

# CHINESE UNIVERSITY BULLETIN

Spring • Summer 1999

The cover features a collage of images. In the foreground, three individuals in blue surgical scrubs, masks, and caps are working in a laboratory. One person is holding a piece of equipment. In the background, a large, multi-story university building is visible. The overall color scheme is dominated by warm, golden-yellow and orange tones, with diagonal light streaks crossing the scene.

**Medical  
Education  
and  
Research  
for the  
New Century**





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Spring • Summer 1999

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# Medical Teaching and Research at CUHK

The 18-year old Faculty of Medicine enjoys all the benefits of being young. Unburdened by tradition, its faculty members bring together expertise and experience from the world over and are highly energetic, original, and responsive to the latest developments in medicine. This issue of the *Bulletin* features new developments in medical teaching and research they have initiated at the University. These include curriculum reform, new teaching methods, and the identification of five areas of excellence (i.e. telemedicine, cancer treatment and research, eye care, geriatrics, and sports medicine) for strategic development. There are also highlights of recent breakthroughs in endoscopic therapy, community and family medicine, and the teaching of Chinese medicine. Through a brief description of these features we hope to give readers a better understanding of the broad direction in which medical education at CUHK is moving.

## Growing with the Times

### Prof. Joseph Lee Reviews the Faculty's Development Before His Retirement



The CUHK Medical School began in 1981 with only two big departments: medicine and surgery. These were further specialized into 18 departments when the faculty was fully established. Of these, 17 were headed by chairs recruited from abroad. With the concentration of expertise and knowledge from different parts of the world, and advanced facilities, the young faculty was rapidly making headway.

### Nurturing 'Cultured Physicians'

Prof. Joseph C.K. Lee, dean of the faculty from 1986



to 1989 and since 1996, was the founding chair of the Department of Morbid Anatomy (now renamed Department of Anatomical and Cellular Pathology). He pointed out that the emphasis of the faculty's curriculum both then and now is on nurturing a 'cultured physician', a physician who has all the makings of an educated person and the essential medical knowledge for the practice of medicine, and who embodies the ethics befitting the profession.

Students are trained in the basic medical sciences for the first two years, and are given a chance to use their knowledge on patients from the third. Small group teaching is practised so that students can use their teachers as role models. In recent years, importance has also been laid on evidence-based medicine, or evidence for practices found through clinical research.

### New Elements in the Medical Curriculum

In the recent curriculum retreat, a major review was carried out on the faculty's teaching and a few areas were targeted for emphasis, namely, small-group teaching, patient-centred learning, self-learning, and lifelong education. Prof. Lee told the *Bulletin* that beginning in the coming autumn semester, all first-year medical students will have to take courses in basic computer knowledge to ensure that they have this asset at their disposal in their entire five years of study. The Faculty of Medicine will also be the first in the world to introduce telemedical education in its teaching hospital, the Prince of Wales Hospital.

### Pioneering Research a Unique Feature

According to Prof. Lee, the faculty's focus in its earliest days was teaching. Research

#### Innovative Treatment of Peptic Ulcers

The treatment of peptic ulcers has traditionally been concentrated on suppressing acid secretion in the stomach by long-term medication or surgery. But ever since a bacterium, *Helicobacter pylori*, was found in the stomach of a vast majority of patients suffering from peptic ulcers, the University's Faculty of Medicine has since 1992 begun studying the use of antibiotics to treat HP infection. As a result, in over 90 percent of patients put on a weeklong course of antibiotic, the ulcer healed, and in 90 per cent of those, there was no reinfection within a year. This medical breakthrough changed the traditional method of treating peptic ulcers which had been used for some 200 years. It reduced the need for surgery and long-term medication was no longer necessary.

#### Profile of Prof. Joseph Lee

Born in Chungking, Prof. Joseph C.K. Lee received his MBBS from the University of Hong Kong in 1964 and his Ph.D. in pathology from the University of Rochester, New York in 1970. He joined the Faculty of Medicine in 1982 as founding chair of the Department of Morbid Anatomy. He will retire in July 1999.

Prof. Lee is vice-president (Asia) of the International Academy of Pathology, and honorary professor of Beijing Medical University, the People's Liberation Army General Hospital in Beijing, the Sun Yat Sen University of Medical Sciences, and Shantou University.

He is well-known for his contribution to research on precancerous changes in the human nasopharynx, ferritin in transplantable hepatomas, and the structure of chromosomes and cytogenetics.

was very much an individual effort centering around the academic interests of the teachers. They began developing interest in research relevant to the local community after 1989 when the then University and Polytechnic Grants Committee made available funding for the purpose. One unique feature of research activities in the faculty has been the development of pioneering research areas. Prof. Lee recalled, 'We were a young and progressive bunch. We weren't content with just doing

“traditional” research. We constantly questioned if what had been done was correct and whether there were better ways of doing it.’ Major research breakthroughs include the use of oral medication to treat gastrointestinal ulcer and the replacement of traditional surgery by endoscopic therapy. Cancer research has over the years also become one of their strengths and their Institute of Cancer Research has been the first to be identified by the Hospital Authority as a research centre of excellence.

### Increased Contact with the Mainland and Taiwan

Contact with mainland China began way back in the early 1980s. Prof. Lee had first met faculty members of the Department of Pathology of Peking Medical University in the US.



Prof. Lee speaking at the second Medical Education Conference organized by the Medical Education Association for China Mainland, Taiwan, and the Hong Kong Region

‘In 1982 I paid a visit to that department to discuss plans for academic exchange. In the years following, similar contacts were established with other medical institutions on the mainland and in Taiwan.’ Such contacts eventually snowballed into the Medical Education Association for China Mainland, Taiwan, and the Hong Kong Region in September 1997. Initiated by the CUHK medical faculty and the medical schools of Peking University and Yang Ming University, the association has a membership of 24 medical institutions from the three areas and aims at formulating the best medical education system for the Chinese in the 21st

century, based on an understanding of the traditional Chinese medical system and experience gathered from modern medical education.

### Future Direction: Amalgamation of Eastern and Western Cultures

Prof. Lee is ‘satisfied’ with the faculty’s development and achievements so far and is most proud of its strong sense of team spirit. As for the students, he believes that though they perform well academically, they need to improve on their communication skills.

He also believes that in the future the faculty cannot rely solely on government grants for its development. Other sources of funding such as donations, business ventures, and technology transfer will have to be explored.

Prof. Lee would also like to see changes in the cultural aspect of medicine for the individual physician. ‘As physicians practising in Hong Kong, we are very westernized and not knowledgeable enough of Chinese culture. The Department of Medicine has produced a book called *Medicine for Asia* directed towards the local population. More should be done along that line. Many medical terms such as Hodgkin’s Disease, Housemaid’s Knee, and Saint Vitus’s Dance are rooted in Western culture. Perhaps we can coin more culturally pertinent medical terms and descriptions to improve communication with our patients.’

This indeed is what Prof. Lee hopes the Faculty of Medicine will devote greater attention to in the new century.

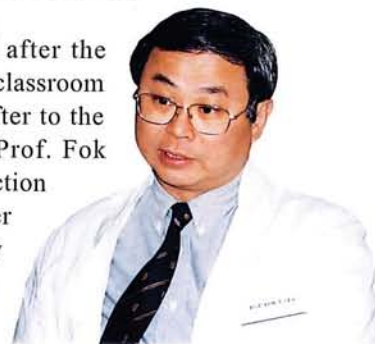


# What is Patient-centred Learning?

## Endless Strive for Progress

A Curriculum Reform Committee was set up in the Faculty of Medicine early this year to plan and review the medical curriculum. Convener of the committee Prof. T.F. Fok revealed the faculty's decision to implement patient-centred teaching in two years' time.

The original curriculum in the 1980s was modelled after the traditional British system with the first two years devoted to classroom teaching of pre-clinical subjects, and the third and thereafter to the teaching of clinical subjects in the hospital. However, Prof. Fok stressed that the faculty's curriculum is not simply a reproduction of the British model: 'Since its founding, the faculty under the leadership of its successive deans has continuously reviewed and reformed its curriculum, amending, dropping and adding on in accordance with changes in demand and advances in technology. The views of external experts were also considered. Curriculum Day was begun 15 years ago to give teachers a chance to exchange views on teaching and the curriculum each year.' The students have also been requested to evaluate the contents and teacher performance of each subject using the curriculum evaluation software designed by the faculty.



Prof. T.F. Fok

## Learning Means Little Without Reflection

In the last 15 years the growth of medical knowledge both in breadth and in depth has been monumental. Students are often overwhelmed by the avalanche of medical information and lack time for reflection. Yet 'Learning means little without reflection,' Prof. Fok said. The faculty understands that it is only by continuously amending the curriculum that it can prevent overdosing students with textbook knowledge and nurture doctors with wisdom and competence. The question is how?

## Excellence in Moderation

Originating in North America, Problem-based Teaching is a method of learning (or teaching) in which students search for information and solutions to problems under the guidance of teachers, and through the process build up their self-learning ability. Yet there is no convincing evidence that this mode of learning produces better doctors. Besides, 'Secondary students in Hong Kong are used to a mode of learning different from that of students in North America. Hence we should not assume that fresh medical students in Hong Kong learn medicine better using this approach. We have to



Medical students during lab

strike a balance somewhere,' Prof. Fok said.

After much contemplation and discussion, the faculty decided to implement 'patient-centred teaching', which is unique in that it adopts a client's (patient's) perspective in training expertise (doctors) and ensuring quality service. By being 'patient-centred', emphasis will be placed on the needs of the community. An important principle is that doctors do not only have to know how to cure patients and provide the best treatment, but they also have to be highly ethical medically.

Certain conditions have several treatment methods. Which one's best for the patient? The treatment of certain diseases may cause the patient immense pain and suffering yet offer a slim chance for success. Should treatment then proceed? Patients' dissatisfaction with doctors often stem from lack of communication. Should doctors opt for directness or circumlocution in speech?

Under 'patient-centred' teaching and learning, students are taught medical theory and instilled proper communication skills and professional attitudes. They are expected to acquire the skills of self-learning such as those for searching information from the Internet or the library. They also have to learn how to assess clinical evidence and devise effective treatment plans for patients accordingly. They should no longer rely purely on knowledge passed on to them by their teachers.

Prof. Fok said the traditional British style of training doctors is similar to the apprentice system. Students follow a teacher to the clinic, observe as he/she gives consultation, learn the methods of treatment, and understand when surgery is more effective than medication etc. Yet the mentor's methods may not always be accurate and even if they are, they may not be the most economical and effective. In this age when medical information is frequently updated and easily accessible, any good doctor capable of independent thinking can get a grasp of the illness from scientific evidence and devise the most appropriate treatment plan for the patient, Prof. Fok said.



Students learn from their 'mentor' during his hospital rounds.

## Refining the Curriculum

The committee will solicit the views of teachers and graduates on curriculum reform and refine the curriculum based on three principles: adjust the breadth and depth of the contents of individual subjects; avoid teaching the same material repeatedly albeit with different emphases; play down the teaching of cutting-edge professional knowledge required only by specialists.

A more succinct curriculum allows students time to think about medical problems. Prof. Fok hopes to implement the new programme in two years' time. He is optimistic about the reform but does not expect immediate results. 'The transition from a traditional British medical curriculum to a "patient-centred curriculum" would take two to five years,' he said.



# Introducing Five Areas of Excellence

## Telemedicine: Providing Health Care at a Distance

Telemedicine, or the provision of medical care at a distance, aims at improving the quality of health care both within hospitals and in areas previously lacking access to expert advice. Its primitive forms are surprisingly familiar to us, such as help-seeking messages sent down the telegraph line to a doctor when someone was taken ill in a remote area in the Wild West, or when a mother seeks help for her sick child from the paediatrician over the phone. The greatest difference between the new and the old forms of telemedicine is the visual element. Modern telemedicine allows visual contact and, unlike television, it is interactive.

### Teleconference Begins at CUHK

The Faculty of Medicine is considered a resource base for telemedicine in Hong Kong. It organized its first telemedicine conference in November 1996 at the invitation of Telemed, a major annual conference on telemedicine in Europe. During the conference the Prince of Wales Hospital and the General Hospital of the Chinese People's Liberation Army in Beijing were linked up with Telemed '96 in London, marking the first real-time three-way teleconference between Hong Kong, Beijing, and Europe.



Prof. Magus Hjelm

Close to 1,000 medical experts from the three regions heard presentations and watched live demonstrations of advanced operation techniques via the information superhighway.

The conference also saw the establishment of the Hong Kong Telemedicine Association, an organization initiated by the faculty and chaired by Prof. Magnus Hjelm, professor of chemical pathology. The association serves as a forum for the exchange of views on telemedicine with other countries and has since helped introduce telemedicine to the vast and remote Xinjiang



province. It also lent its expertise to Tongzhi University in Wuhan in establishing teleconference facilities for teaching.

Another extensive teleconference was the first 'Moving with the Sun', an annual 24-hour global event, organized from 30th June to 1st July 1997 to coincide with the reversion of Hong Kong to Chinese sovereignty. Fifteen medical centres of excellence in Asia, Europe, North America, Africa, and Australia were linked up in a live interactive platform held at the Prince of Wales Hospital.

## Teleconsultation

The faculty's teleconference facilities at the Prince of Wales Hospital were also used for events of a smaller scale such as sessions with overseas experts for postgraduate training in various medical fields, and case conferences for gaining second opinion from overseas.

Among the latter was a widely reported case of the use of teleconsultation to obtain a second opinion from radiologists in London about a 13-year-old girl with a rare skeletal condition. It resulted in the establishment of a preliminary diagnosis and the exclusion of differential ones.

## Teleeducation

The faculty is also one of the first to use teleconference in problem-based teaching. Instead of reorganizing the whole faculty and having teachers of different medical disciplines go to a session, the system allows them to teach simply by going up to the nearest video station. One professor can show diagrams, another can show microscopic slides... . It saves time and gives flexibility in organizing the curriculum.

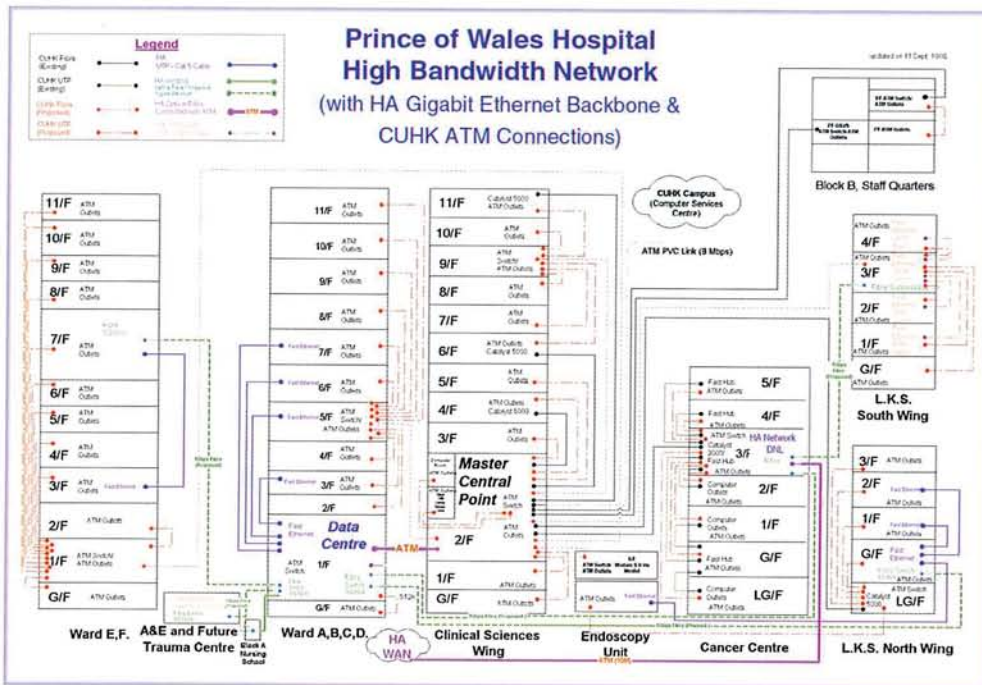
## Experimental Platforms

To find out the feasibility of using audio-visual communication to provide health care, the faculty has launched a joint pilot project with a home for the elderly and Shatin Hospital. All three places are video-linked. Nurses from the home communicate with specialists in geriatric care at Shatin Hospital about the physical conditions of their charge. If anything serious arises, the specialists would contact the faculty's staff at the Prince of Wales Hospital. Prof. Hjelm said, 'In the past, the patient had to come to the hospital. This involved requesting the use of the ambulance, loading the patient on, driving 300 metres, going into Accident and Emergency...then everything in reverse. Video-link saves a lot of time and resources.'

Telemedicine has very important implications for patients with chronic disorders such as diabetes and hypertension. Rather than having them sit in the waiting rooms of outpatient clinics, nurses can go out in the field and contact these patients and refer them to nurse specialists, physicians, and other personnel higher up the medical ladder if necessary.

Another ongoing experimental platform is linking up the whole Clinical Sciences Building at the Prince of Wales Hospital in an audio-visual network so that one part of the building can communicate with any other part by means of video stations. 'For the first time in the world, a hospital exists both as a real and a virtual hospital. This will be the most extensive telemedicine network in the world. Hong Kong had a late start but in





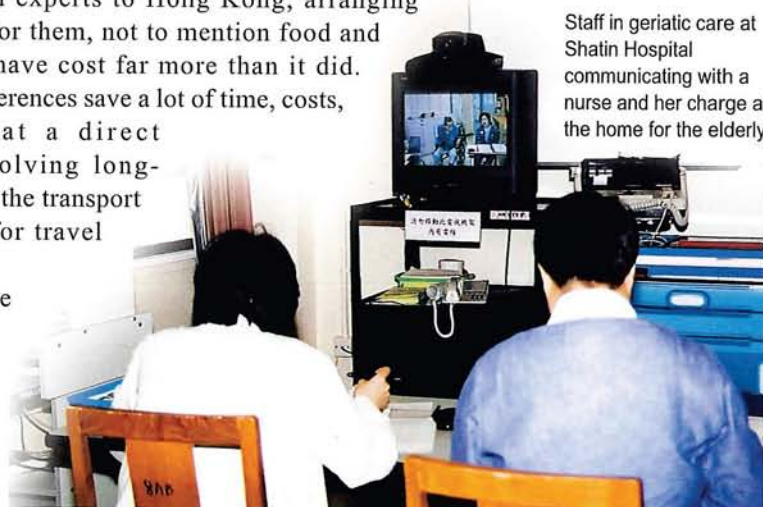
Plan of the virtual hospital and the most extensive telemedicine network in the world

typical Hong Kong fashion, it has caught up and is now on the leading edge of telemedicine,' said Prof. Hjelm. The system will be officially inaugurated in mid-1999.

### Cost and Efficacy

In video links with overseas the cost is six times the IDD charge and connection with local venues is six times the charge of a local call — six because six lines give the minimum bandwidth for reasonably acceptable performance. Yet it is not as expensive as it seems, as Prof. Hjelm explained. Take 'Moving with the Sun '97' for instance. Flying a thousand experts to Hong Kong, arranging accommodations for them, not to mention food and transport, would have cost far more than it did. Similarly case conferences save a lot of time, costs, and trouble that a direct consultation involving long-distance travel and the transport of patients unfit for travel would entail.

