COLLABORATIONS

UCSF Case Raises Questions About Grant Idea Ownership

Here's something to think about the next time you write a grant: Language you incorporate from an earlier proposal with other collaborators could be viewed as plagiarism. That, at least, is an implication of a dispute at the University of California, San Francisco (UCSF). The dispute began when an application for a grant to study the effect of antismoking regimens on the heart drew an accu-

Abbott as an expert on authorship issues. Also troubling, say Kennedy and others, is the fact that the arbitrator found Abbott guilty even though he was not the principal investigator (PI) on the grant in question.

But Drummond Rennie, editor of *The Journal of the American Medical Association* (JAMA), who testified for UCSF as an expert on scientific misconduct, disagrees, saying

the National Institutes of Health (NIH) in December 1992. Following a relatively common practice of applying to more than one funding agency, Abbott and Scheinman decided to submit a similar proposal to TRDRP. What happened next is under dispute.

Abbott claims that in December 1992 Siegel gave him permission to submit the grant to TRDRP and further informed Abbott that he did not want to be included. According to the testimony in the arbitration, Abbott then informed Scheinman of Siegel's consent. Siegel, who is now at UC Davis, declined to be interviewed for this story because Abbott is suing him for defamation, but in testimony at the arbitration hearing, he claimed he was not told by Abbott of the TRDRP submission, and said he certainly would not have given his OK only weeks after his proposal was submitted to NIH.

In any case, Abbott and Scheinman submitted the grant application to the TRDRP with large parts relatively unchanged, and without including Siegel. They noted, as required, that a similar grant was under consideration at NIH. Their grant was approved; Siegel's was not. According to hearing testimony of Melvin Cheitlin, chief of cardiology at San Francisco General Hospital, in the fall of 1993 when Abbott and Scheinman applied to begin enrolling patients in the study, Cheitlin noticed the similarity to the Siegel grant, in which he had also participated, and he notified Siegel. After Cheitlin's efforts to broker a resolution failed, Siegel accused Abbott of plagiarism.

In 1995, a UCSF faculty panel found Abbott—whom UC had fired in April of 1994, citing budgetary problems on the grant from which he was paid—guilty of plagiarism, and a letter of censure was placed in his personnel file. Abbott appealed the plagiarism finding and received a hearing last year at the American Arbitration Association. In June of this year, the arbitrator, Golden Gate University law professor J. Lani Bader, upheld UC's action because, in his view, Abbott had com-

mitted plagiarism by copying large segments of Siegel's NIH grant without attribution to Siegel and submitting it to the TRDRP without Siegel's knowledge or consent.

Abbott maintained throughout the hearing that he and Scheinman—whom UC has not charged with any wrongdoing—were justified in submitting the TRDRP grant without Siegel because the core of ideas in both proposals came from work they had done before joining forces with Siegel. Abbott

had run a smoking-cessation clinic at UCSF and had worked on an earlier grant of Scheinman's in which he monitored cardiac function in patients of the clinic. Abbott had

PLAGIARISM OR BOILERPLATE?

Part of Abstract from Siegel 1992 NIH Grant Proposal

To our knowledge, no study has evaluated the effects of cigarette smoking or nicotine patches in women on the frequency or complexity of ventricular arrhythmias. We propose to measure this, as well as several other cardiac risk factors and physiological parameters that have been associated with increased CAD mortality. Specifically, we will measure (1) the frequency and complexity of ventricular arrhythmias, (2) silent myocardial ischemia, and (3) ambulatory blood pressure during continuous 24-hour monitoring in 280 women who are actively smoking and again 2 and 6 weeks after randomization to either nicotine patches or placebo patches. We will also measure signalaveraged electrocardiograms, fibrinogen and white blood levels at each of these 3 time points.

sation of plagiarism from a collaborator. A faculty panel found the accused researcher guilty, and earlier this summer an outside arbitrator upheld the finding.

