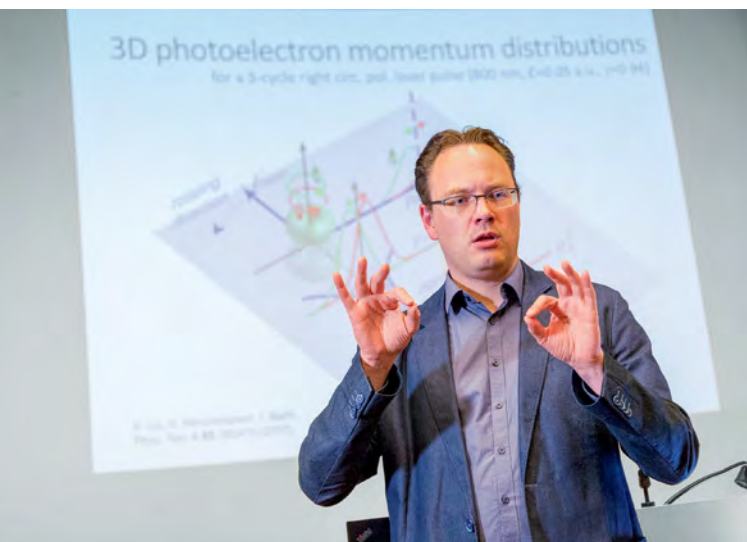


Many hurdles lead to success

How a deaf Max Planck Research Group Leader forges his path in science



Ingo Barth presenting his report at the MPG 2018 staff meeting. His signing was interpreted simultaneously.

For Ingo Barth, the thought that he would one day be a quantum physicist at a Max Planck Institute was even more challenging than it already is for others. In the former East Germany, the deaf could achieve no more than a simple school-leaving certificate and faced the prospect of completing one of only ten rather simple apprenticeships. Then came the fall of the Berlin Wall – and Barth was given the opportunity to obtain his secondary education diploma at a special school for the deaf in Essen. This was already an achievement, but then he faced the next hurdle: how is it possible to study at a university? What offers and opportunities are available for the deaf to participate in lectures and seminars?

These were only the most pressing questions that needed to be answered. The profession of sign language interpreter was just gradually developing at the same time. Ingo Barth therefore decided to tackle the first semesters of his physics studies at TU Berlin with the help of note takers. Parallel to this, as a sign language teacher, he taught other students, providing an abundance of communication and interaction.

Ingo Barth relied on sign language interpreters for every oral examination and every lecture. This created additional hurdles: there was nobody available for physics with English as the working language. For his dissertation defense, he thus had to sharpen not only his own knowledge, but also that of his interpreter. And he succeeded: he completed his dissertation summa cum laude and was awarded the Carl-Ramsauer Prize for it in 2009. In 2013, the German Association of University Professors and Lecturers and the academics portal honored him as Junior Scientist of the Year in recognition of his research achievements and his dedication in translating

technical terms into sign language, as well as his ideas for establishing a European university for the deaf.

These topics still inspire Barth today. With his Max Planck Research Group, in which he has included two more individuals with disabilities, he works on ionization dynamics in strong circularly polarized laser fields and on quantum hydrodynamics in vibrating molecules. In addition to this, he teaches natural sciences sign language in workshops for both interpreters and deaf scientists.

For him, it is essential to have a pool of experienced interpreters who can also travel to conferences. “Sign language interpreters are very expensive,” says Ingo Barth. “But these costs are funded by the Integration Agency. The MPI supports me perfectly; for example, it organizes everything in such a way that questions can be clarified when the interpreters are also at the Institute. And we not only have representatives for employees with disabilities, but also an inclusion representative, who serve as designated contacts.” Ingo Barth has achieved a great deal on his career path so far, but he also has many more plans and ideas – for example about equal opportunity: “It would be good if there were permanent jobs for those with severe disabilities. For me, for example, a move to a distant city or another country would be almost impossible to manage, as I’m dependent on my interpreters. They know my scientific work, they’ve developed specialized vocabulary to interpret from German sign language into English. Anywhere else, I would have to start from scratch,” says Barth, whose career and CV make him a role model – not only for other deaf scientists.

From Lindau on Lake Constance to the MPG’s world of research

The MPG traditionally gives around a dozen junior scientists from the MPI the opportunity to attend the Nobel Laureate Meeting. This time, however, 14 participants unconnected with the MPG were invited on a flying visit to Munich and one of the Institutes in order to promote further network expansion.

The 68th Nobel Laureate Meeting in Lindau at the end of June was yet again an exciting week, which this time brought together 39 Nobel Laureates and 600 junior scientists to focus on physiology and medicine. For 24 of them, the program continued after the conference had officially ended – at the post-meeting event organized by the MPG. This event, which is financed by the Max Planck Foundation, was established last year with the objective of giving highly-qualified young international scientists an exclusive in-

Biodiversity, tropical disease and health

Tandem Research Groups meet in Colombia to share experiences



Group photo with researchers: representatives of ten Tandem Groups spent two days together in Bogotá.