Yet how reliable is telemedicine? There is no hard evidence it is, according to Prof. Hjelm. 'It's a big difference from



Staff in geriatric care at Shatin Hospital communicating with a nurse and her charge at the home for the elderly

sitting face to face with a patient. When we judge a patient's skin colour, for example, we can take the light in the room into consideration. But in teleconsultation, we cannot. We need hard data on the efficacy and effectiveness of teleconsultation, evidence that it is at least as good as face to face consultation. If it isn't, we need to know its limitations and whether we should continue to use it or not,' he said. The faculty is testing the reliability of teleconsultation using randomized controlled trials. The platform with Shatin Hospital and the home for the aged is also being used to collect data for this purpose.

Prof. Hjelm attributed the success of telemedicine at CUHK to the combined efforts of various parties: the initiative of faculty dean Prof. Joseph C.K. Lee, encouragement from both the past and current vice-chancellors Profs. Charles Kao and Arthur K.C. Li, the hardwork of many faculty members in the Faculty of Medicine and Faculty of Engineering, and the cooperation and support from the Hospital Authority and the Prince of Wales Hospital. The University is confident about attracting substantial funding support from the Hospital Authority for implementing telemedicine, as well as grants from other quarters for developing telemedicine with three-dimensional video images.

## A High-powered Anti-Cancer Squad

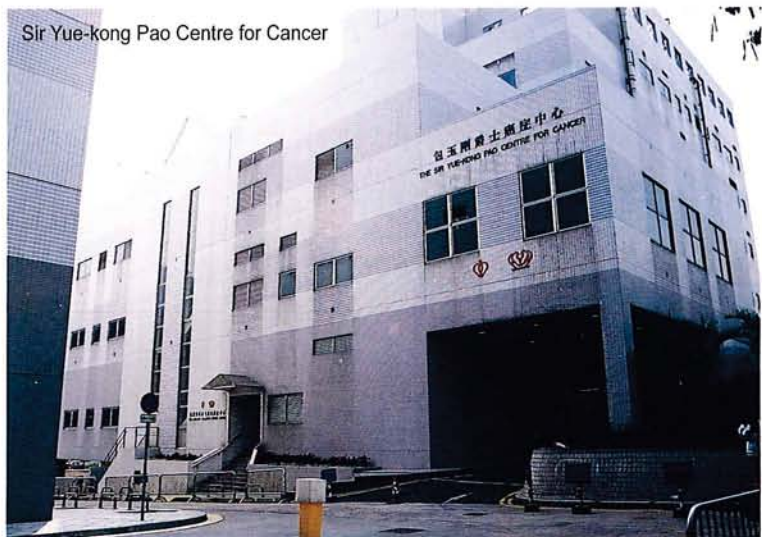
For the first time in Southeast Asia, abnormalities in chromosomal arrangement — phenomena that may be linked to certain cancers — can now be detected at a glance, thanks to a technique which assigns colours to chromosomes. For the first time in the world, there is the prospect of treatment for cancer patients with inoperable tumours. And people with nasopharyngeal cancer may soon be able to boost their immunity against the tumour with a vaccine.

All such techniques originate from Hong Kong's first purpose built cancer centre — Sir Yue-kong Pao Centre for Cancer located at the Prince of Wales Hospital, which was opened jointly with the Lady Pao Children's Cancer Centre in late 1994. Both cancer centres were set up by the Hong Kong Cancer Institute (HKCI), which was founded in 1989 to coordinate different aspects of the University's efforts in the fight against cancer.

### The Hong Kong Cancer Institute

The centres are housed in a seven-storey building. The first four floors are administered by the Hospital Authority and house facilities for cancer screening and treatment, outpatient consultation, and counselling services.

The top three floors are administered by the





HKCI and consist of research laboratories managed by different departments of the Faculty of Medicine, including a Special Diagnostic Pathology Laboratory; a bone bank; two major labs devoted to the study of liver cancer and nasopharyngeal cancer; labs for cytogenetics, cellular imaging, chromatography, tumour marker and pharmacokinetics; a molecular biology lab, and a centralized tissue and serum bank. About a hundred researchers work in these laboratories.



Prof. Philip Johnson, director of HKCI, next to the Spectral Karyotyping machine. On the screen are the 'coloured' chromosomes.

The Sir Yue-kong Pao Centre for Cancer is closely connected to the University's Department of Clinical Oncology which plays a central role among departments of the Faculty of Medicine involved in cancer treatment. Its chair Prof. Philip Johnson is also director of the HKCI. The University department also works with the Hospital Authority department very closely in treating cancer patients and all treatment decisions made are joint.



FACS Vantage flow cytometer being used to determine NPC tumour characteristics such as the percentage of dividing cells present in a biopsy specimen

They are supported by a team of 250, including 25 medical doctors, 10 post-doctoral scientists, physicists, nurses, radiotherapists, and technicians. Each year approximately 3,500 new cancer patients use the outpatient facilities and services. In terms of patient load this would make it one of the three biggest cancer centres in the UK and one of the ten biggest in the US.

Each year the HKCI hosts an international scientific symposium highlighting the most recent developments in cancer and providing a local forum where scientists and clinicians can exchange thoughts and ideas.

Each year the HKCI hosts an international scientific symposium highlighting the

## Clinical Trials

Clinical trials for new treatments are conducted by the self-funding Clinical Trials Unit of the Department of Clinical Oncology. Currently the largest such unit in Southeast Asia, it conducts clinical trials of new drugs for cancers of the liver, nasopharynx, lung,

colon, and breast — including drugs to be registered with the FDA — in collaboration with oncology units, hospitals, and several major pharmaceutical companies in Hong Kong and internationally.

There are currently over 20 ongoing trials which cover the use of immunotherapy to treat NPC conducted in collaboration with the University of Birmingham and Johns Hopkins University. With the former, HKCI is investigating the world's first anti-cancer vaccine for NPC, and with the latter, chemicals that would make tumours more 'visible' to the immune system.

The Clinical Trials Unit is also conducting a major trial of combined chemotherapy and radiotherapy treatment jointly with Queen Elizabeth Hospital to treat advanced NPC tumours.

The intention is to further develop the unit with CUHK spearheading a Southeast Asian Cooperative Trials Group.

## Accomplishments in Research on Hepatocellular and Nasopharyngeal Carcinoma

HKCI's research is mainly focussed on two types of cancer particularly prevalent in Hong Kong and South China, namely hepatocellular carcinoma (HCC) or liver cancer, and nasopharyngeal cancer (NPC), or cancer of the nasopharynx.

HCC research is multi-pronged. In response to the problem of metastasis of HCC, a radioisotope Lipiodol I<sup>131</sup> has been administered into the liver after operation to prevent recurrence after surgical removal of the tumour. Findings of this clinical trial are most promising and have recently been published in the *Lancet*.

Another project has detected consistent abnormality in chromosome 1, the first of our 23 pairs of chromosomes, in over 70 per cent of patients with HCC. For the first time in Southeast Asia, a Spectral Karyotyping machine which assigns a separate colour to each pair of chromosomes has been used to allow easy detection of 'crossings-over' or other abnormalities. Important advances have also been made in the further development of Selective Internal Radiotherapy (SIR). A therapeutic isotope called Yttrium-90 is injected into the liver to shrink an advanced tumour, making it operable surgically in some cases.

New methods for the detection of liver-cancer-specific alphafetoprotein have been found which opens the way to early diagnosis, much earlier than if conventional imaging techniques were used. And for the first time in the world, active treatment for inoperable tumours has been developed. PIAF, a combination of drugs, can now be used to shrink some tumours and make them operable.

## Undergraduate and Postgraduate Teaching to be Reinforced

Currently all medical students have to take a one-month oncology course in their final year, but the faculty has plans to expose the students to cancer earlier on in their education. A 30-hour Clinical Oncology Research Enhancement (CORE) Programme has been designed to teach all staff the practical skills of clinical trial design, medical statistics, grant application and paper writing. Courses in cancer nursing are also organized every Friday evening. These are open to all nurses in the territory interested in learning cancer including the psychosocial problems of cancer patients and palliative care.



## Building on Existing Strength

Research conducted in the centre has resulted in the publication of 55 papers in 1998. The wards for cancer patients have recently been renovated with an integrated unit for high dependency patients. As cancer research is expected to develop very rapidly in the next few years, work by the faculty and HKCI is also expected to make its impact felt in Hong Kong and the world.

## A Rosy Future for Ophthalmology

‘Oh! So that’s how I look...!’

This and other similar exclamations escaped from eight-year-old Wing Yee, bubbling with curiosity about the world. She was born with weak sight and developed cataract at a later age. But thanks to surgery by Prof. Dennis Lam, chair of the Department of Ophthalmology and Visual Sciences, she has regained her vision. Prof. Lam removed the cataract, replaced the cloudy lens with a crystal, and transplanted limbal stem cells from her mother’s cornea.

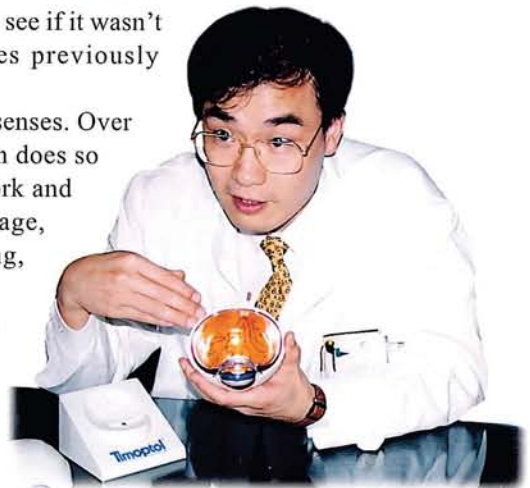
Born with ectodermal dysplasia, Wing Yee’s vision was below 0.1 (normal vision being 1). When she was studying at the Ebenezer School for the Blind, the doctors at The Chinese University discovered that her eyes were curable. She underwent surgery in 1997. She is now going to a regular school.

## Breakthroughs Made Possible by High Technology

Wing Yee would perhaps never have been able to see if it wasn’t for the new and advanced technology that cures previously incurable eye diseases.

Sight is perhaps the most important of our five senses. Over 90 per cent of the information that goes to our brain does so through vision. When our eyes go wrong, study, work and daily living are affected. And in this information age, vision gains even greater precedence over hearing, taste, and smell.

Prof. Lam said, ‘Compared to surgery and medicine, ophthalmology is a new speciality. It relies on sophisticated technology, using the laser and the endoscope for surgery. As Hong Kong’s population is ageing and the demand for eye care services is on the rise, its potential for development is tremendous.’



Prof. Dennis Lam

## Teaching and Clinical Services

He pointed out that since its founding in 1993, the CUHK Department of Ophthalmology and Visual Sciences has been making important contribution towards advancing teaching and clinical services. The department is responsible for training medical students from The Chinese University and the University of Hong Kong in

primary eye care. Another major role is to help train eye specialists for the Hospital Authority. It has imported the most advanced technology to Hong Kong and brought vision or improved vision to many in the local population. Faculty members operate on many parts of the eye: the cornea, limbal stem cells, the lens, the vitreous humor, and the retina. Eye diseases such as advanced glaucoma and retinal detachment can now be treated effectively.

## Research on Myopia and Hereditary Eye Diseases

Among the many research activities of the department, myopia and genetically-based eye diseases are two of the major foci. Using epidemiological and animal studies, researchers investigate the causes of myopia among the Chinese as well as its treatment. Myopia is a condition with many environmental risk factors as indicated by epidemiological studies showing increases in spectacle-wearers as one moves from the country to the city in mainland China and then to Hong Kong. Animal studies have shown too that short-sightedness can be induced through the manipulation of visual environment. The department will be testing medicated eye drops for their effectiveness in arresting myopia.

Last year the department set up a specialist clinic for genetically-based eye diseases providing comprehensive eye examinations and treatment to the public. It also performs laboratory work to collect pertinent information on the molecular genetics of such diseases in order to understand them.

It has also established joint eye institutes with mainland universities such as Shantou University which will provide patient care, train up-and-coming eye doctors on the mainland, and engage in collaborative research.

## Ample Achievements

Despite the department's short history of six years, it has something to show for its efforts in academic research. As a result it has won the support of the World Health Organization and the US National Institute of Health for its epidemiological research. Three years ago it began studying genetically-based eye diseases among the Chinese in order to fill the gap left by Western medicine and made the first step towards preventing hereditary eye diseases among the Chinese by identifying a number of new mutated genes. The department's basic research includes the study of the protective effect of anti-oxidants on retinal cells and it received a three-year donation from the Industrial Support Fund last year to develop research on testing agents for genetically-based eye



(From left) Prof. Joseph C.K. Lee, dean of medicine; Prof. Arthur K. C. Li, vice-chancellor; Dr. Li Ka-shing; and Dr. Zhang Xiang Wei, president of Shantou University at the signing of the collaboration agreement with Shantou University on 14th December 1998



diseases among the Chinese.

More than 40 papers written by teaching staff of the department have been accepted for publication or already published in international journals in the past year — about 10 times that of the Hong Kong yearly total six years ago. The department has been supportive of the *Hong Kong Journal of Ophthalmology* which it helped the College of Ophthalmologists of Hong Kong found in 1997. Prof. Lam, who's editor-in-chief of the journal, hopes that it will soon become an eye journal of international standard.

## Pioneer of Local Gerontology and Geriatrics

As people grow old things start to go wrong in their bodies, a sign that years of wear and tear are taking their toll. The Department of Medicine and Therapeutics and the Department of Community and Family Medicine began following 2,000 elderly people aged 70 or above in 1991 to study the nutritional, physical, psychological, and social aspects of their lives. The three-year study revealed that 70 per cent of the local elderly population are on long-term medication.

In Hong Kong the number of those belonging to the age cohort of 65 and above soared from 88,000 in 1961 to 610,000 in 1996. The number is expected to reach 790,000 in 2001. With a rapidly ageing population, the pressure on health service delivery is intense.

### Founding Hong Kong's Geriatric Research

'Unfortunately the medical needs of elderly people who are chronically ill have not been fully addressed by the government. Relevant information and data regarding their needs are lacking. Hong Kong also lags behind other advanced countries in the treatment of old age illnesses such as dementia,' said Prof. Jean Woo who participated in the research. She is professor of medicine in the University.



Prof. Jean Woo

Prof. Woo pointed out that local gerontology and geriatric research started in the mid-80s when the CUHK Departments of Medicine, Community and Family Medicine, Orthopaedics and Traumatology, Chemical Pathology, and Psychiatry began studying problems related to the elderly, including chronic diseases, disabilities, nutrition, and Alzheimer's Disease. The Departments of Sociology, Social Work, and Psychology also began introducing subjects such as elderly psychology and social service in their curricula at around the same time. The Faculties of Medicine and Social Science thus joined hands in collecting data on the physical, psychological, nutritional, and functional aspects of Hong Kong's ageing Chinese population for the reference of the government in setting medical and health policies and planning services.

The findings of the University's research on gerontology and geriatrics have been widely recognized. Over the years they have repeatedly been published and cited in international journals; research projects have also received over HK\$18 million worth of grants from different quarters. In 1997 the researchers were awarded a prize for



Elderly people receiving physiotherapy treatment

research raises the awareness of the general public towards elderly health care and social service provisions,' emphasized Prof. Woo.

### Comprehensive and Collaborative Study of Geriatrics

As the number of old people continues to grow throughout the 90s, the University established the Centre for Gerontology and Geriatrics in mid 1998 to coordinate interdisciplinary teaching and research between clinical and social science departments. Resources can thus be deployed more effectively and the subject of ageing and the elderly can be covered more comprehensively and systematically.

outstanding achievement in gerontology research by the Hong Kong Association of Gerontology. Moreover Hong Kong's first psychogeriatric unit was established at the University in 1991, and has since served as a model for other units locally. 'The most important thing is that this



More exercise is recommended for the elderly.

#### Key Members of the Centre for Gerontology and Geriatrics

Department	Researcher
Medicine and Therapeutics	Profs. Jean Woo (coordinator), Timothy Kwok
Community and Family Medicine	Profs. S.H.Lee, Suzanne Ho, Edith Lau
Psychiatry	Prof. Helen Chiu
Orthopaedics and Traumatology	Prof. P.C. Leung
Nursing	Profs. Ann Mackenzie, Diana Lee
Sociology	Profs. Rance Lee, Y.K. Chan
Social Work	Prof. J.J. Lee
Psychology	Prof. Agnes Chan

The centre's convener is Prof. Jean Woo and its other members come from different departments in the Faculty of Medicine and the Faculty of Social Science (see table).

Prof. Woo pointed out that a database will be set up that will contribute towards the estimation of active life expectancy for the Hong Kong population, promotion of healthy ageing, and documentation of the prevalence, causes and methods of prevention of chronic diseases and geriatric



syndromes. Specific diseases have also been targeted for study. These include stroke, ischaemic heart disease, diabetes, dementia, depression, osteoporosis, tuberculosis, chronic obstructive pulmonary disease, Parkinson's Disease, arthritis, NSAID-related peptic ulceration, and falls.

The service-related and socioeconomic dimensions of ageing will also be investigated. These include care in nursing homes, long term care, outreach support to nursing homes, discrimination against the elderly, and other issues. The Hong Kong Jockey Club has donated HK\$30 million towards the setting up of a dementia centre in Shatin



The dementia centre is to be housed inside the Shatin Hospital.

Hospital, which is expected to be completed in mid 1999. The Jockey Club will also sponsor the running costs of the centre in the first three years of its existence.

When the University's School of Public Health becomes operational in 2001, the Centre for Gerontology and Geriatrics will be affiliated to the School and a multidisciplinary MSc course in clinical gerontology will then be launched in collaboration with other affiliated units.

## Sports Medicine — A Unique Field of Medicine

Sports medicine is a very broad speciality covering, besides the prevention of sports injury, treatment and rehabilitation, the cultivation of active living as a defence against urban illnesses. The World Health Organization (WHO) has identified 'active living' — the cultivation of physical activity in daily life — as a way to health maintenance, as well as the maintenance of balance, agility, and aerobic capacity.

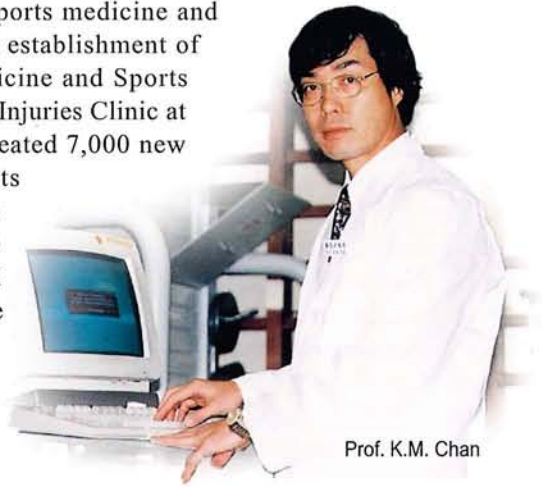
1999 has been designated by the UN to be the International Year of Older Persons. To commemorate the year, the Centre for Sports Medicine and Health Promotion at CUHK, in collaboration with the Hong Kong Sports Institute, held a major conference on 'active ageing' from late April to early May, the first of the centre's many projects to promote exercise for health.

### A WHO-Designated Health Centre

In December 1996, the World Health Organization designated the Hong Kong Centre for Sports Medicine and Sports Science of the University its collaborating centre for the promotion of sports medicine and health. Located at Yan On Hospital, the centre is one of two such centres in Asia, a clear indication that it has gained international recognition for its role as leader in sports medicine in the region.

