A doctor at the Royal Women’s Hospital in Melbourne has proposed to test a cervical cancer vaccine in babies, with a view of adding the vaccine to the infant immunization program.

The vaccine is currently being given to school girls as part of the trials in which Suzanne Garland, the director of microbiology and infectious diseases at the hospital, has played a leading role.

She is now making a visit to the US to meet representatives from the drug companies that make the vaccine. She will discuss with them the proposal to conduct trials in babies up to a few months old.

Professor Garland conducted company-funded trials for CSL’s vaccine Gardasil and rival GSK’s vaccine Cervarix, the two companies that have her on their advisory boards. She is of the opinion that there are benefits to immunizing babies instead of school girls.

According to her, vaccination of babies can be particularly beneficial for Third World countries, where many girls do not finish school. It could also be easier to vaccinate Australian infants instead of school girls, she says.

Since the vaccine has so far been tested only in children as young as 10, there is need to first test its effectiveness and safety in infants, Professor Garland concedes.

She feels that it is possible to combine cervical cancer vaccine with another so that babies are spared from too many jabs. However, it is yet unclear as to how long the vaccine’s effect will last, and whether babies will require booster shots years later.

Cancer Research Using Kangaroos Given Grant

A scientist working to fight lung cancer through researching kangaroos has been awarded a Queensland fellowship.

The University of Queensland’s Dr Ming Wei has been given the $750,000 Dr Jian Zhou Smart
State Fellowship for Immunology and Cancer. The one-off prize honours the late Dr Zhou, co-founder of the world’s first cervical cancer vaccine, Gardasil.

Dr Wei said he would use the funds to engineer a bacterium — found in the stomach of the Eastern Grey Kangaroo — that could target and penetrate tumor tissue. It would also release special molecules to stop tumor growth.

By injecting the spores into the blood, the spores can get into the tumor — into the center of the tumor — and that would work as a live, active and tumor-seeking agent, that destroys tumors from the inside.

The fellowship comprised $300 000 each from the government and the University of Queensland, and $150 000 from CSL Limited.

New South Wales Funds Cyclotron to Boost Neurological Research

The New South Wales Government has provided $15 million for a cyclotron to be built at the Sydney Brain and Mind Research Institute. The facility is a particle accelerator, which will enable scientists to better understand diseases like Alzheimer’s and Parkinson’s. It is similar to Victoria’s new synchrotron facility, only much smaller.

The facility allows scientists to make compounds that allow them to take pictures inside the body of different disease processes. The technique is commonly used in medical imaging techniques in nuclear medicine.

The technology will be shared by 17 other research centers and is expected to help create 500 jobs. The state funding also directly secures a further $100 million from the federal government. This new development will help scientists better understand neurological and psychiatric conditions such as Alzheimer’s disease, schizophrenia and Parkinson’s disease.

CHINA

China Has 120 Million Hepatitis B Carriers

At least 120 million people in China have become carriers of the hepatitis B virus out of the 700 million people who once were infected with it.

Hao Yang, deputy director of the Ministry of Health’s disease control and prevention bureau, revealed the figure at a ceremony unveiling a free hepatitis B vaccination project for 320 000 primary school students in northwest China’s Qinghai Province.

“Prevention should come first to contain this disease, which is highly preventable with the hepatitis B vaccine that has been available since 1982,” he said.

Since 2002, China has added the vaccine to its routine immunization programs, under which the government foots the bill for vaccines for all newborn babies.

In China, 40% of all infections are mother-to-child, according to Samuel So, director of the Asian Liver Center at Stanford University. Unfortunately, very few people are aware that a vaccine at birth is likely to stop the baby from contracting the virus.

The vaccine, given as a series of three injections and costing roughly US$8 for each one, is the most cost-efficient and effective way to curb the epidemic, which causes hundreds of thousands of deaths and major economic losses to China every year, noted Wang Zhao, vice-president of China Foundation for Hepatitis Prevention and Control, which helped raise the $1 million funding for the project.

China Stresses International Pharmaceutical Cooperation

International pharmaceutical communication and cooperation should be further strengthened, said Chinese Vice Premier Wu Yi at the opening ceremony of the 2007 World Congress of Pharmacy and Pharmaceutical Sciences and the 67th International Congress of International Pharmaceutical Federation (FIP).
Wu said the international cooperation on research and development of new medicines should be strengthened and the advantages of traditional medicine should be inherited. She also urged the developed countries to help developing countries get proper medicines for their citizens.

