## Fight Over Data Disrupts Michigan State Project

The university's handling of a dispute between a graduate student and her former professor has upset faculty members

THERE ARE MANY WAYS FOR THE PARTNERship between a Ph.D. candidate and professor to come undone, but a recent case at Michigan State University-in which a frustrated graduate student allegedly seized and removed materials from her professor's labreveals how intense the struggle for academic credentials can become. It also shows, according to the professor, how timid university officials can be when confronted with an angry student. In this case, the professor claims he's been trying to recover the "hostage" lab data for 18 months, with minimal help from MSU authorities. The student is still in the graduate program at MSU and is trying to publish an article based on the disputed data.

This account is necessarily one-sided because neither the student nor university officials would discuss the situation with *Science*. The professor also skirted some details, noting that in November he filed a formal charge against other members of the faculty, which is the subject of a preliminary inquiry due to end by January.

However, Associate Dean Justin McCormick, now serving as one of the student's academic advisers, points out that the university has an obligation to protect student interests as well as faculty prerogatives. He describes the situation as a divorce in which the parties are seeking a fair distribution of joint property. And he comments that the professor has become "obsessed" with the case.

But this is the kind of dispute that triggers obsessive behavior. In addition to raising questions about academic responsibility, it presents some broad ethical issues as well, such as: What happens when partners in a collaborative project split up? Can one of them use jointly produced data if the others object? Can an adviser dismiss a student and keep the data he or she has produced?

These questions arise out of a conflict that has been raging at MSU's Colleges of Veterinary and Osteopathic Medicine since May 1989, when a senior professor of microbiology named Jeffrey Williams, described by former students as an excellent but "demanding" teacher, dismissed his Ph.D. candidate, Maie ElKassaby. ElKassaby then removed the tissue samples and data on which she had been working, according to present and former faculty members.

Williams considers these materials the common property of the "Sudan Project," an international parasitology project funded by the National Institutes of Health, directed by



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Williams in collaboration with physicians in the Sudan and researchers at the Upjohn Company. Indeed, Williams did persuade ElKassaby to return some of the material to him, but not all. And in a recent strange twist, the university obtained the rest of the missing data, but has refused so far to turn them over to Williams.

Five university officials interviewed by Science declined to comment on the situation, and ElKassaby, contacted by telephone, had nothing to add, declaring it a "private matter" and directing questions to Mary Elizabeth Kurz, the university's legal counsel. Kurz said she cannot discuss specifics because the law requires her to protect the privacy of students. Invoking a legal catch-22, she also declined to discuss the generic problem of data ownership because, she said, one must first know the specifics of a case. But members of the microbiology and pathology departments, and others who have left MSU, provided documents and background information. Many, in fact, are concerned about the university's posture, perhaps fearing that they, too, could be put at the mercy of a litigious collaborator and receive no help from their university.

Although the quarrel hasn't made news locally, it has upset the affected departments at MSU. James Jensen, a former MSU professor in the Sudan Project now at Brigham Young University, says one of the reasons he left MSU was that he became "disgusted" by the way officials are handling this problem. Robert Garrison, a former student in the MSU project, now at Purdue, says the same. "The university screwed this up from the beginning," he adds. He thinks university officials "just turned their back on Dr. Williams."

Meanwhile, members of the microbiology department have been asking the university to clarify its position. MSU Provost David Scott has received two petitions asking for an explanation of what's going on—one in October signed by 24 faculty members and another in November signed by 28 graduate students. Scott has promised to meet with the faculty soon, but at this writing he hasn't responded to the students' letter or set a date for meeting with the faculty.

Among the petitioners are sources who say that Williams and ElKassaby had loud and angry disagreements over how to conduct a part of the research project, and they report that ElKassaby had failed a preliminary exam in her departmental field, pathology, before Williams dropped her as a student. According to some graduate students, ElKassaby took two actions following her dismissal: She filed a grievance against Williams, reportedly charging that Williams had acted arbitrarily and without warning, and she removed data she felt belonged to her.

According to a five-page statement filed by Garrison after he left for Purdue, ElKassaby also told MSU officials that she had been "cheated out of a patentable invention by Dr. Williams and scientists at the Upjohn Company." Garrison claims that the university has already established this claim of ElKassaby's to be "groundless." Two top research officials at Michigan State, former vice president John Cantlon and associate vice president Henry Bredeck, looked into the charge in 1989 and eventually concluded it had no merit. After weeks of probing in which the accused were not notified directly of the inquiry, Cantlon and Bredeck wrote letters of apology to both Williams and Upjohn. Cantlon's letter to Upjohn, dated 21 December 1989, said, "This inquiry identified no evidence to support any mishandling of intellectual property by Dr. Williams or any of the researchers or staff in the Upjohn Company. On behalf of Michigan State University let me express our regret over any discomfort or concern that an inquiry caused Upjohn

personnel." Cantlon has since retired and could not be reached, and Bredeck had no comment.

After a period of quiescence, the dispute escalated this summer when Williams learned that ElKassaby, still in MSU's graduate program, intended to publish an article based upon her work in the Sudan Project. According to Garrison and Jensen, ElKassaby thought that the data she produced were hers to use. But Williams insists that she must obtain permission from other collaborators in the Sudan Project. Not surprisingly, he and the Sudanese have reportedly refused to grant it, and now question their very validity.