Supervisor of the centre Prof. K.M. Chan pointed out that the University has always

been a pioneer in the development of sports medicine and sports science in Hong Kong. Upon the establishment of the Hong Kong Centre for Sports Medicine and Sports Science in 1983, it set up the first Sports Injuries Clinic at its teaching hospital, which has since treated 7,000 new cases. In 1985 it set up the first Sports Medicine Clinic at the Hong Kong Sports Institute, providing comprehensive medical care and engaging in applied sports science research. And ever since the centre was designated as a partner in sports medicine and health promotion by WHO in late 1996, it has been strengthening ties with the mainland and fostering a new culture of active living in the local community. In line with WHO's goal of 'Health for All Mankind in 2000', it has been promoting new concepts of health and creating the life of quality.



Prof. K.M. Chan

Prof. Chan said that the centre has the blessing of the Faculty of Medicine in all its endeavours. Its primary work, moreover, has been identified as an area of excellence by the University for priority development. Such development include coordinating interdisciplinary research in sports medicine and health promotion, nurturing expertise in sports medicine through postgraduate training, providing clinical services to the community for the better management and prevention of sports injuries, and setting up a Sports Medicine Resource Centre for Asia.

Collaborative research with the Tianjin Institute of Sports Medicine on the effect of regular sports on physical fitness among children



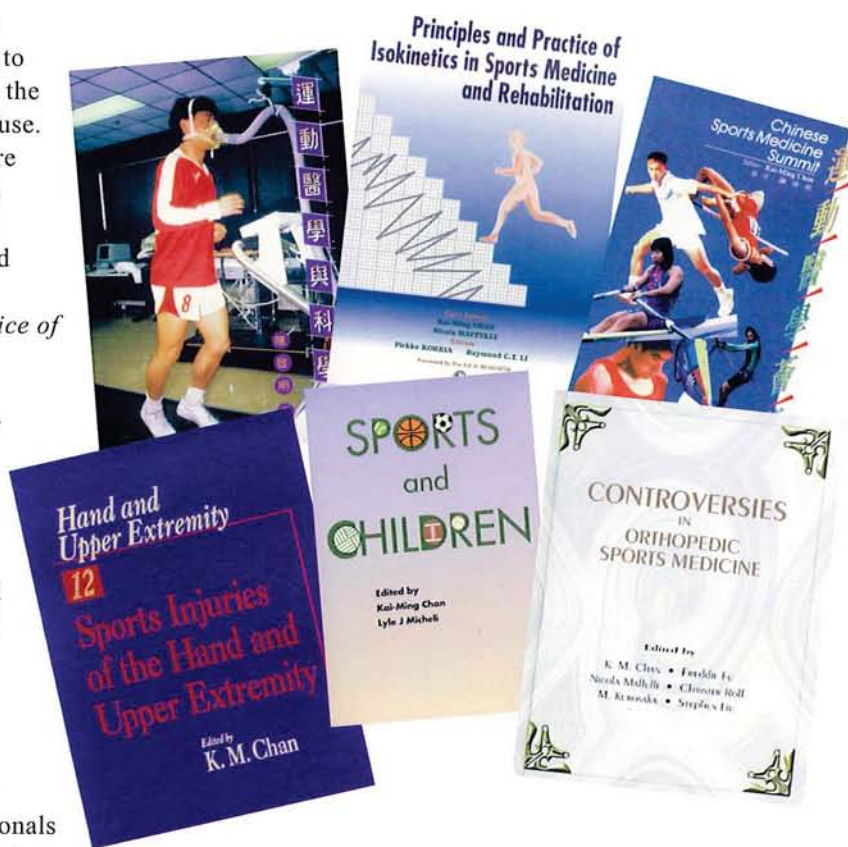


## The Only Programme in Hong Kong

Sports medicine is a field that's closely connected to everyday living. Why then does sports medicine as a discipline have only a short history of 20 years? The main reason, Prof. Chan explained, is because medical education has always been strong in upholding its own tradition. Sports medicine is about taking a new perspective of the relation between medicine and health, so it is eyed with skepticism by the more traditional medical schools. On the other hand, the University's Faculty of Medicine, being relatively young, is highly sensitive to the new directions taken by medical development in the world. Sports medicine hence constitutes an important part of its medical curriculum. Medical students spend four weeks in their third and fifth years studying orthopaedics, of which sports medicine is one of the modules — a unique characteristic of the University's medical programme. And since 1984 the University has been providing the only postgraduate training in sports medicine in the territory. It also collaborates with the Chinese-speaking Orthopaedic Society in providing advanced training for Chinese orthopaedists annually.

## Publications

The University's publications relating to sports medicine over the years have been profuse. They range from more popular titles such as *Sports Medicine and Science* to specialized publications such as *Principles and Practice of Isokinetics in Sports Medicine and Rehabilitation*. Other publications include *Chinese Sports Medicine Summit*, *Hand and Upper Extremity*, and the recent *Sports and Children* and *Controversies in Orthopedic Sports Medicine*. These publications serve to educate both professionals and the general public in this new but important discipline. Their contribution to sports medicine education has been significant.



# New Treatments, New Buildings, and New Programmes

## Bringing Endoscopic Therapy to Fruition

### What Is Endoscopic Therapy?

What is endoscopic therapy? It is, as dean-elect and head of the Endoscopy Centre Prof. Sydney Chung puts it, 'the use of the endoscopic approach to perform treatment that in the past could only be achieved by open surgery.'

The endoscope can be inserted through natural orifices such as the mouth, or through small openings created in other parts of the body. The difference between endoscopic therapy and traditional surgery is that a large incision to gain access to the inside of the human body is avoided. This is why endoscopic therapy is also called minimally invasive surgery: the result is much less pain, faster recovery, quicker return to work and a better cosmetic result.



Prof. Sydney Chung

Minimally invasive therapy, started in the last two decades, marked a major revolution in many branches of surgery.

### A CUHK Speciality

In endoscopic therapy, there is no big incision to allow the surgeon's hands to touch the patient's internal organs. Rather, the image of the internal organs is transmitted by the endoscope and projected onto a television screen. Prof. Chung recounted: 'Endoscopy is a



Taking a look at the intestines using the endoscope

relatively new speciality whose development depended on advances in fibre-optics and electronics. In the 1980s the technology was advanced enough to produce instruments which allow clear observation of the insides of the intestines and allow us to make very accurate diagnoses. Our Faculty of Medicine was established in the early 80s. As a young and vigorous faculty, we had a very open academic climate and were not afraid to depart from tradition. We pioneered many techniques of using the endoscope to treat common diseases in Hong Kong. Bleeding peptic ulcers, gall stones, stomach perforations are



good examples.' The rest is history.

### Is Endoscopy Less Risky?

Is endoscopic surgery safer than conventional surgery? The answer is yes and no. Because of the absence of a large incision, many of the complications associated with a large wound can be avoided. On the other hand, the same procedure has to be achieved by using tiny instruments inserted either through the endoscope or through small puncture holes. Technically the job is more difficult for the doctor, who has to acquire special skills before he can perform this kind of surgery.



Endoscopic surgery entails smaller wounds.

### Less Harm Done to the Immune System

So has all the effort been simply for the sake of reducing patient suffering? Endoscopic surgery means more than that. The detrimental effects of traditional surgery to the immune system are well known. As the Chinese say, it hurts the *yuan chi*, or the natural energy of the body. Comparatively endoscopic operation does far less harm in this respect. This has great implications especially for cancer patients for whom the body's immunity is of crucial importance. The Chinese University is presently studying the effects of endoscopic surgery on the human immune system.

### Outstanding Achievements

After years' of development this new technology has transcended the boundaries of general surgery and extended into paediatric surgery, obstetrics and gynaecology, orthopaedics and even neurosurgery. It is now possible to perform certain kinds of brain surgery with tiny endoscopes! This highly versatile surgery is developing very well in the Prince of Wales Hospital and has put CUHK on the cutting edge internationally. Not long ago Prof. Chung worked with colleagues in the Department of Orthopaedics and Traumatology to perform laparoscopic spinal fusion for a patient with a slipped intervertebral disc, the first such operation in Southeast Asia. Last year the paediatric surgery team used miniaturized instruments to perform a primary single stage laparoscopic-assisted pullthrough for a 12-day-old infant. It was the first successful operation of its kind in the world.

### International Training Centre

The Chinese University of Hong Kong has acted as an important international training centre in these new techniques. Ever since 1985 CUHK has been conducting international workshops on therapeutic endoscopy where endoscopic procedures are relayed live to

the lecture theatre. The workshop has become an important event on the international calendar of endoscopy. Surgeons and endoscopists come from all over the world to the Prince of Wales Hospital to learn the latest advancement in this new branch of medicine.

Since the first laparoscopic cholecystectomy (removal of the gall bladder through the umbilicus) in 1991, CUHK has held many workshops and training courses for doctors from Hong Kong, mainland China and Southeast Asia. As with any new technology, inevitably there will be complications in the early phases of the learning curve. But what makes CUHK rightfully proud is that the incidence of such cases is far lower in Hong Kong than anywhere else in the world, a reason being that doctors in the local hospitals and in private practice have been properly trained in these techniques.

### Total Colonic Aganglionosis

Total colonic aganglionosis is a congenital condition in which the whole length of the large bowel lacks normal nerve cells and normal bowel movement, thereby resulting in bowel obstruction. Traditionally this condition is managed by the creation of a stoma in the abdomen to divert faeces, followed by excision of the abnormal aganglionic large bowel and pullthrough of normal, ganglionic bowel down to the anus, then closure of the stoma. Surgery is staged and takes up to one and a half years. It also leaves multiple surgical scars on the abdomen.

In laparoscopic surgery, four apertures each measuring 1cm in radius are created to allow the insertion of the endoscope and surgical equipment. The aganglionic large bowel is removed, and the ganglionic bowel is pulled through down to the anus. The whole process takes three hours.

## Materialization of a New Concept

When asked which kinds of endoscopic surgery were first performed at CUHK, Prof. Chung recounted, 'The first laparoscopic cholecystectomy in Hong Kong, the first splenectomy, the first vagotomy, the first colon resection, the first adrenal gland removal...the list is endless.' He paused and said, 'I don't think this is where the true significance lies. To experiment with a concept almost no one believed in and to help develop it into something in everyday use — that's the greatest achievement. ...to help doctors acquire the skill, bring it home to their respective countries and regions, teach it to other doctors so that the greatest number of patients can benefit — that's the greatest success.'

## Building a New School of Public Health

Tseung Kwan O — a new town with a population of over a hundred thousand. What health problems plague its residents? What type of medical care do they most need? Are there enough doctors? Are these doctors well trained? In October last year, the Department of Community and Family Medicine introduced the 'Healthy Cities' project to evaluate the present and future demand for health services in Tseung Kwan O for the purposes of planning public medical, health, and rehabilitation services.

In mid-1999 the Department launched another programme entitled 'Healthy Schools', the first task of which was to offer a Professional Diploma Course in Health Promotion and Health Education which prepares teachers and school administrators for designing and implementing health education in schools, and promoting health in the school and home environments.



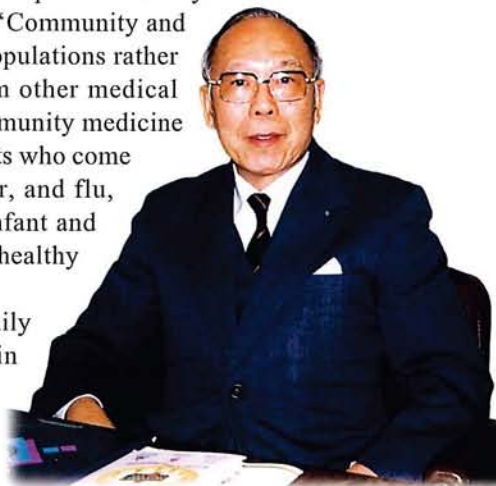
As its name implies, community and family medicine is inextricably related to schools and families, the very basis of a community.

## Targeting the Community Not the Individual

As a medical discipline, community and family medicine covers theories of epidemiology, the epidemiology of communicable and non-communicable diseases, occupational health, environmental health, principles of family medicine, and the treatment of common illnesses. 'Community and family medicine is concerned with the health of populations rather than individuals. This is its main difference from other medical specialities,' said Prof. S.H. Lee, professor of community medicine at the University. He continued, 'Most of the patients who come in have minor problems such as headaches, fever, and flu, rather than serious illnesses. We also look after infant and maternal health and rehabilitation. Our targets are healthy people.'

Hence the development of community and family medicine has to be synchronous with changes in societal conditions such as in demography, disease pattern, lifestyle, the environment, and health costs. In terms of teaching, the curriculum has been continuously reviewed and renewed all these years and many higher degree, certificate and continuing programmes have been offered to train community and family doctors.

The department's main research interests include osteoporosis, arthritis, elderly health, smoking and health, sero-epidemiology of Hepatitis A and B, environmental pollution, noise-induced hearing impairment, neurobehavioural disorders caused by organic solvents, health service delivery, disease mapping and surveys.



Prof. S.H. Lee

## Tackling Problems 'Upstream'

For the past 10 years, the health environment and the need for health care in Hong Kong have undergone significant changes. 'Factors affecting our health are not confined to bacteria and viruses,' said Prof. Lee. 'Unhealthy personal habits such as smoking, alcoholism, promiscuity, drug abuse, lack of exercise can all damage our health. Air, noise, and environmental pollution can lead to respiratory diseases, hearing impairment, and food poisoning. Changes in social structure and ageing of the population can result in greater need for elderly health services. Work pressure can cause psychiatric problems. Poverty can lead to malnutrition. Genetic mutations can breed new diseases.'

Prof. Lee believes the right way to handle illnesses is to go to the root of the problem, to explore their 'upstream' causes and accordingly take measures for prevention. For instance, teaching school children the harms of smoking may reduce their chances of acquiring the habit in adulthood and as a result reduce the prevalence of respiratory diseases. Treating only the symptoms would do little to cure the patient and would actually lead to escalations in government spending on health care.

Last year the University decided to reorganize the Department of Community and



Family Medicine into a School of Public Health to raise public awareness of the importance of prevention through training and research activities and to achieve 'Health for All'.

### A New School for the New Century

The School of Public Health will consist of five divisions: Occupational and Environmental Health, Epidemiology and Biostatistics, Health Care Policy, Personal Health, and Family Medicine. It will also have many research centres.

It will offer undergraduate and postgraduate programmes and provide training for public health workers, health education workers, and dieticians.

The school building will be constructed on a site at the Prince of Wales Hospital with a donation of HK\$51 million from the Hong Kong Jockey Club Charities Trust, and is expected to be completed in early 2001.



Vice-Chancellor Prof. Arthur K.C. Li (middle) with Dr. Margaret Chan (right 3) of the Department of Health, Dr. E.K. Yeoh (right 2) of the Hospital Authority, Mr. David Eldon (right 5) of The Hong Kong Jockey Club Charities Ltd., and other faculty members at the ground-breaking ceremony





## Introducing a Degree Programme in Chinese Medicine

A School of Chinese Medicine was established under the Faculty of Science in December 1998 to offer a Bachelor of Chinese Medicine Programme starting from the 1999–2000 academic year. It will train generalists in Chinese medicine who are knowledgeable in basic life science and the medical sciences, and who are equipped with humanitarian insight to provide primary health care as general practitioners.

Western medicine has been the mainstream of treatment in Hong Kong for some 50 years. Although Chinese medicine is also popular among the local populace, there has been no formal training for the discipline, and no official system for the registration of practitioners of Chinese medicine.

The reversion of Hong Kong to Chinese sovereignty has brought about changes. The HKSAR government has decided that full-time degree programmes be launched to encourage and support the scientific research and development of Chinese medicine, and that Chinese medicine and its practitioners be incorporated into the health care system of Hong Kong.

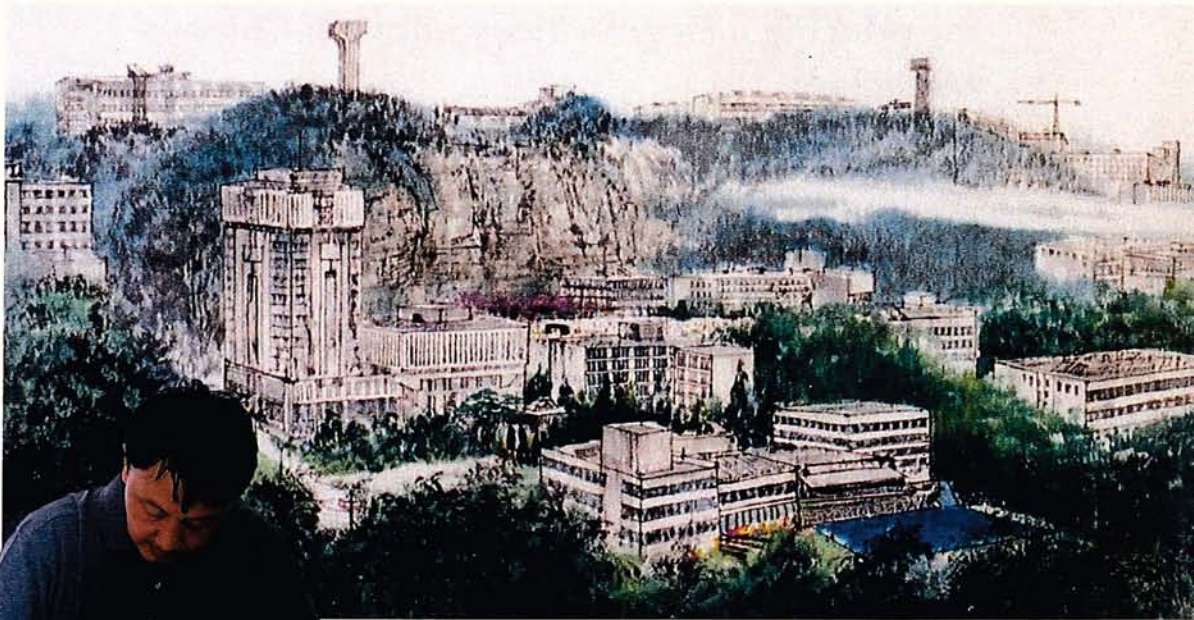
The Chinese medicine programme newly launched at The Chinese University adopts a holistic approach and integrates the teaching of the humanities, classics in Chinese medicine, modern biomedical sciences, and clinical practice. Students will concentrate on medical theories in the first three years, after which they will go through one year of clinical training and one year of supervised practice to ensure that they know how to apply their knowledge and skills to treat patients. The Guangzhou University of Traditional Chinese Medicine has pledged to second its senior teaching staff to CUHK and provide hospital placement for CU students. The Tung Wah Group of Hospitals and the Hong Kong Federation of Trade Unions have also been approached to provide clinical training opportunities for the students.

The Bachelor of Chinese medicine programme sets a model for the practical teaching of this ancient art of healing. It offers courses in basic biological sciences which are lacking in the traditional approach; it emphasizes clinical teaching and practice which are not offered by conventional Chinese medicine programmes; the participation of the Faculty of Medicine in programme planning and clinical teaching further enables the amalgamation of Chinese and Western medicines, giving new perspectives and dimensions to the art of healing.

With an 18-year old Faculty of Medicine and a newly founded School of Chinese Medicine, The Chinese University aspires to promote healthy dialogue between Western and Eastern healers, and facilitate medical education and research on a higher plane. □







## Artist at Work

### Wang Mingming's Rendition of the University

'The University's campus is breathtaking. To capture its essence in a painting is no easy task,' said renowned Chinese painter Wang Mingming.