Medical services across the world should be improved and personnel working in the pharmaceutical field should be better trained, she added.

She also called on the international community to work together to find an effective way of worldwide pharmaceutical supervision to standardize global pharmaceutical market order and strengthen protection of intellectual property rights in the pharmaceutical field.

### Chinese Traditional Medicine Tested in Space

China’s astronauts have been testing new varieties of traditional Chinese medicine that could help treat osteoporosis, insomnia and improve immunity.

Doctors with the China Astronaut Research and Training Center say the new remedies will be prepared for sale after further tests during the country’s third manned space program in 2008.

The medicines have been packaged in pill and capsule forms for the first time so astronauts will be able to take them in space.

The medicines were intended to improve cardiovascular and heart and blood vessel functions during short space flights or space walks, said Li Yongzhi, a doctor with the center.

“We have finished human trials and the results were satisfactory,” said Li. “The medicine is expected to be in the market in the next two years and we hope they will not only benefit the space elite, but also the general public.”

“Living in zero gravity could lead to cardiovascular problems, lower immunity and bone mineral loss,” said Li. “We can’t say the astronauts would be ill as it is the normal physical reaction of a healthy body to an abnormal environment,” added Li.

“Western medicine lacks effective remedies with no side effects, but traditional Chinese medicine offers good overall recuperation,” she said.

Li’s center has applied traditional Chinese medicine to the health care of astronauts since 1997. “Our astronauts are very healthy, so the Chinese medicine they have taken is used to improve their adaptability and endurance,” said Li.

China has a team of 14 astronauts. Li and her colleagues have spent 10 years collating their physical indices during training and space flights, on which the doctors have composed different recipes for each astronaut. “The astronauts only take traditional Chinese medicines when needed,” said Li.

“The astronauts began to drink what we call ‘medical tea’ (herbal
soup) 90 days before the Shenzhou VI space mission in 2005," she said. "They said they slept better and were more energetic after drinking the tea."

Li said Russia and other European countries had begun research into traditional Chinese medicine for space programs.

HONG KONG

Detection of 111 New HIV Cases in Hong Kong

The Department of Health of Hong Kong revealed that 111 people tested positive for HIV, the cause of AIDS, in the second quarter of 2007 in Hong Kong.

This new figure has brought the cumulative total of reported HIV infections to 3400 in the city.

Of the 111 new HIV cases reported, 36 acquired the infection via heterosexual contact, 38 via homosexual or bisexual contact and 10 via injection of drug. The routes of transmission of the remaining 27 cases were undetermined due to insufficient data.

Speaking at a press conference, the consultant of the Department of Health Dr Wong Ka-hing said one more cluster of eight reported cases of HIV-1 Subtype B, a type of HIV infection with similar gene sequencing, was detected this quarter.

According to Dr Wong, cases of the newly found cluster were reported between July 2006 and May 2007 and all contracted the virus through homosexual and bisexual contact.

The detection of this new cluster echoed the rising number of reported HIV infections in men who have sex with men. It suggested the presence of a local HIV transmission in Hong Kong.

As for the existing two clusters which were found earlier, one has expanded from 53 to 66 HIV infections and the other remained at 13 cases as of June 2007.

Reviewing the HIV/AIDS situation in Hong Kong, Dr Wong said the predominant route of HIV transmission in this quarter remained to be sexual contact.

There were 18 new cases of AIDS reported in the second quarter, bringing the total number of confirmed AIDS cases to 893.

INDIA

New Program in Hospital Operations Management to be Launched

The Institute of Clinical Research (ICRI) is planning to start a new two-year MSc program in Hospital Operations Management in association with the Cranfield University of Britain.

This was announced by Professor Joe Lunec, head of Cranfield Health at the Cranfield University while inaugurating the second batch of MSc program in clinical research at the Delhi campus of ICRI recently.

The new course is expected to benefit the healthcare sector as Professor Joe is considered a pioneer in Hospital Operations Management and has worked extensively in the University College of London and the Kings College of London — leading medical schools in Europe.

