department of biomathematics at UCLA, and Freimer will direct a new center for neurobehavioral genetics.

UCSF officials dispute Blower's allegations. In a statement on 23 March, Bishop said that a 1-month inquiry by a UCSF associate dean into Blower's allegations found "no evidence of institutional sexism, gender discrimination, sexual harassment or professional misconduct directed against Dr. Blower." But at least one administrator agrees that the status of women in medical schools in general needs improvement. "The quality of academic environment for women ... is not ideal in academic medical centers anywhere in this country," says Diane Wara, associate dean for minority and women's affairs at UCSF.

Leaving. UCSF's Sally Blower seeks balmier academic climate at UCLA.

Blower, 42, completed a postdoc 10 years ago with Robert May at Oxford University, then worked at the UC Berkeley School of Public Health before taking a position as adjunct professor at UCSF in 1995. Over the past decade she has published a steady stream of articles in high-profile journals, including *Nature Medicine* and *Science*, modeling the transmission dynamics of infectious diseases. As a theoretician, Blower's space needs upon arriving at UCSF were modest: an office for herself and one for her postdocs. She had her own grant to pay salaries and research expenses, and she says she was not "looking for red-carpet treatment," but just wanted to be left "alone with a few postdocs [to] do some excellent research."

Instead, in an e-mail circulated in February to colleagues, she complains of mistreatment by a group of faculty members, whom she calls "the Senior Boys." The experience, she writes, left her feeling "powerless and voiceless" against "a vicious brutal sexist system, run by a bunch of bullies."

In a written response to questions from *Science*, the university said that Blower "was not repeatedly evicted from space. On the contrary, extraordinary efforts were made to accommodate her requests," including the offer of premium space at the Parnassus Heights campus and salary support when she was between grants. "Sally was not picked on uniquely," says Wara. "Space is precious here, and all of us have to be flexible."

Blower is neither suing UCSF nor filing a grievance. Her intention, she says, is to "shine the light ... on the status and treatment of women at UCSF." She says many female UCSF faculty members support her but have remained silent "based on a fear of retaliation." But others vigorously deny that UCSF is a notably sexist place. "In the basic science departments at UCSF, I firmly believe there is about as little sex discrimination as anywhere in the world," says geneticist Cornelia Bargmann. "One of the reasons I came to UCSF was because I knew that was true. It was clear you could do well here."

Some attribute Blower's dissatisfaction to the fact that she has been a highly accomplished scientist serving in an adjunct position. And Bargmann notes that although her female tenure-track colleagues are thriving in the basic science departments at UCSF, the situation is very different for adjunct professors at most U.S. medical schools. "You look around and you see they are not treated well," she says about this group, often women, whose soft-money, non–tenure track positions give them little clout. "People feel that they are doing them a favor by giving them a position at all."

Wara acknowledges that assisting women in a historically male-dominated system and protecting the rights of adjunct faculty are more difficult than achieving such numerical goals as increasing the ranks of women faculty and providing pay equity. "We have tried for over a decade to put in place strategies to at least diminish the power differential" that female faculty members experience, she says, but "we still have a long way to go."

The university began an inquiry into the status of women before Blower made her charges. It is designed, according to a statement, to "research the issues and get beyond the numbers." A good place to start, say some researchers, may be the concerns of women in adjunct faculty positions.

–MARCIA BARINAGA

CREDITS: (LEFT TO RIGHT) S. BLOWER; RICK KOZAK

BIOMEDICINE

Hazel Trees Offer New Source of Cancer Drug

SAN FRANCISCO—Taxol is a potent and popular cancer drug, but it is harvested from the needles of an endangered tree, and demand for the drug could outpace the trees' productivity. Last week, researchers here at the American Chemical Society's semiannual meeting announced that they have isolated the compound from hazelnut trees and fungi, a finding that could lead to an abundant new source of the drug and possibly lower its cost.