A National First-class Artist and vice-president of the Beijing Studio of Traditional Chinese Painting, Mr. Wang was invited to be artist-in-residence 1998-99 by the University in celebration of its 35th anniversary. As such he has made brush-and-ink paintings of the University, and conducted lectures and demonstrations for students of the Department of

Fine Arts. During his visit to the University from 18th October to 7th November last year, he completed 13 paintings. These were exhibited at the foyer of Sir Run Run Shaw Hall from 6th to 16th January 1999. Mr. Wang (middle) himself joined Prof. Arthur K.C. Li (left), vice-chancellor of the University, and Prof. Ambrose King (right), pro-vice-chancellor, in the ribbon cutting ceremony held on 5th January.

The University plans to use that series of paintings for its year 2000 calendar.







What is difficult about capturing the University's landscape on canvas? Mr. Wang said, 'The University is no doubt beautiful but the lines of its buildings are all straight. As this is incompatible with the style of traditional Chinese painting, I had to use a different style. Here on this campus modern buildings with distinct forms lie side by side natural foliage. How to express the harmony between the two also required careful consideration.'

Landscape painting was a new undertaking for Mr. Wang, whose specialities are portraits and paintings of flowers, birds, fish, and insects. Hence he planned and researched meticulously before putting brush to canvas. Time posed another limitation for he had to finish all 13 pieces in 21 days.

Right after his arrival in Hong Kong, he made use of every opportunity to tour the University campus, immersing himself in its ambience, and busily taking snapshots and sketching in his notebook as he made

observations and awaited inspiration. Some of these were eventually transformed into the subjects of his paintings when he returned to his hostel on campus.

Mr. Wang decided on an impressionistic



Figure 1



Figure 2

painting style to soften the linearity of the University's buildings and to bring out the 'poetry' of a scene rather than try to represent it realistically. In the painting of United College (Figure 1), for example, the palm trees in the foreground had been artistically 'transplanted' there from their actual location beside the University Library for the purpose of mitigating



the barrenness of the building. Similarly, in the painting of the University Library (Figure 2), rain is used to dilute the strong straight lines of University Mall. In two other paintings (Figure



Figure 3



Figure 4

3 and Figure 4) the heavily textured Chung Chi Tang and the University Residences appear as a hazy reflection amidst foliage which is used to detract attention from the buildings.

Mr. Wang said he did not choose to paint the University realistically because 'the works must show its mood and spirit.' To get a better feeling for this 'mood and spirit', he studied his subject's history, mission, distinguishing characteristics, college life, etc. through reading

University publications and observing student life. In doing so he hoped to capture not only its physical beauty but also its inner aesthetics. He stressed that a painting must contain the

artist's subjectivity — one that is artistically controlled — in order to be able to move, communicate, and make an impact on the viewer. 'My stay was too short unfortunately. If I paint the campus again next time, you'll see a different rendition resulting from a different comprehension.'

Mr. Wang had originally finished some 20 paintings, many of

which ended up in the artist's bin. Among the remaining 13 are paintings of the landmarks of the four colleges and the main campus, and one of the whole university which was finished in Beijing.

The works show what Mr. Wang thought of the University. But what do members of the CUHK community think of the University and of Mr. Wang's paintings? Mr. Wang said he simply couldn't wait to hear their views. □

Wang Mingming, a native of Shandong province, was born in Beijing in 1952.

Already an avid painter when he was very young, Wang was hailed as a prodigy. His early works were exhibited in over 30 countries across the world, winning first-class awards and prizes in international children's painting competitions.

In the seventies he trained under such great masters as Wu Zuoren, Li Kuchan, Jiang Zhaohu, Lin Lingcang, Lu Chen, and Zhou Sicong, thereby building for himself a solid foundation for his later works.

The last decade or so has been a productive period for Wang, whose creations, with diverging themes, reflected the genuine feelings that could only be the result of an exquisite sensibility. As ease with tradition and emphasizing the cultivation of the inner spirit, Wang has evolved a style that combines the serenity of the literati with modern consciousness, one that blends the brush-and-ink tradition with the profundity of living, displaying an unsurpassed freshness. His works have time and again featured in nation-wide art exhibitions, attracting much attention and acclaim from his fellow artists.

Wang has held exhibitions and given lectures in Singapore, Japan, Hong Kong, Taiwan, and Canada, and his influence on his contemporaries is considerable.

A National First-class Artist, Wang is currently a vice-president of the Beijing Studio of Traditional Chinese Painting, a director of the Chinese Artists Association, a vice-president of the Beijing Artists Association, a vice-chairman of the Commission on Senior Job Titles of the Artistic Profession in the Beijing Municipality, a Beijing representative in the National People's Congress, and a member of the Chinese People's Political Consultative Conference.







## HK\$19 million Research Grants for 33 Projects

Research grants totalling some HK\$19 million from various local and overseas sponsors for CUHK projects were recorded during the period October 1998 to May 1999:

<i>Sponsors</i>	<i>Amount Involved</i>	<i>Number of Projects</i>
Research Grants Council (Central Allocation)	HK\$7,700,000	3
UK-Hong Kong Joint Research Scheme	£50,719.57	9
Health Services Research Committee	HK\$5,277,523	9
New Zealand Dairy Board	HK\$3,800,000	1
Occupational Safety and Health Council	HK\$566,208	1
Hong Kong Council on Smoking and Health	HK\$805,230	1
Germany/Hong Kong Joint Research Scheme	HK\$238,674	9

## Two More Patents for CUHK Inventions

The University has successfully applied for the US Patent for the following inventions, the sixth and seventh it has been granted to date:

- Polymerase Chain Reaction — Restriction Fragment Length Polymorphism Test for the Authentication of Traditional Chinese Medicines

*Inventors:* Prof. Jun Wang (Department of Biochemistry), et al.

This invention provides a procedure for authenticating plant and animal materials used as traditional Chinese medicine. It offers a reliable and definite way to identify morphologically similar Chinese medicines, using a minute amount of biological samples.

- Context-based, Adaptive Lossless Image Codec (CALIC)

*Inventors:* Prof. Wu Xiao Lin (former staff, Department of Information Engineering), et al.

The rapid growth of image data imposes burdens on computer storage and visual communication bandwidth. Thus image compression becomes a pressing technical challenge in visual communications and computing. This invention is a practical, high-performance, universal coding system called CALIC, for lossless compression of digital pictures of all types. An image is encoded in a compact form for storage and transmission and can be decoded without any loss of



information. It has the best compression performance among all existing lossless image coders.

## Six More 'Excellent' Research Projects

Six research projects funded by earmarked grants and completed by CUHK faculty members were rated 'excellent' by the Research Grants Council (RGC) in the most recent evaluation exercise. They are:

- Intra-epithelial Neoplastic Changes in the Human Nasopharynx

*Investigators:* Prof. Joseph C.K. Lee, Prof. Dolly Huang, Dr. J. Lloyd McGuire\*, Prof. Michael W.M. Suen, Dr. Henry G. S. Murray\*, and Prof. Charles Andrew van Hasselt

- The Development of Grammatical Competence in Cantonese-speaking Children

*Investigator:* Dr. Thomas H.T. Lee\*

- Hybrid Connectionist Expert Systems for Spatial Inference and Analysis — An Integration of Neural Networks and Expert Systems Technologies

*Investigator:* Prof. Leung Yee

- An Object-oriented Knowledge-based Image Analysis System for Environmental Monitoring Using Remote Sensing and Geographic Information Systems

*Investigators:* Profs. Fung Tung, Leung Yee, and Leung Kwok-sak

- Identification of Chinese Medicinal Herbs by Combined Molecular and Chemical Approaches

*Investigators:* Dr. Shaw Pang-chui and Prof. Paul B.H. But

- 3, 4-Bis (trimethylsilyl) and 3, 4-Bis (trialkylstannyl) -furans, pyrroles and thiophenes: Versatile Building Blocks of 3, 4-disubstituted Five-membered Heterocycles

*Investigator:* Prof. Henry N.C. Wong

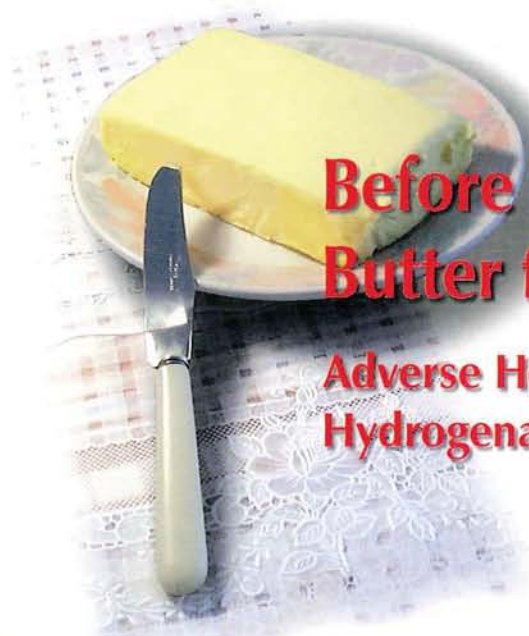
To date, a total of 28 CUHK research projects have been rated excellent by the RGC.

\* No longer a CUHK employee

## Research Highlights

The *Chinese University Bulletin* regularly carries articles on research projects funded by the Research Grants Council as well as new research facilities on campus. Such highlights can be found on pages 31–37. □





# Before You Swap Butter for Margarine

## Adverse Health Effects of Hydrogenated Vegetable Oils

It is well known that too much animal fat in the diet can increase the risk of cardiovascular disease, cancer, diabetes, obesity, and other chronic diseases. Animal fats such as beef tallow and lard contain cholesterol and a higher level of saturated fatty acids than vegetable oils such as corn, soybean, rapeseed, and sunflower oil. The latter are believed to have fewer adverse effects on health due to the absence of cholesterol and their higher unsaturated fat content.

Yet vegetable oils remain in liquid form because of their lower melting point, and hence do not offer the convenience of, say, being spreadable like butter. Besides they go bad easily: food that has been cooked with vegetable oils does not keep.

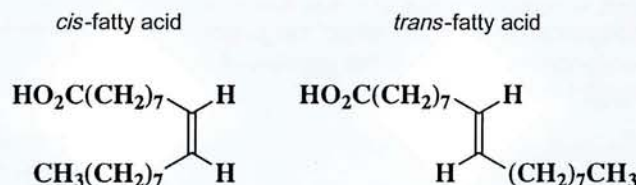
Food manufacturers at the turn of the century invented a process called 'hydrogenation' which converts vegetable oils into 'vegetable shortening' by catalyzing them with hydrogen and certain metals in the presence of heat. In the last decade food manufacturers and fast food restaurants have switched to using hydrogenated vegetable oils because they are less expensive and because food cooked with them has a longer shelf life. It was also found that when partially hydrogenated, vegetable oils become margarine, which

quickly replaced butter in the market due to its lower cost and 'healthier' image.

### Hydrogenated Vegetable Oil is Unhealthy

But while the world was believing that vegetable oils were a healthier alternative to animal fats, studies showed hydrogenated vegetable oil could be a health hazard.

All fatty acids in nature fall primarily into three categories: saturated (having no double bond), monounsaturated (having one double bond), or polyunsaturated (having two or more double bonds). Most unsaturated fatty acids have their double bond arranged in *cis*-configuration, meaning the two hydrogen atoms are located on the same side of the double bond. Less common than these are *trans*-configured fatty acids such as those found in margarine. *Trans*-fatty acids are also unsaturated but their two hydrogen atoms



are arranged on the opposite sides of the double bond. The process of hydrogenation converts some fatty acids from their natural *cis*- to *trans*-configuration.

A research conducted by Harvard University found that people consuming more *trans*-fatty acids have a higher risk of cardiovascular disease. Another study published in *Lancet* showed that the consumption of hydrogenated vegetable oils by 85,095 nurses over an eight-year period had increased the occurrence of coronary heart diseases among them. And Dutch researchers found that volunteers on a *trans*-fatty acid diet have 20–30 mg more serum cholesterol than those on a *cis*-fatty acid diet. These findings cast doubts on the widespread use of hydrogenated vegetable oils in Western fastfood restaurants. The effects of *trans*-fatty acids on health becomes a controversial issue.

### Mother-Infant Transfer of Trans-Fatty Acids

Prof. Chen Zhen Yu of the Department of Biochemistry of The Chinese University found a positive correlation between the level of consumption of *trans*-fatty acids by lactating Canadian women and the *trans*-fatty acid content in their breast milk, in a study he conducted in 1992 as a research fellow at the Nutrition Research Division of the Department of Health in Canada. This means that *trans*-fatty acids present in partially hydrogenated vegetable oils are transferred to human milk through maternal diets. Another study conducted by German researchers found a correlation between the consumption of *trans*-fatty acids by mothers and low birth weight in infants.

It is estimated that North Americans consume approximately 10g of *trans*-fatty acid per day. As the diet of Hong Kong's population becomes more westernized, does it also mean that Hong Kong women are consuming more *trans*-fatty acids? In 1995 Prof. Chen began the project 'Metabolic Rate of *Trans*-/*Cis*-Fatty Acids Present in High-*Trans* Milk and Their Effect on metabolism of Essential Fatty Acids'. The project was supported by a HK\$1,180,000 grant from the Research Grants Council.

### Trans-Fatty Acid Content of Hong Kong Maternal Milk

The study was divided into two parts. One part investigated the fatty acid composition of the



Prof. Chen Zhen Yu graduated with a BSc in chemistry from Henan Normal University in 1982. He then went abroad to the US where he obtained his PhD in food and nutritional science from the University of Massachusetts (Amherst) in 1989. For the next five years, he was first postdoctoral fellow in the Department of Nutritional Science at the University of Toronto, then research fellow at the Nutrition Research Division of the Department of Health, Canada. He joined The Chinese University in 1994.

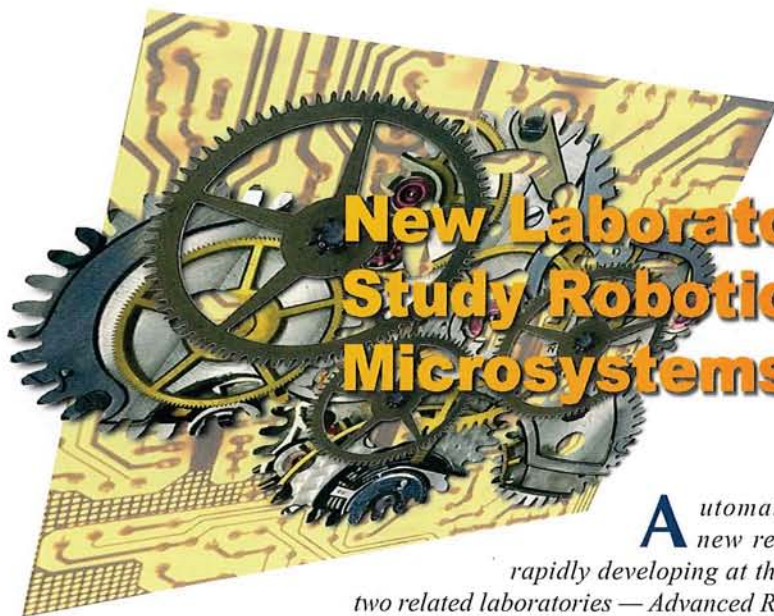
breast milk of 51 Hong Kong Chinese women and compared it with that of 33 mainland Chinese and 198 Canadian women. It was found that Hong Kong Chinese breast milk contained 0.88 per cent of *trans*-fatty acid, while mainland Chinese breast milk contained 0.22 per cent, and Canadian breast milk, 7.19 per cent.

### Adverse Effects of Trans-Fatty Acids

The study's other part investigated the relation between the amount of *trans*-fatty acids in maternal diet and that in maternal milk by putting lactating rats on diets with varying levels of the acids in question and analyzing their milk. A positive correlation was found: rats on a 10 per cent *trans*-fatty acid diet produced milk with six per cent of the acid while rats on a 25 per cent diet produced milk with 16 per cent.

Prof. Chen and his colleagues also found adverse effects associated with feeding newborn and maternal rats with large doses of *trans*-fatty acids. They could accumulate in the heart, kidney, and liver, in the place of natural *cis*-fatty acids. Overconsumption of *trans*-fatty acids also interferes with the metabolism of essential fatty acids in newborn rats. Although the adverse effects of *trans*-fatty acids in maternal milk have not been confirmed, Prof. Chen advises lactating mothers to reduce their intake of both saturated and hydrogenated fats. □





## New Laboratories to Study Robotics and Microsystems

Automation and robotics are new research areas that are rapidly developing at the University. Last year two related laboratories — Advanced Robotics Laboratory and Advanced Microsystems Laboratory — were established under the Department of Mechanical and Automation Engineering. In November the Xiangshan Scientific Symposium on Telescience and Robotics was convened on CUHK campus, drawing together some 40 top scientists and researchers from Hong Kong, mainland China, Japan, USA, Russia, and Germany to discuss frontier research in robotics, automation, information and space technology, and to promote international collaboration in these areas.

### Robots Can Do Almost Anything We Can Do

#### Automation of Driving

One day if you see a driverless car on the highway, stay calm. This is no longer a scene from a sci-fi film. Prof. Xu Yangsheng, chairman of the Department of Mechanical and Automation Engineering, said he had participated in research on autonomous vehicles back in the early 1990s at Carnegie Mellon University. In 1996 the car they produced drove itself for the first time all the way from Washington D.C. on the East coast



At the opening of the Xiangshan Scientific Symposium: (front row from right) Prof. Kenneth Young, CUHK Pro-Vice-Chancellor; Prof. Zhang Kan, Director of International Cooperation, Chinese Academy of Sciences; Prof. Arthur K.C. Li, CUHK Vice-Chancellor; Mr. Wang Feng Chao, Deputy Director of Xinhua News Agency — Hong Kong Branch; Prof. Zhang Tao, Director of Xiangshan Scientific Symposium; Prof. P.C. Ching, CUHK Dean of Engineering; Prof. Xu Yangsheng.

to San Diego in California.

One of the research focuses of the Advanced Robotics Laboratory which Prof. Xu heads is how to model human intelligence and use this model to replace human intelligence in control strategies, such as driving.

What exactly is 'modelling human intelligence'? Prof. Xu explained that it is the



rendering of human intelligence into a neural network model. When coupled with real-time sensing information, this model can be used as a kind of system for control strategies. For example, installed in an autonomous driving system is a model of human intelligence involved in driving manoeuvres, which takes the place of the human brain. At the same time there is a robotic eye which observes road conditions and feeds information to an automatic driving mechanism. With all these features linked up and coordinated, the car can move safely along the road.

### *Flying Wheels*

The Advanced Robotics Laboratory also conducts research related to space technology. For example, the single-wheel robot which Prof. Xu has developed, also known as the gyroscopically stabilized robot, is the first robot in the world to use motion to maintain its balance. It can walk on earth, water, space, and any other surface without falling and hence has great potential for expeditions to the moon and Mars. The national defence units of many countries have expressed interest in this research because the robot can be used to detect mines by simply installing a sensor. 'I grew up in China, a country with the most number of bicycles in the world. This concept of the "flying wheel" was inspired by the physics of the bicycle,' quipped Prof. Xu.



A student remotely controlling the single-wheel robot in the lab

### *Interdisciplinary Research*

The laboratory was recently awarded two grants by the Research Grants Council: HK\$450,000 for the project on the 'Modelling of Human Intelligence' and HK\$2,700,000 for using intelligent robotic technology in servicing industries including in hospitals and hotels, as well as cleaning and construction.



Prof. Xu (standing) introducing the autonomous driving simulation system

Prof. Xu emphasized that much of the lab's research is conducted in collaboration with staff from the Faculty of Engineering, for instance, with Prof. Y.H. Liu who is an expert in the control of the manipulator and gripper, and with Prof. Ronald Chung who specializes in 'robotic eyes'. The pooling of different expertise is crucial to modern scientific and technological research. The lab is also making its state-of-the-art technologies available to Hong Kong's different industries. Prof. Xu pointed out that a robot, an 'intelligent machine with real-time response capability', combines the technologies of electronics, mechanics, and the sensor. He predicts that it will have great application value in the coming two decades.

