

## The State of the Profession

**F**rom time to time, it's a good idea for us to step back and examine the conditions under which we all live and work. In this issue we report on a survey of a kind *Science* has not done in the past: It interrogates a sample of more than 20,000 U.S. life-scientist members of the AAAS, examining salary, job satisfaction, and several other dimensions that help define how our colleagues feel about their careers.

At one level, the picture painted by the survey results is reassuring. The 8692 respondents—mostly well-established older scientists, the majority of whom are in academic institutions—display a high level of satisfaction with their work. The salaries they report are comfortable, if not generous, and increased at twice the inflation rate last year. Few respondents indicate a desire to change jobs. Indeed, half of them look forward to working after retirement. They spend half their time on research, and wish they could spend more. Their only complaint, apparently, is having to perform so many administrative tasks. You've heard that before, haven't you?

Nevertheless, it is important to look beyond the data and ask who wasn't there. For example, only a quarter of the respondents were women—reflecting a continuing gender gap in the profession—and those who responded reported lower salaries and slightly reduced job satisfaction compared with the men. Perhaps more troubling is the undersampling of an important cohort of scientists: the young post-doctoral fellows and beginning faculty members or industry researchers who represent the future of the profession. Only 6% of the respondents were under 35 years of age. Postdocs made up only 3% of the sample, and nontenured “para-faculty” only another 11%. The reports from this group displayed far less contentment.

It is almost as though there are two cohorts in our profession. The first is older; it is more satisfied, having traveled through a more favorable climate for getting research support and then for establishing a professional career. The second is dominated by younger job seekers, many of them frustrated by a discouraging marketplace, and by the difficulty they have experienced in funding their research. In my previous academic life, I became acutely conscious of the unhappiness of scholars in this cohort. Now, a decade later, their discontent comes through clearly in comments generated by the Salary Survey. It is reflected in the dialogue on Next Wave, *Science's* online career development site, where a special section allows postdocs to discuss their views on status (students or employees?) and compensation (with or without benefits?).

One might ask whether this demography of dissatisfaction is strictly an American phenomenon. The answer is clearly that it is not. Next Wave began in the United States, but has now expanded its reach, with portals for young scientists in Canada, the United Kingdom, Germany, and Singapore. A new organization, Eurodoc, representing Ph.D. student organizations across Europe, has approached Next Wave to help provide an outlet for raising issues of concern to their constituents. As of today, Next Wave is publishing a series of articles, the Eurodoc Exchange, in which young scientists describe their current situations, and invite comments. *Science* hopes that scientists and policy-makers of all ages and disciplines will participate in this online discussion.

It hardly needs saying that the venture in which we are all engaged depends on the future we can create for these scientists in the making. The Salary Survey may provide some comfort for the older generation. But neither it, nor what we are learning through Next Wave and in other dialogues with young scientists, should leave us comfortable about the next generation. We know how good they are: We see them as coauthors, and as equals in the laboratory and in seminars. We have come to understand their capacities and their hopes—but perhaps we have not tended carefully enough to their fears. Daunted by a lack of clear career opportunities, and by a system that holds them for too long in positions of uncertain status and low reward, they need some help. Although we cannot restructure the job market, we can at least tell them up front what they are facing, present them with career alternatives, and support their efforts to gain appropriate rewards for their work.

**Donald Kennedy**

