confirmed by *Science*. Lawyers for Gallo and Popovic have claimed that the draft report contains significant errors of fact and interpretation. "If that is the case, I can assure you that the report will be significantly revised," Diggs told *Science*.

The OSI report accuses Popovic of misstating the length of time he kept the AIDS virus in continuous culture; not having positive reverse transcriptase results before he tried to infect cell lines with pooled virus samples, as the *Science* paper stated; mischaracterizing the accuracy with which he could determine how well the virus was growing in culture; and mislabeling inconclusive results as "ND" for "Not Done" when in fact they were done. The report also criticizes, but stops short of labeling as misconduct, Popovic's failure to describe accurately the origins of the cell line used to grow the virus.

As for Gallo, the report is highly critical of the way he ran his lab, slamming him for being too tolerant of Popovic's poor record-keeping and imprecision in reporting his results. Gallo's failings as a lab chief "created and fostered conditions that give rise to falsified/fabricated data and falsified reports." A three-member committee of scientists advising OSI on its investigation was split on whether to recommend that Gallo himself be accused of misconduct.

The report deals only with allegations of improprieties in the reporting of the results in the *Science* paper. It does not deal directly with the bitter battle between Gallo and Pasteur Institute virologist Luc Montagnier over the origins of the virus Popovic grew in his cell line. That dispute, formally settled in 1987, keeps threatening to flare up after revelations that the French virus apparently contaminated Gallo's laboratory.

In a 59-page rebuttal to OSI's draft report, with a cover letter dated 6 September, Popovic's lawyers Barbara F. Mishkin and Edward L. Korwek of the Washington, D.C., firm Hogan and Hartson, blast OSI for "irresponsible and unfounded allegations, biased and haphazard investigations, and improper public disclosures of confidential and procedurally flawed proceedings." The rebuttal, which was released to *Science*, reiterates in greater detail most of the points Popovic made in a letter and statement he gave to *Science* last month (16 August, p. 728). Popovic denies any misconduct and claims that the OSI report's authors misunderstood some of the points they accused him of misreporting.

The usually loquacious Gallo has been muzzled by NIH authorities and will not speak about the report. But his lawyer, Joseph Onek of the Washington firm of Crowell and Moring, disputes charges that Gallo was a poor lab manager. The report states: "The chief problem with his conduct was what he did not do, i.e., his failings as laboratory chief and senior author of the papers." "All those charges are totally stupid. First of all, they are derivative of charges against Popovic which are totally wrong," says Onek. "Secondly, to make charges about Gallo's style based on his relationship with one person is utter nonsense." Onek declined to release Gallo's rebuttal.

One great irony in this investigation is that no one has challenged the overall validity of Gallo and Popovic's work. The alleged falsifications "did not negate the central findings of the [1984 *Science*] paper," according to the OSI draft report.

Although the formal investigation has been dragging on for more than a year, there is still more to come. A sequence analysis of the viruses that Gallo and Popovic used to create their first infected cultures has now been completed. That analysis may shed additional light on when Gallo's lab became contaminated with the French virus. Those results, along with the Gallo and Popovic rebuttals, will be wrapped into a final report. Some informed sources think that could be available in weeks, but others, used to the glacial pace of OSI investigations, think it will be at least the new year before the story is finally concluded. ■ JOSEPH PALCA

Societies Complain About Ethics Rules

Like many journal editors, Thomas Birmingham, who for 4 years served as editor in chief of the prestigious *Journal of Geophysical Research, Space Physics*, kept pretty busy. Birmingham now estimates that running herd on some 550 manuscripts a year took up nearly three-quarters of his time. "And I put in some long hours," he says. Birmingham, however, wasn't employed by the American Geophysical Union (AGU), the publishers of the journal. He was a space physicist at NASA's Goddard Space Flight Center, an arrangement that appears to have suited both NASA and AGU just fine. Recognizing the "mutual benefits" and the "prestige" NASA would gain, the two organizations even signed a memorandum of understanding in 1985 that explicitly permitted Birmingham to use his "official time" to serve as editor.

Soon, however, federal scientists, eager to help out scientific societies—and to reap the professional honors that such commitments often bestow—could find themselves blocked by government ethics rules. Published in the *Federal Register* on 23 July, a set of proposed revisions to federal ethics standards includes language that would prohibit federal employees from using official time "to administer the internal affairs of any [professional] organization or to carry out its business affairs, or to attend or to participate in meetings or events that primarily serve those purposes." An attorney with the Office of Goverment Ethics, which issued the rules, said the intent is simple: "We don't want federal employees doing other people's work on government time."

Officials at scientific societies have howled in protest. "These rules would make federal scientists second-class citizens," says AGU president Fred Spilhaus. "They wouldn't have a chance to assume leadership roles in scientific societies and to receive professional recognition." Robert Park, director of the American Physical Society's (APS) Washington office, voiced similar concerns in an electronic newsletter he sends out to APS members: "If academia and industry took the same position, it would mean the end of scientific societies."

The effects of the proposed rules might also extend beyond the federal workforce itself. "It's more and more common to see agencies like the Department of Energy making an attempt to apply [federal employee regulations] to contractor employees," says Jerry Hudis, a former associate director at Brookhaven National Laboratory and now a vice president with the private contractor that runs the laboratory. "I can see that being a bone of contention."

The societies have one firm ally in the federal government: presidential science adviser D. Allan Bromley, who says he is "very concerned" about the new rules. And the President's Council of Advisers for Science and Technology (PCAST) agreed last Thursday to submit a letter critical of the proposed standards to the Office of Government Ethics before the period for public comment closes on 20 September. "People were pretty upset," says one PCAST member. "When you need to turn something around quickly, you do it." ■ DAVID P. HAMILTON