GETTY IMAGES

WAITING GAME

Visa problems continue to frustrate scientists seeking entry to the United States. **Karen Kaplan** investigates the roadblocks.

Scientists, postdocs and students planning to travel to the United States to work or study need two things before applying for a visa: time and patience.

Despite recent efforts by federal agencies to improve and accelerate the visa-application process — including adding staff and setting shorter waiting times — it still needs legislative and regulatory reform, say those who are familiar with the system. Many consider it to be a labyrinthine muddle of requirements and regulations. Delays of up to half a year are not uncommon, even with the processing improvements brought in to clear the backlog and speed procedures after the terrorist attacks of 11 September 2001 forced a visa clampdown.

The consequences of such a system are potentially much more damaging than inconveniencing a few researchers and students seeking to work or study temporarily in the country. In a January 2009 report, the US National Research Council called for a thorough revamp of existing visa regulations, saying that the current system is quashing international scientific collaborations (see *Nature* **457,** 752; 2009). Some researchers are worried that the delays might mean collaborators give up coming altogether (see 'Unwelcome guest', overleaf).

In June, 31 US academic and research associations asked the federal government to streamline the visa process for international scientists, scholars and students (see *Nature* **459,** 1157; 2009). The US National Postdoctoral Association also called for regulatory changes earlier this year, including a new non-immigrant visa for postdocs.

In response, the US Department of State, which handles student and exchange visa applications, brought in a combination of new procedures and extra staff and resources to expedite the process and chip away at the backlog that has contributed to delays.

These procedures are specifically intended to address those applications that require special 'administrative processing' — which is triggered when the applicant's work is linked to sensitive technology, weaponry or military applications, or if the applicant is from a country identified as a "sponsor of terror" or as a nuclear-proliferation concern. Most of these applications are now expected to get through the system in a maximum of ten working days, according to David Donahue, director of the public-affairs office at the state department. He says that routine applications that don't require special security checks account for 97% of the annual total — which last year reached some 6.5 million — and should take well under 30 days. Students in particular are benefiting from the shorter processing times, says Donahue. "We are doing everything we can to ensure that students don't miss the beginning of their study programmes," he says.

Although the state department brought in the changes at the end of May, by late July university administrators, immigration lawyers and others who work with visa applicants had noticed little difference. They advise that an applicant should still allow up to six months for visa approval, although they acknowledge that in many cases, the visa will be issued within two to four weeks.

"It may be a little slow, it may not be the easiest interview, but people are getting through it and getting here — provided they start their application paperwork in a timely fashion," says Roger Chalkley, senior associate dean for biomedical research education and training at Vanderbilt University School of Medicine in Nashville, Tennessee. The school admits about 75 non-US graduate students and 250 non-US postdocs every year. "There have been hiccups, and it took a while, but things are getting resolved," he says.

Processing problems

Administrators still warn of persistent delays for those scientists or students already in the United States who need a different visa from the one they currently have. That could include a graduating student who needs an exchange visa, or a postdoc who is offered a permanent job and thus needs an employment visa.

Such employment visas — generally H-1Bs for scientists — are handled by the US Department of Homeland Security (DHS)

UNWELCOME GUEST

Juhn-Jong Lin, a condensed-matter physicist and professor at the Institute of Physics at the National Chiao Tung University in Hsinchu, Taiwan, hasn't been to the United States for two years. And he doesn't plan to return any time soon.

Lin used to hand his passport to a travel agent in Taiwan who would apply on his behalf for a J-1 exchange visa. Without fail, he would receive a five-year visa, which made it easy for him to attend the American Physical Society's biannual conferences and to travel to and from the United States for any other work-related reason as often as he liked within that period. But things became more difficult after the terrorist attacks of 11 September 2001, and worsened again about two years ago, Lin says.

"After 9/11, I had to apply in person — and I always got only a one-year visa," he says. Every year he had to complete a lengthy application, prepare a detailed CV, have a new specific-sized photo taken, undergo an in-person interview 80 kilometres away in Taipei and pay an application fee of about US$150. Waiting times for visa approval stretched from a week or two before 11 September 2001 to about two months, and recently ballooned again to four months. "No one knows why," Lin says.

In 2005, Lin planned to attend the American Physical Society's March meeting as usual and applied for a visa about eight weeks in advance. The document was not issued in time for Lin to attend.

