good departments are becoming saturated." One department chairman sent in a comment which was echoed by many others. He wrote that in several areas of psychology "there were fewer positions to be filled last year than the year before, and still fewer this year. . . . I have the impression that outstanding people in several areas are having more than usual difficulty in finding appropriate positions. These areas include particularly physiological psychology, psychology of language, and experimental social psychology."

A job shortage adversely affects people of all ages who want to move from their current jobs. The shortage does, however, strike young scientists with special severity. Christiana Morison Leonard, a talented neuropsychologist doing postdoctoral work at Rockefeller University, said that her colleagues were "having enormous difficulty finding jobs." She noted that people she knew with Ph.D.'s from universities such as Harvard, M.I.T., or Michigan and with postdoctoral experience and publication records were finding it almost impossible to find desirable openings. She noted the case of one colleague who had had job offers from three leading universities 2 years ago but was finding it difficult now to obtain one suitable offer. "The job market has just dried up," she said.

More Demand for Ecologists

Biology. "The situation is much tighter this year than in preceding years," thinks Elwood B. Ehrle, associate director of biological education for the American Institute of Biological Sciences in Washington. "Where there were once 3 or 4 applicants per position, there are now 12 to 15 applications per known vacancy." Ehrle said that the situation varied greatly by specialty in the life sciences—that the demand in systematic biology and comparative anatomy had fallen off in the last decade and that molecular biology had passed its peak demand about 1968. He noted that there seemed to be a growing demand for ecologists and that the market for microbiologists, for whom there was great industrial need, remained "as strong now as ever."

"The situation is somewhat more difficult," comments Norman S. Kerr, associate dean of the college of biological sciences at the University of Minnesota; "Our Ph.D.'s used to get three or four offers; now they feel lucky to get one." Kerr said that people in field biology had had the most trouble, but that there was now an "across-the-board shortage" of job opportunities in the biological sciences.

Mathematics. "It is tighter than two years ago," noted Truman A. Botts, executive director of the conference board of mathematical sciences in Washington, D.C. "At the most recent meeting of the American Mathematical Society in January, there was a general impression that young Ph.D.'s weren't getting jobs in droves or at least not the kind they wanted. The hotshot young researcher from Harvard, Berkeley, or the University of Chicago now may have to accept a job in an institution below the top ten. There is a growing saturation at the top."

Social Sciences. Some of those interviewed in sociology, anthropology, and political science expressed the opinion that it was a little more difficult to obtain jobs, but complaints were less severe than in the natural sciences. Of course, student enrollments have been rising more rapidly in the social sciences than in the natural sciences, thus stimulating the creation of many new university teaching positions.

Among the natural sciences, the brightest spot for jobs seems to be in the geological sciences. Among those disciplines shepherded by the American Geological Institute—geology, geophysics, oceanography—the job situation is "excellent," according to manpower specialist Bonnie Henderson, who reported that the geological sciences had now fully recovered from the manpower surplus of a decade ago, when there were far fewer jobs than people to fill them.

From the information that can be obtained, it seems that job prospects are dimmer this year in most natural science disciplines. The reasons seem to be manifold: (i) severe cutbacks in the rate of growth of public support of R & D, especially at the federal level; (ii) a rapidly rising increase in Ph.D. production, coupled with a slower rate of growth in the number of science students; (iii) a lessening of willingness by corporations to hire scientists in certain areas.

What can be done? In this writer's opinion, one thing that should be done, for every scientific discipline, is to begin accumulating much more comprehensive data on the supply-demand situation for scientific manpower. One would hope that the federal government (perhaps the National Science Foundation) could assume this task. Failing that, private scientific organizations could do much better in this regard than they are now doing. It is impossible to ascertain future need for scientists if there is no clear idea of what is happening now to recent graduates.

Second, the attitude of young scientists and their mentors may have to change. It is obvious that the nation's capacity to assimilate basic researchers is limited, and scientists will increasingly have to consider teaching in community colleges, junior colleges, and high schools as legitimate career choices. Moreover, young scientists will have to overcome what seems to be a growing prejudice against working in industry.

Better Persuasive Efforts Needed

Third, it is obvious that the scientific community is going to have to work harder to convince political Washington to spend the money to create more scientific jobs. Rather than wait for the federal government to come to scientists, scientific groups should present plans detailing how increased funding for science could help abate some of the social, environmental, and health problems of the nation.

Finally, if one accepts the probability that federal science spending will not greatly increase in the years ahead, it is apparent that those scientists who are still trumpeting the "golden future" of science as a career should, at least temporarily, lower their voices. The days of a salary and security "gravy train" for the scientist of only average abilities seem to be drawing to a close. Unless the tendency to cut back on federal science spending is reversed, it may well be that the scientific profession will be winnowed to those able scientists who are driven primarily by love of their work. Although such a forced sifting would be hard on many of the scientifically mediocre, it seems unlikely that it would drastically reduce the high quality of American science. A brisk winnowing might even help.

—BRYCE NELSON

Nelson Joining L.A. Times

Bryce Nelson, who has written for News and Comment for the past 3 years, has joined the national news staff of the Los Angeles *Times*. He will report on political and social topics in the midwestern states from Chicago.