



FROM THE CHIEF EDITOR

In the first issue of the College Newsletter this year, Dr. K.C. Lee shares with us his view regarding the current and future trend in the training in Pathology in the *Message from the President*.

To go back in time, in this featured article, *the Passion for Pathology Runs in the Blood*, we tell the stories of two important families of pathologists that are instrumental in the development of Pathology in Hong Kong.

In the Topical Update from the Education Committee, Dr. Edmond Ma discusses *the Recent Perspectives in Glucose-6-phosphate Dehydrogenase (G6PD) Deficiency*. This is another example where molecular biology is playing an important role in the practice of Pathology.

The 15th AGM 2006 and the 15th T.B. Teoh Foundation Lecture were both well attended. For those who could not be there, the snapshots in this issue can let them take a glimpse of what they have missed.

The Second Trainee Presentation Session 2006 was a great success. It was difficult for the judges to decide on the winner, since all the participants have performed exceptionally well. In this issue, we publish the abstract of the presentation of the winner, Dr. Patricia Fan, who also provides us with her personal view towards this activity.

In *Out of the Whitecoat* section, we report the recent visit by Dr. R. Lycette, another prominent retired pathologist who has contributed significantly to the field of Pathology in Hong Kong. We also discover that our Hon. Treasurer, Dr. W.M. Poon, took part in the last Oxfam Trailwalker event.

Enjoy reading!

Dr. Alexander C.L. Chan,
Chief Editor

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Message From The President

How should we develop our trainees? What are the preparations required for them to meet the challenges they will be facing? With constantly changing practice environments, the training requirements for tomorrow could be very different from what we have been providing in the past. The better we are able to understand the training gaps, the better should be our ability to close those gaps and equip our young pathologists.

Surveys conducted in the United States, for example, have suggested that while newly qualified pathologists are technically well prepared for their jobs, they are not always able to work effectively in the multidisciplinary clinical environments, where teamwork is required for comprehensive patient care. Lack of clinical exposure and of training in communication skills are among the factors identified as causes for such weakness.

Pathology, as we all know, has a special role since the inception of the profession several centuries ago. It is the bridge between the bedside and the benchside, with the mission to transfer and transform scientific discoveries and new technologies into practices in clinical medicine, making it more effective and safe. Through the understanding of the diseases, Pathology has laid the scientific foundation of medicine.

However, quite often there appears to be a significant gap in others' perception of what we seem to be and what we really are - pathologists often give them an image of being "locked-up" in the laboratory and out-of-touch with clinical reality. We seem to be only interested in exotic pathological entities, in sub-classifying diseases into minute

details, and in what's written in the books rather than what's shown in the patient's chart.

Contrary to such image of our profession, the reality is that, with more than 70% of all hospital admissions anywhere in the world relying on the laboratory to make diagnoses, Pathology is right at the core of modern healthcare provisions, and should be the proper centre to drive medical progress and enhance patient care. The value of our service therefore should not be confined to the scientific understanding of disease process, but should be geared towards making real differences in patient management and disease prevention.

Furthermore, many of the recent developments in the profession are made at the earlier end of the event chain of disease process - in prevention and in public health protection - where clinical impacts of our services could be potentially greater. These include the key roles that pathologists are playing in infection control, in the prevention of emerging infectious diseases, in cytology screening for early cancer detection, and in surveillance of genetic abnormalities and poisonous substances.

A pathologist, therefore, is a clinician, a scientist, and, increasingly, a guardian of public health all at the same time. As we move "upstream" along the healthcare event chain, our ability to communicate effectively with our clinical colleagues and with the community becomes more and more relevant.

A new emphasis in our training is therefore needed: scientific knowledge alone is not enough; we need to be able to turn science into health solution. The pathologist requires not only a strong knowledge of the pathogenesis and pathophysiology of disease, but also an in-depth understanding of the problems that are confronting the clinicians and the community.

Training programmes, therefore, should provide not just the up-to-date advances, but also a broad learning experience in the current standards of patient management, to ensure that our young pathologists learn how their services are related to the health outcomes, and understand how clinical decision-making is affected by the provision of laboratory data. They should be able to evaluate the clinical impact of their services, and to assess the cost-effectiveness of various diagnostic and screening options.

Over the past few years, therefore, we have been revising our Training and Examinations Regulations to put in components with more clinical emphasis. In some specialties, trainees are required to have rotational attachments to clinical departments, so that in the process they could learn, in addition to the clinical aspects of diseases, to maintain comfortable partnership with their clinical colleagues in multidisciplinary teamwork for better patient care.

