

Max Planck Center Established in Tokyo



The Max Planck Center for Integrative Inflammation, a joint venture with the University of Tokyo, is the 13th Max Planck Center worldwide and the second in Japan. The center has attracted considerable interest among Japanese scientists.

The Max Planck Society and the University of Tokyo intend to intensify their work in the new field of integrative infection research and improve their network links still further. The joint Max Planck Center of Integrative Inflammation will bring together the research projects being undertaken by both organizations and simplify the exchange of ideas and experience between disciplines. “Inflammation research will be one of the central issues in the field of medicine in

research organizations in Asia and Japan. Initially located on the campus of the University of Tokyo for a period of five years, the new center is headed by Rudolf Grosschedl of the Max Planck Institute of Immunobiology and Epigenetics in Freiburg together with Tadatsugu Taniguchi of Tokyo University. The scientists involved will also benefit from the proximity of the university clinic, with which the center is expected to cooperate closely.

years to come,” commented the President of the Max Planck Society, Peter Gruss. The purpose of the body’s inflammatory reactions is to protect against the harmful effects of pathogens, degenerative cells, etc. However, the response is effective only if it is precisely regulated and not excessive. Otherwise, such defensive reactions can do more harm than good. Chronic inflammation, in particular, can lead to tissue damage, which in turn can aggravate existing conditions or even trigger new ones. In establishing the new center, the Max Planck Society is continuing to develop its close relations with



Max Planck Society Receives Prince of Asturias Award

It is an award that honors the Society as a whole – and it came as something of a surprise: After the award went to the International Red Cross and Red Crescent in 2012, this year, the Prince of Asturias Foundation elected to reward the Max Planck Society for its commitment to international cooperation.

Announcing its decision, the jury praised “the Society’s European orientation, interdisciplinary approach and close cooperation between Max Planck institutes and other research institutions and universities the world over.” In addition to the MPS’s scientific excellence, the jury also emphasized our international support for junior scientists in the form of over 40 Partner Groups worldwide that enable highly qualified young research-

ers to develop research groups of their own in their home countries. The President of the Max Planck Society, Peter Gruss, was delighted at this recognition: “This award is a remarkable honor that recognizes the work of all Max Planck Researchers and their partners worldwide.” The award will be presented by the Spanish Crown Prince on October 25 in Oviedo, the capital of the Principality of Asturias.

Martin Stratmann Succeeds Peter Gruss as President

At its meeting on the periphery of the annual assembly in Potsdam, the Senate of the Max Planck Society elected current Vice President Martin Stratmann as President for the term of office from 2014 to 2020. The 59-year-old chemist is Director at the Max-Planck-Institut für Eisenforschung GmbH in Düsseldorf. He takes over from Peter Gruss at the 65th General Meeting of the Max Planck Society in Munich in June 2014. The evening Plenary Assembly at this year's meeting, which was dedicated entirely to internationalization, was addressed for the first time by Anne Glover, scientific advisor to EU Commission President José Manuel Barroso. As a molecular biologist herself, she argued that "science should have a strong voice in Europe" and praised the courage displayed by the German government in increasing its investment in research and development in times of crisis. Federal Research Minister Johanna Wanka paid tribute to the Max Planck Society's initiatives aimed at expanding its global network, and in particular to the com-



Current President, Peter Gruss (second from left), and his successor, Martin Stratmann (right) accompanied by Federal Research Minister Johanna Wanka (third from left) and Brandenburg's Science Minister Sabine Kunst (second from right) listen to the speakers at this year's Plenary Assembly.

mitment of the current President. He, in turn, stressed that, alongside the Fraunhofer-Gesellschaft, the Max Planck Society is one of Germany's very few internationally recognized science brands: "We aim to strengthen our Max Planck

brand name, not just in Germany, but above all internationally, by pursuing research of the highest quality and heightening our international presence. Where we succeed, Germany profits too," declared Peter Gruss.

Max Planck Research Prize 2013 Goes to Chris Field and Markus Reichstein



Markus Reichstein (left) and Chris Field are recognized for their work in investigating the influence of climate change on our ecosystems and projecting an image of the world of tomorrow.