The researcher, UCSF cardiologist Joseph Abbott, said the material in the second grant was his own, from work that predated both grants. His accuser, David Siegel, also a UCSF cardiologist, disputed that claim. But beyond the specifics of the case, some people familiar with it are disturbed by the decision, saying that the arbitrator used a concept of plagiarism that would condemn common grant-writing practices in which project participants contribute text and ideas that become so thoroughly merged it may be impossible to sort out who contributed what when collaborations end.

"It should certainly alarm anyone in the scientific community that a distinguished research university would try to convict on that kind of charge," says former Stanford President Donald Kennedy, who testified for

Part of Abstract from Scheinman/ Abbott 1993 TRDRP Grant Proposal

To our knowledge, no study has evaluated the effects of cigarette smoking or nicotine patches on the frequency or complexity of ventricular arrhythmias. We propose to measure this, as well as several other cardiac risk factors and physiological parameters that have been associated with increased CAD mortality. Specifically, we will measure (1) the frequency and complexity of ventricular arrhythmias and (2) silent myocardial ischemia during continuous 24-hour monitoring in 250 patients who are actively smoking and again six weeks after nicotine patches and then at 12 weeks when free from their cigarette habit and patches. We will also measure signalaveraged electrocardiograms, blood pressures, and heart rate variability at each of these time points.

the offense that UC was alleging and the arbitrator found to have occurred—reuse of large portions of a grant without the permission of the original PI, Siegel—is clearly beyond the pale of acceptable grantsmanship.

"We learn about plagiarism as kids," says Rennie. "It's in the dictionary. It is stealing someone's intellectual property or words and using them without attribution."

The dispute revolves around a proposal that Abbott and cardiologist Melvin Scheinman (listed as PI on the proposal) submitted to the UC Tobacco Related Disease Research Program (TRDRP) in early 1993, seeking funding for a study of whether nicotine patches used as a stop-smoking aid

might be harmful to people with heart disease. Abbott and Scheinman had previously collaborated with Siegel on a grant application for a similar study, which Siegel sent to



Accused. Joseph Abbott.

also written and submitted a grant application, which was not funded, prior to the collaboration with Siegel in which he proposed to study the safety of nicotine patches for cardiac patients. "A lot of the text from the first Scheinman grant, and the context and text from my failed grant, wound up in Siegel's grant," Abbott claims.

Siegel's hearing testimony disputes that. He said that "no more than 10%" of his grant application came from contributions by Abbott and Scheinman. As an example, Siegel cited a method of classifying cardiac arrhythmias that he had devised and published previously. It wasn't mentioned in the earlier Scheinman and Abbott grants, he said, but it figured prominently in his grant application and in Scheinman's and Abbott's subsequent TRDRP grant. What's more, while much of the text remained the same in the TRDRP submission, seven references to Siegel's work had disappeared.

Observers of the case are split on whether it is plagiarism to have used the material if, as the arbitrator concluded, Abbott did not get permission. "Common sense dictates that you have to get permission to use large chunks of another person's words, and give attribution," says Rennie. But Paul Friedman, former dean for academic affairs at the UC San Diego School of Medicine, and former chair of the committee on research integrity of the American Association of Medical Colleges, testified that authors who have contributed material to a grant are generally considered to have a right to reuse the grant, even without the permission of the PI.

Indeed, the working definition of plagiarism used by the U.S. Public Health Service's Office of Research Integrity (ORI) states that "a collaborative history" among scientists "often supports a presumption of implied consent to use the products of the collaboration by any of the former collaborators." ORI doesn't consider cases such as this one to be plagiarism, says ORI investigator Alan Price. It classifies them as "authorship disputes," and defers their handling to the university. Because UCSF claims to use the Public Health Service standard of plagiarism, Abbott attorney Alex Parrish says that UC should not have accused Abbott of plagiarism in the first place.

JAMA Editor Rennie, who served on the 1994 Ryan Commission on research integrity, disagrees, noting that "universities are allowed by federal regulations to set their [own] standards." He adds, "The fact that the ORI, for administrative reasons, declared they wouldn't deal with authorship disputes doesn't mean that plagiarism by one coworker of another's work cannot ever occur. And it doesn't mean that [a university] can't call such stealing plagiarism."