Nevertheless, the university appears to be willing to allow the publication to go for-

ward, according to Williams and other observers. This posture may have caused Williams to decide to go over the university's head. Recently, he called on the police to intervene and recover the material, which he felt he could not get in any other way. But university officials informed the police there was no crime to investigate because the missing material had been surrendered to Associate Dean McCormick. He told the police they would be returned to the Sudan Project after ElKassaby has signed a legal release. This infuriated Williams, and is undoubtedly the basis of his formal charge of scientific misconduct against the university officials.

Failing to receive satisfaction from the university, Williams has also sought intervention

## SSC Detectors: Yes, No, Maybe

This week, managers of the Superconducting Super Collider (SSC) are expected to announce which two large experiments will be given space on the machine. *Science* has learned that a group led by George Trilling of the University of California at Berkeley, the SDC (Solenoid Detector Collaboration), has been given the go-ahead. A proposal from a group called EMPACT/TEXAS, led by Michael Marx of the State University of New York at Stony Brook has been turned down. And a collaboration led by Samuel Ting of the Massachusetts Institute of Technology, known as L\*, has been told to rework its proposal in response to problems identified by the SSC's Program Advisory Committee (PAC). While this news has been floating around in the high energy physics community for 3 weeks in the form of faxed drafts of the PAC's report, written after a public hearing last month (*Science*, 21 December, p. 1648), the official notification was held up until after the first of the year.

The approval of SDC was no surprise. It made use of a traditional design, employed relatively low-risk technology, and was led by a standard-bearer of the community.

The chief competition had been between L\* and EMPACT/TEXAS. The latter was explicitly designed for the special high-energy, high-event rate conditions of the SSC, and introduced a new technology into high energy physics. But the PAC found the technology too risky, and worried that the collaboration—the youngest and smallest of the three—was not up to mounting an effort of the required magnitude.

Ting's L\*, essentially an ambitiously scaled-up version of his current detector at CERN, also provoked doubts—but about cost estimates and the way the collaboration was structured. The group's heavy reliance on foreign contributions makes the experiment vulnerable if some fall through; moreover, the total cost was calculated to be about \$100 million higher than Ting's group had reported. L\* is also heavily weighted with European physicists, and the committee wanted more involvement by leading U.S. institutions and individuals. In order to attract them, Ting will have to overcome a common perception that he is an autocratic leader.

Last week, Trilling began putting together a formal design proposal for presentation to the SSC laboratory in April 1992. Ting started to woo other institutions and physicists and to rework his cost estimates in preparation for another attempt to secure approval. Marx and other members of the EMPACT/TEXAS team found themselves faced with the choice of joining the other collaborations or mounting a smaller experiment on their own; aside from allotting \$550 million for the two large detectors, the SSC has also earmarked \$75 million for smaller experiments to be approved at a later date.

The scale of the SSC experiments has made the selection process considerably more difficult and protracted than in the past. "It's not just a lot more people, a lot more money, and a lot more time," says SSC head Roy Schwitters. "There will be a natural evolution in design and engineering between today and when the detector is built 9 years from now, so you have to make judgments far in advance, which is extremely risky. We're in a new world now."

by NIH's Office of Scientific Integrity. This is not the first time he attempted to bring NIH into the case. Last summer, Williams tried to get the NIH institute that funded his work to investigate what he views as misappropriation of data. But in a letter dated 6 July, 1990, John R. La Montagne of the National Institute of Allergy and Infectious Diseases informed Williams that the case "falls within the jurisdiction of local law enforcement authorities and the university itself."

This logic seems to support the university actions. Vice president for research Percy Pierre told *Science* that any data produced under contract with the faculty belong to the school. Since the university now has possession of the data, officials may feel the fight over custody is moot. Pierre wouldn't say, but he forecast a resolution soon, promising to disclose more at that time.

One big loser in all this may be the Sudan Project itself. When one industry scientist says, "This is not trivial research," he has a point. The work that involved ElKassaby focused on a drug called ivermectin, recently adapted for use in humans to treat onchocerciasis, a parasitic disease in the developing world known as "river blindness" that is estimated to infect about 17.5 million people. ElKassaby had been asked to test a radioiummune assay that would detect low concentrations of ivermectin in blood and tissue. The Upjohn Company donated free of charge a testing protocol and radio labeled test chemicals. They were hoping to use the information to develop a general pharmacokinetic model for antiparasite drugs. Physicians in Mexico and the Sudan played a major role, contributing human tissue and blood samples from people infected with the worms that cause river blindness. Jensen added that it's not easy to get such material from the Sudan: "There were three coups, two civil wars, and three famines."

But now an uncivil war on a U.S. campus has shut down a laboratory that had survived all that. Williams—who won an MSU distinguished professor award in 1982 and holds the 1979 Henry Baldwin Ward medal for parasitology research—has decided to end the project at MSU after 11 years and take early retirement. He says he is "disillusioned" by the way officials failed to support his claim to data from his own lab. The grant is being transferred to Brigham Young University.

"The real losers" in this dispute, Jensen says, are the Sudanese, who made a great effort to collect the samples and whose claims "are being ignored." At the same time, some of the faculty at MSU fear that unless universities learn to handle such conflicts better, collaborative research on campus will become a risky proposition.

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