### *Lilliputian Tsing Ma Bridge*

The Advanced Microsystems Laboratory, as its name suggests, studies very small things. Prof. Li Wen Jung, head of the laboratory, took pains to explain how small precisely micro-machines are when asked to introduce his job. He said, 'One micron is equal to one millionth of a metre. The diameter of the human hair is about 100 microns or one tenth of a millimetre.'

Because the things studied by the laboratory are so small, they can be seen clearly only under the microscope. Prof. Li took out a magnified digital photo of an ant and a similarly-sized Tsing Ma Bridge. The three-dimensional miniature bridge was made by



Prof. Li's students, who explained that micro-machines are made in much the same way as integrated circuits are made in traditional electronic engineering — with diminutive parts. The miniature bridge has a height of less than one millimetre and a width of around two millimetres.

Prof. Li Wen Jung



Tinier than an ant — the miniature bridge has a height of less than one millimetre and a width of around two millimetres.

Many objects, even whole systems, produced in this lab measure less than one tenth of a millimetre in height. There are micro-generators for generating electricity for integrated circuits, micro-resonators and micro-actuators which can be used to produce micro-sensors, or used in optical communications and micro-robotic applications.

Because the weight and volume of micro-

sensors are only a thousandth or a millionth of regularly sensors, they cost significantly less to launch into space and are therefore frequently used in aeronautics.

There are also micro pressure sensors which can be implanted in a prosthetic bone to monitor whether it has moved or come loose due to pressures caused by changes in the patient's weight. This means that doctors no longer have to insert equipment inside patients' bodies to monitor the prosthetic bone. This greatly reduces the latter's pain and discomfort.

Prof. Li pointed out that microsystems research is rare among local universities, and of such research that does exist, the University's has the most practical value.

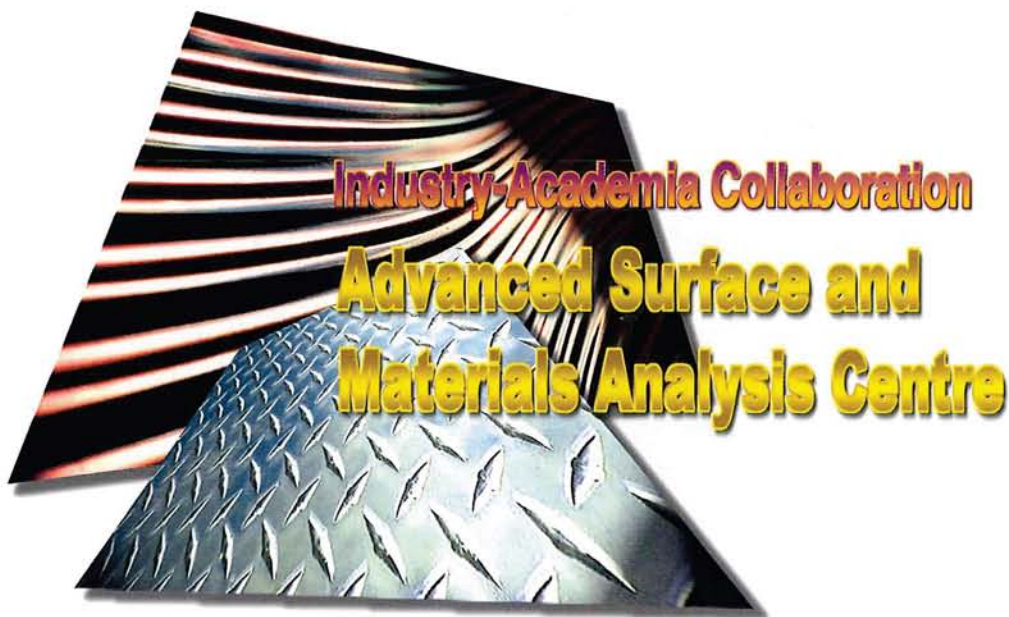
### Collaborative Research of Enormous Potential

Prof. Xu and Prof. Li said that the two laboratories have a very close working relationship. Recently they began a project that makes use of micro-machines to manufacture a micro-robot which can travel inside veins. Such a robot may have great potential in medical application. The pooling of expertise of two state-of-the-art laboratories in research no doubt breeds enormous potential.

The Department of Mechanical and Automation Engineering has moved into the new Mong Man Wai Building. With increased office and laboratory space, researchers now enjoy improved working conditions and that no doubt will also be reflected in the quality of their research. □

Advanced Microsystems Laboratory





**A** batch of circuit boards produced by a Hong Kong factory in Guangdong were rejected by their buyer. The factory manager was baffled. Examining the circuit boards, he could only detect an unusual reddish tint on the gold plating. He took the boards to the University's Advanced Surface and Materials Analysis Centre, where the researchers found that the reddish patch contained more calcium, magnesium and carbonate than its surrounding region. They came to the conclusion that the problem was caused by contamination of the water used by the factory at its source. The factory then began filtering its tap water and the problem was subsequently solved.

These and similar problems beset high value-added industries like surface finishing and electronic packaging. Manufacturers need to employ advanced analysis technology to analyze the products of their competitors, account for flaws in their own products, solve production problems, and develop new products.

At CUHK, an Advanced Surface and Materials Analysis Centre was recently set up to provide crucial support to this kind of industry.

### External Support

The most difficult part about establishing the centre was getting funding support.

Prof. S.P. Wong of the Department of Electronic Engineering and Prof. Raymund Kwok of the Department of Chemistry are materials scientists who have frequently lent their expertise to local industries to solve their production problems. They were joined by Prof. Leo Lau, professor of materials science,

and Prof. Ian Wilson, professor of electronic engineering in planning the establishment of a permanent centre on campus to render the expertise required by the market. With the assistance of the Hong Kong Productivity Council, the team contacted different factories to explain how their project can be of use to them. Over 20 responded with great enthusiasm, agreeing to pay for the services proposed and promising to make an advance of HK\$1.3 million, equivalent to about 3,000 hours of service, to help establish the centre. As a result the Industrial Support Fund approved a grant of HK\$10 million to subsidize the centre's operation for three years.

### University Support

The centre also received a generous start-up fund from the University, which is supportive of its collaboration with industry. Dean of science, Prof. Lau Oi-wah, and dean of engineering, Prof. P.C. Ching, helped look



for an appropriate location for the centre's office and laboratory, in addition to endorsing financial support.

Prof. Kwok was responsible for the acquisition of an *x*-ray photoelectron spectrometer and a scanning Auger microscope and for designing the labs. Prof. Wong helped set up the analysis program of the Rutherford backscattering spectrometer for analysing industrial samples. All four are involved in the recruitment of staff and staff training. The centre was officially opened on 18th January 1999 on the University campus.



Vice-Chancellor Prof. Arthur Li said at the opening ceremony that the setting up of the centre was necessitated by the demands of society and the market. It will help advance the development of local industries and the University's research, and establish an effective model for future collaboration between academia and industry.

## Collaboration Between Academia and Industry

In the past the surface finishing and metal finishing industries could only rely on overseas expertise to solve their production problems. The costs were astronomical and only large manufacturers could afford the service. Medium and small manufacturers could hardly bank on this method to improve their products. Now with the installation in the centre of state-of-the-art equipment which can provide fast, effective, and high quality service, they can seek speedy assistance locally. Moreover they will only be charged the use of the equipment (HK\$500 per hour for industry and HK\$300 for academia). Expert service and analysis are free.

For surface finishing and metal finishing



(From left) Prof. Ian Wilson, Prof. Leo Lau and Prof. Raymond Kwok next to the scanning Auger microscope

industries, the design and development departments are usually located in Hong Kong even if production takes place on the mainland. The demand for materials analysis services is therefore always there. Import/export agencies of industrial materials also need this kind of technology for quality control of their merchandise. Even large manufacturers with in-house materials analysis equipment will have to resort to the centre's services at times because combined in the centre are the facilities and wide-ranging expertise of the University's Departments of Physics, Chemistry, and Electronic Engineering, and the Hong Kong Productivity Council. Problems could thus be solved rapidly and effectively.

## Looking to a Bright Future

During the first three years of its operation, the centre will strive to promote its services among manufacturers so as to gain their faith and establish connections. In the latter half of 1998, over 30 manufacturers used some 500 hours of the centre's services. And in January 1999 alone over a hundred hours were used. At this rate, the centre will easily reach its target of offering 4,500 hours of service in three years. Centre director Prof. Leo Lau is full of confidence that the centre will very soon be able to break even and stand on its own.

Important tasks in the coming months include obtaining accreditation from ISO 9000 for its analysis procedures, and the development of a computer database of analysis cases to serve as a reference centre for industrial applications. □

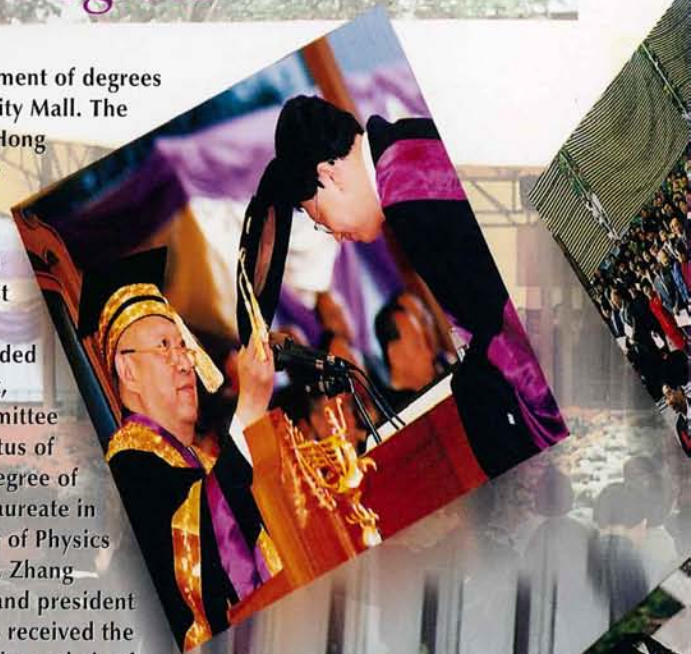


# The 54th Congregation for the Conferment of Degrees

The University's 54th congregation for the conferment of degrees was held on 10th December 1998 at the University Mall. The Honourable Tung Chee-hwa, Chief Executive of the Hong Kong Special Administrative Region, officiated at the ceremony as Chancellor of the University. A total of 4,031 degrees were awarded, including 79 doctoral degrees, 838 master's degrees, and 3,108 bachelor's degrees. Among the graduates this year were the first batch of 14 Masters of Public Health.

On the occasion honorary doctorates were awarded to six distinguished persons. Prof. N.G.D. Malmqvist, eminent sinologist who served on the selection committee for the Nobel Prize in literature and professor emeritus of Stockholm University, was conferred the honorary degree of Doctor of Literature. Prof. Steven Chu, 1997 Nobel laureate in physics and Theodore and Frances Geballe Professor of Physics and Applied Physics at Stanford University, and Prof. Zhang Cunhao, internationally renowned physical chemist and president of the National Natural Science Foundation of China, received the honorary degree of Doctor of Science. Dr. Chen Din-hwa, chair of Nan Fung Textiles Consolidated Ltd. and Nan Fung Development Ltd., Mr. Chow Kwen-lim, chairman and president of Chow Sang Sang Holdings International Ltd., and Dr. Fong Yun-wah, chair of Hip Shing Hong Group of Companies and managing director of Kam Wah Investment Company Ltd., were each awarded the honorary degree of Doctor of Social Science. Their citations were written and delivered by Prof. Andrew Parkin and Prof. Serena Jin, the public orators.

On the same day, the four constituent colleges, the Part-time Degree Programmes, and the Graduate School also held graduation ceremonies for their students.







## Degrees Awarded

### *Honorary Degrees*

Doctor of Laws, <i>honoris causa</i>	1
Doctor of Science, <i>honoris causa</i>	2
Doctor of Social Science, <i>honoris causa</i>	3
	<hr/> 6

### *Doctoral Degrees*

Doctor of Medicine	5
Doctor of Philosophy	73
Doctor of Music	1
	<hr/> 79

### *Master's Degrees*

Master of Philosophy	301
Master of Arts	42
Master of Divinity	1
Master of Fine Arts	1
Master of Music	3
Master of Business Administration	141
Master of Education	87
Master of Nursing	16
Master of Public Health	14
Master of Science	188
Master of Architecture	35
Master of Social Science	2
Master of Social Work	7
	<hr/> 838

### *First Degrees*

Bachelor of Arts	471
Bachelor of Business Administration	567
Bachelor of Education	172
Bachelor of Engineering	424
Bachelor of Medical Sciences	4
Bachelor of Medicine and Surgery	148
Bachelor of Nursing	60
Bachelor of Pharmacy	31
Bachelor of Science	641
Bachelor of Social Science	590
	<hr/> 3,108

<b>Total</b>	<b>4,031</b>
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## Nils Göran David Malmqvist

Fil. lic., D.Litt

Citation



Born in 1924 into an artistic family in Stockholm, Sweden, Göran Malmqvist grew up with a mother who read poetry and a father who was a painter. A keen interest in poetry and painting is a legacy that has sustained him all his life. Their apartment in Stockholm, in the heart of the old city, commands views of an environment full of intriguing architecture: the classical and heroic bulk of the royal palace but a stone's throw away; the humane urbanity of the Academy buildings almost next door.

After his army service, he entered the ancient University of Uppsala to study classics and Roman law, a good preparation for a well-paid legal career. Such is the winding path of human fate that after two years he abandoned law for anthropology and Chinese. Paradoxically, he found his true way by entering the thickets, with much bewilderment, of Daoist philosophy in translation. Fortunately, he asked the great Swedish sinologist, Karlgren, for help. Karlgren not only lent the young man his personal translation of the *Dao De Jing* but took him on as a student, an experience that gave him the feeling that he was working at the forefront of research. After two years he could read classical Chinese with, as he says, 'some competence'. He won a Rockefeller scholarship to study in China in 1948. He lived in a Buddhist monastery at the foot of Mt. Emei, where his love of rambling through the countryside doubtless proved useful for his field work on local dialects. This visit to China produced in him a life-long passion for Chinese culture. He also taught English to a very original young woman, the individualistic Ningsu, later to become his warm and courageous wife.

Leaving China in 1950, he graduated from Stockholm in Chinese in 1951. His university teaching career started with a lectureship at Uppsala. He was soon invited to join the School of Oriental and African Studies (SOAS) in London, thus further broadening his knowledge and making new scholarly contacts. He left London, however, for Beijing in 1956, as Swedish cultural attaché and interpreter. Although his time at the embassy suggests he contemplated a career as a diplomat, he in fact secured another academic post, in the Australian National University, Canberra, rapidly gaining the rank of professor. He became head of Chinese and then dean of the Faculty of Oriental Studies. Malmqvist had gained Australian, indeed international, academic recognition. After his return to Sweden, he became in 1965 professor



and head of the Chinese Department at the University of Stockholm, remaining there until his retirement as professor emeritus in 1990.

His scholarly works of literary history, linguistic analysis, and translation, marked by that particular sensitivity to languages and literatures that is a requirement of first-rate literary translators, have enabled him to produce an impressive record of publications, with an extraordinary range of interest, from classical to contemporary Chinese. His translations of more than 30 books and some 200 shorter works help to confirm his place among the greatest sinologists the West has produced. As a founding member of the *Academia Europaea*, dedicated to the preservation of academic standards, he is a general editor of the four-volume *A Selective Guide to Chinese Literature (1900–1949)*, which covers novel, drama, poetry, and short fiction. The quality of his work has attracted many honours and prizes internationally and at home: honorary degrees from Prague and Stockholm, an honorary fellowship of SOAS in London, membership of the Royal Danish Academy of Sciences, the chairing of the Scandinavian (now Nordic) Institute of Asian Studies in Copenhagen, and many purely Swedish honours that include his Knighthood of the Northern Star for government work, a Gold Medal of Merit for services on a Royal Tour of China, and top translation prizes, such as the Elsa Thulin Medal, as well as the most prestigious of Swedish academic prizes, the Royal Prize. There can, perhaps, be no greater mark of confidence in his qualities and capacity for intellectual work than his election, years ago, to the Royal Swedish Academy of Letters, History and Antiquities, and also that of Sciences. He is a member, too, of ‘The Eighteen’, those trusted so highly as to be life members of the Swedish Academy, directly responsible for the selection of the Nobel prize-winners in literature.

We are therefore proud that Prof. Malmqvist has been a Renditions Fellow (1990–91) in The Chinese University of Hong Kong and has always been available for help and advice. His brilliant work and genial presence, especially as a catalyst for academic enterprises and exchanges, are truly inspiring. We at The Chinese University benefit from his experience on the Advisory Boards both of *Renditions* and the *Journal of Translation Studies*.

The essence of his work, I believe, is that he unmasks what was hidden, bringing the neglected to light, as with his work, to give just one example, on the writer Yang Jifu. As a translator he insists on trying to render at once a service and an emotional impact, by finding not only the voice but the breath and pulse of the writer, by many re-readings; as a scholar he seeks the most objectivity possible, based on evidence; as a linguist he knows that what at first seems dry and unpromising may release fascinating results, as in his work on epistemic modality in archaic Chinese. The discovery that the third person pronoun may be used as a modal verb means that certain texts have been misconstrued and we now need to recognize different meanings in such texts. This is invaluable for all future readers.

Here is a man whose work, scholarly and creative, is the product of a remarkably elegant, practical, generous, and surprising mind. Many years ago, he and his late wife surprisingly decided to spend their honeymoon in a small house on Lantau. To get there involved a strenuous hike. The rightness of their choice is proven by the fact that the house is, astonishingly, modestly, beautifully, still there.

