

# Science Meets Politics and Business

The MPS stages its first discussion forum at the World Economic Forum in Davos



The World Economic Forum takes place in Davos every year. The high-caliber participants of the five-day event take a close look at a range of global challenges.

With its premiere in the renowned Swiss health resort, the MPS gained direct access to decision-makers from the global political and business arenas. The dialogue focused on how we can create a more sustainable and fairer world. The discussion format itself presented a challenge, as it forced the speakers to present their theories with particular conciseness.

When the top international economics experts, politicians, intellectuals and journalists convene at the World Economic Forum in Davos, around 2,500 participants discuss global challenges for five days. One of the event's formats is the IdeasLab – a special forum that has long been utilized by research institutions such as MIT and the University of Cambridge, and now made use of for the first time by the Max Planck Society. Under the heading “Human-centered Economics,” the speakers highlighted the fact that, although humans are responsible

for the overexploitation of Earth's resources, they also have characteristics in their nature that can be harnessed politically to slow down the depletion of resources and protect the planet worldwide.

The contributions from the MPS, presented by Tania Singer, Director at the MPI for Human Cognitive and Brain Sciences, Manfred Milinski, Director at the MPI for Evolutionary Biology, and Lael Schooler from the MPI for Human Development, covered interdisciplinary insights from a variety of research areas. The group of speakers also included economist Dennis Snower, professor at Kiel University and director of the Kiel Institute for the World Economy.

## 20 SECONDS PER SLIDE

All of the speakers were faced with a tough job, as the hosts of the World Economic Forum have defined strict procedural rules for the IdeasLabs:

based on the PechaKucha presentation style, the slides compiled by the speaker are projected for only 20 seconds each – so the slides don't follow the speaker's word flow, but rather, the speaker must keep pace with the slides. A presentation comprising exactly 15 slides equals a total speaking time of five minutes. “Adapting the lecture to this principle involved a huge amount of preparation,” says Manfred Milinski. This made the presentation itself a real challenge, according to Milinski, because the “machine is simply merciless, the slides just keep running.”

In the end, however, Milinski managed to get his message across. Moreover, he describes the subsequent discussion in small groups, which is also part of the format, as a real bonus. For this, the audience, which is limited to 50 people for the IdeasLabs, is divided into four groups. The group participants discuss questions presented by the speaker for 30 minutes – an appointed minute-taker records the results of the group discussion and presents them to the plenum. “The room was full of bright minds and we had a very intensive dialogue,” says Milinski. Furthermore, he also believes that some of the ideas presented by the scientists were readily received by the business leaders. “From this perspective, it was a great success,” says Milinski. In the future, however, he would like ten minutes of speaking time and would prefer to control the slides himself.

Despite the challenges it presents for the speakers, Max Planck President Peter Gruss, who opened the IdeasLab, feels that the format offers added value. The extent of the MPS's participation in the coming year will be decided on the basis of the experiences gathered by all the participants. The organizers have already announced that the PechaKucha procedure will be repeated. From their point of view, it has proven to be advantageous, as it forces people to get to the point.

📺 Videos of the IdeasLab contributions:  
[www.mpg.de/lab](http://www.mpg.de/lab)

# Our Graduate Students Tell Us How It Is

The results of the survey conducted among Ph.D. students and alumni are now available

In 2013, the Max Planck Society conducted an online survey among its Ph.D. students and alumni to gain better insight into the needs of doctoral candidates.

By no means all graduate students who study at the Max Planck institutes continue their professional careers at research facilities and universities. Many also move on to companies or associations, choosing a career path outside of science. Where do doctoral candidates and freshly minted Ph.D. graduates see their professional future? What are their reasons for switching to another professional field? What support would doctoral candidates like to have when preparing for their next career step? And what kinds of professions have Max Planck alumni moved into after receiving their doctorates? These were the key questions the survey covered.

