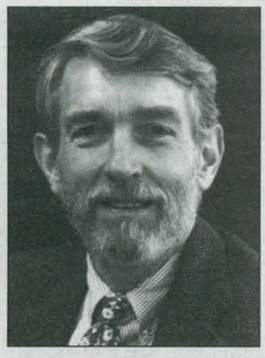
BIOTECH PATENTS

Genentech, UC Settle Suit for $200 Million

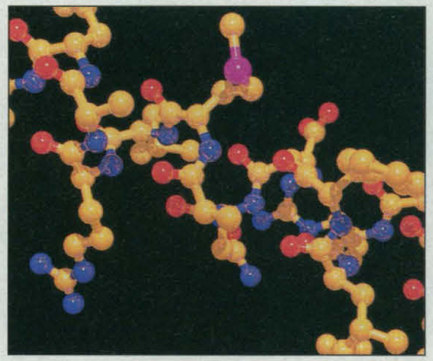
SAN FRANCISCO—A bitter episode in biotech history was finally put to rest last week when South San Francisco biotech pioneer Genentech agreed to pay the University of California (UC) $200 million to settle a long-running patent suit. UC and Genentech were locked in a court battle over UC's claim that the company's $2 billion drug, Protropin, had infringed its patent on engineered human growth hormone. The deal, which includes a $50 million donation toward a research building at UC San Francisco—the campus that holds the disputed patent—will result in payments of $17 million each to five former UCSF scientists.

UC's claim was the subject of an 8-week trial last spring that ended with the jury deadlocked 8 to 1 in favor of the university. Because Genentech survived that first round so narrowly, many viewed the retrial, scheduled to begin on 3 January, as a "slam dunk" for UC, says San Francisco patent attorney Richard Osman, who followed the case closely. If UC had won, damages could have topped $1 billion. But the outcome was far from assured, says Zach Hall, vice chancellor of research at UCSF, and "whoever had won, the other side would have felt aggrieved." The settlement, he adds, "provides a basis for future cooperation and allows us to put behind us whatever bad feeling may have been engendered by this dispute."



Genentech is not admitting that it infringed UC's patent, says the company's chair and chief executive, Arthur Levinson. "I can't tell you that I know for a fact that we were not [infringing the patent], and I think if you were to ask the UC folks, they probably couldn't say with 100% assurance that we were. The way we approached this was largely as a risk mitigation exercise. We could have ended up paying more than $200 million, and we could have ended up paying nothing." Investors apparently liked the deal; after news of the settlement began to leak out on 15 November, shares of Genentech stock began a 4-day climb from $71.75 to close Friday at $87.06.

In addition to the $50 million toward the new research building—which will be on UCSF's new Mission Bay campus and which Genentech will name—the company is paying UC $150 million in cash. Based on a UC formula for distributing royalties that was in place when the patent was issued, UC's general fund will get $30 million, UCSF will receive an additional $35 million, and the remaining $85 million will be split equally among five scientists who first cloned the gene for human growth hormone. They are the three inventors named on the patent—former UCSF professor Howard Goodman, who is now at Harvard; his former postdocs Peter Seeburg, now director of the Max Planck Institute for Medical Research in Heidelberg, Germany; and John Shine, now executive director of the Garvan Institute of Medical Research in Sydney, Australia—and two collaborators, John Baxter of UCSF and his former postdoc Joseph Martial, now of the University of Liege in Belgium. The university's legal fees, which Hall estimates at $20 million to $24 million, have already been paid by UCSF and the five scientists from other patent income, including more than $41 million from the human growth hormone patent.



All friends together. Zach Hall (*below*) hopes collaboration will flourish after settlement of suit over patent on human growth hormone (*above*).

The settlement ends a case that burst into public view last April when Seeburg took the stand for UC during the trial and offered explosive testimony. He said that when he was working as a scientist at Genentech in 1979, he had used growth hormone DNA that he had cloned while a postdoc at UC, and subsequently removed from his former lab, to make the DNA vectors from which Genentech produces Protropin. What's more, he testified that he and former Genentech scientist David Goeddel, now chief executive officer of the South San Francisco biotech company Tularik Inc., had agreed to misrepresent the source of the DNA in a 1979 paper in *Nature*. Goeddel has vigorously denied that they used the UC material or struck any such agreement. Legal experts have questioned whether Seeburg's testimony was relevant to the underlying patent case, and some have argued that it shouldn't even have been admitted in the trial (*Science,* 11 June, p. 1752).

Regardless of the relevance of his testimony, Seeburg's court appearance has had personal repercussions for the prominent German scientist. Following his testimony last spring, the Max Planck Institute opened an investigation of whether he had committed scientific misconduct 20 years ago. The results of that investigation, which have not yet been made public, were delivered to Max Planck president Hubert Markl last week.

The settlement will avoid a replay of the spectacle of two well-respected scientists challenging each other's veracity under oath about the origins of the growth hormone DNA. UC and Genentech have agreed that despite the wealth of evidence that has been presented, it will never be known for sure where the DNA in the Genentech clone came from. In the end, says Levinson, "there is no way you could conclude one thing or the other that would satisfy 100% of the people." And maybe with a new UCSF research building that carries Genentech's name, and the legal case finally closed, most people eventually will cease to care. —MARCIA BARINAGA

GEOSCIENCE FACILITIES

NSF Proposes Marriage Of Rocks and Waves

Despite their common subject—the planet Earth—practitioners of geology and geophysics generally keep their distance. The lone field geologist stomps over "her" mountain or favorite outcrop, hauls back some rocks, and tells her fellow geologists about them at a meeting of the Geological Society of America. The geophysicist pores over the squiggles of seismic waves, increasingly gathered by consortia of his colleagues, and reports his results at a meeting of the American Geophysical Union. But that may be chang-

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