French government passes unpopular research bill

The French Council of Ministers in late November approved a controversial proposal to reform the country's system for funding research. Scientists are protesting the bill, saying it favors applied science over basic research.

The bill calls for an additional €6 billion (about US $7.1 billion) over three years for research, tax exemptions for the private sector and publicity campaigns to attract people to the profession. The government also created the National Research Agency (NRA) in February 2005 to accept grant applications and dole out the funds.

French researchers have opposed the proposals since 2004, when the government cancelled hundreds of permanent positions promised to postdoctoral fellows (*Nat. Med.* **10**, 319; 2004). Thousands of scientists protested, prompting the government to reconsider the changes.

By directing grant applications to the NRA, the bill gives the government more control over funding decisions, say scientists. In the past, two institutes, the National Center for Scientific Research and the National Institute for Health and Medical Research, reviewed the applications.

Independent committees of experts will evaluate the applications for the NRA, but critics say the committees are subject to pressure from the government and industry and may disproportionately favor proposals in applied science fields in order to meet short-term economic goals.

Pfizer launches large Celebrex safety study

US researchers in December announced a large international study that aims to settle lingering questions about the safety of the painkiller Celebrex and others in its class.

Celebrex is a member of a class of painkillers called COX-2 inhibitors that includes Vioxx and Bextra. Reports in the last two years that the drugs cause increased risk of heart attack and stroke forced manufacturers to pull Vioxx and Bextra off the market. The third lawsuit challenging the safety of Vioxx ended in a mistrial in December.

The new study aims to compare Celebrex, the only COX-2 inhibitor remaining on the market, with the nonsteroidal anti-inflammatory drugs ibuprofen and naproxen. Researchers at the Cleveland Clinic will test the effectiveness of the drugs on 20,000 people prone to heart attack or stroke. Pfizer, the maker of Celebrex, will fund the study and independent researchers will collect the data.

News briefs written by Emily Waltz

Resistance emerges to new malaria drug

Malaria parasites in some regions are showing signs of resistance to the most potent antimalarial drug available, scientists warned in December. The drug, called artemisinin, was introduced to counter increasing resistance to standard malaria treatments.

The researchers took blood samples from individuals with malaria in French Guiana, Senegal and Cambodia, where different first-line treatment policies are in use. Resistant isolates had developed in the samples from French Guiana and Senegal, but not in those from Cambodia (*Lancet* 366, 1960; 2005), scientists said.

Resistance may be developing in those two areas because patients are not taking the drugs in combination with other antimalarials. In 2001, the World Health Organization recommended combining artemisinins with other drugs to help prevent the malaria parasite, *Plasmodium falciparum*, from developing resistance to them.

Companies continue to test artimisinin-based therapies in clinical trials. In November, GlaxoSmithKline announced phase 2 results of an artimisinin-based drug. The company will test the drug in phase 3 trials across sub-Saharan Africa, and plans to make it commercially available in 2008.

US requests mandatory anthrax shots for military

The Bush Administration in December asked a federal appeals court to allow mandatory anthrax vaccinations for members of the US military. The administration's move reopens an issue that had seemingly been resolved in December 2004, when a judge ruled that the vaccine may only be given on a voluntary basis.

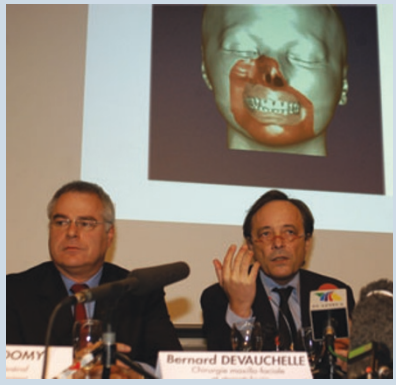
The administration's request is the latest in a series of rulings and counter-rulings that began in March 2003 (*Nat. Med.* **10**, 112; 2004), when six soldiers sued the government, saying they were being forced to take an experimental drug that had not been approved by the US Food and Drug Administration (FDA). The agency in December declared the vaccine safe and effective.

The soldiers contend that the vaccine is not effective against the inhalation form of anthrax and that it can cause severe side effects. Department of Defense officials have said they would report any adverse events in soldiers who receive the vaccine, and that fewer than 100 soldiers have been hospitalized.

But US Army records uncovered by the *Daily Press* in Virginia show that more than 20,000 military personnel were hospitalized between January 1998 and December 2000. The hospitalizations could have occurred for any reason, however. During that time, the military vaccinated more than 400,000 soldiers.

Ethical concerns greet first face transplant

French surgeons in late November completed the world's first partial face transplant, sparking vocal ethical concerns from scientists. The surgeons did not exhaust other alternatives before turning to the controversial procedure, critics say.



ZUMA Press

Researchers elsewhere say they have delayed performing the procedure until ethical guidelines for its use are in place. A French ethics committee had approved partial face transplants, but warned that they were high-risk experiments and that true informed consent might be difficult to achieve.

Face transplants require the transferring of skin, attached muscles, cartilage, fat, blood vessels and nerves from a donor to the recipient, who must then take immunosuppressive drugs to ensure the body doesn't reject the tissue.

The surgeons grafted the nose, lips and chin of a brain-dead woman to a 39-year-old woman who had been mauled by her dog. In a second experimental procedure, they infused the donor's bone marrow stem cells to prevent the woman from rejecting the new face. The doctors and the patient had reportedly signed a movie deal three months before the operation.

Critics say the surgeons should have first tried traditional reconstructive surgeries and should not have attempted two experimental procedures on the same individual. Many scientists also raised concerns about the patient's psychological stability and her capacity to take immunosuppressive drugs for the rest of her life.