## ONLY ONE IN TWO GRADUATES TO REMAIN IN RESEARCH

"I congratulate Max Planck for undertaking this survey; hopefully the information that we give you will help you better shape this great Society. Personally, I would like to thank you for the Ph.D. fellowship you gave me. Thanks to you, I am now quite advanced in my career," wrote one of the respondents, thus confirming that this survey had touched a nerve. The Max Planck Society was supported by the HIS-Institute for Research on Higher Education (HIS-HF) in conducting the review. Even if this survey is not representative, it still provides some interesting points of reference that should be brought into the discussion about how junior scientists are supported in the Max Planck Society. More than 1,000 people took part in the survey; two-thirds of them were alumni, and one-third Ph.D. students. Two-thirds of respondents came from Germany, and one-third from outside the country. While the gender ratio among the Ph.D. students was balanced, 62 percent of the alumni who took part in the survey were men.

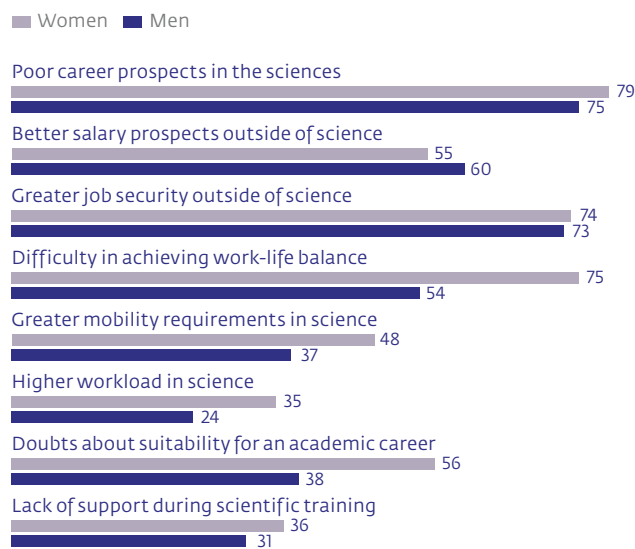
At the beginning of a Ph.D. program, slightly more than half of alumni (55 percent) and graduate students (56 percent) are aiming for a career in science. However, these figures fall as they continue with their Ph.D.: in response to the question of where they see themselves in five years, only 49 percent of biologists (previously 64 percent), 48 percent of chemists and physicists (previously 55 percent) and 47 percent of engineering scientists (previously 56 percent) replied that they see themselves as scientists at a university or research facility. However, 63 percent of graduate students in the humanities state that they want to remain in science (previously 46 percent). Therefore, while the trend to remain in science decreases somewhat in all subjects over the course of a Ph.D. program, it increases among humanities scholars.

So not even one in two graduate students in the Max Planck Society are aiming for a career in science. When asked about their reasons for leaving the sector, 77 percent of respondents cite the poor job prospects in academia, 58 percent believe that industry offers better earning opportunities, and 33 percent state that they received too little support during their doctoral studies. The gender-specific variation in the responses was particularly interesting: while 75 percent of women mention the difficulties in achieving a work-life balance as an important reason, 54 percent of men cite the same reason. And 56 percent of women but only 38 percent of men harbor doubts about their ability to be a scientist.

When asked about the obstacles they face when changing to another professional field, 45 percent of Ph.D. students and 39 percent of alumni state that they have, or had, no idea whatsoever about their career options. Almost one in three complained about their lack of key skills. It's not surprising, therefore, that many respondents would like to be offered services that would help them prepare for their future career, such as information about career options outside academia, project management training or mentoring, even while they are still completing their Ph.D. One of the alumni writes: "I had a great time – and received great support – while completing my Ph.D. Looking at it now and comparing Germans to people outside of our country, I see that other countries/universities and institutes outside of Germany focus much more on promoting students' personal direction. [...] A coaching type of approach, where mentors/coaches help students find their strengths, goals, values, etc., could be very valuable to students [...]."

The responses to open-ended questions in the survey also underscore the need for "(alumni) networks" and "industry contacts": "I think such surveys are particularly important. In my case, I'm not satisfied with my current position because networks – not qualifications – are most important for academics like me who want to get good university and non-university jobs in this part of the world. Unfortunately, the Max Planck Society doesn't offer opportunities to join networks that could lead to placements outside one's own country." Max Planck could definitely provide these networks. Even so, 25 percent of the alumni who took part in the survey are employed in industry – in both research and non-research roles.

