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Anthrax Case Renews Questions on Bioterror

By [ERIC LIPTON](#) and [SCOTT SHANE](#)

WASHINGTON — Until the [anthrax](#) attacks of 2001, [Bruce E. Ivins](#) was one of just a few dozen American bioterrorism researchers working with the most lethal biological pathogens, almost all at high-security military laboratories.

Today, there are hundreds of such researchers in scores of laboratories at universities and other institutions around the United States, preparing for the next bioattack.

But the revelation that [F.B.I.](#) investigators believe that the anthrax attacks were carried out by Dr. Ivins, an Army biodefense scientist who committed suicide last week after he learned that he was about to be indicted for murder, has already re-ignited a debate: Has the unprecedented boom in biodefense research made the country less secure by multiplying the places and people with access to dangerous germs?

“We are putting America at more risk, not less risk,” said Representative Bart Stupak, Democrat of Michigan and chairman of a House panel that has investigated recent safety lapses at biolabs.

F.B.I. investigators have long speculated that the motive for the attacks, if carried out by a biodefense insider like Dr. Ivins, might have been to draw public attention to a dire threat, attracting money and prestige to a once-obscure field.

If that was the motive, it succeeded. In the years since anthrax-laced letters were sent to members of Congress and news organizations in late 2001, killing five people, almost \$50 billion in federal money has been spent to build new laboratories, develop vaccines and stockpile drugs.

After the attacks, for example, an experimental vaccine Dr. Ivins had spent years working on moved from the laboratory to a proposed \$877 million federal contract, though the deal collapsed two years later. Federal documents suggest that Dr. Ivins, along with several colleagues, might have earned royalties had the contract gone forward, but the deal ultimately collapsed.

Dr. Ivins’s lawyer, Paul F. Kemp, and some of the scientist’s colleagues insist that he was innocent. Mr. Kemp said by e-mail on Saturday that news reports that his client had considered agreeing to a plea bargain were “entirely spurious.” And a senior law enforcement official said that discussions between investigators and Mr. Kemp were “preliminary” and routine and did not represent any

active discussion of a plea bargain.

But officials at the Justice Department and the Federal Bureau of Investigation on Saturday appeared confident that they had the right man. They said they were still weighing how and when to seek an end to the grand jury investigation.

“That’s not a decision we’re going to make lightly,” said one Justice Department official who spoke on condition of anonymity because he was not authorized to discuss internal deliberations. “There won’t be a rush to judgment.”

As prosecutors consider how to proceed in the wake of Dr. Ivins’s death, federal officials say they are convinced that the increase in biodefense spending has brought real gains.

“Across the spectrum of biothreats we have expanded our capacity significantly,” said Craig Vanderwagen, an assistant secretary at the [Department of Health and Human Services](#) who oversees the biodefense effort. Systems to detect an attack, investigate it and respond with drugs, vaccines and cleanup are all hugely improved, Dr. Vanderwagen said. “We can get pills in the mouth,” he said.

Supporters of the spending increase cite studies that project apocalyptic tolls from a large-scale biological attack. One 2003 study led by a Stanford scholar, for instance, found that just two pounds of anthrax spores dropped over an American city could kill more than 100,000 people, even if [antibiotic](#) distribution began quickly.

And there is ample evidence that Qaeda leaders have shown interest in using biological weapons. Yazid Sufaat, a Malaysian-born Qaeda biochemist who trained in the United States, spent several months in 2001 trying to cultivate anthrax in Kandahar, Afghanistan.

Yet nearly seven years have passed without another biological attack, which has reduced the sense of urgency about the bioterrorist threat, even among some specialists.

“I think it’s an important risk, but frankly I’m more concerned about bombs and guns, which are easily available and can be very destructive,” said Randall S. Murch, a former F.B.I. scientist who has studied ways to trace a bioterrorist attack to its source.

And Congressional investigators recently warned that the proliferation of biodefense research laboratories presents real threats, too.

More people in more places handling toxic agents create more opportunities for an accident or intentional misuse by an insider, Keith Rhodes, an investigator with the [Government Accountability Office](#), said at a Congressional hearing in October.

Nationwide, an estimated 14,000 people work at about 400 laboratories and have permission to work with so-called select agents, which could be used in a bioterror attack, although not all are authorized to handle the most toxic substances, like anthrax. With so many people involved, there is insufficient federal oversight of biodefense facilities to make sure the laboratories follow security rules and report accidents that might threaten lab workers or lead to a release that might endanger the public, Mr. Rhodes testified.