Chris Field and Markus Reichstein received the Max Planck Research Prize 2013 in recognition of their research into the effects of climate change on ecosystems. Chris Field is Founding Director of the Department of Global Ecology at the Carnegie Institution and a professor at Stanford University; Markus Reichstein is Director at the Max Planck Institute for Biogeo-

chemistry in Jena. The prize winners each receive 750,000 euros to fund their research and, in particular, to finance cooperation with scientists in Germany and abroad. The Max Planck Research Prize is one of Germany's most valuable science awards. Financed by the Federal Ministry of Education and Research, the prize is presented annually by the Alexander von Humboldt Foundation and the Max Planck Society to two scientists, one working in Germany and the other working abroad. Markus Reichstein and Chris Field received the prize for their definitive work in broadening our understanding of how life on Earth is responding to climate change and the interactions to be expected between the biosphere and the atmosphere. Not only are their fundamental findings of pioneering importance, but they are also helping to gauge the consequences of climate change for mankind.

“Yet another man”

Biologist Julia Schröder on the lack of visibility of women at conferences



Julia Schröder

Why does it feel as though women are under-represented at conferences? At the 2011 conference of the European Society for Evolutionary Biology (ESEB), Julia Schröder of the Max Planck Institute for Ornithology was not the only one who felt there were too many men. Together with colleague Hannah Dugdale (University of Sheffield), she has been studying the figures for female participation over the past ten years.

How did you arrive at the idea of investigating the number of women?

Julia Schröder: It was quite amusing; I was invited to a presentation at the ESEB conference, and as the next speaker stepped up, I suddenly heard a woman behind me groan, “Yet another man.” I had to laugh, because I had thought the same thing myself. It was all men, to the point that it became a running gag. We began to count men and women, and when we met in our groups for lunch or dinner, there was only one topic of conversation. On the way home, I went through the conference program and decided, together with Hannah Dugdale, that we should write a paper.

Had you already decided where you were going to publish the article?

No, we originally intended to write something for the ESEB newsletter or website, but then we began to think about a statistical analysis. There was hardly any such work to date. Most articles simply contain a verbal description of the visibility of men and women. It was important to us to

know that our results would be evaluated by peer review – hence the publication in the *JOURNAL OF EVOLUTIONARY BIOLOGY*.

You have done a great deal of work, and – as the 38 names on the list of authors shows – brought in a great deal of expertise.

What, exactly, did you find?

Well, first, that our gut feeling didn't deceive us. We identified how many women had appeared as “invited speaker,” “presenter,” “plenary speaker” or “oral presenter,” how many had been invited, and tracked the figures back to 2001. At the same time, we also considered these figures in relation to the number of women on various rungs of the career ladder in the scientific community, while taking into account the composition of organizing committees and the gender ratio among lead authors and last-named authors of current publications. These, after all, are the ones who are invited as a matter of preference, because science has been advanced by their findings.

To summarize, it's fair to say that men and women were more or less equally represented in the case of poster presentations or “regular talks.” But measured against the gender ratio on the corresponding rung of the career ladder in the scientific community, there ought to have been far more female scientists among the “invited speakers.” That isn't in any way intended as a criticism of the ESEB organizers. But it does mean that an element of high-quality science is being lost, to the detriment of progress in evolutionary biology.

Why is that?

Women are less likely than men to accept invitations to appear as “invited speakers.” There was a marked gap between the number of female scientists invited and the number who actually attended, a gap that wasn't in evidence among men.

Perhaps women have no desire to attend male-dominated conferences?

I think it's more likely that women with children find it difficult to juggle their time. The time of life when you think about having a family often clashes with the stage in your career when it is particularly impor-

tant to be in attendance to discuss your own research findings and build up networks with scientific colleagues, both male and female. Men are usually more flexible. Their role as fathers rarely keeps them home for long.

But that's just a supposition?

Yes. The next step is to find out whether this really is the reason why conference invitations are turned down. It's probably at least one factor, which triggers a downward spiral, as it were: Careers suffer from lower visibility and fewer opportunities for networking, meaning there is less chance of grants and prizes. And fewer women in top positions means fewer female role models for female students making their way into science.