Professor Joe said that India is being considered the hub of clinical research and the course is catered to meet the demand in the market. The ICRI – Cranfield alliance has actually given them an opportunity to address the growing demand for clinical research professionals in India.
Dr S K Gupta, Dean and director general of ICRI added on that by saying, “We aim to address the need for qualified and trained clinical research professionals by offering various programs conveniently placed.”

The ICRI recently entered into an academic alliance with Europe’s leading research led institution, Cranfield University, UK. This alliance is aimed at furthering the cause of ICRI in India in grooming professionals in clinical research, to face exciting challenges posed by the pharmaceutical sector and also pave the way for new career opportunities in this field.

Global Diabetes Research Center to be Set Up Near Chennai

A global research center to intensify studies on diabetes among Asian Indians would be set up in the city outskirts by the Madras Diabetes Research Foundation (MDRF), in collaboration with Emory University at Atlanta, USA.

The center to be set up at MDRF’s new facility at suburban Siruseri would serve as a research hub for epidemiological research in the country, MDRF President Dr V Mohan said. It will also help India take up intervention trials on prevention of diabetes and its complications throughout South Asia and globally.

Mohan said India had over 40 million diabetic patients, the largest in the world. Although the exact reasons for Indians being more susceptible to diabetes were still not clear, there were certain unique characteristics of this ethnic group which were collectively called the “Asian Indian phenotype.”

This included increased insulin resistance and higher waist circumference despite lower body mass index and some unique genetic factors were considered to contribute to their increased predilection towards diabetes, he added.

Dr James Curran, Dean of Emory’s Rollins School of Public Health, said the collaboration with MDRF would initially be for a period of three years, which could later be extended based on the success of the program.

India’s First Stem Cell Facility to be Set Up in Karnataka

Stempeutics, the stem cell arm of the Manipal Health Systems, part of the Manipal Group, has invested Rs 4.5 crore to set up the country’s first stem cell product manufacturing facility at Manipal near Mangalore in Karnataka.

The facility spans an area of 4 lakh sq ft and will be ready in the next 16–18 months. Meanwhile, it has also submitted a proposal to the Drugs Controller General of India (DCGI) for the human trials with allogeneic stem cell products. The Indian Council of Medical Research (ICMR) will assess the proposal after which the DCGI will give the consent. The company has already completed pre-clinical and pilot studies and on the basis of its report, it is gearing up for clinical trials. The adult stem cell therapy from the company is expected to launch regenerative medicine with products to assist in treatment of chronic diseases.

The company has outsourced the service of validating the products to the clinical research organization of the Manipal Group, Manipal AcuNova to conduct multi-centric trials in the country. Feasibility studies have been completed and within a fortnight an investigators’ meet will be held to train the personnel on the conduct of the trial.

The trials are expected to commence in November. The studies will now scientifically ascertain the efficacy of the allogeneic stem cell products for treatment of myocardial infarction (MI), leg ischemia, cerebral stroke, and multiple sclerosis. The company is also making arrangements for a clean room facility at its hospital located on the Mysore Road, Bangalore for the preparation of the products.

Manipal Hospital had succeeded early this year to treat a Parkinson’s disease case with stem cell therapy which was a first-of-its-kind in the country. Autologous stems cells were retrieved from the bone marrow of the patient who was suffering from the degenerating disorder for the last 15 years. The patient had shown fast recovery in symptoms and the medication for Parkinson’s disease has been withdrawn.
Following the success of the treatment with stem cell, Manipal Hospital has 400 patients lined up for treatment and is booked till 2009 for Parkinson’s disease.

Globally, Osiris Therapeutics Inc has been working for the last one-and-a-half decades to develop and commercialize cellular therapies based on stem cells isolated from readily available adult bone marrow. There is ample scientific evidence proving that stem cells provide treatments for many disease conditions. USFDA has also permitted the company to conduct phase III trials using Allogeneic Mesenchymal stem cells.

British companies that are pursuing discussion with their Indian counterparts include the University of York, Eschmann Holdings, Tenscare and Smiths Medical International. A number of joint ventures are thus slated to be formed up in the coming months.

Besides, the British Government has promised a package of Rs 2000 crore as aid to improve the country’s health programs and access to healthcare for the poor, especially in the States of Andhra Pradesh, Orissa and Madhya Pradesh.

