Public puts faith in nanotech despite little knowledge

Washington Many people on both sides of the Atlantic have little idea what 'nanotechnology' means — but they still think it will benefit them in the long run.

A poll of more than 1,500 US adults, backed by the National Science Foundation, has found that 80% of people have heard little or nothing about nanotechnology. Nevertheless, 40% of respondents felt that it would bring more benefits than risks, and a further 38% felt the risks and benefits would be about equal.

A British survey released in March by the Royal Society and the Royal Academy of Engineering found similar levels of ignorance: 71% of UK respondents had never heard of nanotech. But of those who knew the term, 68% thought it would make things better in the future.

The surveys are likely to reassure scientists working in the field, who have become alarmed at activists' attempts to portray their work as a threat to human health and the environment (see *Nature* **424**, 246–248; 2003). But the US poll has a sting in its tail: 60% of respondents said they do not trust business leaders to minimize the technology's risks.

Europe joins forces to study cell-division genes

London The genes and proteins that orchestrate the division of human cells are to be investigated in an €8.5-million (\$10.6-million) project funded by the European Commission. The MitoCheck project will involve scientists at the European Molecular Biology Laboratory in Heidelberg, Germany, and ten other research institutes.

The researchers plan to sift through some 20,000 human genes using RNA interference to silence them one by one, and observe the regulatory effects that individual genes have on the cell cycle. "To do this for a single gene is a routine procedure, but to do this for tens of thousands of genes with precision is a very challenging task," says project coordinator Jan-Michael Peters of the Research Institute of Molecular Pathology in Vienna, Austria.

Buckminster Fuller gets stamp of approval

Washington The polymath Richard Buckminster Fuller is honoured this month with a US first-class stamp. The image, taken from a 1964 cover of *Time* magazine, depicts Buckminster Fuller's head as a geodesic dome, his best-known creation.

After inventing gadgets such as a three-wheeled car and modular bathroom, Buckminster Fuller patented the geodesic dome in 1954 as a means of making strong, lightweight buildings. His domes are still not widely used in architecture, but their structure was found in the 1980s to be echoed in a series of ball-shaped carbon molecules, now known as the fullerenes.



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Cell biologists hope that the study will also reveal the mechanics of how proteins are modified by phosphorylation as cells undergo division.

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Arizona braces itself for dengue invasion

San Diego As the rainy mosquito season looms, there are growing fears that dengue fever may be about to break into the southwest United States. An explosion of cases in Mexico, near the border with Arizona, has researchers scrambling to find out why the mosquito-borne virus is spreading north.

In 2003, there were 1,177 cases of dengue fever in the Mexican state of Sonora, compared with just 258 in 2002. Cases of the most serious form of the disease — dengue haemorrhagic fever, which kills in 5% of cases — climbed from 98 in 2002 to 346 in 2003.

Researchers at the Center for Insect Science at the University of Arizona in Tucson, working with Mexican scientists, have found that this upsurge of cases has coincided with the emergence of the DEN-4 strain of the virus, typically seen farther south, in addition to the DEN-2 and DEN-3 strains. This is a concern, because the haemorrhagic form of the disease occurs when people are serially infected with more than one viral strain.

The last instance of dengue infection in mainland United States was in 1999, when 18 people were found with the disease in Laredo, Texas.

Graduate students cannot form unions, board rules

Washington Graduate students at private US universities have been stripped of their right to unionize. The National Labor Relations Board ruled on 13 July that graduate students at Brown University in Providence, Rhode Island, should not be allowed to join a union as they are students and not employees.

The decision reverses a ruling by the board in October 2000 that allowed graduate students who had research or teaching duties at New York University to unionize (see *Nature* 408, 123; 2000). That decision was made while the board had a majority of Democrats. President George W. Bush has since appointed three Republicans.

The ruling bars collective bargaining at private schools such as Brown, but will not affect state-run public universities. Some states, including California and New York, do allow graduate students to form unions.

Feeding frenzy paves way for crazy ant death

Sydney Work has begun to save Australia's Northern Territory from one of the world's most voracious pests. Billions of yellow crazy ants will be poisoned in an attempt to halt the insects' trail of devastation.

Yellow crazy ants (*Anoplolepis gracilipes*), so-called because of their chaotic movements, originated in Africa and are one of the world's most invasive species. Instead of forming queens that fly away from the parent colony to establish new communities, they form dense supercolonies with up to 1,000 ants per square kilometre of bush.

In Australia's northeast Arnhem Land, the insects have now infested 25,000 square kilometres of land — feasting on local flora, and killing or out-competing resident invertebrate populations.

Scientists plan to combat the ants by dropping granules of poison onto the colonies from helicopters. The pellets, called Presto, contain a fishmeal product that the ants love but other animals avoid.