Generically known as paclitaxel, Taxol is

ScienceScope

Costly Benefit? An ounce of prevention may still be worth a pound of cure, but a new vaccine may cost Americans more than it saves them, according to a study published 15 March in *The Journal of the American Medical Association.*

The recently approved vaccine Prevnar wards off seven strains of bacteria that cause ear infections, pneumonia, blood infections, and meningitis. Vaccinating infants could save more than $750 million in medical expenses, missed work, and other costs, according to researchers at the Harvard Medical School in Boston. But the vaccine's cost will outweigh savings if it exceeds $46 per shot, the researchers say. The vaccine's manufacturer, American Home Products of Madison, New Jersey, intends to charge $58 per dose.

Prevnar may still be a good deal in spite of the bottom line, says pediatrician Tracy Lieu, lead author of the study. "It would prevent a lot of suffering," Lieu says, "and it's not easy to put a number on that benefit."

Ready to Rumble Senator Arlen Specter (R–PA, below), head of the Senate Appropriations subcommittee that oversees the National Institutes of Health's (NIH's) budget, says he is ready for a "knock-down, drag-out battle" over legislation to endorse taxpayer funding of research on stem cells derived from human embryos. But at a hearing last week, NIH officials—who agree with Specter's position—fumbled a bit when their champion asked for some ready-for-prime-time sound bites he could use to press his case.

Last year, Specter and Senator Tom Harkin (D–IA) inserted language into NIH's spending bill that would have clarified government support for the controversial research, but they agreed to withdraw it after antiabortion lawmakers threatened to stall the bill. In return, Specter got a promise from Republican leaders that he would get substantial time on the Senate floor this year to debate the issue.

With that clash possibly just weeks away, Specter asked NIH officials to remind listeners "why stem cells from embryos are so valuable." But after Gerald Fishbach, director of the National Institute of Neurological Disorders and Stroke, produced two responses that were too unwieldy for political wordplay, a visibly agitated Specter took another tack. Could NIH leaders, he asked, take pen in hand, "sharpen up the answer, and provide it to me in writing?"

one of the best selling cancer drugs worldwide. It is used to treat ovarian and breast cancer, and many breast cancer survivors take the drug to prevent recurrence of the disease. For now, there's enough paclitaxel to go around, but demand could soon grow: Investigators are testing the drug's power over other cancers, Alzheimer's disease, and multiple sclerosis, among others. If those uses pan out, supplies might become scarce. That's because paclitaxel is made by modifying a precursor compound extracted from the needles of the Pacific yew, an endangered tree that grows along the coast of the Pacific Northwest.

Angela Hoffman, a chemist at the University of Portland, Oregon, had previously looked for ways to boost paclitaxel production in yew trees. To her surprise, she found a new source of the compound while working on a completely different project. She and her colleagues were studying hazelnut trees to see why some were more susceptible than others to Eastern filbert blight, which is devastating hazelnut groves in Oregon's Willamette Valley. The researchers prepared extracts from several types of hazelnut trees, and after purifying and analyzing the samples, Hoffman noticed the familiar chemical signature of paclitaxel.

Hoffman and her colleagues determined that hazelnut trees make paclitaxel in their leaves, twigs, and nuts, although only at about 10% of the concentration in yew trees. They also found that fungi living on hazelnut trees produce paclitaxel.

Down the road, it's the fungi that could be the most valuable find, says David Houck, a natural products expert at Phytera, a drug company in Worcester, Massachusetts. Paclitaxel-producing fungi have also been isolated from yew trees, he says. If a fungus could be coaxed into churning out the drug in vats, "it would definitely have value," Houck says.

New leaf? As demand for paclitaxel grows, producers may get it from hazelnut trees.

