SWEDEN

Leveling the Playing Field in Stockholm

Half of Stockholm University's senior biology faculty are female—a drastic change from 7 years ago

Only 7 years ago, Stockholm University's cell and molecular biology program was, if not gender-parity hell, then at least purgatory. Among a dozen or more professors, there was only one woman: emigré British physiologist Barbara Cannon. And the department was hardly an isolated case, since throughout Sweden, only 6% of university professors were female. That was a notable blot on the record of the left-leaning Social Democratic party, which had governed Sweden for decades and took pride in policies that propelled women into the labor market, largely through subsidized child care and a tax system that favored working couples.

Today, things have changed in Sweden. The Social Democrats are out of power, replaced in 1991 by a center-right coalition government. Ironically, however, the female-friendly policies the party pursued are beginning to bear fruit in the Swedish university system. And nowhere more visibly than in the Stockholm biology faculty. Since 1987, a series of retirements among male faculty members has allowed the appointment of eight new professors, five of them women, making the Stockholm cell and molecular biology program one of the few university science departments in Sweden to have reached an even split between men and women among its senior faculty. Today, six of the program's 13 full professors—who each head small, independent departments—are women.

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A fair share. From right, Astrid Gräslund, Elisabeth Haggård-Ljungquist, Barbara Cannon, and Britt-Marie Sjöberg—four of Stockholm's six senior women biologists.

This balance was achieved not by aggressive affirmative action policies, but through open appointments, mitigating the influence of "old boy networks," and through societal support for working women. "If you let women in," says Elisabeth Haggård-Ljungquist, who was last year appointed to head Stockholm's genetics department, "they will also end up in the highest positions—without having any quotas."

When asked by *Science* to identify the factors that enabled them to rise through the ranks, Stockholm's cohort of women biology professors pointed first to the benevolence of the Swedish welfare system—which not only provides subsidized child care, but also allows more than a year's paid leave after childbirth. Haggård-Ljungquist, as a divorced mother, knows how valuable this can be. When she spent almost 2 years at the Cold Spring Harbor Laboratory, she had to take an *au pair* with her in order to provide the same level of support offered in Sweden, stretching her finances to the limit. The help offered by the Swedish government alleviates the painful tension between motherhood and profession often faced by women in other countries. "None of us have forfeited becoming mothers to have a career," says Cannon.

Just as important, says Britt-Marie Sjöberg, who heads Stockholm's molecular biology department, is an appointment process for professors that reduces the influence of "old boy networks" that can exclude women from top-level positions. Before applicants are considered by faculty appointment committees, they are first ranked for scientific merit by a panel of three independent experts in the same general field, and usually only one of these experts is Swedish. Because the foreign reviewers rarely know any of the candidates personally, there's little room for cronyism. And while the appointment committee is free to disagree with the reviewers and appoint a lower-ranked candidate, this rarely happens, says Sjöberg. In biology, she says, this system was introduced about a decade ago—just before the sudden rise in the number of female professors in the Stockholm cell and molecular biology program.

It shouldn't be assumed that there isn't any affirmative action written into Swedish employment legislation. Indeed, laws state that, where two candidates for a job are equally matched, the applicant from the "minority sex" should be favored. But in fact, none of Stockholm's women biologists owe their positions to this provision: They've overpowered the competition without legal assistance. "They have been more qualified than their male colleagues," says remote sensing expert Leif Wastenson, Stockholm's dean of natural science.

Stockholm's cell and molecular biology program has also been helped along the road to equality by faculty turnover. "I think we may have just had more openings," says Sjöberg, explaining why the program is ahead of other Swedish biology schools. If she's right, then women should soon begin to make their presence felt in high-prestige institutions like Uppsala University and the Karolinska Institute, which have male-dominated—but graying—biology faculties.

There are, however, obstacles in the way of similar rapid progress in other disciplines. In physics, for instance, too few women are setting foot on the first rung of the scientific career ladder: Women made up only 11% of Swedish physics Ph.D.s awarded between 1988 and 1992. And overall, progress may be dented by Sweden's crippling national deficit, which threatens the social welfare system. Even if the Social Democrats resume power in a scheduled fall election, the system seems certain to be squeezed. "I'm grateful that I got through the system when the benefits were as good as they were," says Cannon.

But while the cost of child care may rise, hitting low-paid women hard, Sjöberg is optimistic that academics, with higher salaries, will still be able to afford it. And since women account for around 50% of new Swedish Ph.D.s in fields like molecular biology, immunology, and microbiology, most of her colleagues believe women will soon repeat their Stockholm success elsewhere. "It takes time," says Haggård-Ljungquist, "but it will come at the other universities too."

–Peter Aldhous