Lin's experience is not unusual, says immigration lawyer Paul Herzog, who works in Los Angeles, California. Lin's work as a physicist means his visa application is likely to be flagged for a Visa Mantis screen, one of several types of security checks required for 'administrative processing'. Herzog says applications singled out for such processing are known to cause problems. "Those checks can take weeks and months," he says, "especially if [the federal agencies reviewing the applications] are concerned about espionage or terrorism."

Lin, for his part, says he has given up. "I no longer want to try," he says of applying in the future for a US visa. Lin has now formed fruitful collaborations with physicists in Japan, China and Europe. "There is no longer much incentive to visit the United States," he says. **K. K.**

and have lengthier processing times than the student or exchange visa. Chris Rhatigan, a spokeswoman for US Citizenship and Immigration Services, part of the DHS, says H-1B approval is usually received in two months, possibly longer depending on the applicant. "We don't post processing times," she says. "Each application is reviewed on a case-by-case basis."

Applicants already in the United States on a J-1 exchange visa who can't support themselves financially while they wait for H-1B approval must return to their home country. However, the process can be fast-tracked if their institution pays a 'premium-processing' fee of US$1,000, which cuts the wait from 2–4 months to 15 days or fewer. University administrators say, however, that such an expenditure cannot be made routinely, especially by a research-intensive institution that might employ dozens of non-US postdocs every year.

"It's a significant cost to the sponsoring institution," says Mary Anne Timmins, administrative director of biomedical postdoctoral programmes at the University of Pennsylvania in Philadelphia. Other visa charges on top of the premium-processing fee can push the total cost of bringing in one non-US postdoc to more than $3,000, she says.

Those affected by delays or the requirement to return home often wonder whether they should even go through such an upsetting process, says Peter Palese, head of microbiology at the Mount Sinai School of Medicine in New York, who works with international postdocs. "Other countries make it easier," he says. "We are harming ourselves."

Some administrators and others say that despite improvements to the process for all types of special security checks — including those conducted under Visa Mantis, the check that most commonly affects scientists, science students and postdocs — wait times are still far longer than ten days. Under a Mantis check, federal agencies including the state department, the DHS, the FBI and the CIA investigate an application for links to terrorism, espionage or illegal transfer of sensitive technology.

"Things aren't as bad as they were right after 9/11," says immigration lawyer Elizabeth Goss of legal firm Tocci, Goss and Lee in Boston, Massachusetts, "but there are still issues. And there's really no one you can talk to. That can be frustrating."

Heightened security

In 2003, special security checks took roughly 75 days to complete, according to independent federal investigators. After congressional pressure, the waiting time for Visa Mantis applicants was cut to about 15 days by the end of 2004. But in the past year, delays on Mantis applications lengthened again to between 4 and 12 months.

Although the Mantis checks make sense in principle, many say that in practice they clog up a process that should move far more freely. "The visa process should serve as a barrier to people with criminal or terroristic intent," says Vic Johnson, senior adviser for public policy at NAFSA, the Association of International Educators. "But it should also be a gateway for people with the talent our economy and society requires." Before September 2001, Mantis clearances totalled several dozen a year. Last year, under Mantis, federal screeners reviewed some 55,000 applications. "If all these Mantis clearances are being approved, it must mean you're reviewing a lot that don't need review," says Johnson.

Physicist Juhn-Jong Lin has given up on US visas.

Still, officials say that further improvements are on the way. As well as the state department's efforts to speed up Visa Mantis processing, some US embassies have updated their websites to show the visa waiting times at consulates in every city.

An inter-agency group led by the DHS that meets to discuss visa issues convened most recently in July, and has met at the White House with the National Security Council to identify other areas of the system that need improvement. "We are always asking, 'Can we do better?'" Donahue says.

Legislative changes may also be coming. According to Amy Scott, assistant vice-president for federal relations at the Association of American Universities in Washington DC, a Senate bill could be introduced this month that would streamline the visa process for scientists and students. Although Scott says it is likely that the bill's passage will be delayed, she notes that President Barack Obama is calling for immigration reform by no later than next year.

Donahue and Rhatigan say their agencies recognize that streamlining the visa process allows for the free flow of scientists and their ideas into the United States — a positive outcome for all. "We will continue to listen to the science community and try to figure out ways to address their concerns," Donahue says. "There have been long waits for a variety of reasons. We have made a great effort to change that." ■

Karen Kaplan is assistant editor of *Naturejobs*.

See Editorial, page 12.