Shuttle's wonder worms make it back to NASA in one piece

Washington Live nematodes recovered from the debris of the space shuttle Columbia have finally made their way back to the scientists who sent the worms — or rather, their ancestors, as they only live for a week or two — on the ill-fated voyage.

Between 1,000 and 10,000 *Caenorhabiditis elegans* worms were found in petri-dishes packaged inside one of the shuttle's small mid-deck lockers, according Nate Szewczyk of NASA's Ames Research Center in Moffett Field, California, a member of the team that was testing a new kind of synthetic medium for nourishing the nematodes during spaceflight.

C. elegans is a handy model organism for space biology studies, and has already flown on several shuttle flights. Szewczyk says that once the Ames researchers realized the equipment housing the worms had made it through re-entry, they were not surprised that the animals survived the violent forces that broke Columbia apart. Nematodes have endured brief exposures to accelerations 100,000 times the force of gravity.

Mathematics institute appoints new number one

Washington The Clay Mathematics Institute, which has been rudderless since November when its president was ousted and two board members resigned, now seems to be getting back on track. Its new president will be James Carlson, a mathematician at the University of Utah in Salt Lake City.

Established in Cambridge, Massachusetts, in 1998 by financier Landon Clay, the institute has been embraced by mathematicians. It awards \$3 million of research grants each year, and has raised the profile of pure maths by offering prizes of \$1 million for anyone who solves each of seven famous problems.

Mathematicians were concerned about the sudden departure of Harvard mathematical physicist Arthur Jaffe and the subsequent resignations of two other members of the institute's four-strong scientific advisory board (see *Nature* 421, 303; 2003). The board has now been reconstituted, and Carlson will take the reigns in August.

Cancer body gets tough on conflicts

San Diego The 20,000-member American Society of Clinical Oncology (ASCO) last week adopted one of the toughest conflictof-interest policies of any scientific body.

Research leaders seeking to present studies at ASCO conferences or to publish articles in the society's journals must now disclose any financial support from a project sponsor in excess of \$100, including gifts and travel expenses. In comparison, the US National Institutes of Health only requires researchers who receive grants to disclose to their institutions payments or stock in excess of \$10,000 a year from a study sponsor.

ASCO president Paul Bunn, an oncologist who directs the University of Colorado's Cancer Center in Denver, explains that a plethora of conflict-of-interest cases prompted the rewriting of a previous policy that dates from 1996. "We really felt a need to tighten up," says Bunn. The new policy will come fully into effect in a year's time.

Howard Hughes steams ahead with new campus

Washington Despite financial worries, the Howard Hughes Medical Institute (HHMI), based in Chevy Chase, Maryland, is pushing ahead with an ambitious new research campus in rural Virginia. The institute's board of trustees is expected this week to name HHMI vice-president Gerald Rubin as the first head of the new project, shortly after a groundbreaking ceremony on 5 May.

HHMI officials say that the campus, called Janelia Farm, will cost around \$500 million. It will house up to 300 investigators, as well as visiting scientists, fostering projects that will yield new research tools, says HHMI president Thomas Cech.

So far, Janelia Farm has escaped cuts that the HHMI announced last year, which include trimmed budgets for the 300 investigators it funds at universities around the United States. "We need to respond to new opportunities," says Cech. In November, the institute said that the continuing economic downturn had slashed its endowment from \$13 billion to \$10 billion over the preceding three years.



Over the hill? Last year was the first since 1997 in which the biotech revenues in Europe fell.

Biotechnology industry plateaus out in Europe

London Europe's biotechnology industry has stalled, according to a report from consultants Ernst & Young. The number of biotech companies on the continent, which has grown at 10–20% each year since 1997, remained almost static at around 1,900 in 2002. Revenues dropped by 2%, and the workforce decreased in size by 6%.

Some sectors have suffered more than others from the current economic slump. Genomics companies have been the hardest hit, whereas more established areas of the industry, such as vaccine development, have been less affected. The report does not cover large pharmaceutical companies.

Glenn Crocker, biotechnology adviser at Ernst & Young in Cambridge, UK, and the report's lead author, says that the industry faced similar problems during the 1990s and recovered from them. But he warns that some lessons, such as the need to base strategies on revenues generated in the early years of a business, have not yet been learned. > www.ey.com/uk/healthsciences

Quark 'compound' has them all guessing

San Francisco A new composite subatomic particle has been uncovered by physicists at the Stanford Linear Accelerator Center (SLAC) in California — but no one is sure exactly what it is.

Given the catchy name of Ds (2317), it seems to be an unusual configuration of quarks — the fundamental building blocks from which protons and neutrons are made. Ds (2317) could be an anti-strange quark orbiting a charm quark, or perhaps a 'quark molecule' made of four quarks. But whatever it is, researchers hope the particle will deepen their understanding of the strong nuclear force, which binds quarks together.

Physicist Marcello Giorgi of the University of Pisa in Italy and his colleagues stumbled on Ds (2317) while sifting through years' worth of data gathered by the BaBar detector at SLAC (pictured), which looks at the high-energy collisions between



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electrons and their antimatter counterparts. The particle was found among relatively low-energy debris from these collisions. It is unusual in that its mass is lower than expected, and is well defined — typically, the mass of such composite particles is made fuzzy by quantum uncertainties. **)** www.slac.stanford.edu

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