

Comment

The usual suspects

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"Round up the usual suspects!" In the classic film *Casablanca*, that was the automatic response by Louie, the police inspector, whenever a crime was committed. I've seen that movie about a dozen times, and the line always gets a laugh, even from the most jaded audience.

I doubt that Thomas Butler would laugh, though. On 3 September, in federal court in Lubbock, Texas, Dr. Butler, a 62-year old professor of medicine who is chief of the division of infectious diseases at Texas Tech University, pleaded not guilty to a 69-count indictment on charges that included illegal transportation of plague bacteria from Tanzania into and within the United States; lying to the Federal Bureau of Investigation (FBI) by claiming that 30 vials of the bacterial samples had been stolen when in fact, according to the FBI, he had destroyed them; embezzlement; tax evasion; and mail fraud. The case is scheduled to go to trial in November. Meanwhile, Dr. Butler remains free on \$100,000 bail. Although he cannot, by the terms of his release, visit his laboratory and files at Texas Tech, with the help of a colleague at Johns Hopkins he managed last week to submit a paper to *The Lancet* on the effectiveness of different antibiotics against the plague.

There is a Kafkaesque quality to this story, which has so concerned biologists in the US that last week the National Academy of Sciences' Committee on Human Rights wrote to scientists urging them to protest at Dr. Butler's treatment at the hands of his own government and urging them to donate money for his legal bills, which are said to approach half a million US dollars already. The president of the Academy, Bruce Alberts, and the president of the affiliated Institute of Medicine, Harvey Fineberg, wrote a letter to John Ashcroft, the US Attorney General, on 15 August, stating that the case against Butler was "troubling" and likely to have a negative "impact on other scientists who may be discouraged from embarking on or continuing crucial bioterrorism-related scientific research."

My information on the Butler case comes from a variety of sources, including Eileen Choffnes of the Policy and Global Affairs Division of the Academy and some excellent pieces by Scott Shane, a reporter for the *Baltimore Sun*, and Ceci Connolly of the *Washington Post*. To begin with, it is important to realize that Dr. Butler is a recognized authority on infectious diseases, widely respected in that community, and a particular expert on the plague. His troubles stem from a series of trips he made in 1994 and 2002 as part of his research into the most effective treatments for plague, a bacterial disease that may have killed as much as a third of Europe's total population during the Black Death in the Middle Ages. On these trips he carried with him a number of vials containing samples of *Yersinia pestis*, the plague-causing bacterium. One of the charges against him is that he failed to properly report that he was carrying such specimens - even though this method of transport, which is clearly safer than sending them through the post, is so common that there is even a nickname for it in the microbiological community: VIP ('vials in the pocket'). The government's outrage seems as disingenuous as Louie's ("I am shocked - SHOCKED! - to find that gambling has been going on here," he says to bar owner Rick, just before a croupier hands him his winnings in another classic scene from *Casablanca*). But this incident would never have caught the attention of the government except for what happened next. Last January, for reasons that are still unclear and probably will remain so until Dr. Butler testifies in his own defense at his trial, he reported to officials at his university that 30 vials of the bacteria were missing from his laboratory.

Fearing that the samples may have been stolen by terrorists, Texas Tech immediately called in the FBI, who in turn notified the newly-created Department of Homeland Security. Within days, more than 60 law-enforcement agents had descended onto the normally sleepy campus in the west Texas town of Lubbock, a city whose previous claim to fame was as the birthplace of the legendary rock-and-roller Buddy

Holly Butler, his supporters allege, was taken away in handcuffs and interrogated for ten hours straight through the night without having an attorney present. What happened next is unclear, but sources say that, at around 3 am, he finally signed a statement saying that the plague vials had been "accidentally destroyed earlier" and that his assertion that they were missing was "inaccurate". He claims that he signed the paper because the FBI agents told him it was necessary to end the investigation. Instead, in April, he was indicted on 15 felony counts. During the first week of September, these charges were expanded to include mail fraud and embezzlement in connection with research that he conducted for two pharmaceutical companies. The indictment states that he received almost a third of a million dollars in payment from the companies without reporting the income to his employer, the university. Butler's supporters allege that these new charges are an attempt to divert attention from the weakness of the original charges relating to the plague samples. They believe that the FBI, the Department of Justice, and the Department of Homeland Security need a "victory" in the war against terrorism to distract the public from the failure of their investigation into the anthrax-laced letters incident, and that Butler is being used as a scapegoat. Through his attorneys, he denies wrongdoing in connection with payments from his pharmaceutical company work. Meanwhile, the whereabouts of some 30 vials of deadly germs remain unknown: Dr. Butler asserts that the statement he signed under duress was false, and that he has no memory of actually destroying the vials.

Without drawing conclusions as to Dr. Butler's guilt or innocence, one can conclude on the basis of the evidence available so far that he has acted somewhat peculiarly, and possibly stupidly. But that doesn't make him a criminal, and it seems to me that the government's prosecution is far out of proportion to any offences he may have actually committed. This whole affair has the smell of a witch hunt about it, and it's pretty easy to guess why. Federal agents and the government officials who control them need to produce culprits from time to time to prove that they are doing their jobs. It's much easier to prosecute a hapless individual who can be induced to admit guilt to something than to do the difficult - sometimes, to be fair, impossible - work of finding out what really happened in a situation where imperfect memory, faulty record-keeping, and the general sloppiness common to many scientists make tracing samples a logistical nightmare.

But I don't entirely agree with the Academy's claim that Butler's prosecution - some would say persecution - will necessarily have a chilling effect on research into the genomics, biochemistry and physiology of pathogenic microbes. Scientists go where the money is, and right now, in the US at least, there is a lot of money for biodefense-related studies. Funding trumps fear. What will happen, I think, is that any scientist with more brains than a gerbil will think twice before reporting any discrepancy or possible theft of biohazardous

material to either his or her institution or to the government. Why raise an alarm when the reaction is likely to be to shoot the messenger, or at least to try to send the messenger to jail for a long time? The unintended consequence of the Butler affair is likely to be that it will become more difficult for governments to fight bioterrorism, because their natural allies, their own scientists, will not trust those governments to treat them as allies. Why chase terrorists who are hard to find when you can bring to the dock people you already know? Don't all witch hunts concentrate, not on outsiders, but on those close to home?

Witch hunts make the hunters famous and powerful, at least for a time, which probably accounts for their recurring popularity throughout history as an instrument of policy. And witch hunts begin with rounding up the usual suspects. In the post-genomic world of bioterrorism, it would seem it is the biologists, not the terrorists, who are most likely to become the usual suspects. And although one would hope that governments and scientists would naturally work together against the misuse of science and technology, the Butler affair makes one fear that, unlike the case of Louie and Rick at the end of *Casablanca*, this will not be the beginning of a beautiful friendship.