

News in Brief

SOUTH ASIA EARTHQUAKE

Devastation

- 7.6 on Richter
- Worst natural disaster ever experienced in Pakistan
- 64,000 km² affected
- Areas most affected – Jehlum and Neelum Valleys,
- 54,407 confirmed dead; 78,175 injured and 3.3 million people rendered homeless in Pakistan alone
- 15,000 villages affected
- 8,000 schools destroyed
- US\$5 billion – estimated damage to infrastructure

Aid

- International aid pledged – US\$700 million
- Relief from charities within Pakistan – US \$77 million
- 15 countries have sent rescue teams and 25, including Singapore, have sent medical teams
- Number of Pakistani and foreign doctors working in the affected regions – 810
- Tent cities consisting of 22 to 200 units have been set up in various Pakistani provinces including heavily-hit Balakot, Mansehra and Nawazabad

AVIAN FLU

	Avian Influenza (H5N1)	Spanish Flu (H1N1)
Number of countries affected	4 (Indonesia, Vietnam, Cambodia and Thailand)	Worldwide presence, only sizeable inhabited place with no documented history of outbreak – Marajo island at the mouth of the Amazon
Number of dead	60	2.5 - 5% of the world's population estimated at 1 billion
Number of non-fatal cases	117	20% of the world's population

Sources:

1. Pakistani Government Embassy fact file on South Asian Earthquake – <http://www.embassyofpakistan.org/news165.php>
2. CDC Avian Flu fact file – <http://www.cdc.gov/flu/avian/gen-info/avian-flu-humans.htm>
3. Nature.com Avian Flu timeline – <http://www.nature.com/nature/focus/avianflu/timeline.html>

AVIAN FLU QUOTES

* Condensed from *Time* magazine and *The Straits Times*.

“This is huge, huge, huge.” – Prof John Oxford, a virologist at St. Bartholomew's and the Royal London Hospital, on recent discoveries linking the H5N1 avian influenza virus with the Spanish flu microbe. The latter infected more than 30% of the world's population and claimed an estimated 100 million lives during a global pandemic in

1918, killing more people in 24 weeks than AIDS has in 24 years.

“Nothing in influenza is surprising to me, because the one thing you can be sure of in influenza is its unpredictability.” – Malik Peiris, a virologist at the University of Hong Kong.

“If a pandemic occurs, no matter how developed this world is, it would shut down. And I know it's coming.” – Guan Yi, an animal virologist at the



University of Hong Kong, who is credited with identifying civets as a major SARS virus reservoir in 2003.

“It’s like a frequent flyer program. Take enough trips and you can go anywhere.”

– Michael T Osterholm, Head of the Center for Infectious Disease Research and Policy at the University of Minnesota, on how a new deadly strain of flu virus could arise through the accumulation of minor mutations.

“We are seeing the unfolding of a pandemic in slow motion. We can reduce the damage, but we cannot avoid it.” – Dr Klaus Stohr of the World Health Organization (WHO)

“Asia remains ground zero in the war on avian flu and still represents the most serious risk to global public health.” – Dr Shigeru Omi, director for the Western Pacific region for the WHO

NOBEL PRIZE IN MEDICINE

* Condensed from *The Straits Times*.



Australian medical researchers Mr Robin Warren, 68, and Mr Barry Marshall, 54, won the 2005 Nobel Prize in Medicine for their discovery of *Helicobacter pylori*, which causes more than 90% of duodenal ulcers and up to 80% of gastric ulcers, and also predisposes people to stomach cancer. Mr Marshall even tested the hypothesis on himself by drinking a culture of *H. pylori*, contracting a severe case of gastritis as a result.

This landmark finding in 1982, which challenged the previously established dogma that ulcers were caused by lifestyle and stress, rendered the chronic and frequently disabling condition treatable through a short course of antibiotics. Their work has also stimulated the search for microbes as possible causes of other inflammatory illnesses such as Crohn’s disease, ulcerative colitis and rheumatoid arthritis.

KEYSTONE SYMPOSIA / GENOME INSTITUTE OF SINGAPORE (GIS)

* Condensed from *The Straits Times*.

This year’s Keystone Symposia in Singapore marked the first time it is being held outside the United States. The five-day event attracted hundreds of doctors and scientists in the fields of cancer and stem cell research from around the world, featuring experts such as Dr Irving Weissman, director of the Institute for Cancer / Stem Cell Biology and Medicine at the Stanford University School of Medicine, Dr Suzanne Cory, Director of The Walter and Eliza Hall Institute of Medical Research, and Dr Elizabeth Blackburn, Professor at the University of California, San Francisco, and a leader in telomere research.

Local advances were also highlighted to the international community. Dr Lena Motoda from the Institute of Molecular and Cell Biology presented her findings on the relationship between leukaemia and stem cells, while Dr Ng Huck Hui of the GIS unveiled results from his work in transcription factor mapping.

The GIS generated excitement with its discovery of 98 genes – previously unknown to be associated with cancer suppression – which are targeted by p53, using a technique which Dr Wei Chialin, one of the GIS group’s leaders, has likened to satellite scanning the length of the genome. This technology has already attracted the interest of leading universities like Yale, Johns Hopkins and the University of California, San Diego, securing US\$1 million in funding from the United States National Institutes of Health, making the GIS one of only three non-American organisations to receive the grant. ■