

French success with immune disorder boosts gene therapy

Paris Two infants with inherited severe combined immunodeficiency (SCID) have been treated with gene therapy. The positive findings will boost a field still shrouded in gloom after the death of Jesse Gelsinger, who was enrolled on a gene therapy trial at the University of Pennsylvania, last year.

The form of SCID in question is caused by a mutation in a gene on the X chromosome that codes for a subunit of certain receptors for molecules known as cytokines. Patients suffer from defects in two classes of immune cells: T cells and natural killer cells.

A team in Paris, led by researchers at the French medical research agency INSERM, administered the sequence for the receptor subunit using a vector derived from a retrovirus. In *Science* (288, 669; 2000), the researchers report “full correction of disease phenotype” ten months after the treatment.

Public invited to suggest where to point Hubble

Washington In celebration of the Hubble Space Telescope's tenth anniversary, the US space agency NASA is inviting the public to pick targets for the telescope. Hubble's operators will take suggestions up to 6 June on where the telescope should be pointed.

The selection criteria include feasibility, scientific interest and the potential to take a compelling image. The target must not be something that Hubble has observed before.

This is the third such opportunity offered to the public. The first two winners voted for the Polar Ring Galaxy NGC 4650A and a group of galaxies called Hickson Compact Group 87. Guidelines to help in the selection can be found at: <http://heritage.stsci.edu>.

US treats AIDS as a threat to security

Washington The Clinton administration has declared AIDS a potential threat to US national security. As a result, the administration will seek to double funds — to \$254 million — in the fiscal year 2001 for combating the disease in other countries. The National Security Council, which normally deals with threats of war and terrorism, will be given responsibility for drawing up an international AIDS strategy.

The new emphasis on AIDS outside the United States was triggered in part by an intelligence report last year, which concluded that the disease could cause political instability in Africa, Asia and the countries of the former Soviet Union. “Hopefully this move will underscore the need to view AIDS more as an international disease,” says

Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases at the National Institutes of Health.

Russian Supreme Court clears navy officer of treason

Moscow Russia's Supreme Court has upheld the acquittal by a St Petersburg court of Alexander Nikitin, a retired Russian navy captain, on espionage and treason charges. Nikitin, now an environmental campaigner, co-authored a report critical of the Russian navy's handling of nuclear wastes.

The report led the Federal Security Services to pursue espionage charges over a five-year period. Amnesty International welcomed the decision, although it says that the ruling could be appealed again. “There never was any doubt that Alexander Nikitin was innocent,” says a spokesperson for the organization.

Life isn't sweet for young UK academics

London Young academics in England feel underpaid, under pressure and undervalued, according to a survey for the Higher Education Funding Council for England, which funds teaching and research in English universities. Most of the 370 interviewees were dissatisfied with the succession of short-term contracts that currently comprises the career structure for young academics, and felt that attempts to improve the situation had failed.

The survey's finding on pressure in the workplace matches recent research presented to the British Psychological Society, which found that more than a quarter of academic staff surveyed had suffered from stress-related illnesses in the previous year.

Claims on matter of gravity receive cautious welcome

London Physicists from the University of Washington in Seattle claim to have narrowed the uncertainty surrounding the value of G , the gravitational constant — a value that has fluctuated disconcertingly over the past few years. Because of gravity's relative weakness, G is one of the hardest fundamental constants to measure.

The Washington team, led by Jens Gundlach and Stephen Merkowitz, claim to have established the value to within 0.0015 per cent, using a modified version of the ‘torsion balance technique’ first used to make the measurement in 1798.

But Clive Speake at the University of Birmingham, UK, who will soon announce further measurements, says that the new figure needs confirmation using different techniques. Speake's team is holding back its results until it has two independent measurements that tally.



Hand transplant in danger of rejection

Paris The world's first hand transplant patient is being treated for rejection symptoms, the Sir Charles Gairdner Hospital in Perth, Australia, confirmed last weekend. Clint Hallam (above) received the transplant in September 1998 at the Hôpital Edouard-Herriot in Lyon, France. One of the questions has been whether the novel cocktail of antirejection drugs that made the operation possible would be effective in the long term.

Jean-Michel Dubernard, who carried out the operation, was unavailable for comment as *Nature* went to press. But he is reported to be confident that Hallam's hand can be saved. An earlier bout of rejection was controlled, and tests on Hallam carried out last month had shown low levels of the immunosuppressive drugs, suggesting that the treatment regime needed to be adapted.

US agricultural research 'at risk', says report

Washington The US Department of Agriculture's main basic research programme needs reorganization and a fourfold increase in funding — to \$500 million a year — according to a study from the National Research Council, the research arm of the National Academy of Sciences.

The study says that inadequate funding has placed the programme, known as the National Research Initiative, “at risk”. It calls for larger grants, a new external advisory panel, and an end to a ceiling on overhead charges that deters some universities from applying to the programme.

The National Research Initiative was set up in 1991 to support more competitive grants in basic agricultural research. But its budget has never come close to the \$500 million originally envisaged. Most of the Department of Agriculture's \$1.6 billion research and development programme supports non-competitive grants and contracts.