

Cities' response to attack hampered by unknown airflow

Washington Lack of knowledge about how skyscrapers, parks and urban sprawl affect city airflow could hamper the emergency services' response to a chemical, biological or nuclear attack, the US National Academy of Sciences said last week.

In a report released on 2 June, the academy suggests that meteorological modellers need to do further work on the flow of hazardous agents around cities. The authors say that the models need to provide emergency teams with more information on the probabilities associated with specific predictions.

The report calls for more urban field research and wind-tunnel simulations, better use of meteorological monitoring networks, and unmanned airborne vehicles to supplement fixed observation equipment.

♦ www.nas.edu

Massive cathedral testifies to ancient emperor's might

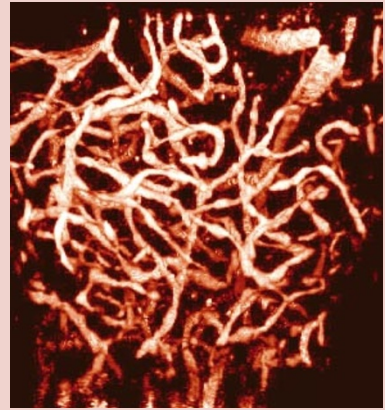
Munich German archaeologists believe they have discovered the legendary cathedral of the Holy Roman Emperor Otto the Great (AD 912–973), one of the largest churches

Laser to shed light on delicate tissue

Washington A laser imaging technique could give researchers easy access to three-dimensional images of brains and other organs, its creators say.

Jeff Squier of Colorado School of Mines in Golden used the process to produce this image of blood vessels in a mouse brain. He used short laser pulses to excite fluorescent dyes attached to the vessels, and digitally recorded the light emitted. He then used a second set of laser pulses to burn the upper layer of tissue away, and repeated the process until the whole sample had been scanned.

Squier, who presented the results at last week's Conference on Lasers and Electro-Optics in Baltimore, Maryland, says that the process should be suitable for imaging delicate tissue samples such as embryos.



J. SQUIER/OPTICAL.SOC.AM.

built north of the Alps during the Dark Ages.

Otto, who reigned over most of central and southern Europe, built the cathedral in Magdeburg, now in eastern Germany, as a show of power. The cathedral's exact site had been a mystery, although it was thought to lie beneath the city's existing gothic cathedral.

The researchers found the ruins, including foundations and graves, when searching a site, about 40 metres from the present cathedral, which some archaeologists believe is the location of Otto's palace. "The graves

we found at the north and south foundations are typical for churches and it definitely rules out the palace theory," says Rainer Kuhn of the Archaeology Heritage Service in Saxony-Anhalt, who led the dig.

SARS anxiety disrupts conferences

Washington Scientists from areas affected by severe acute respiratory syndrome (SARS) are to be screened by telephone interview

before attending a major cancer conference in Washington next month.

Organizers of the annual meeting of the American Association for Cancer Research (AACR) say that people from countries for which the World Health Organization has issued a travel warning will be asked whether they have had contact with SARS patients or suffered SARS-like symptoms. Those answering yes will need a doctor's clearance to attend. The meeting was to have been held in Toronto in April, but was rescheduled three days before it was due to open because of a SARS outbreak in the city (see *Nature* 422, 547; 2003).

A new spate of SARS cases in Toronto led organizers of a separate conference — the International Union of Biochemistry and Molecular Biology's 19th annual congress, which was scheduled for July — to cancel their meeting. Organizers say a successful meeting could no longer be held because too many registrants had already dropped out.

Charities chip in to save chromosome institute

Washington The Eleanor Roosevelt Institute, a key player in the sequencing of human chromosome 21, has been saved from closure thanks to help from two private foundations and the University of Denver.

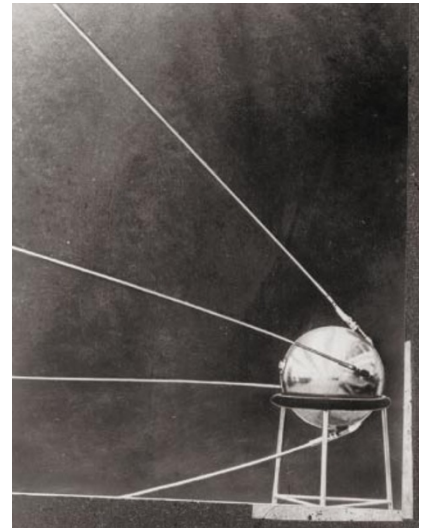
The non-profit institute, which is based in Denver, Colorado, looked doomed in April after a downturn in charitable donations and the loss of a large grant from the National Institutes of Health (see *Nature* 422, 462; 2003). But two Denver-based charities — the Bonfils-Stanton Foundation and the Boettcher Foundation — have chipped in \$970,000 to pay off the foundation's building mortgage, and the institute has now merged with the city's university.

First satellite for sale, one careful owner

Washington Do you want to own a piece of space history? This could be your chance. A US classic-car dealer is selling what he claims to be an original version of the Soviet Sputnik 1 satellite.

The satellite is a souvenir from the dawn of the space age, says George Stauffer of Stauffer Classics in Blue Mounds, Wisconsin, who is asking for US\$39,000 for the item on his website. Sputnik 1, the first man-made satellite to orbit the Earth, was launched in October 1957. Less than 60 cm high, it caused gnashing of teeth among US politicians, who feared that they were falling behind their Soviet rivals.

Interest in Sputnik surged after the online auction company eBay advertised a similar



Space pace-setter: Sputnik, shown resting on a three-legged pedestal for its first official photo.

sale last week, although the item has since been removed following a flurry of fraudulent bids. Historians say that Soviet scientists built between 4 and 20 more models, for use in testing, demonstrations and as diplomatic gifts. Nobody can say for sure how many authentic Sputniks exist, although many museums claim to own one.

▶ www.staufferclassics.com