AAAS☆93

Brown Turns Up the Heat on Pork

BOSTON—Representative George Brown (D–CA) has opened a new front in his long—and so far unsuccessful—battle against pork-barrel funding of scientific projects. Speaking at the opening day of the annual meeting of the AAAS* here, Brown announced that the House Committee on Science and Technology, which he chairs, has launched a year-long investigation of academic "earmarking"—instructions inserted into spending bills by powerful members of appropriations committees to fund specific projects, often in their home states. Brown intends to hold a series of hearings designed in part to embarrass institutions that have benefited from earmarking and members of Congress who have indulged in the practice. He also vowed to use new House rules to challenge pork-barrel projects on the House floor if any appear in appropriations bills this year.

STEVE TURNER

"Madder than hell." Rep. Brown.

Brown said he is turning up the heat because the practice of earmarking is "spiralling out of control." A Congressional Research Service analysis completed last fall found that $2.5 billion worth of academic projects were funded by the pork route between fiscal years 1980 and 1992—more than $1.2 billion of these came in the past 2 years alone. Part of the reason Brown is so ticked off, however, is that the practice undermines the authority of his own committee, which is supposed to authorize spending on science projects.

The opening move in Brown's new campaign came in the form of a letter the committee sent to 50 academic institutions that received special earmarks in 1993 appropriations bills. Brown is asking for information about how the money will be spent, and he may hold hearings on some of them later in the year. Next, he plans to hold hearings on projects funded in the 1980s to see what they have accomplished and whether the funds really did go to items specified in the earmarks. His committee is also planning hearings on how government agencies oversee the projects they are forced to support, and whether earmarking has hurt funding for projects that have gone through the traditional funding route.

This new offensive comes after Brown tried unsuccessfully to stop $95 million worth of earmarks last year. The projects were originally inserted into the Department of Energy's appropriations bill, but Brown—much to his surprise—succeeded in removing them by an amendment he proposed on the House floor. A few weeks later, however, they all appeared in the defense appropriations bill, and Brown discovered them too late to knock them out. That, said Brown, "made me madder than hell." He got the House rules changed so that he will now be notified of science pork projects in appropriations bills and he will have an hour on the House floor to debate them. He intends to challenge anything the appropriations committees try to sneak through.

–Colin Norman

*AAAS Annual Meeting, Boston 11-16 February. More coverage of the meeting will be included in next week's issue.

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Pasteur Notebooks Reveal Deception

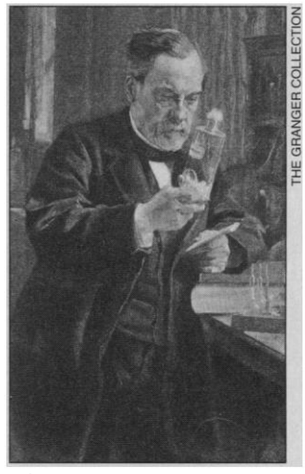
In 1878, Louis Pasteur told his family never to show anyone his laboratory notebooks. For nearly a century, those instructions were followed. But Pasteur's last surviving grandson donated the documents to the Bibliothèque Nationale in Paris in 1964 and a decade later a few historians were granted limited access to them. Now one of those historians, after deciphering hundreds of pages of Pasteur's tiny, crabbed handwriting, has found a possible explanation for the great scientist's recalcitrance: evidence of potential scientific misconduct and ethically dubious human experimentation.

In a speech at the AAAS meeting, Princeton University historian Gerald Geison revealed evidence that in at least three instances, Pasteur broke what were even in the mid-1800s standards of scientific and medical conduct.

■ In one highly publicized 1881 trial, Pasteur inoculated half a flock of sheep with an experimental anthrax vaccine, then exposed the entire flock to the disease. The vaccinated half survived, a result that brought Pasteur international accolades. But Geison discovered passages in Pasteur's notebooks showing that the vaccine used in the trial was not created by Pasteur's own method of oxygen inactivation, as he had claimed at the time and in later published work. Instead, he used a method of chemical inactivation invented by a competitor, a veterinarian named Toussaint. A few months after the trial, Toussaint suffered a nervous breakdown and died.

■ As Pasteur was developing a vaccine against rabies, two patients who already appeared to be suffering from advanced symptoms of the disease came to him for help. Although he had not yet tried the vaccine in symptomatic animals, he nevertheless injected it into both patients. "Even his experiments trying to *prevent* rabies [with that technique] were inconclusive at the time," Geison said. One patient, a young girl, quickly died, while the other, who recovered, may not have actually had rabies, according to Geison.

■ In 1885, when two young boys came to him shortly after being bitten by rabid dogs, but before exhibiting any symptoms of rabies themselves, Pasteur injected them with a new experimental vaccine, based on virus grown in the spines of rabbits. Again, he had not conducted animal trials with the vaccine. "As it turned out," Geison said, "Pasteur had guessed right about the safety of the method." Both boys survived and neither exhibited any symptoms of rabies. But that's not surprising: Some five out of six unvaccinated people who are bitten by rabid animals don't come down with the disease. Given the possible risk of the untested treatment and the fact that the patients were not even known to have the disease, Pasteur's own assistant, Emile Roux, refused to participate on the grounds that the trials were unethical.



THE GRANGER COLLECTION

Misconduct? Louis Pasteur comes under fire.

After reviewing more than 100 laboratory notebooks stored in the Paris library, Geison concluded that "Pasteur's research often failed to adhere to the standard scientific method" of his time. Pasteur himself advocated scientific and medical ethics, including the need for animal trials before human trials. Although Geison argued that Pasteur's conduct, at least in the case of the symptomatic rabies patients, reflected desperation in the face of a uniformly fatal disease, he said that doesn't excuse the other cases. "The ethical standards he violated," Geison said, "were his own."

–Christopher Anderson