

MOVERS

Marja Makarow, chief executive, European Science Foundation, Strasbourg, France



2003-07 Vice-rector, University of Helsinki
2003- (on leave of absence until 2012) Professor of applied biochemistry and molecular biology, University of Helsinki
2000-04 Research director, Program in Cellular Biotechnology, University of Helsinki

Marja Makarow's early interest in linguistics soon gave way to an interest in the sciences after she fell in love with the word 'biochemistry'. But her ability to speak several languages and understand multiple fields will serve the Finnish biochemist well in her new role as chief executive of the European Science Foundation (ESF).

Makarow is charged with finding new ways to encourage cooperation across borders (both political and scientific) to support pan-European and interdisciplinary programmes. The ESF is not a funding agency, although its 77 member bodies include major funding agencies and research institutions from 30 countries. Rather, it facilitates networking, runs conferences and publishes position papers.

The University of Copenhagen's Liselotte Højgaard, who was on the search committee that selected Makarow, cites her strong academic background, international experience and leadership roles. She recalls seeing Makarow present strategies in a new white paper from the ESF's European Medical Research Councils. "She was very good at facilitating it, in a friendly, kind, polite and still firm way," says Højgaard. "She doesn't come across as a bulldozer. She listens."

Makarow studied biochemistry at the University of Helsinki, where she did postdoctoral work in virology, and went on to the European Molecular Biology Laboratory (EMBL) in Heidelberg. She was a group leader at the University of Helsinki's Institute of Biotechnology before becoming the institute's research director, an ascent interrupted only by a stint at the University of Kuopio.

Ten years ago, Makarow ventured into policy, serving on the Academy of Finland's Research Council for Health, the main funding agency for biomedical research. Next, she served on the governing body of EMBL and its multinational funding organization, a window on the European grant funding system. As vice-rector at the University of Helsinki, she oversaw research in many scientific disciplines. "When you give the little finger, the hand often goes," says Makarow, recounting the many positions she has held in addition to running her own lab.

Højgaard uses the word *sisu* to describe Makarow. "It means the ability to go through stone," she says, noting that the word often refers to a personality trait that Finns have developed during centuries of surviving cold, dark winters and holding Russian incursions at bay. "It's a tough job to be the chief executive of the ESF, but she can do it. She really has *sisu*."

Jill U. Adams

MENTORS & PROTÉGÉS

A guiding COMPASS

As I contemplated pursuing a PhD in cell biology, I looked back at my own undergraduate experience and decided that scientists in minority groups needed a more supportive pathway. With the help of associate deans and advisers at Carnegie Mellon University, I set up COMPASS (Coaching Minority Progress and Academic Success in Science), a mentoring programme led by older students that helps incoming minority students. That programme now has 15 members. Its genesis was rooted in my own struggles adjusting to a rigorous academic atmosphere.

During my first year as an undergraduate, I often felt overwhelmed and unsure about my abilities as a student. I was lucky to meet Malika Jeffries-EL, an African-American postdoc in chemistry, whose encouragement convinced me that my hard work would pay off. Some struggling, she said, was natural. She and I had much in common. She too had been the only black student in a science class. She knew the pressure to avoid failure. Communicating with a woman of colour who had earned an advanced science degree helped me see a path to success.

My work improved in my second year. My research project, analysing the interactions of proteins involved in

ribosome assembly, was an eye-opening experience. I enjoyed the various biochemical and genetic techniques used to study cellular mechanisms; I was stimulated by the questions that arose from analysing data; and I became interested in solving biological problems and addressing deeper questions at the PhD level. This year I was fortunate to be awarded a Howard Hughes Medical Institute Gilliam Fellowship for Advanced Study, which will fund the entirety of my graduate-school experience at the school of my choosing. I hope one day to become a cell-biology professor.

My experience of mentoring inspired me to start COMPASS, which enables incoming minority students to network with current students, key advisers and faculty members. Students are contacted the summer before their first year and invited to participate. The programme helps me share my insights in a supportive network.

This autumn, I plan to study regulation of the cell cycle at Stanford University. I will continue to serve as a mentor and adviser to COMPASS, hoping to help young minority scientists develop their own paths to success.

Betty Mbom is a senior at Carnegie Mellon University.

POSTDOC JOURNAL

In the name of science

This month I ran more than 20 metres carrying fresh gelada faeces on a rock (trying to photograph the defecator) and learned to tell females apart by the length of their nipples. It's all in the name of science. I love my job! I am living in a monkey soap opera — gelada baboons quarrel and have sex daily, providing us scientific voyeurs with hours of data-gathering.

All I miss is free time. I'd forgotten how much time is consumed by the process of gathering and digitizing behavioural data. Still, I'm an absolute nerd. I find it exhilarating to see the information increase, and to transcribe gelada vocalizations painstakingly recorded through the hazards of windy weather and tourist encounters. New ideas are already brewing in my mind, new things on which to focus, new questions to ask. (Do rank, spacing and/or hormones affect their contact calling?) My brain works in spite of the oxygen deficit!

Perhaps I am sacrificing some ordinary social skills, though. I am learning to identify some 100 geladas by their unique individual quirks or characteristics. The downside? I seem to be classifying new people as if they were geladas. Just the other day I caught myself comparing one man's straggly whiskers with another's skewed moustache and thinking, 'These males are easy to tell apart!' I foresee problems readjusting to the human soap opera when I leave the field.

Aliza le Roux is a postdoctoral fellow in animal behaviour at the University of Michigan.