NATURE|Vol 436|21 July 2005

MOVERS

Giovanni Galizia, professor of neurobiology, University of Konstanz, Germany

2003–05: Associate professor, Department of Entomology, University of California, Riverside
1999–2005: Head, independent research group, Berlin
1995–99: Postdoctoral fellow, Free University Berlin
1993–95: Postdoctoral fellow, Max Planck Institute, Tübingen
1989–93: Doctoral research, University of Cambridge, UK

Giovanni Galizia is exactly the type of researcher of which German science policy-makers dream. He is young, gifted, committed — and about to return to his native Germany after a successful stay abroad. Until recently Galizia combined working in California with leading an independent research group funded by the Volkswagen Foundation and the Free University of Berlin.

Since the 42-year-old researcher started thinking about science, he says, he has been inspired by the big questions: how the world works, what nature is all about, and how its phenomena are connected. He didn't have a preference for one specific subject area initially, although in time he gravitated towards a career in biology and mathematics, and then began to focus on the neurobiology of odour processing in insect brains.

The basic architecture of the olfactory system is similar in most animals, explains Galizia, and he hopes that he will decode the neural connectivity in insects and then be able to extrapolate that knowledge to other species. By combining single-cell analysis with studies of entire cell populations, he intends to understand a model neural network in detail. But he doesn't know how long this will take. "There is still a hard nut to crack, because the necessary technological approaches have not yet been developed," he explains.

Galizia's interest in science extends beyond the lab and into process and policy. As speaker and head of the scientific policy committee at the Young Academy — a German joint academic project to establish the promotion of young scholars — for five years, he promoted issues of concern to young scientists. He plans to draw on his US experience to promote ideas that could improve Germany's university system. He says that US universities look at other systems around the world in order to adopt the best available models and solutions, a practice he believes should be more widely used at German universities.

With career uncertainty and the absence of a tenure-track system, young scientists in Germany are put in an environment that is not optimal for focusing solely on their research, says Galizia. Therefore, he adds, it is essential to create conditions that will make research careers more predictable and attractive to those who have proved their talent for science.

"The widespread feeling here is that whether or not you make it in science is a question of chance," he says. "What's really lacking is a sense of trust in the system." ■

SCIENTISTS & SOCIETIES

A collective approach

Scientists everywhere — in academia as well as industry — face many of the same work issues at some point during their careers. People get laid off, for instance, or decide to switch jobs, or need to take time off for illness or child care.

To face these challenges, Swedish scientists have historically banded together, rather than going it alone. The Swedish Association of Scientists has, for over 50 years, provided researchers with a collective voice. The organization's unity has been in great demand lately, as biotechnology companies merge, and telecommunication and information-technology firms face greater financial pressures.

The organization has 21,000 members with a university degree in the field of science; more than 25% have a PhD and 20% hold a managerial position. The group is part of the Swedish Confederation of Professional Associations, which unites more than 570,000 members from different professional associations.

In Sweden, most terms of employment are regulated in collective agreements, and these tend to be negotiated by unions and professional associations. According to Swedish legislation, the professional associations and traditional trade unions are the main advocates for employees' rights.

The Swedish Association of Scientists helps to negotiate terms for members when they leave jobs. And when members suffer job losses, as a result of lay-offs or bankruptcy, the association can supplement their income with insurance, as well as help them find training or other job opportunities.

As a professional organization, it also offers members individual career and salary coaching as well as legal advice. Collectively the group pools its knowledge and resources to lobby for better working conditions, including those within the lab, and on quality-of-life issues and medical care.

This has proved to be a very effective way not just to improve working conditions for Sweden's scientists but also to increase efficiency, and therefore productivity, for its researchers, their institutions and for the country as a whole.

Organizing scientists has worked well in Sweden, but it may not be an option in countries that prohibit scientists from unionizing. Perhaps professional organizations can still offer members advocacy and support. ■

Marita Teräs is editor of the Swedish Association of Scientists' newsletter.
www.naturvetareforbundet.se

GRADUATE JOURNAL

A study in time

Graduate school is a time warp. I'm sure of it. This month, I entered my seventh year of graduate school. The past six years of work seemed to move at radically different paces from each other.

The first two years went by fairly quickly. There was a lot to accomplish: making new friends, completing class requirements, doing rotations in four different labs, choosing a lab and finally starting my thesis work. Things were moving along and I was moving right along with everything.

In my third and fourth years, time felt as if it was slowing down and my life dragged. A major project that seemed to be going well imploded, as did a long-term relationship. Every day was endless, the simplest tasks took too long and I accomplished little. There were moments when I felt time was standing still.

In my fifth year, work began to move along again and life accelerated. Friends and classmates started defending and graduating. Meetings with my thesis committee became more frequent and more important. In my sixth year, the pressures to finish a project, to write a paper, to make decisions about postgraduate school employment pushed the speed of time into warp drive.

My head spins when I think how quickly those 12 months passed. I'm nervous that the next 12 will move even faster. There is too much to accomplish, and if time continues to move at this pace, I'm afraid I won't be able to do it all. ■

Anne Margaret Lee is at Harvard University, Boston, Massachusetts.