

More Planning Security for Young Scientists

First national report on the situation of junior scientists sees need for reform



Clear targets: Doctoral students at the MPI of Biochemistry are conducting research for their doctoral theses.

Junior scientists must be offered more attractive prospects in the German scientific system, with a more secure basis for the future. This was the unanimous view of the nine experts who were invited to address the Research Committee of the German Parliament in early March. Max Planck Secretary General Barbara Bludau also went on to warn of an upcoming dearth of scientists as a result of demographic change.

In late February, the German Federal Ministry of Research had published its first national report, running to almost 300 pages, on the situation and support

available to the next generation of scientists. The report is based on the results of a study conducted under the auspices of the Institute for Research on Higher Education (HoF) at Martin Luther University Halle/Wittenberg. It aims to supplement the national educational reporting program and become part of a system of reports on the situation and development of junior scientists. As a result of the study, the report identifies five areas in need of reform to bolster the next generation of scientists. These

include the issue of career prospects and planning, equal opportunity, the effects of sponsorship and support, internationalization, and career development within and outside the world of science and research.

The experts invited to address the Committee also saw opportunities for improvement. Barbara Bludau drew attention to demographic change as the “most important parameter.” In order to prevail in the face of global competition, more secondary school students must complete their university qualification, and the potential inherent

in women must be more fully exploited. But financial and legal implications also make it difficult for Germany to maintain its position. Mentoring, the time allotted for undergraduate and postgraduate studies, flexible fast-track options, early responsibility for independent research projects – all these aspects would benefit from significantly improved conditions. Among the most striking features of the hotly contested market for the most talented minds are the headlong development in research in newly industrializing countries, and the increased efforts being made by top-ranking research countries.

Andreas Keller of the education and science trade union GEW called for more easily calculable career paths. Even after obtaining their doctorates, junior scientists are often unable to chart a course for themselves in the world of science. The so-called tenure track procedure, the American route to permanent academic employment, could be an option following a doctorate or junior professorship. Matthias Kleiner of the German Research Council also put tenure track at the top of his wish list. Besides professorships, tenure track could also embrace other permanent employment opportunities. Only by offering such prospects, in combination with better pay, can science compete with the offers made by industry.

Good Prospects

The Senate of the Max Planck Society approved two programs to support talented young scientists. Now, when Max Planck Institutes apply to the President for an Independent Junior Research Group, they can decide whether they want the appointment to be with or without tenure track. If tenure track is to be granted, there must be a relevant need, and the institute must have a corresponding W2 post at its disposal.

The first step is to appoint a candidate to head the Independent Max Planck Research Group for a fixed term. Candidates that prove to be outstandingly well qualified can then be appointed to a permanent post via the tenure track procedure. This carries with it the right to conduct independent research, for which

financial resources must be earmarked by the Board of Directors as part of the institute budget. Secondly, the so-called “W2 appointment with perspective” is to be trialed. This introduces a new rung on the career ladder as head of a research group, a post mid-way between an Independent Max Planck Research Group and a directorship.

The object is to retain outstanding and creative young scientists with great potential at the MPS by offering them the attractive prospect of an appointment as Director in the medium term. This will, of course, be dependent on a directorship becoming available within a foreseeable period of around five to seven years.

Network in Life Sciences

Successful *interact* Ph.D. symposium will now be held on an annual basis

What do you get when you bring together 400 enthusiastic life science graduate students and give them a platform to brainstorm, discuss and talk about science? The answer is *interact*. This one-of-a-kind Ph.D. symposium, organized solely for and by graduate students, took place at the majestic main building of the Ludwig Maximilian University. Munich's strong reputation as a life science center was well illustrated by participants from all of the seven life science institutes, including the Max Planck Institutes of Biochemistry,

Neurobiology and Psychiatry, the Munich Universities and the Helmholtz Zentrum. The event was supported by contributions from both academia and industry.

The first *interact* symposium took place in 2007, and this year's follow up proved to be an equally successful crowd puller with keynote lectures from Alfred Wittinghofer (Max Planck Institute of Molecular Physiology, Dortmund) and Nobel laureate Tim Hunt (Imperial Cancer Research, London). The diversity and depth of the field of

life sciences was well represented in the seven graduate student talks and 140 posters that encompassed such topics as immune system regulation, cytoskeleton dynamics and protein integrity.

Following its main objective, *interact* encouraged participants to exchange knowledge and expertise and build a network that would support their current projects and future aspirations. Based on this year's response and success, the organizers announced that the *interact* symposium would now take place on an annual basis.

Lawyers Learn Business and Economics

The family of International Max Planck Research Schools continues to grow: There are 54 of these graduate schools established at or with Max Planck Institutes. The latest IMPRS is dedicated to law, at the MPI for Intellectual Property, Competition and Tax Law, and has just completed 100 days of collaboration with economics and business administration students at Munich University.

The new IMPRS for Competition and Innovation – Legal and Economic Determinants is based on an interdisciplinary approach. The first cohort of doctoral students has been pursuing just such an approach since the autumn of 2008 in their study of the legal and economic aspects of competition and intellectual property rights. Reto Hilty, Director of the IMPRS and at the MPI hopes "that the Ph.D. students will make a significant contribution toward establishing interdisciplinarity as an innovative research method in addressing the system of intellectual property rights and the rules of competition."

The founders of the IMPRS themselves reflect this interdisciplinary aspiration: in addition to the MPI, the partners include the Department of Economics, the Munich School of Management and the Faculty of Law of the Ludwig Maximilian University of Munich. The Munich Intellectual Property Law Center is also associated with the School. The shared premises, joint courses and literature seminars are designed to establish interdisciplinary cooperation between scientists and students. In addition, the doctoral students are also required to take a substantial number of courses in order to develop their basic understanding of other disciplines.

