

the exiting dean characterizes it, "significant reprogramming and rebudgeting."

As any initiate of faculty politics knows, those are fighting words. In terms of the medical school, the sibling rivalry is between those who see patients and those who do not—the clinicians and the researchers—and also between "have" departments, such as surgery and radiology, and "have-nots," such as pediatrics and many subspecialties.

The struggle has been a long time coming, arguably since 1959, when Stanford Medical School moved from San Francisco to Palo Alto and was reincarnated as the very model of a research-oriented medical school. For 10 years the decision paid off stunningly; by 1969 federal research funds supported 60 percent of the budget. But as everyone knows, or should have known, what goes up must

come down. By 1974 research funds paid 41 percent of the faculty's salaries; since then the ratio of research-derived to clinically derived support has dwindled from 1.5 to parity.

For years Stanford weathered the shift by virtue of its complex administrative structure, which allowed the dean to reallocate revenues according to his priorities. But such a structure is vulnerable at a time of across-the-board and increased fiscal accountability, a lesson that Stanford has seemed slow to learn.

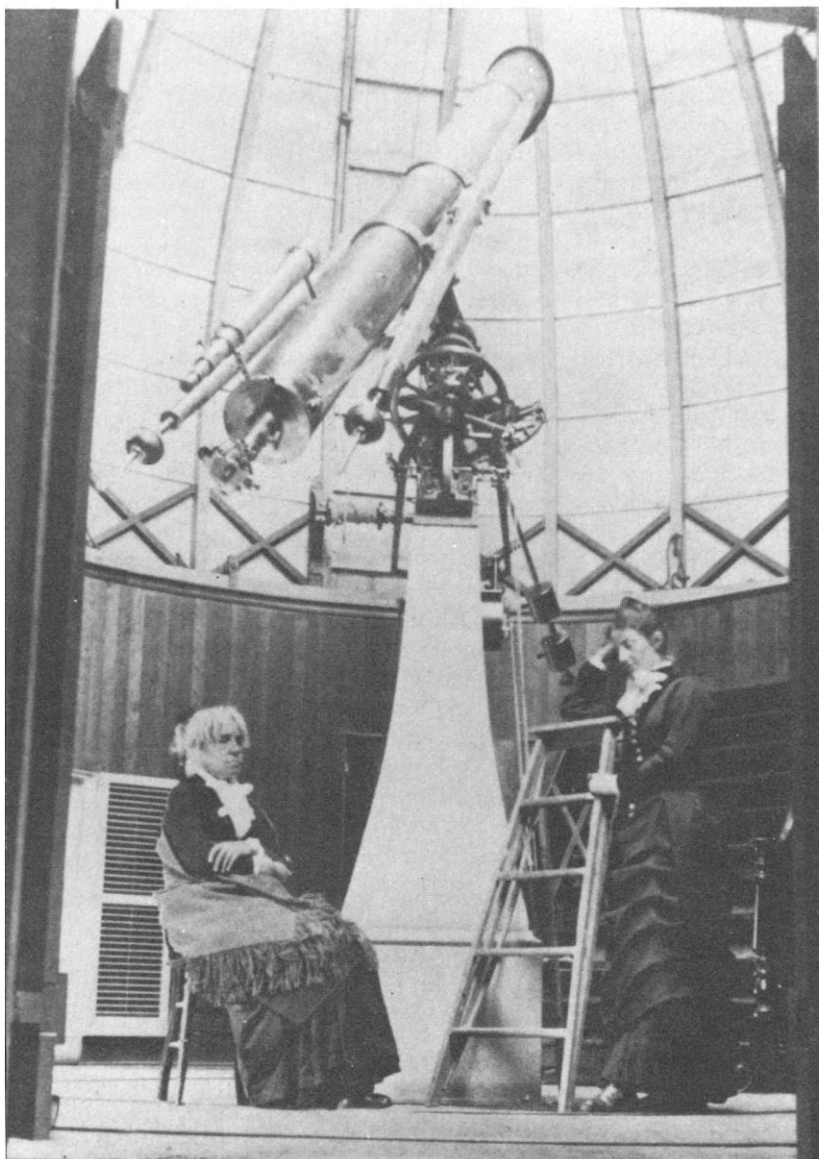
Rich had hoped to meet the emergency without much structural reform. Lately he had been pushing for a plan to organize the clinical faculty into a large corporate group practice, apparently on the theory that government agencies and statutes, such as a California law against "the corporate practice of medicine"

that Stanford is accused of violating, would thereby be satisfied. Under such a group practice, the faculty would technically no longer be "on salary" from the university, but the dean, as executive head of the corporation, might presumably maintain a good deal of redistributive discretion.

