Hometruths

Economic conditions are making it harder for young German postdocs to stay in their home country. But a few programmes offer some hope, says Quirin Schiermeier.

The prospect of sunny weather and year-round beach life was not why Giovanni Galizia moved last year from Germany to the University of California, Riverside. The 40-year-old neurobiologist, who studies the insect olfactory system, can already look back on more than ten successful years in research. But he started to feel increasingly ill at ease with the German research system, which, he says, fails to offer a clear career perspective — even to postdoctoral scientists with proven talent. So when offered a tenure-track position as associate professor at Riverside, he lost little time in accepting. The Free University in Berlin would have gladly retained him, but could not offer him such attractive conditions.

Galizia is not alone. A combination of changes in research policy and economic problems have made many young German researchers consider either leaving the country or abandoning the bench. A university law introduced last year allows German scientists to spend no more than 12 years on fixed-term contracts, including PhDs and postdoctoral positions, before they obtain a tenured university post (see Nature 415, 257–258; 2002), and this is driving some abroad. The economic crisis, which has reduced science funding, despite recent promises of increases, is forcing others to leave (see Nature 420, 452; 2002).

As a result of these conditions, German universities are finding it increasingly hard to attract the best young scientists, says Jürgen Mlynek, the rector of the Humboldt University in Berlin. Because there are too few tenure-track positions, many postdocs prefer a more secure position abroad or in industry, he says.

FIGHTING BACK

But Mlynek points to a number of promising new initiatives to enhance the status of young scientists at Germany’s 100 or so research universities and numerous non-university institutes. Junior professorships, for example, were introduced last year to give postdoctoral researchers full scientific independence at an earlier age. And the main granting agencies, such as the publicly funded DFG and the private Volkswagen Foundation, each operate tailor-made programmes for top young researchers.

The DFG’s prestigious Emmy Noether programme, for example, includes repatriation grants for young German scientists abroad. The Volkswagen Foundation’s new Tandem Programme targets pairs of young postdocs with interdisciplinary ideas in non-established combinations of fields. And the foundation’s Lichtenberg professorships offer researchers with two or three years’ postdoctoral experience tenure-track positions in a wide range of innovative fields.

In general, the competition for grants is getting...
The overall rate of successful applications at the Volkswagen Foundation has dropped from almost 60% to 44% since 1995, and in the wake of the current budget constraints, many DFG-funded projects are being downsized.

**UNKINDEST CUTS**

Many young researchers can tell tales of unexpected cuts. Wolf Schmidt, a 35-year-old theoretical physicist at the University of Jena, recently received a letter from the university's chancellor telling him that his group's budget for small equipment and travelling needs to be reduced by €3,500 (US$4,100). “It doesn't sound a lot,” he says. “But it is very annoying to have two computers less at times when we have more graduate students than ever before.”

The difficulties are more noticeable in Germany's poorer Länder (states), in the east and north, than in the rich south, where universities continue to receive more generous support from state governments.

Earlier this year in Berlin, Mlynek announced an end to all new appointments at the Humboldt University if the government doesn't give it any more money (see *Nature* 423, 101; 2003). As a result of this cash crunch, young researchers there describe the atmosphere at the brink of bankruptcy as paralysing.

“Berlin is a crazy city, but I hope not so crazy as to intentionally rid itself of the best young scientists,” says Ingo Bachmann, a cell biologist and neurobiologist who was appointed last year as a junior professor at the Charité, the Humboldt University's medical faculty. “I don't worry about my personal future,” he adds, “but if Berlin is not able to pay for quality, then I will go somewhere else.”

But many postdocs in Germany do have to worry about their future. Monika Kortenjann, for example, a biologist formerly at the Max Planck Institute of Immunobiology in Freburg, is looking back at the age of nearly 40 on the ruins of an 11-year career in research. A fixed-term group leader at the institute since 1998, her contract was terminated last year, after the DFG cancelled two projects of a large collaborative grant in which she participated.

Kortenjann applied for a position at the University of Essen — only to find that her ‘time’ under the new university law had run out. She was flabbergasted to learn that the new rule applied to her, although her career had started many years before its introduction.

“I feel mucked around. I had apparently taken part in a race without knowing that I was in it,” she says.

After several applications for jobs in the pharmaceutical industry remained unanswered, and frustrated by the pointlessness of carrying on, she gave it all up. She is now preparing for a second career in science journalism or in an editorial office.

“This is a typical example of how Germany tends to over-regulate people’s lives,” says Axel Meyer, head of evolutionary biology at the University of Konstanz, one of the rising stars among the younger generation of German life scientists.

Experienced scientists such as Kortenjann, who for whatever reason have not obtained a tenured position, can still be very valuable, says Meyer. He recently also lost a German postdoc who, facing the approaching 12-year limit, left for Canada. “I would have liked him to stay and I had funding for him, but the new rule required that he had to leave Germany's university system,” Meyer says.

**SIGNS OF HOPE**

By and large, however, Germany remains an attractive place for young scientists, says Gregor Markl, a mineralogist at the University of Tübingen, who four years ago became the youngest full professor in Germany at the age of 28. He admits that it is getting harder in Germany to succeed in research. “But let’s not decry this country,” he says. “The actual opportunities here are better than the general mood.” Markl stresses the importance of helping young scientists to make the right decisions before research careers end up in a dead-end street.

“Of course it is not easy to tell somebody that his or her gifts may not be sufficient, but I wouldn’t hesitate to tell someone mediocre that it may be better for him or her to look out for something else,” he says.

But what will a 32-year-old professor advise a good postdoc, who may well be older than himself? “That hard work alone is not enough,” says Markl: “It also takes a lot of talent, imaginative power, a real urge to do research — and a good bit of fortune.”

Quirin Schiermeier is *Nature*'s German correspondent.

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