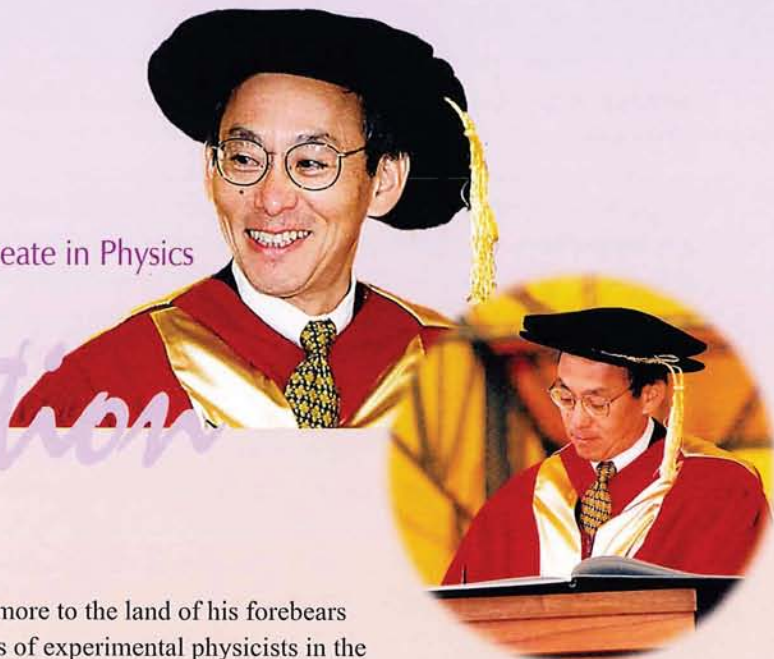
Mr. Chancellor, I present a man of sure spiritual strength and generosity of mind, one of the greatest sinologists of our century, Prof. Nils Göran David Malmqvist, for the degree of Doctor of Literature, *honoris causa*. □



## Steven Chu

AB, Ph.D., Nobel Laureate in Physics

Citation



Let us welcome back once more to the land of his forebears one of the most adventurous of experimental physicists in the world, Prof. Steven Chu. His lasers have brought not just light but precisely concentrated light to what once was dark and unknown. Given the nature of his work, enabling us to measure more precisely than before the minuscule universe of atoms, it is no exaggeration to say that he shares something with that visionary poet, Henry Vaughan, who, excited by the new sciences making headway in the seventeenth century, wrote:

*I saw Eternity the other night  
Like a great ring of pure and endless light,  
All calm, as it was bright,  
And round beneath it, Time in hours, days, years,  
Driv'n by the spheres  
Like a vast shadow moved; in which the world  
And all her train were hurled.*

In 1948, Steven Chu was born into an American Chinese family living in St. Louis, Missouri, in the United States. After graduating from the University of Rochester in physics and mathematics, he went to Berkeley, where, under the supervision of Prof. Eugene D. Commins, he gained his Ph.D. in physics from the University of California at Berkeley in 1976. After two years as a research fellow at Berkeley, he joined Bell Laboratories in New Jersey, later becoming head of the Quantum Electronics Research Department. In 1987, he moved back into academia as professor of physics and applied physics at Stanford. Over the next three years he had been a Morris Loeb lecturer at Harvard, been named Theodore and Frances Geballe Professor of Physics and Applied Physics at Stanford, a chair he still holds, been a special visitor to the Joint Institute for Laboratory Astrophysics in Colorado, and visiting professor at the prestigious Collège de France in Paris. Such things exact a price: he was appointed chair of the Physics Department at Stanford between 1990 and 1993.

Prof. Chu's work brought him the Stoddard Prize for both Physics and Mathematics at Rochester, suggesting his brilliance and potential, a promise fulfilled at home and abroad by



his Humboldt Senior Scientist Award, the Broida Prize for Laser Spectroscopy, the King Faisal International Prize for Science, the Arthur Schawlow Prize for Laser Science of the American Physical Society, the Optical Society of America's William F. Meggers Award for Spectroscopy, his various fellowships, and his membership of not only the US National Academy of Sciences, but of the Academia Sinica in Taipei and, as a Foreign Academician of the Chinese Academy of Sciences. Such achievements testify to his outstanding work in physics and to the crucial role he plays in the promotion of scientific research in China.

In 1997, he shared the Nobel Prize with William Phillips and Claude Cohen-Tannoudji. Prof. Chu showed that the random motion of atoms at high speeds in different directions can be controlled, ordered, and slowed down by strategically positioned lasers. This results in the cooling of the atoms. The laser cooling and trapping of atoms by means of what has been called optical 'molasses' is a breakthrough for theoretical physics as well as for experimental techniques and procedures: to bring atoms almost to a standstill facilitates more precise study of them, has led to deeper understanding of the interaction between light and matter, and has enlarged the arena in which theoretical ideas can be tested. Prof. Chu's methods have stimulated intense activity among physicists worldwide. The study of the quantum behaviour of dilute atomic vapours at very low temperatures has applications in, for example, the refinement of atomic clocks, developments in atomic lithography, and the development of the first atom laser. The exacting precision of Prof. Chu's work is matched by the imaginative inventiveness that distinguishes his experiments and innovative techniques.

Prof. Arthur Schawlow, the inventor of lasers and a Nobel laureate for 1981, points to the wide range of interests in different problems that marks Steven Chu's thinking and to his grasp of theoretical speculation, enabling him to devise the kind of searching experiments that display great virtuosity. The virtuosity is what we might call his style in experimental physics, a style distinguished by a willingness to address a crucial but intransigent problem in a fashion that operates at the edge of what is technologically possible and yet succeeds. Thus he proceeds in those extraordinarily difficult investigations that have made such important contributions to atomic and condensed matter physics, biology, and polymer science. He was the first to obtain high resolution spectra of positronium and muonium. Furthermore, he confirmed De Gennes' model of reptation — the way polymer strands 'relax'. Yet the man capable of such advanced experimental physics is not too lofty to help a student sweep up the laboratory in order to keep it tidy!

Those who attended Prof. Chu's Wei Lun Distinguished Lecture here at The Chinese University of Hong Kong in March 1998 on 'Laser Cooling and Trapping of Atoms and Particles' can agree that it was extremely well received, creating a high level of intellectual excitement. His lectures are acclaimed for the wit and clarity he brings to his exposition of creative scientific ideas. He focuses on what turns out to be the centrally important factor. He influences advanced students and co-workers in ways that earn their sincere gratitude. We are indeed fortunate that he has been able to advise us and to inspire young scientists everywhere with his views on scientific and technological development.

Mr. Chancellor, for his services to the scientific community worldwide, his enthusiastic inspiration of Chinese scientists in particular, and his fruitful liaison with our university, I present Steven Chu, Nobel laureate, for the award of the degree of Doctor of Science, *honoris causa*. □



**Zhang Cunhao**  
B.S. Ch.E., M.S. Ch.E.



## Citation



Prof. Zhang Cunhao, president of the National Natural Science Foundation of China, is a chemist of international renown. His family came from Wudi in Shandong and he was born in Tianjin in 1928.

He moved with his family to Chongqing at the age of nine, and was admitted to Nankai Secondary School at ten. That was the time of the Japanese invasion of China and, in the turmoil of war, the young Zhang moved again from Chongqing to Fujian, and then further to Shaoguan, Hengyang, and Guiyang, sometimes covering a hundred miles a day. After a tortuous journey, Prof. Zhang entered the Department of Chemical Engineering at Central University in Chongqing, obtaining his degree in 1947. He then proceeded to enrol in the Department of Chemical Engineering at Nankai University in Tianjin for a master's programme, and in 1948 he went to the United States. He took the Master of Science in chemical engineering at the University of Michigan in 1950, returning to China later in that year. Since 1951 he has been engaged in research work at the Dalian Institute of Chemical Physics of the Chinese Academy of Sciences. During these years he has held the position of associate research professor, professor, deputy director, and eventually director.

Prof. Zhang's research interest encompasses physical chemistry, chemical dynamics, laser chemistry, and chemical lasers. During the early fifties he led a research team which worked successfully on the synthesis of liquid fuel from water gas. This produced an efficient catalyst, which, when applied to synthesis of liquid fuels from water gas on a fluidized bed, surpassed achievements made in Britain, the United States, Germany, and Japan at the time in terms of effectiveness and product distribution. In the sixties Prof. Zhang directed research on rocket propellant and motor combustion with remarkable achievements, and the multilayer combustion theory of solid propellant he propounded earned much praise from the scientific community worldwide well into the eighties. From the 1970s on, Prof. Zhang turned his attention to laser chemistry and chemical lasers. In the eighties he placed special emphasis on the chemistry and spectroscopy of molecules in excited states and on short wavelength chemical lasers. Such research initiated studies in double resonance multi-photon



electroionization spectroscopy study, and the device of 'ion hole spectroscopy' was developed. The result of this pioneering research project was published in 1986 to great acclaim both in China and abroad. To date, Prof. Zhang has received seven awards from the Chinese Academy of Sciences and four National Science Awards.

Prof. Zhang is known all over the academic world for the many breakthroughs he has achieved. During a research career of some 40 years, he has published over 80 papers, of which many were published in leading international journals. His articles 'Double Resonance Spectroscopy and Molecular Dynamics', published in *Science* in 1993, and 'Evidence for Quantum Interference in Collision-induced Intramolecular Energy Transfer within CO Singlet-Triplet Mixed States', published in the *Journal of Chemical Physics* in 1995, are particularly influential.

Prof. Zhang holds important public offices on top of his research activities. He is the president of the National Natural Science Foundation of China. In 1980 he was elected academician of the Chinese Academy of Sciences and, in 1981, he became a member of the Chemistry Panel of the Degree Committee under the State Council. Between 1984 and 1994 he was elected first as standing member, then as deputy director and finally as the director of the Chemistry Division and a member of the Presidium of the Chinese Academy of Sciences. In 1992 he was made a fellow of the Third World Academy of Sciences, and in 1993 a bureau member of the International Union of Pure and Applied Chemistry. Prof. Zhang is an adviser to the Presidium of the Chinese Academy of Sciences. He was a standing council member of the Chinese Chemical Society, and has been at various times a part-time professor of Peking University, Nanjing University, Fudan University, the University of Science and Technology of China, and Zhejiang University. He is on the advisory editorial board of *Chemical Physics Letters* and *Spectrochimica Acta, Pt A*, and sat on the international advisory board of *Faraday Transactions*, published under the *Journal of Chemical Studies* in Britain.

By taking up positions of high responsibility in administration, teaching, research, and publication, Prof. Zhang has shown outstanding talent and exceptional dedication. When asked what it was that contributed to his success as a scientist, Prof. Zhang pointed out the following qualities. First, he must not back away from difficulty, for scientific research is teeming with unexpected twists and turns. In order to resolve a problem encountered during the course of research, a scientist must be able to look it in the eye, and deal with it with determination and fortitude. Second, research is often dependent on inspiration, with self-discipline playing a complementary role. As in the case of literature and the arts, a research worker in pure science needs inspiration. However, scientific research is not a wild game of guessing either. Furthermore, it has to be admitted that certain quantitative aspects of scientific research are insipid and dull, and success is available only to those who can pursue their projects to the bitter end with determination and tenacity. Third, the importance of team work can never be over-emphasized: scientific research is best carried out by small groups of like-minded people who can stimulate and encourage one another through difficulties which abound on the way. The fourth factor is the importance of team work, in which cooperativeness



is the keyword and the commitment to a mutually agreed objective overrides all other considerations. Even relationship between teacher and pupil is to be ignored. Each member of the team should take on difficult jobs himself while reserving credit for others. This is the only way to success.

Prof. Zhang is blessed with a generous and liberal mind, and he has come independently to conclusions similar to those of Prof. Yau Shing-tung, the famous mathematician, and Prof. Daniel Tsui, who won the Nobel Prize for physics this year. Prof. Yau suggests that Chinese scientists should recognize the importance of academic freedom without clinging to traditional individualism, while Prof. Tsui describes scientific research as a joyous, challenging, meaningful, and rewarding undertaking. Thus these three scientists got to the heart of the matter: scientific research has to be free and totally unfettered.

Prof. Zhang firmly believes that real science should be different from technology. The scientist advocates a ceaseless quest and a pioneering spirit: it is a spiritual yearning for renewal and liberation, and not a pursuit of materialistic ends. To draw a parallel from the Madonnas in the museums in Florence: paintings created before the 14th century are uninteresting portraiture with a dolorous expression and dull eyes. However, Madonnas executed during and after the Renaissance are much more lively and spirited, with eyes that sparkle with life. These changes of course came from an emancipation of the mind and a revitalization of the intellect. It was the result of a liberated soul, and the effect thus created has never ceased to amaze. What is true for the visual arts is also true for science. In a similar manner, the work of the National Natural Science Foundation of China is heavy but far from dull. Among the very large number of research proposals reviewed by Prof. Zhang each year, many open up exciting prospects: as a matter of fact, with assistance and support from all quarters, scientific research in China has made tremendous progress, with major breakthroughs, during the years 1996 to 1998. The National Natural Science Foundation, under Prof. Zhang's presidency, has increased its funding five-fold, and is set to play an increasingly significant role in the promotion of scientific research in China.

Prof. Zhang is not only a scientist of meticulous thinking and admirable foresight. He is also a scholar learned in the arts and science of both the past and the present. In his leisure he enjoys poetry and music, and writing articles which will benefit the younger generations of students. In April 1998 he published an essay on the importance of the linguistic aspects of scientific and technological treatises. In August of the same year he expressed high hopes for Chinese scientists in the international hall of fame in an article entitled 'Now is the time to have a go at the Nobel Prizes'. It would appear that Prof. Zhang had some foreknowledge of this year's awards, particularly the nomination of Prof. Tsui's for the award.

Mr. Chancellor, Prof. Zhang Cunhao has distinguished himself in China as well as in the international community of scientists. His achievements in scientific research, his international reputation, and his major contribution to higher education and the encouragement he gives to young scientists are all worthy of our admiration and respect. I therefore present Prof. Zhang for the award of the degree of Doctor of Science, *honoris causa*. □



**Chen Din-hwa**  
OBE, DBA



## Citation



Dr. Chen Din-hwa has long impressed the property developers and weaving industries of Hong Kong as much by his leadership as by his genius. Born in Ningpo, Zhejiang in 1923, Dr. Chen's father was in the textile business. The young Chen Din-hwa made up his mind early to make his career in business and, in his twenties, was already the general manager of three business organizations in Shanghai and Ningpo. In 1949, he moved to Hong Kong and established Nan Fung Textiles Limited in 1954. It was a modest operation during those early years but, under the diligent and judicious care of Dr. Chen, the company achieved amazing growth and, in less than a decade, had produced marvellous results.

The company underwent a major reorganization in 1969 when Nan Fung Textiles Consolidated Limited came into being. In 1970, Nan Fung was listed on the Hong Kong Stock Exchange and became the holding company of three wholly-owned subsidiary companies, Nan Fung Textiles Limited, Nan Fung Textiles Second Mill Limited, and Kin Fung Garments and Investments Limited, with a diversified portfolio of business interests. Since then the Nan Fung Group has grown from strength to strength, building new plants, bringing in advanced technology, and exploring new business opportunities. In the short span of a few years the Group not only achieved unprecedented success, but also provided new space for development for others in the cotton yarn business. Over the years the weaving industry underwent many changes and reforms to become one of the pillars of Hong Kong's economy, and the contribution of Dr. Chen Din-hwa to this success is universally acknowledged. Hence the epithet 'King of Cotton Yarn', which Dr. Chen certainly deserves.

In 1976, Dr. Chen expanded his business operations to overseas countries, and invested



in the United States, Singapore, and Malaysia. At the same time Nan Fung also purchased land in Quarry Bay, with funds amounting to tens of millions, from the British firm John Swire and Sons. This eventually became Nan Fung Sun Chuen, marking Dr. Chen's first major success in the property development business. In the doldrums of the 1980s Dr. Chen impressed all in the property market by selling Goodview Garden flats in Tuen Mun at special discounted prices, thus taking the first step in rejuvenating the market and bringing about a new enthusiasm for home purchases among consumers. In 1993, he pioneered the hundred per cent mortgage and achieved excellent results. Nan Fung has since become a force to be reckoned with among Hong Kong developers, and Dr. Chen has also come to be known as the 'King of Real Estate'.

In 1992, Dr. Chen's group issued a total of 15 warrants and, within a few months, the Hong Kong stock market took a nose-dive. Dr. Chen thus created another legend in Hong Kong's business community, which could not help but marvel at his foresight and seeming omniscience. The incident also earned him the accolade of 'King of the Warrant'. Today Dr. Chen is at the head of an immense fortune comprising interests in cotton spinning, real estate development, shipping, finance, securities investment, and construction. There are some 200 companies in his group and his business interests extend to all corners of the world. He is certainly a key player in high commerce much respected by his peers.

However, this outstanding billionaire, known for being the King in three industries, prefers a low profile and a simple life. He is a devout Buddhist of the Pure Land Sect and puts the charitable precepts of his religion into practice to the benefit of the community. He has a broad and generous mind and, much as he puts his heart and energy into his enterprises, he cares very little for honours and reputation which he dismisses as temporal. As a result of his benevolent disposition, he established the D.H. Chen Foundation as early as the 1970s. Over the years, Dr. Chen has given substantial funds to various charitable and relief causes in Hong Kong and elsewhere. He is a keen promoter of education, having endowed 600 primary schools under Project Hope in various parts of China. He is also keen on preserving China's cultural heritage: he supports Beijing opera on the mainland. Not only did he fund the establishment of opera schools in China, he also sponsored the visits of many renowned troupes to Hong Kong, thereby promoting a traditional art form and directly contributing to the quality of our cultural life. However, while his kindness has taken many and varied

forms, he makes most of his donations anonymously, his intention being not to be known to the world, but to perform merit for the sake of eternal bliss. The wisdom of Buddhism has indeed found manifestation in Chen Din-hwa as a benefactor of charities. We have said that Dr. Chen Din-hwa is a practising Buddhist, and he is, indeed, sincere in his devotions, and active in the promotion of wisdom. For many years, he has published many research works on Buddhism, and has given away over ten million tape-recorders for the recitation of the sutras. While he remains active in the operation of his huge business empire, he has found time to recite the sutras, and to practise spiritual exercises. This explains why he is free from all cares, enjoys a long life, and takes an optimistic view of the world. He finds himself constantly in a state of religious happiness, where he enjoys spiritual freedom and where his blessings and wisdom increase day by day.

Dr. Chen is an enthusiastic promoter of commerce and industry in Hong Kong. His contributions are acknowledged by all, and his support for social welfare and cultural services are even more widely recognized. Thus he was made an Officer of the Most Excellent Order of the British Empire in 1997, and at the same time received the Highest Award for Cultural and Artistic Development from China's Ministry of Culture. Dr. Chen is the life honorary chairman/president of the Kiangsu and Chekiang, Ningpo, Yongjiang, and Shanghai Fraternity Associations, and an honorary chairman or director of numerous charities. He was a member of the Selection Committee for the First Hong Kong Special Administrative Region Government, a trustee of the Better Hong Kong Foundation, and a vice-chairman of the Association for Celebration of Reunification of Hong Kong with China.

Dr. Chen is a staunch supporter of higher education in Hong Kong. He has taken a keen interest in academic research projects and student welfare, has donated generously to the research on Chinese medicine and the Three-Year MBA Programme of The Chinese University of Hong Kong, and established the D.H. Chen Foundation Student Loans Fund for Shaw College. He is also a member of the advisory board on the Three-Year MBA Programme of the University.

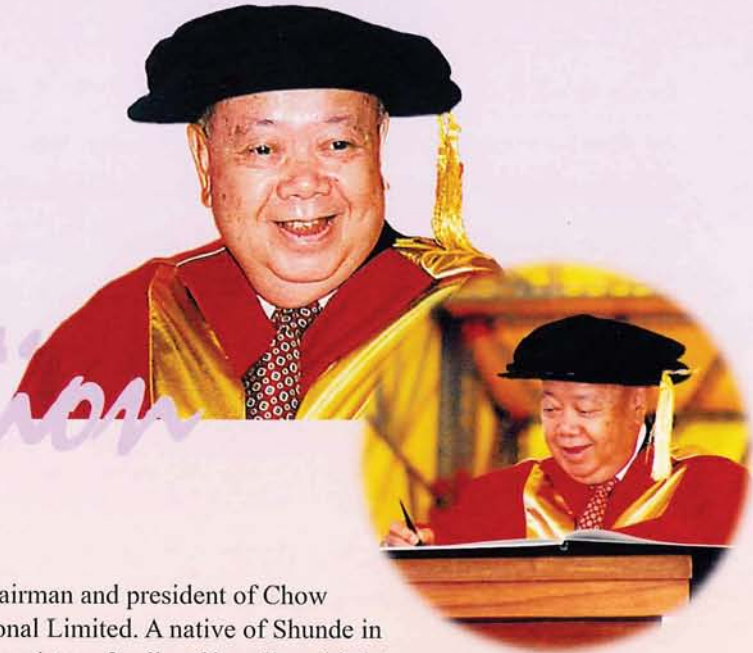
Mr. Chancellor, in recognition of his excellent achievements in commerce and industry and his substantial contribution to social welfare and the development of higher education, I present Dr. Chen Din-hwa for the award of the degree of Doctor of Social Science, *honoris causa*. □



## Chow Kwen-lim

MBE, JP

# Citation



Mr. Chow Kwen-lim is the chairman and president of Chow Sang Sang Holdings International Limited. A native of Shunde in Guangdong, Mr. Chow was born into a family of jewellers, his late father having started the family firm in Guangzhou. The name Chow Sang Sang, which literally means 'incessant growth', was adopted for its connotation of self-renewal and perpetual development. Mr. Chow has certainly brought his father's wish to fruition. During the years of Japanese invasion, Mr. Chow, at the age of ten, moved to Macau to help operate the family business while continuing with his education. He then came to Hong Kong in 1948 and, together with his brothers Messrs Chow Kwen-ling and Chow Kwen-yam, founded Chow Sang Sang as a goldsmith business. The Chow brothers soon expanded their business and today Chow Sang Sang Holdings is a large, diversified, and international conglomerate with a staff of over 1,300. It is a leader in the jewellery industry in Hong Kong and its success is well-known to all.