With Rich's departure that resolution of the problem may be down the drain too. The more powerful clinical chiefs, such as heart surgeon Norman Shumway, are said to be designing departmental group practices that would keep firm control of departmental revenues.

The implications of these plans are not lost upon basic researchers, who of course see no patients, nor upon have-not clinical departments that depend on cross-subsidization from their more prosperous brethren. "Basic research

## Women and Science in the Nineteenth Century



The mahogany telescope erected at Vassar College in 1865 is the centerpiece of a Smithsonian Institution exhibit on 19th-century American women of science. The small but sturdy show, occupying a room at the Museum of History and Technology, demonstrates that even in the Victorian era, women and science took each other seriously. It contains scientific instruments donated by women's colleges, models, photographs, and books and illustrations done by women in the latter part of the century.

Featured in the show is astronomer Maria Mitchell, America's first woman scientist of note, who became director of Vassar's observatory when the college opened in 1865. "For many," says astronomy curator Deborah Warner, "she symbolized the emergence of women from dependent domesticity into the public world of science."

This is not to say, of course, that they were accorded the same status as men. In fact, the Victorian feminist rationale for female participation in science is not one that would go down well today. Mitchell summed it up in 1876: "Women are needed in scientific work for the very reason that a woman's method is different from that of a man. All her nice perceptions of minute details, all her delicate observation of color, of form, of shape, of change, and her capability of patient routine, would be of immense value in the collection of scientific facts."

Since men's colleges were extremely reluctant to grant women advanced degrees in science, and since it was not thought that women could combine a family and a career, the recognized scientists portrayed in the show hardly hint at the numbers of women who were actually doing science in the last century. As Warner points out, many wives of scientists actively collaborated in the work of their husbands. One wonders what the membership list of the National Academy of Sciences would have looked like in 1900 if it reflected the achievements of wives.

The exhibit is open through February.—C.H.

just can't survive if the dean loses his discretion to shift funds," argues one of the nonclinical department chiefs, Eric Shooter of neurobiology. "We aren't exactly the poor relations but we've got to have some subsidy. There has to be a transfer from the clinical side to the basic side." Resentful of the surgeons' boasts that they bring in the lion's share, and groping for solutions, Shooter even suggests plaintively that researchers "get some kind of incentives too, like some part of the indirect [research grant] costs coming back to the investigator as an incentive to write the next grant." It is an idea unlikely to excite the interest of the Department of Health, Education, and Welfare.

Creeping unease about a change in Stanford's mission—a natural and perhaps ineluctable consequence of the

funding and power shifts within the school—is emerging in other contexts these days. Last summer Nobel Laureate Arthur Kornberg, the faculty's most forceful exponent of the Stanford status quo, complained in the alumni magazine about the "erosion of our scientific enterprise" and the "inordinate control over school policy" exercised by clinicians just because they bring in "a major fraction of the school's budget."

"I am concerned," Kornberg wrote, "when there is a proliferation of teaching, clinical service or administrative activity far beyond what is appropriate for an institution with a major mission to create new knowledge."

And the ideological debate extends beyond fiscal power. Two years ago Kornberg and a number of like-minded faculty concluded that Stanford was ad-

mitting far too many students who were more interested in practicing medicine than in "creating new knowledge." As Shooter put it recently, echoing many others, "In the early seventies the admissions committee went overboard in the admission of students who knew from the day they came that they wanted to be general medical practitioners. Stanford is not the place to train that kind of individual."

Those who felt this way engineered a restructuring of the school's admissions procedure that many believe has corrected the trend, though one department chief recently lamented: "Lately I find students drifting toward the practice of medicine. I don't object to that," he added quickly, "but I thought originally that Stanford was more research-oriented."

There is some evidence, however, that



(Left) Collecting marine specimens at the Marine Biological Laboratory in Woods Hole, Mass., in the 1890's. One Woods Hole participant, Nettie Stevens, is credited with establishing in 1905 that chromosome patterns determined sex.

(Right) Anatomy class at Western College (now defunct) in Oxford, Ohio. According to the exhibit "physiology was an especially important subject for women, whose destiny was thought to be determined by their anatomy."



(Far left) Maria Mitchell, one of America's first woman scientists, sits with professor Mary W. Whitney in the Vassar College Observatory. The 13-inch reflecting telescope was only 2 inches smaller in diameter than the one at Harvard.