Those who have regularly attended the College Annual General Meetings may have noticed the change in the programme on the AGM days over the past few years. First we have put in educational seminars just before the TB Teoh Foundation Lectures, and now for the past two years the seminars have been replaced by the Trainee Presentation Sessions.

In fact, we are planning to change our Training and Examinations Regulations to identify communication skills as part of the training curriculum, so as to ensure that trainees have an opportunity to take part in this and other similar events. The aim is to encourage trainees to participate in scientific projects, as well as to learn how to communicate their findings and observations to others effectively.

The revisions of training regulations, and the introduction of presentation platforms for trainees, are by themselves not enough. More concerted efforts are required from all of us involved in training and supervision to help to equip the new generation of pathologists to meet the challenge of changing practice environments.

The ultimate goal is, again, to put Pathology at the heart of patient care.



*Dr. K.C. Lee,
the President*

The Passion For Pathology Runs in the Blood

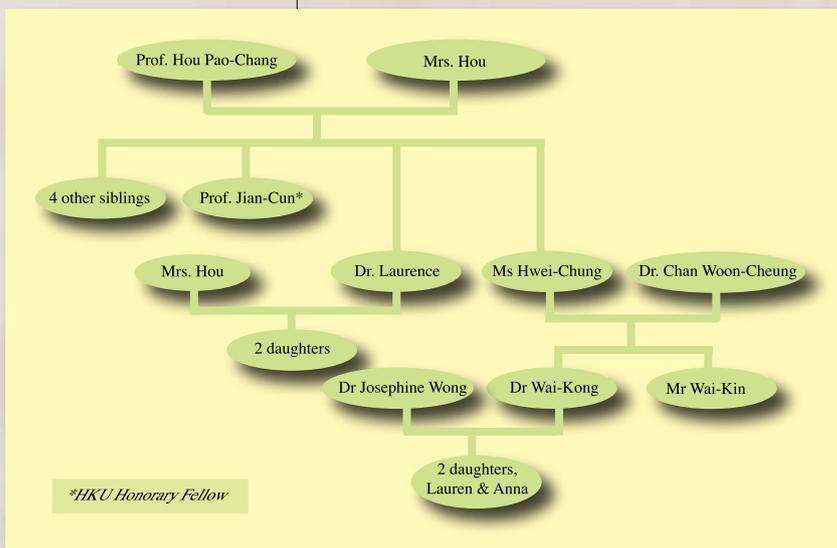
Although the young apprentice in pathology doesn't pick up his/her trade at home, once in a while, some do. In this featured article, two pathologists among us recount the stories of their fathers. Incidentally, these two families are also closely related (see pedigree). Besides, we are happy to have a new member, Dr. Regina Lo, in our reporting team.

REMINISCENCE OF PROFESSOR HOU PAO- CHANG BY DR. LAURENCE HOU

Dr. Laurence Hou, a beloved colleague in private practice, kindly accepted our invitation to an interview to share his fond memories about his father, the renowned Professor Hou Pao-Chang, Head of Department of Pathology at the University of Hong Kong from 1948-1960. Dr. Hou's admiration, respect and love for his father was explicit during the entire interview.

HOW A REBELLIOUS YOUTH LANDED IN PATHOLOGY

Professor Hou originated from a prominent family in Anhui during the last days of the Ch'ing Dynasty. Young Pao-Chang cut off his pigtail during the great awakening, only to be expelled from the family by his father to live on his own. He found enough subsistence by scholarships and working part-time as a copyist to study medicine in Nanjing University, later transferred to Union Medical College of Peking, and finally graduated from Cheeloo University Medical School, Shantung. He had been a student activist during the early revolution days of China, meeting his equally active wife-to-be who was one of the first young women who abandoned the practice of foot binding. After graduation, in the 1920's - 30's, he spent 2 years in Chicago, US, studying histology and pathology; 2 years in Berlin University in Germany, working as demonstrator; and 1 year in London (UCHMS), working with Sir Gordon Roy Cameron. His solid training in pathology, rarely found in those days, quickly established him as Professor of Pathology in Cheeloo University where he met



▲ Pedigree of the Hou and Chan families.

A FAMILY OF DOCTORS

Dr. Laurence Hou came from a family of doctors, a few of them being pathologists. Among them, Professor Hou Jian-Cun, Chair of Pathology Peking Union Medical College, was recently conferred HKU Honorary University Fellowship (2005).



▲ Dr. Laurence Hou (front) telling interesting stories of Prof. P.C. Hou to Dr. Regina Lo (back left), Dr. Florence Cheung (back centre) and Prof. Irene Ng (back right).



