

Berkeley Bemoans Possible Faculty Exodus

Californians may never experience another Gold Rush, unless they're retirement-age faculty at the University of California (UC). Next week, the school's board of regents is expected to approve a plan to reduce costs by offering faculty and staff a sweet early retirement package—the third in 3 years. But the news is bittersweet: Some of the best teachers are leaving, claims the chancellor of the Berkeley campus, Chang-Lin Tien, who is seeking—and apparently will win—a special rule for Berkeley faculty.

Repeated state budget cuts have put the UC system in dire financial straits, Berkeley officials say. Beginning 1 July, salaries are to be cut 5% and programs slashed 9%. In the past 2 years, the ranks of senior faculty at the UC's nine campuses have shrunk: Of the 4125 eligible for early retirement, 1045 have accepted the offer.

The latest retirement plan

would be UC's most generous offer yet, but it's likely to be modified to satisfy Berkeley's concerns. The reason: previous retirement waves have "decimated" some Berkeley departments, says spokesman Jesus Mena. For example, physics has lost 26% of its senior professors, math 20%, anthropology 17%, and civil engineering 26%. While Berkeley has hired younger people to replenish the ranks, Tien claims further hemorrhaging may diminish the quality of instruction.

Tien became so upset, according to the *San Francisco Chronicle*, that he threatened to quit at a meeting of UC chancellors last month unless they granted Berkeley an exemption from the retirement program. The chancellors agreed, and now, according to UC officials, the regents are expected to approve changes in the retirement offer that would make it less "sweet" for Berkeley professors. This, UC officials hope, will discourage faculty from leaving.

Research Plan on EMFs Forthcoming

Worried by epidemiological studies that suggest a link between cancer and electromagnetic fields (EMFs) emanating from everything from electric razors to powerlines, Congress has asked researchers at the National Institute of Environmental Health Sciences (NIEHS) and the Department of Energy to take a closer look at EMF risks. When an NIEHS advisory panel meets next month to set a research agenda, it will have a roadmap to guide its discussions—a proposed research plan from the Health Effects Institute (HEI), a nonprofit corporation that consults for industry and government sponsors.

The renewed interest in EMF hazards peaked last fall, when two Swedish epidemiological studies correlated EMFs with a slight increase in leukemia cases in people living near high-voltage powerlines (*Science*, 11 December, p. 1724). Congress entered the picture, passing an authorization bill

that charged government scientists with creating a 5-year, \$65 million research program to study the health effects of EMFs.

The HEI report lays out a 7-year, \$55 million plan, half of which would be spent on specific animal and cell studies and half on epidemiological studies. Gary Boorman, head of NIEHS's EMF research program, reviewed the report and says it will be seriously considered by the NIEHS panel.



Submerged rain forest? Biodiversity of coral reefs and other ecosystems will be the focus of a workshop to divine new frontiers in marine research.

Scientists to Plumb Marine Diversity Depths

After focusing for years on understanding rain forest biodiversity, environmental scientists are about to open a major new research front. Next week, the National Research Council (NRC) is expected to approve plans for an autumn workshop that will lay out a research and funding strategy targeted on marine biodiversity.

Scientists in this field study diverse life forms, ranging from elaborate coral structures found in shallow reefs to primitive bacterial and viral colonies that dwell in silt and sludge on the ocean floor. But research on marine life has lacked a strong sponsor in the past, since it falls between the disciplines of population biology, dominated by landlubbers, and oceanography, ruled by nonecologists, says Eric Fischer, director

of NRC's biology board. That means the field has won little funding in the past—about \$5 to \$10 million per year, one federal scientist estimates. This is a paltry sum, some say, especially since evidence is growing that the oceans may host more diversity of life than previously thought (*Science*, 19 February, p. 1123).

But fresh enthusiasm for marine biodiversity may not translate to more funding anytime soon. "We're a long way from seeing big new money in this area, unless pressure comes down from the [White House]," says Phillip Taylor, director of the National Science Foundation's biological oceanography program. So what's the use of discussing research currents that may fail to draw increased funding? Fischer and company say they're thrilled just to see the field getting some long-overdue attention.

As Rare Virus Waxes, Army Viral Research Wanes

Last week, U.S. health officials tentatively fingered a member of the hanta virus family as the cause of an outbreak of a flu-like illness blamed for the deaths of seven people in New Mexico and Arizona. Now comes the bitter irony: For nearly a decade the U.S. Army maintained a program for studying just such a virus, until it began shutting it down a few years ago.

The Army's interest in hanta viruses dates to the Korean War. Korean hemorrhagic fever, caused by a hanta virus, killed nearly 400 U.S. soldiers in Korea in the 1950s. About 10 years ago the Army began studying the virus at the Army Medical Research and Development Command at Fort Detrick, Maryland, and in the late 1980s expanded the work to its medical research unit in South Korea. But after the Gulf War,

Congress criticized the military for pursuing arcane studies at the expense of germ-warfare research. In response, the Army began phasing out hanta virus work at Fort Detrick and closing the Korean outfit.

As a result, even though hanta viruses "were clearly a potential biological warfare agent," claims one scientist familiar with the military's work, "virtually all of the excellent viral work was terminated." Many of the Army's hanta virus scientists left the military, except one team at Fort Detrick that continues to pursue a hanta vaccine. Army scientists have developed a diagnostic test and a potential therapy. However, little is known about how the virus causes disease. That could pose a problem for public health officials, who may someday wish they had a hanta vaccine in hand.