

# IPK Journal

## Digest

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## “THE SMARTNESS OF THE FOX AND THE WISDOM OF THE OWL”

**In September, Andreas Graner hands over the reins of the IPK to Nicolaus von Wirén. The Managing Director explains in the IPK Journal how he came to Gatersleben in 1997, what his recipe for success is in leading the Institute and what he gives his successor to take with him.**

I am grateful that I was able to take over an excellently positioned Institute from my predecessor, Ulrich Wobus, in 2007. I am also grateful that during my tenure I have succeeded in maintaining the scientific excellence and international visibility of the IPK and establishing new research priorities,” says Andreas Graner, Managing Director of the IPK. “As a scientist, however, my gaze is primarily turned to the future. Here we face great challenges, for which we need new ideas and fresh forces. But I am very confident that the Institute can continue to achieve great things.”

A foundation stone was laid at the beginning of June with the founding of TRANSCEND, a new alliance for plant sciences. The initiative came from the CEPLAS Cluster of Excellence and the IPK Leibniz Institute. “We want to get a holistic view of plants and their interaction with their environment,” emphasises Andreas Graner. “The current cooperation already brings us a big step further in this direction.”

For Andreas Graner, there is no question that plant research in general will gain in importance. “Agriculture needs crops that can cope with climate change, thrive with less fertiliser and pesticides and continue to have high yield potential. These requirements apply to cereals, oil crops,

beet or legumes,” says the Managing Director. “The reduction of meat consumption creates free areas again. However, these should primarily be used for the cultivation of renewable raw materials and/or nature conservation. The solution to the problems addressed is urgently dependent on innovations, to which the IPK also contributes with its research work.”

But Andreas Graner also remembers his start at the IPK clearly. “In 1996, I met Ulrich Wobus at a DFG colloquium in Bonn. He described to me his plans to expand the research work on barley and asked if I was interested. The institute in Gatersleben enjoyed an excellent reputation and offered an interesting perspective for the further development of my re-

search work. I applied and started my work there on April 1st 1997.”

He also has some advice for his successor Nicolaus von Wirén. “In my office hangs a woodcut that Ulrich Wobus gave me when I took office. The picture shows a tree with a fox lying at the bottom of its trunk and an owl sitting in its branches. I wish my successor that he may combine the smartness of the fox with the wisdom of the owl in the performance of his duties.”

And his own secret to success in running the Institute? “As an autodidact, I don’t have a secret to success - but I do have a recipe. It has always been important for me to review my own actions afterwards in order not to repeat mistakes or to identify opportunities for improvement,” emphasises Andreas Graner. “Furthermore, I always try to master a task set for me as well as possible. If I still fail, at least I have given it my all. I think I owe that to all my colleagues at the Institute.”



Fotos (4): IPK Leibniz-Institut / L. Tiller

# HELPING HANDS

**Olena Kishchenko and Anton Peterson, two Ukrainian researchers funded by the Philipp Schwartz Initiative, have been at the IPK since March 2022. Their stay was initiated by Ingo Schubert.**

Olena Kishchenko and Anton Peterson have now managed to gain a footing in Gatersleben. And within the framework of the Alexander von Humboldt Foundation's Philipp Schwartz Initiative, funded by the Federal Foreign Office and private foundations, the IPK has been given the opportunity to support both of them.

„And they are making great progress,“ emphasises Ingo Schubert, who, together with Manuela Nagel, looks after the Philipp Schwartz Fellows. Anton Peterson is working on the cryopreservation of duckweed. Olena Kishchenko is working on the development of live vaccines against viral fish diseases.

„Ingo Schubert and Manuela Nagel were the people who quickly extended a helping hand to us at a time when our family was in acute danger from the Russian war against Ukraine. It was through their support that we were able to apply for the grant,“ says Anton Peterson. „But we also received invaluable help in many practical matters from Bianka Jacobi and Britt Leps,“ emphasises Olena Kishchenko.



