Schwartz of the American Physical Society points out that a department may be inundated with 400 applications for a position that might have drawn two dozen as recently as 5 years ago. Some of this growth is due to the resumé inflation made possible by word processing, notes Schwartz. But hiring committees, mindful of affirmative action goals, are also casting their nets wider. Some departments have tried valiantly to keep up with the influx. Two years ago, at Macalester College in St. Paul, Minnesota, every member of the search committee for a position in physical chemistry read every one of the 150 applications. But chair Wayne Wolsey predicts that they won't be able to do that this coming year for a position in organic chemistry—there will simply be too many applicants.

Aside from the fact that they are being inundated, another reason departments are being noncommittal in their rejection letters is that they want to keep their options open. Despite the competition, hotshots are still getting multiple offers, so departments have to anticipate turndowns and don't want to have to call up people who were previously told they were unqualified. Anthony Starace, chair of the physics department at the University of Nebraska, adds that "fear of legal action" is another reason for uninformative rejections. And, although many good people are turned down simply because a more suitable candidate has been found, Starace says many employers prefer not to tell an applicant anything "pejorative."

Whatever the reason, no news is not good news, and it only adds to the stress and anger of frustrated applicants. No wonder so many of our respondents question whether the work they trained for really exists. -Sheila Tobias

Sheila Tobias is a writer based in Arizona. Adapted from a chapter, "Report from the Field: The Scientist as Applicant" from a book, Science as a Career: Perceptions and Realities, by Sheila Tobias, Daryl Chubin, and Kevin Aylesworth, to be published in January 1995 by Research Corporation.

## A Quick Guide to Job-Hunting

Unemployment, in some respects, is particularly perilous for scientists. Re-entry into the job market for a researcher may be difficult. Ask John Quackenbush, who got his Ph.D. in theoretical physics from the University of California, Los Angeles, in 1990 and spent 2 years job-hunting before he finally ended up in computational biology. "Who's going to offer me a job in physics? I haven't published anything in 2 years," he says. And even if a scientist has no trouble keeping up with his field, says chemist Attila Pavlath of the U.S. Department of Agriculture in Albany, California, a board member of the American Chemical Society, "the prospective employer [often] feels that if someone couldn't get a job for a year or two he probably isn't worth it."

Re-entry problems can be even worse if a job loss hits during midcareer. Senior researchers, seemingly a valuable commodity in the job marketplace, can be seen not as a goldmine of experience, but simply as overpriced. Take Douglas Collins, a 54-year-old crystallographer whose contract at the Office of Naval Research has dried up. Potential employers have told him they're looking for an "entry-level" worker.

Not every field has been hit as hard as the physical sciences, of course, but biologists and others are also finding their job-hunting skills put to the test these days. "Good people continue to get good academic jobs," says neurobiologist Zach Hall, the new head of the National Institute on Neurological Diseases and Stroke. But "it takes a little longer now."

What is an unemployed scientist to do? Experts say the best job-hunting strategy is the most clichéd, the most tried and true, but the one a lot of scientists still fail to do: Call people up, ask for names of other people to call up, and call them up. In short—network. Scott Davis of Lee Hecht Harrison in Hartford, Connecticut, a job-placement company, says the scientists he works with are notoriously shy about this, but there is no substitute for the strategy. Davis also advises job seekers to get constant feedback on their plans and to pick the brains of anyone who will sit down with them. This kind of thing "is something [scientists] have never learned," says Davis. "They need to learn how to be extroverts."

Neuropharmacologist Duncan Taylor, age 45, who was laid off last year after 15 years at Bristol-Myers Squibb, is one of those who went to Davis for counseling. He says he learned that "you can keep up a dialogue" while waiting to hear from a potential employer by—for example—sending her an article about a subject of relevance to the company, with a cover letter. This keeps you, and your application, in the forefront of a potential employer's mind. Taylor landed another job, as research director for a small pharmaceutical company in Pennsylvania, this summer.

Lawyer and engineer Fred Dorey, president of the Bay Area Bioscience Center, which acts as a job broker for biological scientists, has another piece of advice for industry job seekers: Find a core piece of research that you are knowledgeable about, and "go up the citation tree" to find out which scientists are involved in the research. Then call up their companies. And, says Dorey, "Don't call the human-resources director, who may not have a clue what they are looking for. The right person to go to is the scientist."

Sometimes, however, finding a job in science requires more drastic action: switching fields, as Quackenbush did. That's the route Charlotte Hammond, age 41, an assistant professor of molecular biology at Wesleyan University in Connecticut, is considering. Hammond, who failed to get tenure last fall, is determined to stay in science, but if she doesn't find a job within a year, she plans to enter either law school or medical school. If Hammond goes the legal route, she hopes to become a patent lawyer for a biotech firm; if she pursues medicine, she plans to return to research as an M.D./Ph.D. Either road would be long, but Hammond says she finds them attractive because neither would take her far from scientific work.

-Constance Holden

"Who's going to offer me a job in physics? I haven't published anything in 2 years"

> —John Quackenbush