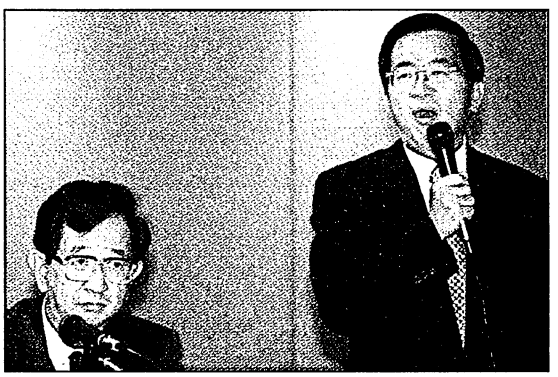
–ROBERT F. SERVICE

TAIWAN

Lee to Remain as Academy President

Scientists and staff at Taiwan's Academia Sinica are breathing a sigh of relief this week after institute head and Nobel laureate Lee Yuan-tseh decided to remain at the academy rather than join Taiwan's new administration.

Lee, who has become a major political figure since returning to Taiwan in 1994 to head the academy, endorsed Chen Shui-bian for president just a week before Chen won a narrow plurality in the 18 March election. It was a controversial move, partly because the head of Academia Sinica reports directly to the president of Taiwan.



Staying put. President-elect Chen, right, and a reluctant Y.-t. Lee.

Lee then tendered his resignation, which was rejected by outgoing president Lee Teng-hui, and went on a 2-week vacation. When Chen won, he announced that Lee was his first choice for premier.

The possibility that Lee might join the new government left a cloud of uncertainty hanging over Academia Sinica, a collection of 24 institutes that represent the island's premier research efforts. Lee is credited with garnering increased financial support, reforming advancement and research procedures, and recruiting leading scientists to key positions. But on 29 March Lee announced he would turn down Chen's offer and stay on as head of Academia Sinica, although he said he has agreed to serve as a presidential adviser.

Staff are glad to have him back. "We're really happy," says Sheng-Hsien Lin, director of Academia Sinica's Institute of Atomic and Molecular Sciences. "We think he can do much more [for Taiwan] in science than in politics."

Although the immediate question of the academy's leadership is resolved, its long-term political status remains unclear. Lee may have alienated Taiwan's National Assembly, which is still controlled by the long-ruling Kuomintang, the Nationalist Party, by criticizing its policies and endorsing Chen, a member of the Democratic Progressive Party. Some observers also wonder if Lee's support for the progressive party, the most pro-independence group in Taiwan, might affect efforts to build stronger scientific relations with China.

–DENNIS NORMILE

BIOCHEMISTRY

Chemical Tags Speed Delivery Into Cells

SAN FRANCISCO—For pharmaceutical-makers, trying to get a drug inside cells can be as difficult as meeting the Rolling Stones: You might score tickets to a Stones concert, but to party with Mick Jagger you need a backstage pass. In the case of pharmaceuticals, companies must make drugs water soluble to pass through the bloodstream on the way to their targets. Yet once the compounds have arrived at their destination, they need a very different kind of chemistry to dissolve through the fatty membrane surrounding cells. Often drugs can manage one task but not the other. But a team of California researchers may have found a way to change all that.

At a meeting of the American Chemical Society (ACS) here last week,* team leader Paul Wender of Stanford University reported that he and his colleagues have discovered a small chemical tag that appears to act as a universal pass, allowing compounds access to the interior of cells. The cellular pass is a short protein fragment, or peptide, made up of a repeating series of up to nine arginine amino acids. At the meeting, Wender, an organic chemist, reported that when the arginine peptide is linked to a variety of different drugs, it ferries its cargo into cells at unprecedented rates. When the team hooked the peptide to the powerful immunosuppressant cyclosporin, for example, the drug passed right through human skin grafted onto a mouse—an impossible feat without the peptide.

"This is an important development," says John Voorhees, a dermatologist at the University of Michigan Medical School in Ann Arbor. When physicians use cyclosporin to treat skin conditions, they give the drug in capsules in hopes that some of it will make its way from the gut to the bloodstream and eventually inside skin cells. A topical cream could be more effective for treating conditions such as psoriasis and eczema, and it

* 219th ACS national meeting, 26–30 March.

CREDITS: (TOP TO BOTTOM) AP PHOTO/WALLY SANTANA; VISUALS UNLIMITED