Under the leadership of Mr. Chow Kwen-lim, Chow Sang Sang Holdings grew rapidly and the quality of its products improved day by day. Not only is the firm a household name in Hong Kong, but it is also well-known abroad. Mr. Chow established a jewellery business in Guangzhou as early as 1958 and the sales contributed to the building up of the country's foreign currency reserve. Currently Chow Sang Sang has 13 establishments on the mainland and 10 mainstream outlets in Taiwan. To meet the demands of a younger market the company has made efforts to modify its products, and as a result the new line 'Emphasis' has been launched with great success. The company also revamps its production strategy to bring in western techniques which blend well with the traditional art of the Chinese jewellers, and complements the high reputation of the company with innovative design concepts. Mr. Chow's vision and foresight are much praised by his peers, as is evidenced by the outstanding achievement award bestowed on him by the jewellery industry.

While his business is firmly rooted in Hong Kong, Mr. Chow casts his eye on the wider world. In addition to managing and developing his substantial business interests, he also actively supports community services, bilateral trade between Hong Kong and the mainland, as well as the promotion of education. Over the years he has held innumerable public offices, paying special attention to youth services, educational enterprises, the Community Chest, the Po Leung Kuk, Caritas Hong Kong, and the Lok Sin Tong Benevolent Society. He was also a member of the Sham Shui Po District Board, the honorary vice-president of the Hong



Kong Girl Guides Association, the vice-president of the Scout Association of Hong Kong, the first vice-president and honorary treasurer of the Lion Club of Bayview Hong Kong, and a member of the Board of Management of Chinese Permanent Cemeteries. Mr. Chow has been presented with many awards, among them the Silver Carp Award of the Girl Guides and the Golden Dragon Award of the Scouts. A Justice of the Peace, Mr. Chow was a Hong Kong District Affairs Adviser and, in recognition of his significant contribution to the community, was made a Member of the Most Excellent Order of the British Empire.

Mr. Chow also actively promotes trade and commerce and supports education for young people in mainland China. In Shunde, the place his family hails from, he founded schools, preserved ancient monuments, introduced ecological measures, and developed tourism as practical ways to bring prosperity to the people of his native place. Mr. Chow's devotion to his homeland and country is well acknowledged, and he now holds honorary citizenships of the cities of Guangzhou, Shunde, Foshan, and Changle. Furthermore, he is also a delegate of the Chinese People's Political Consultative Conference of Shunde.

Mr. Chow is an enthusiastic supporter of higher education in Guangdong and beyond. In his typically practical and low-key manner, he chose to be an anonymous donor of the Award for Students/Teachers Sponsored by a Hong Kong Citizen at Fudan University in Shanghai. He holds the view that while human pursuits are finite, a nation's capacity for development is infinite and that to nurture and educate the young is fundamental to the future of China. With his broad vision and perspective, Mr. Chow has made invaluable contributions to Fudan University in his capacity as honorary professor and university council member.

Blessed with a generous mind and a pleasant character, Mr. Chow is known for his warmth as a person. Despite the resources at his command he is not extravagant in his life style, and he has friends all over the world. He is a major collector of antiques and enjoys travelling with his friends. An accomplished photographer, he has published several very substantial collections of photographs taken during his travels abroad. These include *Chow Kwen Lim's Travels in Europe: A Photo Album* and *Chow Kwen Lim's Travels in Pictures*. Both publications are full of vivid and varied colours, as Mr. Chow captures cities large and small, and moods rustic and romantic, with his camera, and records them for posterity.

Mr. Chow has led a perfect life not only because of his considerable wealth but, more importantly, because of a happy marriage of over 50 years. Mr. and Mrs Chow have four children who are all putting their fine education to good use. A cultured man, Mr. Vincent Chow, his eldest son, Justice of the Peace, was made a Member of the Most Excellent Order of the British Empire. In addition to being the general manager of Chow Sang Sang Holdings, Mr. Vincent Chow is the chairman of the Hong Kong Arts Development Council, in which he plays a pivotal role in the development of the arts in Hong Kong.

Apart from his many commitments to community service, Mr. Chow Kwen-lim is also a supporter of higher education in Hong Kong over the years. He is a voting member of the University of Hong Kong Foundation of Educational Development and Research and a member of the Board of Trustees of New Asia College of The Chinese University of Hong Kong. During his term he made substantial contributions to the construction of a student hostel, to the foundation of scholarships which enabled mainland students of quality to pursue higher studies at The Chinese University, and for the development of language training facilities at New Asia College. In recognition of his outstanding achievements in the realm of business, and his exemplary acts of benevolence, Mr. Chancellor, it is with great pleasure that I present Chow Kwen-lim for the award of the degree of Doctor of Social Science, *honoris causa*. □



**Fong Yun-wah**  
DBA, LLD, MBE, JP



## Citation



Education is a life-long process both for individuals and societies. Dr. Fong Yun-wah touches on its essence and significance for us all when he remarks that 'The impact of education is not confined to the existing generation, but never-ending.' Coming from a family where his father had no chance to complete secondary school, Fong Yun-wah's own schooling was interrupted by the war, and so he shares his father's ideal of helping young people to pursue their education, giving them a better practical chance of success in life. He has put this youthful idealism for improving the human condition into practice for over 30 years by donating a constant percentage of profits yearly to this work. He has held firmly to the same hope and optimism throughout his career.

Dr. Fong, in the grand tradition of Hong Kong business people, is chairman of a group of companies, the Hip Shing Hong Group; is also managing director of another firm, the Kam Wah Investment Company; chairs two charitable organizations, the Fong Shu Fook Tong Foundation and the Fong's Family Foundation; while serving as a member of a third, the Hong Kong Pei Hua Education Foundation. Through these activities he has made enormous contributions to the development of schooling at kindergarten, primary, and secondary levels in Hong Kong and especially in mainland China. This splendidly comprehensive effort has led to his being named by Beijing as one of China's Ten Charitable Champions for 1997, a year in which he was the only Hong Kong recipient. Through the Hong Kong Pei Hua Education Foundation he has promoted valuable exchanges between Hong Kong and the mainland, contributing to the development of talent and leadership in China. Nor has he neglected tertiary education, being on the Board of Trustees of United College, The Chinese University of Hong Kong, for over three decades, and on the college's Endowment Fund Committee, as well as taking a keen interest in adult learning, through the Sponsorship and Development Fund Committee in The Open University of Hong Kong. That his caring about education extends widely into China mainland may be seen from the long list of institutions to which he serves as a special adviser, including Nanjing and Yunnan Universities, and



Dongguan College of Science and Technology in Guangdong Province. That his concern about health and social development extends equally widely may be seen from his work as director of the Tung Wah Group of Hospitals (1956), as chairman of Po Leung Kuk (1966), as honorary adviser of Pok Oi Hospital (1997), as vice-patron of the Hong Kong Childhealth Foundation, as a committee member of the Hong Kong Red Cross, as trustee of the Wildlife Fund for Nature in Hong Kong, and as vice-chairman of the China Association (Hong Kong) for Science and Society. That his philanthropy and sense of important fundamentals in a community's development have made a significant impact on many people is doubtless reflected in his appointment to the Selection Committee for the First Hong Kong Special Administrative Region Government.

Dr. Fong's influence in the business community needs no emphasis but it is worth noting that he is an honorary adviser to the Real Estate Developers Association of Hong Kong. It is highly significant that honours and awards he has received come not only from his own country but from Britain, the United States, and Canada. As a Member of the Most Excellent Order of the British Empire, as an honorary degree holder from both the USA and Canada, as well as a Gold Medallist from the University of California at Berkeley, he has shown that he is international in outlook as well as deeply patriotic.

Dr. Fong's meetings with astronomers and astronauts, some of whom are friends, and his involvement as an adviser to the Asteroid/Comet Naming Committee of the Purple Mountain Observatory under the Chinese Academy of Sciences, demonstrate his keen interest in space. The Observatory's International Asteroid/Comet Naming Committee, who named an asteroid the Fong Yun-wah Star, has recently approved Dr. Fong's nomination of an asteroid (3297) to be called the 'Hong Kong Star' to acknowledge the aspirations of local and overseas Chinese, in particular the Hong Kong people. The influential part he plays in these activities show that he has an astronomer's sense of the world as a precious place, supporting both the human race in general and also the Chinese people. His desire to help thus reaches from his own city and country to the truly global.

He is a citizen of the world, a citizen who demonstrates that doing is important, that making friends is important across national boundaries, fostering peace rather than conflict, and that facilitating excellence in others is an art as well as a necessity. As a grandfather, he realizes the significance of giving to little children the best opportunities we can offer.

How does he keep fit amidst all the demands of business, family, and philanthropy? He swims, he exercises, and plays a bit of golf. He exercises the mind and spirit by learning more about Chinese culture and reading Chinese philosophy. When he has an interesting idea, he writes it out and sends it to his friends and others in many different parts of the world. He communicates.

A star among men and women, by whose light we can see what help our society needs, and one who has given generous and lasting help in abundance — such a steadfast star, Mr. Chancellor, is Fong Yun-wah, whom I present to you for the award of the degree of Doctor of Social Science, *honoris causa*. □



# An Address

by Prof. Steven Chu

*Mr. Chancellor, Chairman of the Council, Vice-Chancellor, members of the faculty, ladies and gentlemen, graduates,*

I am honoured to speak on behalf of my fellow honorary degree graduates and say a few words on this auspicious occasion. When I was asked to speak, I believe the emphasis was on 'few words'. I sympathize with this request. When I think back to my own graduation, I do not remember what the commencement speaker said.

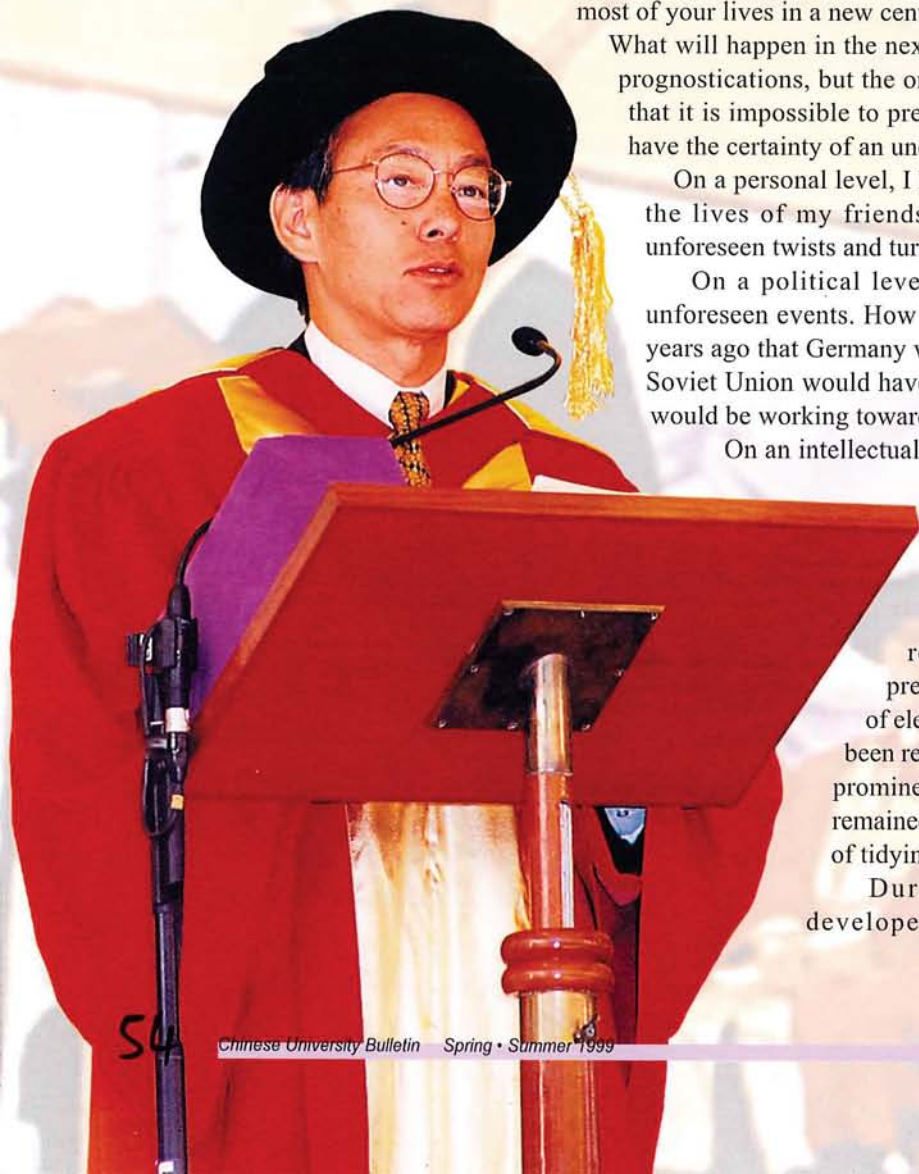
It is customary to give sage advice to the new graduates at commencements, but what advice can I give? Most of the people on this commencement platform, including myself, were born in the first half of this century, whereas you will live most of your lives in a new century and a new millennium. What will happen in the next century? There are many prognostications, but the only thing I am certain of is that it is impossible to predict what will happen. We have the certainty of an uncertain future.

On a personal level, I have seen both my life and the lives of my friends and family take totally unforeseen twists and turns.

On a political level, there have been many unforeseen events. How many people predicted 30 years ago that Germany would be reunified, that the Soviet Union would have fractured, and that China would be working towards a market economy?

On an intellectual level, we can look back to the beginning of the twentieth century and consider the state of physics at that time. Newtonian Mechanics reigned. Some of the key predictions of the unification of electricity and magnetism had been recently verified, and several prominent physicists thought what remained in their field was a matter of tidying up loose ends.

During this century, we developed a description of the





microscopic world, a mysterious 'quantum' form of mechanics that is vastly different from the intuitive, Newtonian-like world. We learned that time and space were intimately linked and that we lived in a world where Euclidean geometry was only an approximation to a 'curved' space-time. We established the molecular basis of life.

In addition to these paradigm shifts in our thinking about nature, such discoveries are transforming our society. The development of quantum mechanics led to the transistor and the laser. These inventions, in turn, led to the computer, optical communications, and the internet. The advent of molecular biology led to the determination of the structure of DNA, genetic engineering and cloning. The extrapolation of physical laws learned from experiments and observations at the human and microscopic scale have been extrapolated to explain the working of the stars and the evolution of the universe soon after its birth 12 billion years ago. We now know that that the Sun will eventually consume the nuclear fuel. The exterior will expand into a Red Giant, a fireball that will vaporize life on earth. The core will collapse into an immensely dense, glowing ember. This is a dire prediction, but we have roughly five billion years to plan an escape.

I apologize for giving a science lecture at a commencement address, but the fact is I love science and will talk about it at the slightest opportunity. When I was at the age of today's graduates, I did not know how much I was going to enjoy physics and science in general. When I applied to graduate school, I had to write a statement describing why I wanted to study physics. I wrote a terse essay that went roughly as follows: 'I like physics. I want to continue studying physics. Going to graduate school will allow me to continue doing what I like to do.' (Although I was accepted to graduate school, I do not recommend you write a similar essay.) During my years as a physicist, I began to appreciate more deeply how many natural phenomena can be described by simple mathematical models and how this approach further illuminated the beauty and elegance of the natural world. I also began to appreciate how knowledge gained through an interplay between discovery and conjecture, experimental test and theory, is knowledge that generations of scientists can build upon. However, for all of its grandeur, science is not everything. It may tell us what will happen for a given set of circumstances, but it does not tell us what *should happen*. That wisdom must come from other sources.

Most of you will not pursue a career in science, and the majority of you may be wondering what I am talking about has to do with you. There may still be some guiding principles that are relevant. First, you should remain idealistic and seek a career that captures your imagination and passion. I was lucky and chose a career that I continue to feel excited about after many years. Second, while attending this university, you have been part of a community of scholars. Physics is just one of many disciplines that may appear as completely separate areas of study. However, there is a common theme. The true lessons of scholarship and real goal of your studies are how to think and evaluate information, how to recognize when you do not understand something, and how to teach yourself. Although your teachers do not know what will happen in the future, they are giving you this set of intellectual tools. These tools you have received will not only allow you to adapt to the future, they will also allow you to guide it.

In closing, I am reminded a piece of advice my friend and colleague, Arthur Schawlow, has given me: 'When speaking, have something to say. Say it. Then stop.' I am not sure I had anything profound to say, but I will stop now. Thank you for your attention and good luck to you all. □





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## Council News

### *Resignation of Vice-Chairman*

Dr. Alice K.Y. Lam resigned from her appointment as vice-chairman and member of the Council and all her other posts at the University from 1st January 1999.

At a Council meeting held on 30th November 1998, vice-chancellor Prof. Arthur K.C. Li praised Dr. Lam for the very able leadership she had rendered to the University for over two decades, and thanked her for the outstanding contributions she had made.

Dr. Lam has been appointed as chairperson of the University Grants Committee from 1st February 1999.

### *New Vice-Chairman*

Mr. Raymond Kwok has been elected by the University Council as vice-chairman of the Council for two years from 2nd March 1999.

Mr. Kwok was first elected as Council member in November 1994, and has contributed immensely to the University's financial management since becoming University treasurer and chairman of the Finance Committee in 1997. Mr. Kwok is also chairman of the University Tender Board, a member of the Campus Planning and Building Committee, convener of the Committee on Donations, and a trustee of the University's Staff Superannuation Scheme and other foundation funds.



### *New Treasurer*



Mr. Roger K.H. Luk has been appointed treasurer of the University for three years from 2nd March 1999. A Council member since November 1997 and currently a member of the Terms of Service

Committee, Mr. Luk has also been a council member of other local universities for many years and is familiar with Hong Kong's tertiary education scene. An early graduate of the Three-year MBA Programme of the University, he has offered his services to CUHK through his capacities both as Council member and alumnus.

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## University Members Honoured

### *Honorary Doctorate and Onsager Prize for Prof. C.N. Yang*

Prof. Chen Ning Yang, Nobel laureate in physics, Distinguished Professor-at-Large of the University, and Albert Einstein Professor of Physics at the State University of New York at Stony Brook, was conferred an honorary degree of Doctor of Science by the University of Michigan on 20th December 1998.

Prof. Yang was also selected by the Onsager Prize Committee as the 1998 recipient of the coveted Onsager Prize in recognition of his contributions to statistical mechanics. The award was presented to Prof. Yang at the centennial celebration of the American Physical Society in Atlanta in March 1999.



