In brief

Miami jury rules dismisses second-hand smoking case: A former TWA flight attendant awaiting a lung transplant for emphysema and sarcoidosis had her claim for damages rejected by a Miami jury. Marie Fontana, 59, of Boca Raton Fla, a flight attendant for 26 years had sued the airline for lung diseases brought about by cabin second-hand smoke, one of 3200 flight attendants who filed lawsuits in south Florida last year.

UK government funds prostate cancer trial: A large scale trial of treatments for prostate cancer, which causes more than 8500 deaths annually in England and Wales, is to be funded by the Department of Health at a cost of £13 million.

New medical school in Qatar planned: The Weill Cornell Medical College will establish a medical college in the Persian Gulf nation of Qatar in 2003, offering a complete medical education, based on the same admission standards and curriculum as the New York campus. A foundation funded by the Emir of Qatar and his wife has pledged an estimated \$750m for the venture.

Hospitals ordered to clean up:

Forty-two NHS hospitals in England have failed Department of Health cleanliness standards, which were laid down as part of a £60 million drive to improve hospital hygiene. Teams from some of the cleanest hospitals inspected will visit the worst-performing 10 identified this year to help them raise standards of cleanliness.

Junior leads Ireland's doctors:

A junior doctor is head of the Irish Medical Association for the first time. Mick Molloy, 30, an A&E doctor at Dublin's St. Vincent's Hospital, was instrumental in brokering a deal on junior doctors' working conditions after they took industrial action last summer. Key aspects of that deal have yet to be implemented.



German heart surgeon denies corruption

Annette Tuffs Heidelberg

A heart surgeon in Heidelberg who was fined DM200 000 for accepting money from a manufacturer of heart valves to invest in his research department has denied that he acted corruptly. Siegfried Hagl was found guilty of unlawfully receiving research money via a charity from 1990 to 1992.

A court in Heidelberg ruled that the money should have been given to the administration of Heidelberg university hospital. It was alleged that the firm's payments to Hagl's department varied according to sales figures for the valve. Hagl denied that he had acted corruptly, insisting that he had dealt with the payments as he would any research money. But he added: "There cannot be a complete distinction between a firm's interest to sell products and the university's interest to do research."

Despite the guilty verdict in Hagl's case, the legalities of research sponsorship remain complex and uncertain. An oncologist in Bonn, Hans-Juergen Biersack, was recently acquitted of corruption charges even though he had accepted research money from firms, as Hagl had done.

These court cases date back to the "heart valve scandal" that began to emerge in 1994. It was discovered that many heart valves were sold to German hospitals at greatly inflated prices. Lawyers investigating sponsorship practices found evidence of people accepting money, gifts, or free travel for ordering certain heart valves. More commonly, doctors did not benefit personally but received money to support their research work. It was common practice to have research accounts or to found a charitable organisation which received money from a manufacturer and passed it on to the founder with the minimum of bureaucracy.

In many university hospitals more than half of the research activity would collapse if financial support from pharmaceutical or other medical firms ("Drittmittel"—third party funding) was not available.

In the case of Biersack, money was paid into a registered university account and used for research and employing doctors. The district attorney in Bonn pointed out that this enabled Biersack to enhance his personal prestige inappropriately, but the court did not accept this argument. The judge pointed out that since the state itself expects doctors to acquire funding from a variety of sources, doctors cannot be punished for simply complying with the government's policy.

The donation of additional finances to a hospital must not be tied to a company's sales of a particular product to that hospital under a consensus agreed in October 2000 by Germany's medical scientific societies, the associations of pharmaceutical and medical technology firms as well as the German hospital and university societies. The statement also calls for the establishment of a sound legal framework laying down clear rules for financing medical research. Their set of guidelines gives some help to institutions and individual doctors how to use other financial resources without having to fear legal action.

Scientists solve mystery of volcano's "natural deaths"

Xavier Bosch Barcelona

Scientists believe they have pieced together the chain of events that can explain some of some of the most bizarre and mysterious deaths in recorded history. When Mount Vesuvius erupted in AD79, thousands of people evacuated areas around the volcano, but about 2000 were killed. Many inhabitants of Pompeii died of suffocation.

However, the skeletons of some victims from nearby Herculaneum who had taken refuge in nearby caves have puzzled scientists since they were discovered 20 years ago. They were found in natural, relaxed postures, with no signs of mechanical impact nor of the involuntary self protective responses or contortions of agony that one would expect. No one understood why. The conclusions of an interdisciplinary team of scientists, published in Nature (2001;410: 769-70), is that the shock of the



A lurid Victorian image of Vesuvius erupting

heatwave stopped the activity of their vital organs before their involuntary responses could be activated.

At the time of the Vesuvius eruption, a cloud of a swiftly moving mixture of volcanic gases and ash with a temperature of 500 C swept over the town of Hercula-

neum and its beach. The 80 intact skeletons on which the study was performed were unearthed from the volcanic ash in which they were buried in caves used as boat chambers along the beach. The research was also partly based on observations of fire victims, ancient burnt bones and human bone tissue, cremations, and victims of pyroclastic flows (flows of hot ash, blocks, and gases down the slopes of a volcano) as well as on teeth that were heat treated in the laboratory.

Alberto Incoronato of the University of Naples Federico II, who led the research, said that skeletons "exhibited contractions of the hands and feet and long bone fractures due to exposure to a high temperature, and skull fractures due to violent brain vaporisation." In fact, the heat of the ash was just sufficient to vaporise most of the organic matter.

"They died instantaneously—in less than a fraction of a second—due to fulminant shock caused by the entrapment within the 500 C ash cloud—not due to suffocation as so far believed. They had no time to display any defensive reaction," he added.