### Which aspects contribute toward not seeking permanent employment in science long-term?



These questions were answered only by persons who wished to remain in science at the start of their doctoral studies, but decided to withdraw, or are planning to do so.



# Open Access for the Community

The President awards the first ever Communitas Prize for outstanding commitment in the service of the Max Planck Society

It's only been a few weeks, and memories of the international conference to celebrate the tenth anniversary of the Berlin Declaration on Open Access to the Sciences and the Humanities are still fresh. In February, four pioneers of the Open Access principle were honored with the Communitas Prize at the very place where additional objectives to establish the free publication of scientific knowledge on the Internet were set out. The outstanding commitment shown by Max Planck Directors Jürgen Renn, Robert Schlögl and Bernard Schutz, as well as by Georg Botz, Open Access Coordinator at the Max Planck Society, "ensured that the Max Planck Society became actively involved with Open Access at an early stage. They promoted the idea of free access to scientific knowledge throughout the world and did pioneering work to make publications available electronically," said Max Planck Society President Peter Gruss at the award ceremony, which took place during the meeting of the Scientific Council in the Leibniz Room of the Berlin-Brandenburg Academy of Sciences and Humanities.

In his speech, Gruss recalled how it all began in 2003, when the three prize-winning scientists managed to bring together key players in the worlds of science, politics, libraries and publishing for an international conference, which culminated in the Berlin Declaration. It's partly testament to their great personal commitment that more than 470 institutions now support the Declaration. The follow-up conferences to the Berlin Declaration have been a crucial forum for promoting Open Access, and it would have been hard to imagine these taking place



President Peter Gruss (second from right) together with the prize winners: Jürgen Renn, Bernard Schutz and Georg Botz (from left). Robert Schlögl was unable to attend the award ceremony.

without the efforts of Georg Botz. Gruss mentioned other achievements, including the initiative shown by Jürgen Renn and Robert Schlögl in setting up the Heinz Nixdorf Center for Information Management (ZIM), the precursor to the Max Planck Digital Library. With the Living Reviews, Bernard Schutz "set a benchmark for high-quality Open Access publications." Thanks to the efforts of the prize winners, the Max Planck Society is now known the world over for its close links with Open Access as a research policy objective.

## PhDnet Sets its Course for 2014

The newly elected representatives of the around 5,000 Max Planck doctoral students discussed their plans for 2014 at the beginning of the year in Munich with representatives from Administrative Headquarters. The PhDnet Executive Committee, headed

by spokesperson Andreea Scacioc from the MPI for Biophysical Chemistry, also presented new findings on the health insurance situation of Max Planck junior scientists. A representative survey conducted among 1,500 participants during the Christmas holidays showed that "28 percent of doctoral students and post-docs take out low-priced private health insurance policies. We must therefore find a way to enable all grant holders to choose affordable insurance that provides coverage in line with that of statutory insurance by means of a group insurance policy," explains Andreea Scacioc. Potential solutions were directly discussed in

Friederike Wrobel, Prateek Mahalwar, Andreea Scacioc and Jan Niklas Grieb (from left) discuss the results of their survey during a coffee break at Administrative Headquarters.

Munich with, among others, Anke Soemer, head of support for the Scientific Research Unit. The PhDnet team also included Prateek Mahalwar (MPI for Developmental Biology), Friederike Wrobel (MPI for Solid State Research) and Jan Niklas Grieb (MPI for Extraterrestrial Physics).

The further plans of the doctoral students' representatives this year also include stronger endorsement for Open Access. To this end, PhDnet will once again take part in the organization of the largest Open Access conference for junior scientists in 2014. Emphasis will also be placed on gender equality. PhDnet therefore took part in an online question-and-answer session on maxNet with equal opportunities experts from the MPS, including Ulla Weber, the central equal opportunities commissioner.