Foto: IPK Leibniz-Institut / L. Tiller

**Five research groups at the IPK mainly deal with questions of chromosome biology. Many threads come together at Andreas Houben.**

Andreas Houben himself has been fascinated by everything to do with chromatids, centromeres and DNA for several decades, or more precisely, since his first look through the microscope while studying agriculture in Halle. Yet one of his professors did not have a good impression of his student. Andreas Houben remembers having to listen to the sentence “You won't turn out anything the way you are sitting at the microscope”. “To his taste, I probably looked too relaxed in my posture when counting the chromosomes with their typical X shape.”

Today, Andreas Houben is one of the world's leading scientists in the field. In addition to numerous publications in renowned journals, he has submitted more than 30 proposals to the German Research Foundation (DFG) to date, the vast majority of which have subsequently been approved. If it doesn't work out with an application, you always have to be sporting about it and not take it personally, says the IPK scientist. Nevertheless, he remains highly motivated. “When a scientist has published in high-ranking journals, you have drunk once of the sweet juice, so to speak, then of course you want to take another sip.”



Fotos: IPK Leibniz-Institut / L. Tiller

## GENE BANKS FROM 14 COUNTRIES VISIT IPK

**Crop Trust and IPK invited partners from 14 gene banks from developing countries to a workshop in May.**

The aim of the workshop was to exchange views on the conservation and management of plant genetic resources. Specifically, the focus was on ex situ conservation concepts. Staff from 14 gene banks were trained in various aspects of ex situ conservation. Their newly acquired knowledge and skills are to be applied in their home countries in the future. The countries represented ranged from Peru and Ecuador to Uganda, Tanza-

nia, Pakistan and Vietnam. Two or three experts came from each gene bank. In most cases, these were gene bank managers, curators or representatives for

gene bank documentation or IT. First, the participants had the opportunity to get to know the IPK gene bank better. For this purpose, there were tours and demonstrations in the gene bank, in the herbarium, in the greenhouses and on the Institute's propagation plots. In short presentations the participating gene banks introduce themselves so that everyone could learn from each other.



Foto: IPK Leibniz-Institut / J. Himpe

## “WE ARE A BIT AHEAD OF THE WAVE”

The IPK Leibniz Institute is a member of the NFDI4Biodiversity and FAIRagro consortia of the National Research Data Infrastructure (NFDI). Its director York Sure-Vetter talks about the growing importance of data for science, the challenges that lie ahead for NFDI and Germany’s pioneering role.



Federal Research Minister Bettina Stark-Watzinger (FDP) said in 2022: “Research data is a treasure that has not yet been properly mined in Germany.” With this finding, she is preaching to the choir of York Sure-Vetter. “Research data and sustainable handling of this data definitely need more attention. Unfortunately, a lot of research data can currently neither be found nor used in an interoperable way - and thus cannot be used again or reused further,” says the director of the National Research Data Infrastructure (NFDI). “We want to change this and thus open up new potential for knowledge generation and interdisciplinary linking.” The pressure to act, however, is great, he says. “More and more research questions can only be answered through the interaction of different disci-

plines,” explains York Sure-Vetter.

There are now 26 consortia in the NFDI. These cover a wide range of disciplines: from cultural sciences, social sciences, humanities and engineering to life sciences and natural sciences. The IPK is represented in the NFDI4Biodiversity and FAIRagro consortia. “Ultimately, we are pursuing the vision of data as a common asset for excellent research organised by science itself,” York Sure-Vetter emphasises.

Politicians in Germany are supporting NFDI with 900 million euros over a ten-year period. Germany has a pioneering role in this, emphasises the NFDI director. “We are seen as playing a leading role with our initiative, and we are a bit ahead of the wave. I also notice this from the fact that I receive invitations from many countries to

report on our experiences,” explains York Sure-Vetter.

In daily work, the model of a data steward, who acts as a link between informatics and science, can help, he says. “At the core, it’s always about ensuring two things: high data quality and long-term access. And I am quite sure that in the future all institutions that generate a lot of data will have such a competence on board,” emphasises the NFDI director.

What he still misses is sufficient remuneration for the preparation and provision of data. “The sharing of research data should be valued just like the publication of articles. A citation system for data sets is a first important step towards this. To this end, research data is made citable and can thus be listed in the reference list of an article just like relevant publications.”

