

Apocalyptic vision sees Newton book a date for doomsday

London Isaac Newton's laws of motion are among the most famous in science, but he also predicted something more sinister: that science, along with everything else, will stop when the world ends in 2060.

Newton's premonition has been unearthed in little-known manuscripts held in the Jewish National and University Library in Jerusalem. The pages reveal his attempts to decode the Bible, which he believed contained God's secret laws for the Universe.

Newton, who was also a theologian and alchemist, predicted that the second coming of Christ would follow plagues and war, and would precede a 1,000-year reign by saints on Earth — of whom he would be one. The most definitive date for doomsday, which he scribbled on a piece of paper, was 2060.

Newton's predictions will be explored in a documentary *Newton: The Dark Heretic* on BBC television on 1 March.

Columbia researchers sift through reclaimed results

Jerusalem Details of the results that can be salvaged from experiments on board the shuttle Columbia emerged last week. The craft was on a dedicated research mission when it disintegrated over Texas on 1 February.

Israeli researchers who had designed an experiment to study dust clouds blown from the Sahara Desert said that 51 minutes of a 77-minute video shot by the Columbia crew were transferred to the ground before the accident. Almost seven of the nine hours of data recorded on phenomena such as sprites — flashes of light that reach up above thunderstorms — were also beamed to the ground before the crash.

Other researchers, such as those working on studies of the radiation flux from the Sun and new spacecraft communication and navigation systems, say that they retrieved all

of their data before the accident. Most of the data from Columbia's life-science studies, however, were to be recovered on landing.

High-tech tomatoes get luxury residence

San Diego A complex of high-security greenhouses has become home to experimental vaccine-producing tomatoes at Arizona State University in Tempe.

The \$1.1-million greenhouse, which will prevent the release of pollen into the outside air, will house experiments to try to produce oral vaccines for Norwalk virus, cholera and the hepatitis B virus. The tomatoes grown in it have been genetically engineered to produce harmless proteins found in the viruses, which should prompt the body to develop antibodies against them. The tomatoes will be processed and freeze-dried, and the resulting material will be put into capsules for clinical trials.

The complex, which was made available for research last month, signals a growing interest in pharmaceutical crop research. Charles Arntzen, a plant scientist who directs the university's Arizona Biodesign Institute, says that collaborators are being sought for projects at the greenhouse.

Congolese health officials confirm Ebola outbreak...

Geneva Ebola virus has been confirmed as the cause of an outbreak of haemorrhagic fever in Kellé, a northwestern district of the Democratic Republic of the Congo. Eighty people have been taken ill and 64 have died in the country since late January.

The Congolese government has requested aid from the World Health Organization (WHO), and an assessment team has travelled to the site of the outbreak. "The people are very, very scared about what's happening, and they're looking for answers," says Iain Simpson, a communications officer for WHO in Geneva. The virus, for which there is no cure, causes external bleeding and kidney and liver damage.

Dead gorillas have also tested positive for Ebola in Mbomo, around 150 kilometres from Kellé. The virus affects non-human primates in much the same way as humans, but the natural reservoir from which it is contracted is still unknown.

...as bird flu sparks alarm in Hong Kong

Hong Kong Health officials are trying to isolate the virus responsible for two human cases of bird flu in Hong Kong. The flu is caused by a virus known as H5N1, which is usually found in chickens and aquatic birds, and there is no vaccine against it. Six people died in a 1997 outbreak in Hong Kong.



Hong Kong officials are trying to track a human outbreak of bird flu, usually found in chickens.

A 33-year-old man died of the virus on 17 February and his 9-year-old son is also infected. The boy's sister died at the weekend from flu-like symptoms, although it is not known whether she had been infected with H5N1. The family had recently visited Fujian Province in China.

One major concern is the possibility that the strain of virus responsible for the outbreak could jump between humans, although people who came into contact with the family have shown no symptoms of bird flu. Hong Kong health authorities and World Health Organization staff are studying the viruses to identify the source of the infection and so track the course of transmission.

Poorly pets to provide early warning in war on bioterror

Washington What's the best way of detecting the early signs of a bioterror attack? Keep an eye on people's pets, says Larry Glickman, an epidemiologist and veterinarian at Purdue University in West Lafayette, Indiana.

Next month, Glickman will begin trials of a surveillance system based on the electronic health records of the 60,000 cats and dogs treated every week at 300 branches of Banfield pet hospitals, which cover 43 US states. "Every night that information is processed," says Glickman. "The right programming and statistical analysis will allow us to detect a terrorist attack using agents such as anthrax or plague." The symptoms of both these agents can be mistaken for other common diseases such as flu.

Similar analyses of human health records are being investigated as bioterrorism-detection measures (see *Nature* 421, 564; 2003), but Glickman says that human surveillance systems tend to be regionalized and use less standardized records.

NASA



Not in vain: researchers have salvaged some data from studies carried out by Columbia's crew.