SIDELINES

NUMBER CRUNCH

89,826 people attended the FA Cup Final on 19 May, the showcase event of the English football season.

688 food and drink outlets served hot dogs and beer to the hordes of fans at the brand new Wembley Stadium.

3,000 football pitches would fit into the ecological footprint of the event, according to researchers at Cardiff University — an estimate of the land area needed to make the food and drink, and to generate the energy for getting everyone and everything to the game.

ZOO NEWS

Soft shell

Conservationists have found "an abundance" of Cantor's giant soft-shelled turtles (*Pelochelys cantorii*) at a former Khmer Rouge stronghold on the Mekong River in Cambodia, calming fears that the creature is nearly extinct.



SCORECARD

Office workers
If your deskbound
existence is making
your waistline spread, never fear
— the inventors of the 'office
treadmill', which lets you work
and walk at the same time,
promise that users could lose up
to 30 kilograms in a year.

Estonian businesses
The small Baltic country seems to be the victim of the world's first large-scale act of cyber war, as almost all government computers and many banking facilities were recently paralysed for several weeks by hackers. The highly coordinated nature of the disruption, coupled with recent tensions with Russian expatriates in Estonia, has led some to say that Russia was behind the attack.

Sources: The Guardian, BBC, ABC News

Japan centres aim to put science in premier league

"The important thing

is being equal. It's hard

to change these things

with compulsory rules."

Japan's top researchers are this week putting the finishing touches to their applications to run a World Premier International Research Center, the grandiose title of the latest government effort to boost Japanese scientists' links with their colleagues overseas.

There will be some five centres, each of which will receive base funding of between US\$4 million and \$16 million for up to ten years. They are the latest in a long line of efforts to make Japanese research more flexible and international in outlook.

Isolation is a major factor weakening Japanese science, says neuroscientist Takao Hensch, who last year moved to Harvard Uni-

versity after ten years at the RIKEN Brain Science Institute in Wako, north of Tokyo. "To be competitive there must be constant communication ensuring that Japanese scientification."

tists are respected participants in their fields," Hensch says.

Japanese policy-makers, including officials at the science ministry, accept that the country's science is isolated as a result of its culture, geography and language. They also suspect that Japanese science is underperforming as a result.

The new institutes, which will be selected in September by an international review panel, are expected to serve as 'globally visible' research centres and to attract top-level researchers from around the world. To prevent the centres from

merely paying lip-service to these goals, the application stipulates that 30% of the roughly 200 researchers expected at each centre and 10–20% of the 10–20 principal investigators must be foreigners. Lack of progress towards these goals could lead to closure.

Such attempts to make Japanese research more international are not new. The Okinawa Institute of Science and Technology, for example, which officially opened this year, had said that it would hire half of its research staff from abroad and looks set to meet that target. At the RIKEN Center for Developmental Biology (CDB) in Kobe, which opened in 2002, 10% of the staff and principal investigators are foreign-

ers. And 20% of the staff at the RIKEN Brain Science Institute, which was set up in 1997, are also from overseas.

But these institutes have remained exceptions in a con-

servative Japanese system that is generally not regarded as being welcoming to non-Japanese scientists.

Some of the problems lie outside the institutes themselves. Douglas Sipp, who heads the CDB's international-relations office, says that although all research material is available bilingually, the ministries tend to send documents such as grant-programme notices in Japanese, with English versions sometimes arriving too late to be of use. Sipp also says that the difficulty foreign researchers have in paying for international schools for their children or

NIH presents the mind of a child

A US National Institutes of Health (NIH) study into brain development during childhood is creating a database as a benchmark against which researchers on other studies can compare their data.

Scientists will be able to apply to the NIH for access to the database once it is ready, probably before the end of the year. They could, for example, compare structural or behavioural data from their studies of a mental disorder against those for children with 'normal' brains.

The study, called the MRI Study of Normal Brain Development, is building a database of what constitutes a 'normal' child. Five hundred children aged from 7 days to 18 years, and representative of US society, have been recruited from six centres.



A database of scans will offer a picture of a normal child's brain.

Those with, or at risk of, any neurological or psychiatric