## TOPPING-OUT CEREMONY AT THE MALCHOW SITE



Foto: IPK Leibniz-Institut / S. Kirsch

**The Genebank locations in Malchow and Groß Lüsewitz are being modernised. In Malchow, the roofing ceremony was celebrated at the beginning of March.** The focus of the work is on the service building. On one side, a new sanitary wing with changing rooms is being built. On the other side, a storage hall, including a workshop, is under construction. „And we are completely replacing the entire electrical power supply, the control technology and the heating installations, but also the cold storage cells in the service building,” says Steffen Kirsch, head of the working group „Technology”.

The site is getting two new cold storage areas for storing the seeds. In the first part, the active collection will be stored at minus five degrees in future. For this purpose, a new rolling shelf system will be installed with a capacity that will also provide enough storage space for the future. And in the second part, the basic collection will be stored at a temperature of minus 18 degrees.

In addition, a new condensing boiler system will be installed and a house connection room will be built. The work should be completed in late summer.

# TRANSCEND TAKES OFF

**The Cluster of Excellence CEPLAS and the IPK Leibniz Institute founded a new alliance for plant sciences at the beginning of June. Federal Research Minister Bettina Stark-Watzinger (FDP) explicitly welcomes the initiative.**

With the creation of a Centre for Translational Plant Biodiversity Research (TRANSCEND), the Cluster of Excellence for Plant Sciences (CEPLAS) and the IPK Leibniz Institute want to pave the way for an alliance of innovative plant sciences. The primary goal is to advance the transformation process towards sustainable agriculture as an important element of a sustainable society. To this end, interfaces for cooperation must be identified, competencies must be brought together and plant research as a whole must be strengthened. The initiative, which was launched at the beginning of June with a founding event in Berlin, is therefore also open to other partners.

„The questions we have to answer in plant research are simply too big, so that they can only be answered in cooperation with numerous, also international, partners,” Andreas Weber says, long-time CEPLAS spokesperson. Research programmes will be developed under the umbrella of TRANSCEND. „We will work on topics from the field of biodiversity, ranging from basic research to applied issues,” said Andreas Graner, Managing Director of the IPK Leibniz Institute and together with Andreas Weber initiator of the alliance.

The initiative has the support of Federal Research Minister Bettina Stark-Watzinger (FDP). „We want to advance the breeding of climate resilient plants with



Foto: Andreas Neßlinger

new breeding techniques and at the same time protect our agroecosystems,” says Bettina Stark-Watzinger. „With the outstanding expertise of the IPK Leibniz Institute and CEPLAS, TRANSCEND can become an important accelerator for sustainable and high-yield agricultural and food systems.”

## BETWEEN “CURRY- WURST” AND SADDLE OF LAMB

## WHAT ACTUALLY DOES...? HOLGER PUCHTA



Foto: IPK Leibniz-Institut/ L. Tiller

**Chef Andrea Fricke makes sure that the guests at the casino are well catered for.** The

crucial question right at the start: How do you feel about currywurst? Andrea Fricke doesn't have to think long. „Currywurst is a must,” says the casino's head chef. But it doesn't always have to be meat on the plate. „The proportion

of vegetarian meals has risen sharply and is now 40 per cent,” says the 43-year-old. By the way, she has 600 dishes in her database for the creation of the menu plan. And she herself likes to eat saddle of lamb, roasted pink, with some salad.

**For seven years, from 1995 to 2002, Holger Puchta was a research group leader at the IPK. Today he works at the Karlsruhe Institute of Technology (KIT).** Holger Puchta still holds close ties with the IPK, especially with Andreas Houben. “He is an outstanding scientist, a good friend and reliable partner. We had many joint publications and we both also complement each other very well as personalities.”

This is not the only reason why he has continued to follow the Institute's development closely. “The IPK is a global player at the top of the world in many areas,” explains Holger Puchta. “With its scientific excellence, the Institute has once again gained a lot of visibility in recent years.”



Foto: KIT



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