In Colombia, there are ten Tandem Research Groups at universities in Bogotá, Cali and Medellín. The leaders of these groups, all of whom are researchers selected by means of international calls for

applications, have now met for the first time to share their experiences.

The first Scientific Symposium for all Tandem Groups took place at the Universidad de los Andes in Bogotá at the

beginning of June and was attended by almost 50 junior scientists. The 26 presentations given at the two-day conference divulged not only the progress made on their research projects, but also the increase in external funding and the growing number of international publications, collaborative endeavors and last but not least doctoral and other students. The groups, each of which contains between five and seven young scientists, have been granted five years of funding by their home university or the Colombian Administrative Department of Science, Technology and Innovation (Colciencias), and cooperate closely with the respective Max Planck Institutes.

Nine groups are carrying out interdisciplinary research in the fields of tropical disease, biodiversity and health, investigating the metabolism and microbiome of plants, animals, insects, bacteria and viruses in laboratory experiments and using innovative biosensors and computer modeling. One other Tandem Group is researching the transformation of public law, particularly with regard to land grabs in Colombia.

sight into the MPG's world of research. A total of 24 talented young people from all over the world were hand-picked from among 80 applicants and invited to familiarize themselves with the support and research conditions provided by the twelve participating MPI.

At the start of the event, Max Planck President Martin Stratmann welcomed the group of young scientists at the Administrative Headquarters in Munich and talked to them about career opportunities in the MPG and their personal goals. The accompanying cultural program consisted of an introductory weekend in Munich including a Bavarian-style dinner, an entertaining tour of the city and a visit to the Deutsches Museum. Afterwards, the scientists traveled to the MPI of their choice. During their two-day stay there, the guests gained an impression of their respective Institutes, spent a day working with one of the working groups, and introduced themselves and their own research as part of a presentation. They were supervised not only by the Directors and Research Group Leaders, but also by MPI "mentors" who had also attended the Lindau Nobel Laureate Meeting. The visitors first met these mentors during this conference.



Informal gathering in Lindau. Bianca Verlinden (left) and Shireen Mentor in conversation with other participants in the MPG's post-event program.

Quiz night in the cafeteria

The Max Planck House hosted a special event for external guests

At the first quiz night in the Administrative Headquarters in Munich, nine quiz teams are solving major and minor research questions and puzzling over everyday trivia. Along the way, they are learning about the Max Planck Society, its history and some of the Institutes.

“How many of you have taken part in a quiz night before?” A couple of hands are hesitantly raised. Most of the 45 or so guests still have no idea what awaits them in the cafeteria of the Max Planck House at the Hofgarten in Munich. It is evening and the staff have gone home. As expected, most of those present are visitors from outside who have come together for the Max Planck Society’s first quiz night.

The two hosts for the evening, Tom Zimmermann and Darren Grundorf, quickly make their guests feel at ease. None of those who raised their hands are made to sit in a “hot seat” or come to the front. Instead, they are expected to work in teams to find solutions. They sit together, are given a series of questions, and everyone can contribute what they know.

And so the quiz starts. The theme of the night is a bus tour of the Max Planck Society, starring bus driver Klaus and humorously described by the two hosts. Klaus takes his guests on a trip to the various Max Planck Institutes in Germany, with detours to Florida and Nijmegen.

During the trip, they not only find out about the MPG as an organization for basic research but are also asked a large number of different questions, with answers to be provided by the nine quiz teams: which household pest is Nobel Laureate Christiane Nüsslein-Volhard researching? What was Max Planck’s famous statement on the importance of basic research? The correct answer to the first question is “fruit flies”, while for the second question, points are awarded for the answer “Insight must precede application”. These questions are not multiple choice, and smartphones may not be used. On stopping at the “MPI for Empirical Aesthetics”, the teams have to complete a couple of lines from Helene Fischer’s song “Atemlos...” – the question is about which texts and melodies are perceived as beautiful. The origins of the petrified objects investigated at the MPI for Evolutionary Anthropology are explained in a completely different way, with a film clip from “Star Trek”.

A good two hours and four rounds later, the winning team is delighted to receive the original Max Planck bath duck and other essential MPG accessories. Moreover, all the other guests are so enthusiastic about the new quiz night that a repeat event is being considered for next year.

An evening of questions and answers about the MPG – this was what the first quiz night had in store for around 45 guests. In the background: hosts Tom Zimmermann and Darren Grundorf.



Photo: Denise Vernillo / MPG

The “Eugen Seibold” sets sail

New ship named after the pioneer of German marine research

In the fall of 2018, the research ship operated by the MPI for Chemistry in Mainz will be heading to the North Atlantic on its first expedition. The launching ceremony took place in May during a conference in Kiel.

Leaders in the field of German marine research convened at the Kunsthalle in Kiel on 11 May. Together they paid tribute to the achievements of Eugen Seibold, who would have celebrated his 100th birthday on that day. In his address, Gerald Haug, climate geologist and Director at the MPI for Chemistry in Mainz, honored the pioneering work of Seibold, who died five years ago. It is largely due to him that “a high-performing, internationally recognized marine research program has been established in Germany,” said Haug. The ship was christened by Seibold’s widow, the micropaleontologist and science historian Ilse Seibold.