In effect, the government may be providing the tools that a would-be terrorist could use, said Richard H. Ebright, a [Rutgers University](#) biochemist and vocal critic of the federal increase in biodefense spending.

“One well-placed student, technician or senior scientist — no cost, with the salary being provided courtesy of the U.S. taxpayer — and no risk, no difficulty,” Mr. Ebright said. “That is all it takes.”

Heightening the concern has been a string of accidents at certain new or expanded biodefense laboratories, several of which were not properly reported to the authorities when they took place.

One of the first accidents was in Dr. Ivins’s lab in late 2001, when he and his colleagues were aiding the federal investigation of the anthrax attacks and spores accidentally spilled outside the secure area. He failed to report the event to his superiors and instead tried to disinfect the contaminated areas, according to an Army report, which concluded, “Adherence to institute safety procedures by laboratory personnel is lax.”

In early 2006, at [Texas A&M University](#), a worker was infected with Brucella bacteria, a pathogen common in livestock that can cause flulike symptoms like [fever](#), fatigue and [joint pain](#), although it is rarely fatal. Later, three researchers at the same lab were infected with [Q fever](#), another cattle-borne disease that can cause serious but generally not fatal illness in humans.

After the two incidents belatedly became public, federal officials temporarily shut down the laboratory, citing a series of safety shortcomings, like unapproved experiments and staff members given access to the dangerous agents even though they had not been approved to handle them.

Apart from the insider threat, some public health experts believe money used to study obscure pathogens that are not a major disease problem could be better directed to study known killers like [influenza](#) or [AIDS](#).

Partly in response to this criticism, government officials now often talk about how strengthening the systems necessary to respond to a terror attack would also prepare the country for a natural epidemic like avian [flu](#).

As experts debate threats, nervous neighbors of expanding biodefense facilities have repeatedly

rallied to try to defeat them. At Fort Detrick in Maryland, some residents have opposed the construction of a “national biodefense campus” slated to include a new building to house the [United States Army](#) Medical Research Institute of Infectious Diseases, where Dr. Ivins worked for many years before his suicide. Three other new laboratories on the campus will be operated by the Departments of Homeland Security, Health and Human Services, and Agriculture.

Proponents say clustering the laboratories on a military base will encourage safe scientific collaboration and save money through sharing of some facilities.

The buildup, and the related increase in research, has brought some important advances, federal officials argue, like promising new experimental vaccines or therapies to treat [smallpox](#) or Ebola virus.

The country now also has an expanded stockpile of vaccines and drugs to treat anyone exposed in a future attack, including enough antibiotics to treat more than 40 million Americans who might be exposed to anthrax and nearly five million bottles of a special potassium iodide liquid that helps protect infants from harm caused by nuclear fallout.

The deal for the \$877 million contract that included Dr. Ivins’s vaccine collapsed in 2006 after the contractor, VaxGen of Brisbane, Calif., missed deadlines. VaxGen, in a licensing agreement with the Army to produce the vaccine, listed two patents held by Dr. Ivins and his colleagues. The possibility that Dr. Ivins could earn royalties from the patents was first reported by The Los Angeles Times.

Arthur Friedlander, one of Dr. Ivins’s collaborators in the work that led to the anthrax vaccine patent in 2002, declined to comment when asked Saturday if he and others who had worked on the project stood to gain financially. He referred the question to an Army spokeswoman, who did not respond to a request for comment.

Dr. Ivins’s lawyer, Mr. Kemp, said he could not comment on the notion that Dr. Ivins stood to earn royalties from vaccine patents because of attorney-client privilege.

VaxGen had agreed to pay royalties to the Army in exchange for the license to produce the new anthrax vaccine, according to federal financial disclosure it filed. And Army policy would allow the inventor to receive up to \$150,000 a year “of any royalties/payments resulting from commercial licensure.”

It is unclear what the deal in this case might have been, or how the royalties might have been split among the five researchers whose names were on the patent.

Addressing the issue of bioterrorism spending, Michael Greenberger, director of the Center for

Health and Homeland Security at the [University of Maryland](#), said he was convinced that the increase had left the nation better prepared for an attack, without creating significant new vulnerabilities.

“You can never say that the system is 100 percent secure,” Mr. Greenberger said. “But the research ethic today is one of much greater discipline and focus on security than was true prior to the anthrax attacks.”

Mr. Stupak, the congressman from Michigan, remains concerned.

“You have all these universities tripping over each other trying to be high-level biosecurity labs,” he said. “What the nation gets is a very expensive bill, less security and a greater risk to the surrounding communities.”

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