So it's always the same women who play an active part in committees?

Precisely. Until at some point their workload becomes so great that they, too, have to say no. Quite apart from the fact that many women get tired of being role models just because they are mothers. A lot of blog entries have shown just that in England, where our study has found a wide audience.

Do you sympathize with this attitude?

Of course, each of us must find our own way. It also shows that not all of the strategies employed are productive. Childcare at the conference venue is a nice idea, but children have to go to school. And even paid, professional and individual childcare at home can't cope with every need when the activities of three children require the full-time commitment of both parents.

And how about yourself: Will you be attending the ESEB conference in 2013?

I will be taking part. But only because it's being held in Europe again and my husband is looking after our children. As a theoretical biologist, he can also work from home. We did consider going to Portugal, all five of us, and having a holiday after the conference. But that would cost an awful lot, and is against the business travel regulations.

Interview: Susanne Beer

The Physics of Waves

Jugend forscht research contest rewards talented young scientists

Leverkusen was the setting for the awards ceremony at the climax of the 48th national *Jugend forscht* contest to find Germany's top young researchers. All of the awards in the physics category are funded by the Max Planck Society – from the regional and state contests through to the national finals. The national award in the physics category went to 18-year-old Daniel Pflüger of Lüneburg. He used lasers and digital cameras to investigate the complex waves that are created when a droplet falls on the surface of a body of water. To visualize the process, scientists generally use high-speed cameras. But these are expensive, so Daniel Pflüger came up with a more economical process. Rather than directly record the droplet's moment of impact, his meth-

od analyzes the resulting waves. He was able to go some way toward measuring the complex reaction of the water following the impact of the droplet by using lasers and digital cameras to precisely measure the height of the resulting waves. The jury was particularly impressed by the combination of theory and practice. "The complex theoretical calculations were elegantly resolved with the same skill with which the idea was put into practice," remarked Ferdi Schüth, Director at the Max-Planck-Institut für Kohlenforschung (Coal Research), in praise of the winner.

This year's winner of the national prize for physics, Daniel Pflüger (right), accepts the award from Ferdi Schüth, Director at the Max Planck Institut für Kohlenforschung (Coal Research) in Mülheim an der Ruhr.



On the Net



Science in Pictures

At the 2012 Lindau Meeting of Nobel Laureates, Munich-based photographer Volker Steger invited the Nobel Prize winners to a photo shoot. He first asked them to outline their research using wax crayons on a sheet of white paper before photographing some of the laureates, including Paul Crutzen, Gerhard Ertl and Theodor Hänsch, with their sketches. These pleasing portraits of scientists were on display until August 25 as part of the *Sketches of Science* exhibition on the island of Mainau. The process by which the images were created is described on the website and the photo series is available for download in PDF format at: www.lindau-nobel.org

Bohemian Gravity

McGill University graduate Tim Blais has briefly swapped theoretical physics for music. His parody of Queen's number one hit "Bohemian Rhapsody", an "A Capella Science" song about string theory, is currently rocking the Internet. Turn it up and make sure to sing along: "Is it real? Or is it just fantasy?" There's even an Einstein sock puppet joining the chorus! www.youtube.com/user/acapellascience

The History of Pop

In his *PopHistory* blog, Bodo Mrozek traces the development of pop culture since 1945. "I try to directly juxtapose differing national perspectives, such as Anglo-American pop cultural studies, French *histoire sociale du rock* and German pop history," explains the scientist, who works at the Max Planck Institute for Human Development. Items include reviews, notes on new releases, events and conference reports – a sophisticated mix with an appeal that reaches beyond music researchers:

www.pophistory.hypotheses.org/author/pophistory

Applications Made Easy

No, you can't apply to the Max Planck Society in general, as an institution – nor is there such a thing as a deadline for general applications. The Max Planck system is not so easy to navigate for many would-be young scientists. A brief how-to video is now available to help them on their way, and will hopefully stem the flow of e-mails. It explains, in a light-hearted way, where applicants should look for information, whom to contact and how to link up with other doctoral students:

www.youtube.com/maxplansociety