Gerald Haug is likely to have been awaiting the christening of the ship particularly eagerly – after all, it is his Institute that will be operating the research vessel in the future. The ship is expected to be ready for service by the beginning of September, when it will be embarking on its first research expedition to the North Atlantic to investigate the upper 500 to 1,000 meters of the ocean. The “Eugen Seibold” will be voyaging south of the Azores in order to avoid the stormy conditions in the North Atlantic. At these latitudes, the vessel can “sail with trade winds that measure five to six on the Beaufort Scale,” explains Haug, himself a keen amateur sailor.

First, however, the “Eugen Seibold” will be cruising back to the Michael Schmidt dockyard in Greifswald, where it was built at a cost of EUR 3.5 million and where the final precision work will be completed. The construction of the 22-meter research ship was financed by the Werner Siemens Foundation.

The “Eugen Seibold” has already made a name for itself as the world’s “greenest” research vessel. The ship is especially environmentally friendly, with a plastic hull, two electric engines



The ship was ceremonially christened in Kiel. The “Eugen Seibold” is equipped with two electric engines and a specially developed hybrid drive.

and a specially developed hybrid drive. This means that sea water, air and plankton samples can be collected from depths of up to 2,500 meters with no risk of contamination. These samples can be analyzed immediately in the clean room laboratory on board. As a result, new possibilities are opening up for the projects being implemented in cooperation with various partners.

This also applies to the Department of Climate Geochemistry led by Gerald Haug, in which the scientists’ work includes analyzing the biochemical processes that take place in the oceans. These processes regulate oceanic heat transport, biological productivity and

the oceanic nutrient reservoir, for example. They also have an immense influence on the concentration of CO₂ in the atmosphere, which is why they are also important for understanding climate change.

The vessel will normally be manned by “three scientists and two or three crew members,” says Haug, who does not want to pass up on the opportunity “to sail with one of the expeditions,” although he finds the yacht quite formidable. He himself sails on board “a wooden Dragon built in 1953 with a sail area of 22 square meters,” while the Eugen Seibold has 300. “You have to know exactly what you’re doing.”

Talent, tools and a tenor

The Harnack House – a magnificent venue for the Chefsache Conference

In mid-June, Max Planck Society Vice President Angela Friederici welcomed 16 board members and executives from major companies to the Harnack House. As a member of the Chefsache Initiative, the Max Planck Society was hosting the Chefsache Conference, at which more than 300 guests had the opportunity to find out about current trends in the development of talent.

Women have the same career opportunities as men – this is what 68 percent of the approximately 400 executives questioned in a survey conducted by the Chefsache Initiative believe. However, the reality looks somewhat different. On closer inspection, it was found that less than half of those questioned were able to confirm that their company actually adopts a systematic approach to the development of talent. Moreover, more than half had not yet addressed the existence of unconscious bias or explored it in any depth. It is therefore hardly surprising that the proportion of women continues to grow smaller with every rung up the career ladder.

“The talent of tomorrow has to be recruited today,” emphasized Angela Friederici in her welcome speech. There are also still far too few female scientists in Germany’s topmost management circles. Professional talent management based on objective criteria could help create equal opportunities for men and women besides making talented women more visible.

Janina Kugel, Chief Human Resources Officer and member of the Management Board at Siemens, went on to explain the importance of diversity within the company. “The mind is like a parachute: it only works when it is open,” is her argument in favor of a diverse corporate culture, in which Siemens even publicly supports the LGBT community.

The highlight was the presentation given by Swiss behavioral economist and Harvard Professor Iris Bohnet, who teaches in the U.S.. She used numerous experiments to explain how



Ruth Werhahn, Labor Relations Director TUEV Rheinland, studies the display in the Harnack House featuring information about famous guests.

unconscious bias can be outsmarted. It is important to apply this knowledge when making personnel-related decisions. Her advice included interviewing job applicants individually in a structured manner – a procedure that should also be followed by the persons in the company responsible for making the selection. This is the only way to make independent judgements of the candidates that can then be brought together.

Participants had the opportunity to test how far they are free from bias by means of a musical interlude. Quite a few of them may have perceived the singing of countertenor Georg Bochow as an intermezzo sung by a female singer, as they were at first not permitted to see the performer. This was where true fans of Baroque music had a clear advantage...

Various workshops gave conference participants the opportunity to discuss the ideas put forward during the morning session in practical terms, share what they had experienced in their

own companies and familiarize themselves with new tools. The workshops focused on the following questions: how can managers be motivated to focus more intensively on developing talent? What form would a talent program have to take to appeal to women? What makes a talented person successful?

The one-day conference was rounded off by two panel discussions between carefully selected guests which also spanned the sports and entertainment industry. The most unconventional arguments were put forward by former professional footballer Katja Kraus from the advertising agency Jung von Matt/sports and feminist Robert Franken. Kraus asserted that having a career did not automatically mean wanting to rise through a hierarchy, while Franken had a request: “Do not see it as presumptuous if people want flexibility in their working lives.” His judgement: despite verbal openness, there is still far too much rigid behavior. The Chefsache Initiative still has plenty more to do.