Not Enough Monkey Business

The importation of cynomolgus monkeys, essential for everything from vaccine development to behavioral research, almost came to a halt in the United States this year—not because there's been any decline in demand, but because health officials thought they had to protect the public from a dangerous monkey virus. After a few nervous months, most health officials are convinced that the virus is not a threat to humans. But even though import controls are now being eased, just introducing those controls earlier this year has created new barriers that will make it more difficult for researchers to obtain monkeys in the future.

Last year approximately 13,000 cynomolgus monkeys were imported into the United States for research purposes. Since April this year, only 884 have entered the country, and even optimistic projections indicate the total for the year will not top 5,000, way short of the research demand. The reason: In March, the Centers for Disease Control in Atlanta instituted strict new quarantine procedures after health officials found several shipments of monkeys infected with a filovirus. It was first thought to be the deadly Ebola virus but later turned out to be an apparently harmless cousin (Science, 1 June, p. 1071). Although shipments of monkeys have begun again, many labs drew down their reserves of animals while CDC was sorting out the risks. Now these labs face problems.

"People have not yet experienced the real pinch," says Robert A. Whitney, Jr., director of the National Center for Research Resources at the National Institutes of Health. "That pinch is going to be somewhere between now and the middle of next year when users will really have trouble finding enough animals to meet their needs." And there's more bad news: "The cost is certainly going to be higher," Whitney says.

CDC officials have tried to make good on their commitment to allow monkey shipments to resume once it was clearly safe to do so. They have issued special licenses to five importers good for 6 months that allow unlimited shipments. In addition, CDC director William Roper has been sending out monthly updates on the filovirus situation to let the scientific community know that he shares their concerns (see p. 492). This week a team of CDC officials was in New York to meet with airline representatives who have been reluctant—and in some cases unwilling—to carry monkeys, even though CDC is convinced they can be safely transported.

But while few fault CDC for taking pre-

cautions last spring against what could have been a dangerous infectious agent, importers continue to feel that CDC hasn't done enough to put right its initial overreaction. Joe R. Held, vice president for primate operations for Charles River Laboratories, says CDC is still requiring importers to go through a mountain of red tape. And if importers are slowed by CDC requirements, they've been stopped dead in their tracks by New York State health officials. And since New York's Kennedy Airport was the main port of entry for monkey shipments, importers have had to scramble for alternatives. Even before CDC implemented its new import restrictions in April, New York established stronger requirements, including requirements for quarantine and blood tests for filovirus infection in the country of origin. Doing such testing has proved impossible so far, and Held says to import sera for testing in this country is no simple matter, in some cases requiring the same elaborate documentation as shipments of whole animals.

New York State officials say they must continue to play it safe. Leo Grady, chief of the state virology laboratories, says there's just not enough information available yet to determine exactly what health risk an infected monkey poses to humans. "If there's any doubt, why not keep the animals out?" he says.

But importers like to point out that other countries have basically ignored the filovirus problem and don't seem to be any the worse for doing so. Indeed, monkey shipments to European countries and Japan have picked up since the U.S. restrictions were implemented, and a World Health Organization official says there have been no reports of human illness related to the imports. "Everyone is trapping and shipping," says Paul Houghton of Primate Products, "but no one is shipping to America."

■ JOSEPH PALCA

Gallo Reports Mystery Break-in

On the evening of Saturday, 11 August, sometime after 6:50 but before 11:00, an intruder reportedly broke into the unoccupied Bethesda home of AIDS researcher Robert C. Gallo. The break-in occurred while Gallo was at a long-planned Chinese dinner on the first night of his lab's annual international meeting. When the visitation was over, the Gallo family jewelry, silverware, and VCR were in their familiar places, untouched. What had been ransacked were the contents of all four desks in the house and boxes in a bedroom closet.

Two and a half months later, Montgomery County police are still looking for the person who broke into the Gallo home. But they're not looking for an ordinary burglar, since as police detective John McCloskey told *Science*: "Not a thing was taken."

So what was the intruder looking for?

Gallo told *Science* he believes the burglar was there to photograph scientific data and papers. According to Gallo, a large white plastic bag that had Daniel Zagury's name on it in inch-high letters had been knocked to the floor and apparently gone through. It contained tubes with Western blots that Zagury was going to take to Zaire. It is not clear whether any of the blots were taken. "I had just gotten them from Zagury," Gallo said, adding that they were "about the vaccine work."

Daniel Zagury of the University Pierre et Marie Curie in Paris, who has been collaborating with Gallo for several years in efforts to develop an AIDS vaccine, is working with AIDS patients in France and in Zaire where prototype vaccines are being tested.

The mystery is deepened—and the connection with Zagury reinforced—by another enigmatic event in AIDS research circles. Just a couple of weeks before the incident at Gallo's Bethesda house, Zagury papers were reported missing from the laboratory of Takas Papas at the Frederick Cancer Research Center in nearby Frederick, Maryland. The Frederick facility is a contractor for the National Cancer Institute, where Gallo works. Papas is a virologist who has been collaborating with Zagury and Gallo on the vaccine research.

"Someone came into my lab and took several pages of correspondence with Zagury and a small paragraph from a report about the protein we are providing him for his vaccine work," says Papas, adding, "It wasn't a pleasant thing. For a while I couldn't sleep, worrying about it. We're just now getting back to normal."

Solving those two incidents may not prove easy, but that hasn't discouraged the authorities. The Montgomery County police are pursuing the Gallo break-in—and they aren't exactly working on their own. According to Samuel Broder, director of the National Cancer Institute, which manages the Frederick center, the FBI was called in on the Papas case because Frederick is a federal facility. ■ BARBARA J. CULLITON