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MOVERS

Nikolaus Rajewsky, head of bioinformatics research, Max Delbrück Center, Berlin, Germany

2003–06: Assistant professor, Center for Comparative Functional Genomics, New York University.
2002–03: Research assistant professor, Rockefeller University, New York.
1999–2002: Postdoc, Rockefeller University, New York.
1998–99: Postdoc, Rutgers University, New Jersey.

"What field of science you belong to depends on what questions you're asking," says Nikolaus Rajewsky, who is formally trained as a physicist. "Having said this, I am a biologist." Rajewsky, who joins the Max Delbrück Center (MDC) in Berlin next month, has frequently reformulated his questions. This is why his career has had such a broad span: mathematics, informatics and biology.

His questions at his current base of New York University have focused on 'microRNAs' — short pieces of RNA that help regulate vital pathways such as insulin secretion and cholesterol synthesis, but whose mechanisms of action are still not understood. That is as hard-core as biology gets — but biology was the first subject Rajewsky dropped in school.

After a PhD in theoretical physics from the University of Cologne (where he also took a master's in piano-playing), Rajewsky took a summer course at Princeton University called 'biology for mathematicians' in 1999. "It was then that I decided on biology," he says. He took up a postdoc position investigating regulatory elements in different genomes at Rockefeller University. "At that time, I knew little more about biology than the double helix and Darwin's theories," he says.

Now a much-courted expert in bioinformatics, Rajewsky taught himself biology — from books, seminars and the "inspiring" scientific environment of Rockefeller.

"The questions I'm asking are biological ones," he says, "and the tools I'm using are mostly informatics and wet-lab experiments." He advises every biology student to get a solid education in bioinformatics: "You'll need it."

His new appointment also covers Berlin's Charité medical school. "I like the possibility of bringing basic science to clinical institutions that the MDC opens up," he says. "One of my long-term aims is to find out whether microRNAs might be competent for treating diseases."

Leaving New York is not easy, he says. "There is this special American spirit: everyone has the right to be happy. And Americans complain a lot less than Germans do."

Despite worries that Europe lags behind in genomics and systems biology, he is happy to be returning to Germany. "I want to bring home some of the things I learned in the United States," he says. "I feel like a 'European American'."

He and his wife, a pianist, are looking forward to the greater cultural variety of Europe. "Berlin in particular is a melting pot of science and culture," he says. He still plays the piano most mornings. "I feel healthy when I'm playing, in every sense."

Dirk Steuerwald

SCIENTISTS & SOCIETIES

Mass uprising of women in science

How do you revive a dormant chapter of a national organization? The Boston chapter of the Association of Women in Science (AWIS) had some unintentional help. A now-infamous speech last year by Harvard University president Larry Summers, calling women's scientific capabilities into question, brought in many new members.

AWIS was founded in 1971, dedicated to promoting women's full participation in all scientific fields through education, mentoring and job opportunities. AWIS also serves as a political voice for women in science, through testimonies on Capitol Hill and participation in a number of coalitions.

Membership of the local chapter MASS AWIS has risen above 80 individuals (including men), whose fields of interest span a broad range, including patent law, academic science, industrial science, engineering and education. In addition, our members range from undergraduates to retired scientists and are at various companies, hospitals, academic institutions and institutes. This diverse network, dedicated to ensuring a role for women in all scientific arenas, bridges the inter-institutional gaps and will provide role models for girls and women at all stages of their scientific careers. AWIS has the potential to play a key role in promoting the advancement of women.

We are currently trying to organize a series of leadership workshops for undergraduates, graduates and postdocs that will target 'soft' skills, such as communication, leadership and interviewing. Although necessary to succeed in any career, these are not usually introduced in academic courses. MASS AWIS will also be establishing programmes and organizing mentors/volunteers to introduce the excitement of scientific discovery to school-age girls. Every chapter event serves as a valuable networking and mentoring resource for our members and guests. Finally, we are actively trying to build a scholarship fund to help disadvantaged women pursue their scientific dreams.

Besides spurring MASS AWIS membership, Summers provided a clear example of the continuing need for institutional change as well as ongoing education on gender equality. We all thought the effort to gain equality in scientific education and careers was well on its way, but this event and the statistics show that we are not yet at the top of the hill. Join an AWIS chapter and keep climbing with us.

Joanne Kamens is MASS AWIS chapter president, Karen Yee is MASS AWIS administrator.
www.awis.org

GRADUATE JOURNAL

Selling the PhD

"Every day, do something that scares you," urges a song I heard once. Last month, I filled my quota for a long time. As part of my mentoring programme, I went for a mock job interview at a government agency. Questions ranged from the traditional strengths-and-weaknesses to testing my knowledge on politics.

In my answers, I tried to remember what people have told me about selling the PhD as a proof of your abilities rather than a scientific piece of work. Don't call yourself a researcher or scientist — rather say that you have experience in planning and realizing large projects. Don't say you're good at lab work — describe yourself as meticulous and patient. Beware of sounding arrogant. Sadly, one of the prevailing prejudices against PhDs is that they are stuck-up specialists. Show them you can think broadly and be a team player.

The interview was stressful but ultimately rewarding. Although my guess on a budget question was €35 million (US$43 million) off, the interviewers said they liked my ability to think analytically and see the big picture, both products of my graduate education. It was a real boost to see I may be employable.

And the little budget mistake? Well, knowing how to find the facts is more important than actually knowing them by heart. At least, that's what I tell myself. If anybody else shares my opinion that €35 million don't matter, just send the money to me.

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