Scheinman, the PI on the TRDRP proposal, was not charged by UC. He declined to be interviewed by Science, but testified that he had read the grant but "didn't do any work" on it, and considered Abbott to be its sole author. But Abbott's attorneys, and several of their witnesses, argued that the PI should be held responsible for the contents of the grant, regardless of his role in its writing. "The principal investigator assumes responsibility for the truthfulness and the originality" of a grant application, Stanford's Kennedy testified. Moreover, Paul Torrens, former director of the TRDRP, testified that at the TRDRP, the PI was considered "responsible for the entire content of the grant application and everything in it."

But Karl Hittelman, associate vice chancellor for academic affairs at UCSF, disagreed. "Because [Scheinman] was the PI of the grant does not make him a plagiarist,"

Hittelman testified. "He did not take the material from Dr. Siegel." Arbitrator Bader accepted that view, writing in his opinion that "without regard to the culpability of Scheinman, Abbott, as the one who intentionally copied the Siegel text, is individually responsible for his actions.

Whether this case will have any broader effects on plagiarism standards is unclear. "I devoutly hope that this will be pursued in the courts," says Kennedy, "because I think it would be a shame if it were left to stand as any kind of precedent." He may get his wish. Parrish says he and Abbott are considering an appeal in the courts. Meanwhile, grant writers may want to take a closer look at the boilerplate text they use in their grants, and their relations with present and former collaborators.

-Marcia Barinaga

DEPARTMENT OF ENERGY_

NY Legislators Want Reactor Closed

In an unexpected setback for U.S. neutron scientists, two New York legislators said this week that they will introduce a bill prohibiting the Department of Energy (DOE) from reopening the troubled High-Flux Beam Re-

actor (HFBR) at Brookhaven National Laboratory in Upton, New York. The bill would also require that the reactor be decommissioned. DOE officials described the surprise announcement by Senator Alfonse D'Amato (R-NY) and Representative Michael Forbes (R-NY) as a major setback to their efforts to repair and possibly upgrade the reactor, which had been leaking tritium.

"The operation of this nuclear reactor poses a threat to the health of Long Islanders and to the safety of our drinking water," the legislators said in a 2

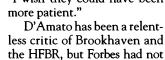
September letter to Energy Secretary Federico Peña. Given Brookhaven's environmental record, they said, "there is no reason to believe that the [HFBR] could operate without further jeopardizing the health and safety of Long Islanders.'

The reactor, which generates neutron beams for materials-science research, was shut for routine maintenance last fall, but the discovery of the tritium leaks angered local groups and prompted DOE to reexamine whether it should be reopened. That review is due to be completed in January, soon after the selection of a new contractor to operate Brookhaven.

The legislators' timing was particularly unfortunate for HFBR advocates. This week a DOE advisory committee report by a team

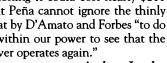
of researchers is expected to argue that the reactor should not only be reopened, but also upgraded from 30 megawatts to 60 megawatts. The improvement can be made, according to the report, without increasing the lab's cur-

> rent annual operating budget (Science, 8 August, p. 761). "It looks like this was more feasible than we imagined just a few months ago," says Martha Krebs, DOE energy research chief. Opposition from the two lawmakers who represent the lab's state and district, however, will make it more difficult for Peña to embrace such a proposal. "It's a real setback and very unfortunate," says Krebs. "I wish they could have been more patient."



previously taken a public stand on the fate of the reactor. Brookhaven officials had been hoping that pressure from scientists and the business community in the region would persuade him to support its reopening, but sources say HFBR critics bent his ears during the August recess.

Krebs insists that political opposition will not alter DOE's timetable for determining the reactor's fate. "The secretary will move in a deliberate way," she says. Closing the facility would draw protests from researchers, and decommissioning it could cost nearly \$200 million. But Peña cannot ignore the thinly veiled threat by D'Amato and Forbes "to do all that is within our power to see that the [HFBR] never operates again."





Strong reaction. Forbes cites "health and safety" threat of reactor.

-Andrew Lawler