

have very limited office space, and have even been thinking about building a new building if we can find money to do it because we are so cramped. We haven't seen any diminution in quality or falling off in numbers of applicants, so we must have been continuing to do something right.

**PT:** You mentioned Witten and Wilczek. Are there other examples of nice collaborations?

**Goldberger:** Yang and Lee, of course. Adler and Dashen wrote a book on elementary-particle physics quite early on when they first came to the institute as young professors. Murray Gell-Mann and Francis Low began their collaboration when they were members at the institute. I spent three separate years there as a member and had some very felicitous collaborations which wouldn't have been otherwise possible—one year Low, Gell-Mann, Norman Kroll and I were all in residence and worked together. You know there are not too many Yang-Lee connections, but the opportunity for them is there.

**PT:** Some years back the tenure of one of your predecessors was troubled by a rather nasty dispute about a proposed appointment in the social sciences. Did that involve any preconceptions about the political content of social science, or was it just a matter of the individual's qualifications and opinions about the relative merits of different fields?

**Goldberger:** The latter.

**PT:** I was interested to hear that you allot historians a larger number of slots than all the other social sciences combined. I've often noticed that physicists seem to have a higher opinion of history than of the social sciences that look to be more quantitative, such as sociology or even perhaps economics.

**Goldberger:** I think there's a feeling among natural scientists that if the word "science" appears in the title of a subject, it's not. And I think in a lot of cases, mathematicians and natural scientists tend to be rather critical of the attempts of social scientists to quantify their subjects, to apply the methods and techniques of physics and mathematics to problems to which they are not admirably suited. Whereas in history, everybody shares a common basis of history and culture that somehow is regarded as OK even though it's not the thing you do—you don't resent the other fellow doing it. Actually our school of social science eschews the quantitative approach, and the school is viewed with approbation by the others here.

**PT:** Do the individual fields select their own candidates?

**Goldberger:** Yes, and there is no review. If we were to decide that we wanted to go into some new area, say Chinese basket weaving, which we don't do right now, then the faculty would constitute itself as a committee of the whole. We have been giving some thought to exploring whether there are aspects of theoretical biology that might be reasonable things for us to go into. Were we to make a move of that kind, that would be subjected to discussion by the whole faculty. But a new endeavor would require finding new resources that would not threaten the sovereignties or the futures of the other fields. Basically, being as small as we are, we have to try to think of things that we can do uniquely well. I can't build the biology department of Caltech or Princeton University, and I have an absolute horror of playing catch-up. I have to find an angle.

**PT:** When you arrived two years ago, did you have some quite definite ideas about things you wanted to strengthen, or did you have, rather, a blank slate?

**Goldberger:** Well, I'll tell you what my charge was from the trustees: over a period of five years or so, to develop a plan for the next 25 years, up to and including doing exactly what we're doing now; second, to raise money, because we operate very close to the edge; and third, to lay the groundwork for finding a successor. I was 65 when I arrived, and 70 is a normal retirement age.

You have to ask yourself the question, If the institute didn't exist, would you invent it, and would you invent it in this form or some totally transformed form? I've come more and more to the conclusion, the longer I'm there, that if the institute didn't exist, it *would* be a good thing to invent. And much of it, I now feel, I wouldn't change very much. As I said before, the lifeblood is the visitors' program—the 150 short-term people. If you had only the permanent faculty, it would become a sandbox for people who would gradually become inactive. That kind of ivory tower would be totally sterile.

## AIP RELEASES REPORT ON MEMBERSHIP OF MEMBER SOCIETIES

The latest *AIP Society Membership Profile*, with a special focus on employment mobility and career change, urges the scientific commu-

nity to strengthen its human resource base in order to meet the predicted rise in industrial and academic employment.

"New patterns of career choice and mobility will be called for if the scientific labor force is to be fully responsive to the new demands of the coming decade," said Beverly Fearn Porter in the report, which is based on information compiled by Porter and Dawn Kellman. The employment and career section of the report was based on a study of the four-year period from 1981 to 1985, and concentrates on the career paths followed by PhDs.

The most frequent and dramatic changes occur early in an individual's career, said the report. "The first several years following the PhD involve a broad range of decisions and shifts in activity." It is during this time that one chooses among temporary postdoctoral positions or potentially permanent jobs in academe, industry, government or at national laboratories.

The mid-career span in which initial employment decisions have already been made is more stable. The more experienced labor force, almost equally split between academic and non-academic employment during the time of the study, underwent fewer upheavals than the force of individuals who had just received PhDs. The stability of the experienced workforce varied, however, with the type of employment. "Once [individuals] have become members of a tenure-line faculty or permanent laboratory staff their careers tend to stabilize. Careers in industry, government and the non-profit sector appear to be more flexible," said the report.

The report describes retirement as a process, explaining how many individuals pursue part-time or alternative full-time employment prior to full retirement. In the academic world professors tend to retain their full-time positions to relatively advanced ages and to remain at the same university even when they shift to part-time status. Currently, the bulk of the professors are approaching the traditional retirement age. When this large group finally retires completely, shortages may appear.

AIP's *Society Membership Profile* gives information about the member societies of AIP, including details on membership composition, employment and salaries. For a copy of the report contact the AIP Education and Employment Statistics Division, 335 East 45 Street, New York, NY 10017.

—PAT JANOWSKI ■