

**ON THE RECORD**

**“We at Clonaid believe that Dr Hwang has cloned human embryos and has the knowledge to develop stem-cell lines.”**

Clonaid, the cloning company run by a religious cult, offers disgraced stem-cell researcher Woo Suk Hwang a job.

**“I hope this means that I inherit a castle in Ireland.”**

Novelist Peter Quinn reacts to a study showing more than 2 million people are descended from Irish nobility.

Sources: Clonaid, New York Times

**SCORECARD**

**French air**  
The levels of greenhouse-gas emissions in France were lower last year than in 1990, putting the country on track to meet its commitments under the Kyoto Protocol on climate change.

**Japanese fishing**  
Giant Nomura's jellyfish (*Stomolophus nomurai*), which can weigh up to 200 kilograms, are swarming the coast of Japan and paralysing normal fishing practices.

**Plant sex**  
A study led by the University of Calgary has found that competition for a dwindling number of birds and bees is hindering pollination in the world's rainforests.

**NUMBER CRUNCH**

Obesity can be treated by 'bariatric' surgery, such as a gastric bypass. A study that estimates the frequency of such work in the United States suggests it is on the rise.

**69,273** bariatric operations were performed in 2002.

**588** patients were under the age of 20.

**736%** is the rise in the number of such operations between 1996 and 2002.

**\$2 billion** was the size of the bariatric industry in 2002.

Source: M. M. Davis et al. Arch Surg. 141, 71-75 (2006).



Geologists want access to Indian waters to understand the devastating seafloor earthquake in 2004.

## India's ban on foreign boats hinders tsunami research

A fresh round of research missions is set to probe the seafloor rupture that triggered the devastating tsunami of 2004. But when researchers arrive in the Indian Ocean, they will find some areas are off-limits.

As with previous studies of the region, vessels will not have permission from the Indian government to enter the country's territorial waters. It is a policy that hampers research, say scientists involved, and ultimately sets back attempts to prepare for earthquakes.

The first of this year's missions set sail from Bremen in Germany on 20 January. Organized by the Federal Institute for Geosciences and Natural Resources in Hannover, the six-week mission will run studies such as seismic surveys and sediment sampling. The data gathered will boost efforts to model the earthquake and help gauge the likelihood of further major tsunamis in the area.

Other nations, including Britain and the United States, also plan to send ships, but none will be able to survey the northernmost 900 km of the 1,300-km rupture zone. This part lies in Indian waters, and researchers say they have not even attempted to ask for permission to enter. Indian science secretary Valangiman Ramamurthi told *Nature* that the ministry of defence does not allow any foreign vessels in its territory for "reasons of national security and sovereignty".

That stance is unusual. With other countries scientists say they are almost always able to reach an agreement to send research missions.

But after decades of being refused entry to Indian waters, they are resigned to relying on the limited data produced by Indian research vessels and the occasional chance to join those voyages.

David Tappin of the British Geological Survey in Nottingham, who is sailing with the German team, says access to the southern part of the 2004 rupture zone is crucial for studying the behaviour of the two plates that caused the earthquake. They interact differently in different places, he explains. In the north, the plates slip horizontally past each other. But in the south, the Indian plate is moving underneath its neighbour.

Chris Goldfinger, a marine geologist at Oregon State University in Corvallis who is organizing a trip for later this year, says lack of access is hampering attempts to understand how frequently major earthquakes have occurred in the area. "This is readily determined by geologic sampling," says Goldfinger. Such sampling is currently only scheduled for Indonesia, he says, leaving important work to a scattering of good but limited efforts under way in India.

In the absence of progress at the diplomatic level, researchers are focusing on collaborations with Indian colleagues. Goldfinger says he is working with the National Institute of Oceanography in Goa and hopes to participate in future Indian missions.

**Jim Giles**

Additional reporting by K. S. Jayaraman in New Delhi