About Rs 816 crore has already been offered by the UK Government for the third phase of the National AIDS Control Program. The package was announced to prevent new infections in high risk groups and the general population; and to extend increased care support and treatment of people living with HIV.

Malaysia to Set Up Agency to Control Distribution of GM Foods

An agency will be formed to control the distribution of genetically-modified (GM) foods and enforce the mandatory labeling of such products sold in the market.

Agriculture and Agro-Based Industry Minister Tan Sri Muhyiddin Yassin said the labeling requirement, which was stated in the Biosafety Bill 2006, will allow consumers to choose whether they want to consume or reject GM foodstuff.

“The regulations will allow people to be aware of the presence of GM foods as it will be stated on the labels pasted on the packaging,” said Muhyiddin. “Unlike some countries where producers can voluntarily label GM foods they export, Malaysia had decided through the Bill that consumers must be informed about the manufacturing process of GM foodstuff and choose whether they want to buy them based on the information they read on the packaging.”

Singapore Cancer Society Gives Out Grants to Four Research Projects

The fight against cancer has been given a S$255 448 boost, with money given out by the Singapore Cancer Society. This will be used as grants for cancer research projects.

More than S$300 000 was collected from Run for Hope (a fundraising event) and the bulk of the money will go towards funding four projects by the National University Hospital, the National University of Singapore and the National Cancer Center.

Dr Koo Wen Hsin, Chairman of the Singapore Cancer Society,
said, “We are very grateful for Singaporeans’ support over the years. Besides donations, many of them had come forward to volunteer, to help our patients and their family members. I believe through more aggressive public education programs to inculcate the idea that cancer affects everybody, more people will step forward to offer their help.”

The annual fund-raising effort will be repeated this year. Besides raising funds, organizers also hope to raise awareness on the need for cancer research.

TAIWAN

Food and Drug Administration Permit Sought for Human Testing of New Taiwan Drug

An innovative drug for diabetic ulcers, developed by a Taiwanese biomedical research institution, is about to be submitted to the US Food and Drug Administration (FDA) for a permit on human testing. If approved, it will mark a milestone in the nation’s pharmaceutical research and development.

The drug was developed by the government funded Development Center for Biotechnology (DCB) and has been transferred to a local pharmaceutical company, Microbio Biotechnology, to continue the R&D process.

All ingredients of the combo drug are extracted from natural herbs, and possess distinct curative effects for diabetic wounds but show none of the side-effects seen previously, making it an improvement on the only drug available on the market, according to the DCB.

If we don’t develop GMO crops now, then we will have to answer a question by our children in the next 10 years as to why we have no development in the field.

THAILAND

New Push for GMO Field Tests

Agriculture and Co-operatives Minister Thira Sutabutra will seek a meeting with ministers in September to lobby support for his ministry’s plan to resume field testing of genetically modified organism (GMO) crops. GMO field tests were suspended by the Cabinet in 2001.

Thira said he planned to talk to the ministers of Science, Natural Resources and Environment, Public Health and Commerce before he put his ministry’s plan to Cabinet. “The experiments on GMO crops are necessary,” said Thira. “I can
guarantee that academically speaking the experiments are completely safe."

Activists have campaigned against GMO crops and voiced fears that field tests would allow seeds from GMO crops to drift and contaminate other fields close to the experimental farms.

"If we don’t develop GMO crops now, then we will have to answer a question by our children in the next 10 years as to why we have no development in the field," Thira said.

The agriculture minister expressed confidence he would be able to persuade Public Health Minister Mongkol na Songkhla to support the plan.

But Mongkol complained that a case about GMO crop seeds spreading from a field test was still pending at the National Counter Corruption Commission. "If we accept GMO crop technology when we are not ready, we may end up being enslaved by GMO producers," Mongkol warned. He also pointed out that the country had yet to develop a proper system of biodiversity and that GMO crops might hurt indigenous crops and local farmers.

"If we have to buy fertilizers and pesticides, we will lose our farming independence," he said.

Mongkol said he would be ready to listen to experts and would not object if they could guarantee that GMO crops would hurt neither consumers nor the local biodiversity, and that the country would not become dependent on seeds, pesticides and fertilizers after it adopted the GMO crops.

National Science and Development Agency director Sakarindr Bhumiratana said Thai researchers had conducted GMO crop farms in line with standards and procedures accepted by various countries for more than 10 years.