats.” This is because most attacks begin via links or attachments that are used to smuggle malware into the internal network. Lucas Hüffner advises special caution here: „Anyone who has clicked on such a link or opened an attachment should definitely report it. Early damage limitation can then prevent worse.”

For such cases, which hopefully will not occur, and also for all other support requests, the central mail address it-service@twincore.de has been set up. (jg)

THIS AND THAT

Visit from Berlin



On 23 February 2023, State Secretary Judith Pirscher from the Federal Ministry of Education and Research visited TWINCORE. In addition to detailed presentations of various research projects, she also met scientists of all career levels in the laboratory.

-70 is the new -80

The Institute for Experimental Virology has converted all of its ultra-low temperature freezers to -70°C. This 10 degree increase in temperature is expected to save around 28% energy in the future without negatively affecting the integrity of the stored materials. It is to be hoped that other institutes and working groups will follow this example.

Helmholtz Young Investigator Group for Yannic Bartsch



The junior research group Antiviral Antibody Omics, led by Yannic Bartsch, will receive a total of 1.5 million euros in funding from the Helmholtz Association of German Research Centres over the next five years as a Helmholtz Young Investigator Group.



Avoiding sexual harassment

At TWINCORE, we maintain an open and respectful relationship with each other. Although no cases of sexual harassment have come to our attention so far, we take this issue very seriously and since March, we have Berenike Lange as a contact person for confidential and low-threshold counseling as well as for support in case of sexual harassment.

„Dealing with sexual discrimination or harassment requires a lot of sensitivity,” says Lange. „In any case, only those further steps are taken that the affected persons themselves want. If desired, I accompany the entire process.”

All members of the TWINCORE, regardless of whether they are employed by the MHH or the HZI, can contact Berenike Lange. „I would like to use this job to help ensure that the TWINCORE remains a discrimination-free place where all employees can feel safe,” says Lange.

Further information on how to avoid sexual discrimination at TWINCORE and the respective action guidelines of MHH and HZI can be found on the intranet. (jg)



Together for a more sustainable TWINCORE by Alina Matthaei

Sustainability concerns social, economic and ecological action. „For us, sustainability does not only serve its own purpose,” says Ulrich Kalinke, Executive Director of TWINCORE. „Without considering aspects in the areas of social and economic sustainability, we could not accomplish our research mission at all. Moreover, we have to prepare for future ecological conditions.”

After all, research institutes require a considerable amount of energy and produce quite a bit of waste at the same time. That is why the Sustainability Working Group was founded at TWINCORE in August 2021. With a focus on ecological sustainability, the WG aims to optimise internal processes. „Everyone is welcome, we are always open to new ideas,” says Birthe Reinecke, laboratory manager at the Institute for Experimental Virology and a WG member from the beginning.

In the area of energy efficiency, the working group has already been able to provide initial impetus. The lighting in the laboratories and corridors is being converted to energy-saving LEDs, and the lights in the sanitary facilities are activated by motion detectors. Recently, waste is also separated at TWINCORE and packaging materials and paper are recycled. These are small contributions to jointly protecting the environment and climate and making the operation of the TWINCORE more sustainable.

New at TWINCORE

Institute for Experimental Infection Research

Marta Sadeghi, *MD student*

Junior Research Group Translational Immunology

Hannah Biermann, *Intern*

Mohamed Elbalkini, *Master's student*

Helmholtz Young Investigator Group Antiviral Antibody Omics

Yannic Bartsch, *Research group leader*

Mareike Schubert, *PhD student*

Nahal Mohsenzadeh Tabari, *Master's student*

Institute for Experimental Virology

Britta Bonde, *Intern*

Daniel Marke, *Student assistant*

Jessica Wenzl, *Technician*

Research Group Pathogenesis of Bacterial Infections

Dr. Faidad Khan, *Post Doc*

Institute for Molecular Bacteriology

Linda Johanna Besser, *Student assistant*

Laura Matos da Silva, *PhD student*

RESIST Research Group Systems Biology of Microbial Communities

Alexander Bräuer, *Master's student*

CiiM Group Computational Biology for Individualised Medicine

Sofia Agosti, *Master's student*

Maryam Nikooei, *Master's student*

CiiM

Karen Susan Blume, *Secretary*

Christiane Patzelt, *Secretary*

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