The students' research projects are also coordinated with those of their classmates. All projects must fit within the specified framework of the "assertion of rights under intellectual property and competition law." In addition, the students working in pairs and on an interdisciplinary basis must each develop a working hypothesis. Indian Ph.D. student Arul Scaria, for example, is researching the enforcement of



Students at the new IMPRS at the Max Planck Institute for Intellectual Property, Competition and Tax Law are carrying out research in an interdisciplinary approach.

rights in India's entertainment industry from a legal, social and cultural perspective, while his colleague Jan Tonon is analyzing the same subject from an economist's viewpoint.

The first 100 days of the IMPRS-CI have shown that interdisciplinary cooperation between lawyers and economists as a means of finding a joint language and methodology is certainly a challenge, and the duality of courses and individual research programs brings a double burden of work. Nevertheless, the students' evaluation is positive: "Even though the first exams are on the horizon, I am glad I chose this Ph.D. program," confirms Agnieszka Ignacak, who even gave up a job at the European Patent Office to take part. One aspect that is particularly significant for her colleagues from abroad is that they are the first candidates in the history of the Faculty of Law at Munich's University who will be permitted to complete their degree in English, with no knowledge of either the German language or German law. In conjunction with the interdisciplinary focus, the results can be expected to cover a lot of ground.

🌐 www.imprs-ci.ip.mpg.de

It's a Family Affair

More and more, appointment committees are faced with couples in which both partners have a career to pursue

They are commonly referred to as “dual-career couples,” and finding the right solution has been known to tax entire appointment committees. When it comes to appointing a top-flight scientist to a university post nowadays, it is only to be expected that he or she will want to bring the other partner, and maybe the children, too. So if you want him – or her – it is a question of tailoring an individual package to meet the needs of the couple: What kind of career prospects can the partner expect? What about child care? Where is there housing available and at what cost? Specialists in this field met at a conference in Munich to discuss practical ways in which multiple institutions in the same region can work together.

As a specialist in human resources, Kerstin Dübner-Gee heads the Dual Career Office set up by the TU Munich in 2007. She describes her job as “rolling out the red carpet.” The task of her office is to fully consider the lives and situation of preferred candidates, and based on experience, develop appropriate prospects. “I try to convey a sense of security and highlight future scenarios, but that doesn’t necessarily include a specific job for the candidate’s partner. They must have a certain appetite for risk.” Or as Madeleine Lüthy, a long-time dual career adviser at ETH Zurich, puts it: “It is an adventurous decision for both partners, but one with positive connotations. You need the couple to want to make something happen.”

Many scientists in Germany would like to see a better work/life balance, and many also believe that this is sometimes easier to find abroad. In the interests of preventing German scientists from emigrating, or even of persuading them to come back home, the dual career issue is rapidly gaining great significance – particularly when appointing female candidates: 80 percent of female scientists have partners who also work in the sciences. Universities and scientific organizations must adapt

their personnel planning to this reality. It’s not just a matter of social window dressing, explained Marion Schick, who works as a personnel officer for the Fraunhofer Gesellschaft.

“Recruiting human resources is a strategic issue for a scientific organization,” she explains, advocating that it be treated just as seriously as issues of research.

The competition for top scientists is becoming fiercer. So martial is the tone that a veritable “war for talent” is being waged. Even the Max Planck Institutes that can tempt Directors with a pool of positions and guarantee excellent facilities must make serious efforts, particularly when it comes to attracting top people from abroad to Germany.

According to a current survey, 40 percent of universities are offering specific assistance to scientific couples. This is a positive trend when one considers that, of 178 university managers surveyed back in 2001 by the Young Academy organization, 73 percent stated that their partner’s career prospects had never or only occasionally been mentioned in appointment interviews.

One of the doyens of modern human resources policy is Professor Michel Domsch, who has consciously turned the focus of personnel marketing to dual career partnerships in order to realize the competitive advantages that can be achieved. As an economist working at the University of the Federal Armed Forces in Hamburg, he has made this one of his main areas of emphasis. He estimates that up to 90 percent of managers between the ages of 30 and 40 have a partner with a career of their own. So sending an up-and-coming manager abroad automatically means considering their private life. On the other hand, rather than pursue a strategy of avoidance that is out of tune with the times, says Domsch, predominantly



Dual-career programs are a particular challenge for human resources policies in the sciences.

large, internationally oriented companies can also intentionally and selectively employ couples and monitor and coordinate the careers of both partners.

Once the needs of dual-career couples become an actively considered part of corporate culture, the benefits are clear: sickness rates are lower, employee turnover is reduced, the company becomes more attractive as an employer, and productivity rises in line with employee satisfaction. This is the proven payoff of a good human resources policy, which of course costs money. But then, getting it wrong is equally expensive. A clear strategy is called for: “You must always look closely and analyze each couple’s situation in precise detail,” Domsch emphasized, “even if that occasionally means asking some intimate questions.”

The social sciences lend a hand here: as Markus Gottwald and Anke Spura of the Social Science Research Center Berlin explained, this branch of science has identified specific types of couples. They presented examples of four different types, though they also made clear that the ways in which couples live their lives are entirely individual to them. Despite originally setting out as egalitarian arrangements, the social scientists were forced to admit that many relationships develop an asymmetrical base: “It is primarily women who accept the career penalties and become, as it were, the synchronizers of a couple’s identity.” Dual career policies must therefore include, above all, elements that are consistently aimed at balance and equality, rather than being restricted to mobility.