### ***Honorary Fellowship and Doctorate for Prof. Arthur K.C. Li***

Prof. Arthur K.C. Li, vice-chancellor of the University, was awarded an honorary fellowship on 6th November 1998 by the Royal College of Surgeons in Ireland, the highest honour the college can bestow and which is reserved 'for those special and talented few who make significant contributions to the progress of medicine and the betterment of humanity'.



Prof. Arthur K.C. Li (left) being conferred the degree of Doctor of Science, *honoris causa*, by the University of Hull.

Prof. Li was also made an honorary graduate of the University of Hull, UK, in recognition of his multifarious capabilities and contributions to the world. He was conferred the honorary degree of Doctor of Science by Prof. David N. Dilks, vice-chancellor of the University of Hull, at a ceremony held at the Kowloon Shangri-La Hotel on 25th February 1999.

### ***Honorary Doctorate for Prof. Ambrose King***

Prof. Ambrose King, pro-vice-chancellor of the University, was conferred an honorary degree of Doctor of Letters by the Hong Kong University of Science and Technology on 13th November 1998.

### ***Prof. Victor Chan Wai-kwong Selected as Outstanding Young Person 1998***

Prof. Victor Chan Wai-kwong, associate professor in the Department of Music, was selected one of six recipients of the Outstanding

Young Persons Award for 1998.

### ***Prof. Dennis S.C. Lam Named Young Leader of the Year***

Prof. Dennis S.C. Lam, chair of the Department of Ophthalmology and Visual Sciences, was selected Young Leader of the Year by the panel of judges for the Sing Tao Daily/Hong Kong Standard 1998 Leader of the Year and Young Leader of the Year Awards.

### ***Mong Man Wai Building Formally Opens***

Mong Man Wai Building, named after Dr. William Mong Man-wai in appreciation of his contributions towards the promotion of research and development in science and engineering, was officially opened on 10th December 1998. The Honourable Tung Chee-hwa, Chief Executive of the Hong Kong Special Administrative Region, officiated at the dedication ceremony.

Located on central campus, the new building houses the Department of Biochemistry, the Department of Mechanical and Automation Engineering, and the Institute of Mathematical Sciences. There are also purpose-designed classrooms, lecture theatres, and state-of-the-art laboratory facilities.

Dr. Mong Man-wai is a distinguished entrepreneur and founder of the Shun Hing Education and Charity Fund, which over the years has donated more than HK\$200 million

From left: Dr. Lee Hon-chiu, Mr. Tung Chee-hwa, Dr. William Mong Man-wai, and Prof. Arthur K.C. Li





to promote education, healthcare, recreation and sports, and environmental protection both in Hong Kong and on the mainland.

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### Accreditation from AACSB-IAME

The Faculty of Business Administration has received accreditation from AACSB-The International Association for Management Education (IAME). This was announced on 18th April 1999 at the association's annual meeting held in Atlanta, Georgia, USA.

AACSB-IAME is internationally renowned as the premier accrediting agency for degree programmes in business administration, accounting, and management, and The Chinese University is the first institution in Asia to have been invited to go through the accreditation process, which includes a self-evaluation report, and an on-site review by a Peer Review Team.

The AACSB-IAME accreditation confirms the high standard of management education achieved by the CUHK Faculty of Business Administration, which will play an even more active role in global management education in the years to come.

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### Asia Academy of Management Established

The University recently took the lead in establishing the Asia Academy of Management, an independent organization run by management scholars interested in management issues pertinent to Asia. The objective of the academy is to encourage management research, education, and dissemination of relevant knowledge to Asia. Its members come from prestigious business schools in Asia including CUHK, the Hong Kong University of Science and Technology, National Central University in Taiwan, Chungnam National University in Korea, Kobe University in Japan, National University of Singapore, the Institute of Management in India, the National Science Foundation of China, as well as other universities in Europe and the US. Prof. Lau



The inaugural conference of the Asia Academy of Management

Chung-ming, chair of the Department of Management at the University, is the founding president of the academy.

The inaugural conference of the academy took place from 28th to 30th December 1998 at the Royal Plaza Hotel.

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### CUHK Forms Accounting League with Mainland and Taiwan Counterparts

The School of Accountancy has formed an academic alliance with the accounting departments of Peking University, National Taiwan University, and Fudan University.

Entitled the Dragon League, the alliance is set up to promote accounting education and

From left: Prof. Jimmy Tsay, National Taiwan University; Prof. Simon Ho, CUHK; the Hon. Eric Li Ka-cheung; Prof. Ambrose King, CUHK; Prof. Lee Kam-hon, CUHK; Prof. Zhang Wen-xian, Fudan University; Prof. Wang Li-yan, Peking University





research in mainland China, Hong Kong, and Taiwan, to examine issues related to discrepancies in accounting standards, and to suggest solutions.

The inaugural ceremony of the Dragon League was held on 6th November 1998. It was followed by a research forum on the role of financial accounting and reporting.

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## All Linked up by Territory-wide Cyber Campus

Hong Kong Cyber Campus, an Internet campus linking up universities, secondary and primary schools, and kindergartens in Hong Kong, was launched on 30th October 1998. With a total funding of HK\$18.9 million from the University Grants Committee (UGC) and the Quality Education Fund, the project is the joint effort of eight local tertiary institutions to promote information technology education in Hong Kong and to enhance links between academic institutions.

Officiating at the launching ceremony were Mr. Joseph Wong, Secretary for Education and Manpower, Mrs. Helen Yu, then Director of Education, Mr. Irving Koo Yee-yin, chairman of the Quality Education Fund Steering Committee, and Mr. Nigel J. French, Secretary-General of the UGC.

Prof. Wong Po-choi (left) and Mr. Joseph Wong (right)



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## CUHK Launches Digital Library Initiative

An agreement was signed by CUHK, the South China University of Technology in Guangzhou, the Academia Sinica in Taiwan, and Carnegie



Pro-Vice-Chancellor Prof. Ambrose King (right) presenting souvenir to Mr. K.C. Kwong, Secretary for Information Technology and Broadcasting of the HKSAR, at the signing ceremony.

Mellon University in the United States on 19th March 1999 to set up high speed experimentation of digital library applications.

The four institutions will also pool efforts in enhancing Digital Library research and application development. They will develop content and digital library applications for the testbed and place valuable contents on the network. They will also assist one another by caching valuable multimedia content locally. An important feature is a cross-lingual platform for mainland China, Hong Kong, Taiwan, and USA.

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## Website on Environmental Impact Assessment

The University has recently become the host of a new bilingual website called EIA Gateway,

Prof. Lam Kin Che (standing), director of the Centre for Environmental Studies, and Ms. Rita Hamn, chief executive of IAIA, demonstrating the use of the EIA Gateway.





which provides information on the latest developments in environmental impact assessment, state-of-the-art techniques in prediction methodology, and professional training. It will also function as a discussion platform for environmental professionals. The website is the collaborative effort of the University's Centre for Environmental Studies, the International Association of Impact Assessment (IAIA), the South China Institute of Environmental Science of the National Environmental Protection Agency, and a few key members of IAIA's local chapter.

### Partnership with SmarTone and Ericsson to Boost Mobile Communications

The University signed a memorandum of understanding on 28th January 1999 with SmarTone and Ericsson for the research and development of added-value mobile data applications over the GSM and/or third-generation mobile network for Hong Kong and other markets.

It is the first academia-industry initiative, involving a prestigious institution of higher learning, a major global telecommunications group, and a leading mobile communications operator in Hong Kong, that is specifically aimed at mobile data applications.

From left: Vice-Chancellor Prof. Arthur K.C. Li; Mr. Hubert Ng, chief executive officer of SmarTone; and Mr. Stephen Yeung, managing director of Ericsson



### CUHK Opens Beijing Liaison Office

The University has established a liaison office in Beijing to promote greater academic cooperation with universities on the mainland.

The liaison office, located in Peking University, was officially opened on 6th October 1998. Officiating at the opening ceremony were Prof. Chen Jiaer, president of Peking University, Prof. Arthur K.C. Li, vice-chancellor of CUHK, and Mr. Xie Weimin, division chief of the Hong Kong and Macau Affairs Office of the State Council.

The new liaison office will play an important role in facilitating communication with the University's various project partners, supplying up-to-date information about the University, and providing logistics support to CU members responsible for organizing collaborative projects on the mainland.

### Inauguration of CUHK-Peking Joint Units



Present at the inauguration ceremony were (from left) Prof. Kenneth Young, pro-vice-chancellor of CUHK; Prof. Chi Huisheng, executive vice-president of Peking University; Prof. Arthur K.C. Li, vice-chancellor of CUHK and Prof. Chen Zhangliang, vice-president of Peking University.

In collaboration with Peking University, CUHK has recently set up a Joint Centre for Intelligence Engineering and a Joint Laboratory for Plant Molecular Biology and Biotechnology.

Officially inaugurated on 24th March 1999 at the University, the centre and the laboratory



will become a base for scientific and technological collaboration, academic exchange, and the nurturing of expertise for both universities.

The centre is involved in education and training, research and technological development, as well as the provision of information-related services to the public.

The laboratory will concentrate on plant genetic engineering and its application in agriculture, medicine, and environment in mainland China, and strengthen collaboration with important scientists and research units worldwide.

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## Centre for Housing Innovations Established



Inauguration of the Centre for Housing Innovations

The Centre for Housing Innovations (CHI) of the Department of Architecture, supported by the Ministry of Construction, was formally established on 18th December 1998 in Beijing.

CHI integrates housing information, technology, and experience from Hong Kong and mainland China for developing innovative architectural strategies to provide housing with the best value, and to improve the building standards and quality of affordable housing in mainland China. It also serves as a clearinghouse for collaboration among international professionals in the fields of architecture, engineering, and construction.

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## Emeritus Professors

The University has awarded emeritus professorship to four retired professors — Prof.

David W. Gwilt, Prof. Omar Wing, Prof. Vincent Lum and Prof. Tunney F. Lee — with effect from 1st December 1998.

### *Emeritus Professor of Music*



Prof. David William Gwilt has been awarded the title of Emeritus Professor of Music. He joined the University as senior lecturer in music in 1970 and became the first professor of music of the University in 1981. From 1974 to 1992, he was chairman of the Department of Music.

Prof. Gwilt retired from the University on 30th September 1996 after 26 years of distinguished service.

### *Emeritus Professor of Information Engineering*

Prof. Omar Wing has been awarded the title of Emeritus Professor of Information Engineering.

In 1991 Prof. Wing joined The Chinese University as acting dean and later dean of the Faculty of Engineering and as professor of information engineering. As a member of the University Council, the Senate and the Administrative and Planning Committee, Prof. Wing made remarkable contributions to the overall development of the University.

Prof. Wing retired from the University on 14th July 1998.



### *Emeritus Professor of Systems Engineering and Engineering Management*



Prof. Vincent Lum has been awarded the title of Emeritus Professor of Systems Engineering and Engineering Management.

Prof. Lum joined the University as founding chair



of systems engineering in March 1991. He made remarkable contributions in the setting up of the curriculum and programmes and the recruitment of quality faculty members for the first systems engineering department in Hong Kong.

Prof. Lum retired from the University on 31st December 1997.

### ***Emeritus Professor of Architecture***

Prof. Tunney F. Lee has been awarded the title of Emeritus Professor of Architecture.

He joined The Chinese University in 1990 as the founding chair of architecture. Under his chairship, the young Department of Architecture made landmark developments.

Prof. Lee has made remarkable contributions to the University Council, the Senate, Chung Chi College, and the Campus Planning Committee, and has rendered invaluable service for the overall development of the University. He retired from the University on 3rd September 1998.



### **Professorial Appointment**



Prof. Tony Gin was appointed professor of anaesthesia and intensive care on 31st March 1999.

Prof. Gin obtained his M.B. Ch.B. and MD from the University of Otago in 1981 and 1992 respectively, and his B.Sc. in statistics from the University of Canterbury in 1984.

Prof. Gin was registrar of anaesthesia at Addenbrooke's Hospital in England and Middlemore and Auckland Hospitals in New Zealand from 1985 to 1987. From 1988 to 1996 he taught anaesthetic and intensive care at The Chinese University. He was appointed chair of anaesthesia at the University of Otago in 1996.

Prof. Gin is a Fellow of the Royal College of Anaesthetists, the Australian and New

Zealand College of Anaesthesiologists, the Hong Kong College of Anaesthesiologists and the Hong Kong Academy of Medicine. He is also an external reviewer of many medical journals.

### **New Programmes of Study**

The University Senate has approved the introduction of four new programmes:

- Four-year full-time Bachelor of Education Programme in Physical Education and Sports Science for introduction in 1999–2000;
- Professional Diploma Programme in Health Promotion and Health Education for introduction in January 1999;
- Advanced Diploma Programme in Security Studies (Distance Education) for introduction in January 1999 by the School of Continuing Studies; and
- Revised Certificate Programme in Japanese for introduction in Spring 1999 by the School of Continuing Studies.

### **Conferences/Workshops/ Seminars**

- **East Asian Jade International Symposium**, 23rd to 27th November 1998, Centre for Chinese Archaeology and Art;
- **The Fourth Language International Conference on Teaching Translation and Interpreting**, 2nd to 5th December 1998, Research Centre for Translation and the Academy of Social Sciences, Shanghai International Studies University;
- **Public Policy Forum on Further Development of Education in Hong Kong: A Discourse on the Chief Executive's Second Policy Address**, 8th December 1998, Faculty of Social Science and the Hong Kong Institute of Asia-Pacific Studies;
- **The First International Symposium on Computer Learner Corpora, Second Language Acquisition and Foreign Language Teaching**, 14th to 16th December



1998, Department of English;

- **The Fourth International Conference on Confucian-Christian Dialogue**, 21st to 23rd December 1998, Chung Chi College, Department of Religion, Department of Philosophy, and the Christian Study Centre on Chinese Religion and Culture;
- **International Conference on New Professionalism in Teaching: Teacher Education and Teacher Development in a Changing World**, 15th to 17th January 1999, Hong Kong Institute of Educational Research, Faculty of Education, and Professional Actions and Cultures of Teaching;
- **The Art and Science of Midwifery: Meeting the Psychological Needs of Childbearing Women**, 15th January 1999, Department of Nursing and the Hong Kong Midwives Association;
- **Hong Kong Nursing Symposium on Cancer Care**, 23rd January 1999, Departments of Nursing and Clinical Oncology;
- **Conference on Pre-Qin Civilization in the Jiangnan Region**, 25th January 1999, Art Museum;
- **Workshop on Advancing Family Medicine in China**, 12th and 13th March 1999, Department of Community and Family Medicine, sponsored by the Fiftieth Anniversary Fund of New Asia College;
- **The Fourth Annual Scientific Symposium of the Hong Kong Cancer Institute**, 13th March 1999, the Hong Kong Cancer Institute;
- **Symposium on Multimedia Everywhere**, 26th March 1999, Shaw College.

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### Wei Lun Lectures

- Prof. Stephen J. Ball, director of the Centre for Public Policy Research, School of Education, King's College London, delivered a lecture entitled 'Global Trends in Educational Reform and the Struggle for the Soul of the Teacher' on 27th November 1998.

- Prof. Thomas B. Ferguson, Emeritus Professor of Surgery at Washington University School of Medicine in Missouri, gave a lecture on 'Some Observations on Scientific Publishing' on 4th December 1998.
- Prof. Rulan Chao Pian, Professor Emeritus of the Music Department and the East Asian Languages and Civilization Department of Harvard University, gave a lecture on 'The Ethnomusicological Approach to Chinese Music Studies' on 7th December 1998.

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### Visiting Scholars

- Prof. Sanson-Fisher, dean of medicine at the University of Newcastle in Australia, visited New Asia College as its Ming Yu Visiting Professor and gave two seminars respectively entitled 'Changing Behaviour in Primary Care' and 'Teaching Communication Skills' on 15th October 1998.
- Prof. Lin Wen-yueh, Professor Emeritus of the Chinese Department of National Taiwan University, visited Chung Chi College as Siu Lien Ling Wong Visiting Fellow 1998–99 from 5th to 16th January 1999. Prof. Lin gave several talks to staff and students.
- Prof. Yau Shing-tung, professor of mathematics at Harvard University and director of the Institute of Mathematical Sciences at The Chinese University, delivered a lecture entitled 'Mathematics and Society' on 15th January 1999 in his capacity as Sir Run Run Shaw Distinguished Visiting Scholar of Shaw College.
- Prof. Wolfgang Kubin, professor of sinology and head of the Department of Classical Chinese Studies of the University of Bonn in Germany, visited Chung Chi College under its visiting scholar programme. During his visit, Prof. Kubin gave a public lecture entitled "'Only the Chinese Understand China" — Problems of East-West Understanding' on 24th March 1999 and a poetry reading entitled 'Images of Macau — A Chinese-European Perspective' jointly



with Hong Kong poet Leung Ping-kwan on 29th March 1999.

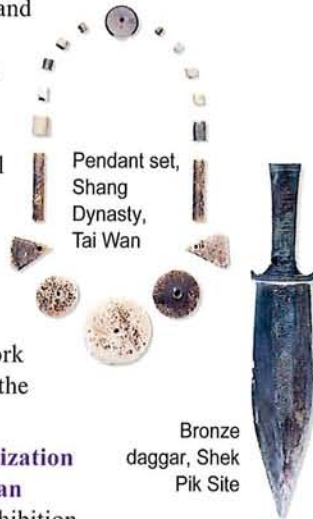
## Art Museum Exhibitions

The Art Museum organized three exhibitions in the West-wing Galleries between November 1998 and May 1999:

- **Unearthing Hong Kong Before the Advent of Writing: A Decade of Archaeology at The Chinese University of Hong Kong** took place from 25th November 1998 to 10th January 1999. With the Centre for Chinese Archaeology and

Art as co-organizer, the exhibition featured archaeological finds resulting from 10 years' intensive excavation work conducted by the centre.

- **Pre-Qin Civilization in the Jiangnan Region**, an exhibition jointly organized with Hubei Provincial Museum, Jingzhou Museum, and Yichang Museum, was held from 22nd January to 21st March 1999.



Pendant set, Shang Dynasty, Tai Wan

Bronze dagger, Shek Pik Site



Bifacial bronze drum, Late Shang Dynasty



Embroidery with intercoiled dragon and pheonix pattern, Mid Warring States period

With the Jiangnan Plain of Hubei as its centre, the Jiangnan Region is an important ancient cultural site along the Yangtze River. The 98 exhibits on display have been excavated in this region and date from the late Palaeolithic period of 50,000–40,000 BP to the late Warring States period of 3rd century BC. They included stone implements, pottery, jades, bronzes, gold ware, lacquerwares, and textiles.

- **The Iron Brush — Rubbings from Ancient Chinese Pictorial Stone Carvings and Bricks** ran from 1st April to 16th May 1999.

The exhibition featured 100 rubbings selected from the Art Museum collection. Exhibits date from the Han Dynasty to the Qing Dynasty.

Literary Gathering of the Orchid Pavilion, Ming rubbing



Procession of Immortals, Han rubbing



## Obituary

The University records with sadness the passing away of Prof. T.B. Lin, Emeritus Professor of Economics and former head of New Asia College, on 12th November 1998 in Taichung, Taiwan, at the age of 63.

Prof. Lin joined the University as assistant lecturer in commerce in 1966, becoming senior lecturer in economics in 1974, reader in 1979, and was appointed professor of economics in 1983. He was head of New Asia College from 1985 to 1992, and retired from the University in 1995. □









香港中文大學  
The Chinese University of Hong Kong