◀ *Prof. P.C. Hou (front centre) and his staff in the Department of Pathology of the University of Hong Kong. The legendary Dr. Han Su-Yin (for those who remember 'Love is a Many-splendored Thing') was also in the department during that time (front left second).*

Professor Gordon King (Professor of Obstetrics & Gynecology, HKU, 1938-1956). It was through Professor King that he was recruited to HKU as Professor of Pathology in 1948. His career did not end upon his retirement in 1960, as he was invited by Premier Chou En-Lai to return to China to be the Vice-Chancellor of the newly established Academy of Basic Medical Sciences in Beijing in 1962. He passed away in 1973 due to heart attack after a lifetime of service to the medical field.

EXPERT IN ANCIENT CHINESE CULTURE AND ANTIQUES

Professor Hou had a special interest in ancient Chinese culture, language and antiques. The story goes that he was once consulted by a Cat Street curiosity shop owner about the nature of some excavated old bamboo tablets with inscription of ancient Chinese characters that nobody understood. Professor Hou identified them as medical prescription dating back to 2000 BC. It concerned the treatment of superficial boils by local application of green mould developed on fermented citrus peel, which of course we now understand to be penicillin. These tablets were shown to Howard Florey during a visit to HKU.



▶ *Dr. Laurence Hou's graduation being congratulated by his parents - Prof. & Mrs. P.C. Hou.*

Florey, Chain and Fleming earlier shared the Nobel Prize for the groundbreaking discovery and isolation of the life-saving antibiotic penicillin in 1945. The Chinese custom of burying their life-long secret learning with themselves meant we have few giants to climb on, especially in the realm of science.

THE PROFESSOR WHO CARED TO REPRIMAND

Professor Hou was "notorious" for being a disciplinarian to medical students, concerning their attitude about learning, even towards marriage and life in general. His advice for pathologists was: a good pathologist has to be inquisitive and thorough, even to the degree of being obsessive. Another interesting quote was: whatever you do out of interest, do not expect any return in terms of material gain.

A great soul in a great era - that was how he passed the discipline of pathology to us.

Prof. Hou Pao-Chang: 'A good pathologist has to be inquisitive and thorough, even to the degree of being obsessive.'



▶ *Dr. Laurence Hou (right second) being congratulated by Lord Wilson, Chancellor of Aberdeen University, upon receiving the Honorary Degree of L.L.D.*

A NOSTALGIC EVENING WITH DR. CHAN WAI-KONG: PAYING TRIBUTE TO DR. CHAN WOON-CHEUNG

On a busy Wednesday evening, Dr Chan Wai-Kong kindly talked to us about his father and himself. Wai-Kong is the elder son of the late Dr. Chan Woon-Cheung of the Department of Pathology at HKU from 1960 to 1978. Besides, he is the nephew of Dr. Laurence Hou, his close partner in private practice.



▶ *Dr. W.K. Chan (front centre) recounting the lifetime achievements of Dr. W.C. Chan to the reporting team (clockwise from front left: Dr. Regina Lo, Dr. Alex Chan, Dr. K. T. Loo, Prof. Irene Ng).*

Wai-Kong's genuine yet unspoken respect and love for his father could be easily sensed. A Gold Medalist graduate in 1958, Dr. Chan Woon-Cheung was a great researcher. He pioneered renal pathology research and introduced the use of frozen section and electron microscopy in renal pathology diagnosis, procedures we take for granted nowadays. As Reader in Pathology, he was highly regarded as a great teacher. Later, he was among the first to start pathology in the private sector (in St Teresa's Hospital). In a broader perspective with respect to our healthcare system, Dr Chan was one of the Preparatory Committee members of the Hospital Authority. At an even wider horizon, Dr Chan was appointed a member of the People's Political Consultative Committee (政協). Thus, he was one of the few among us whose station transcended our profession.

Dr Chan Woon-Cheung was a member of the Preparatory Committee of the Hospital Authority and a member of the People's Political Consultative Committee.



◀ *Dr. W.C. Chan holding a very young Dr. W.K. Chan in his hands.*

Dr. Chan passed away in 1991 shortly after surgery for liver cancer due to liver failure. The profession was shocked and deeply mourned for the loss of a dear colleague and respected teacher. His legacy of a fine personality and dedication to pathology is now carried on by Wai-Kong.

Wai-Kong could vividly remember when he was subtly introduced to Pathology as early as 6 or 7-year old, when his father brought him along to his office. It seemed as if he could still remember the distinctive smell of the Pathology Building. Not feeling any pressure from his family, he took up the study of medicine after completing high school in UK. Graduated from Cambridge University and St. Bartholomew's Hospital Medical School, he became a histopathologist after a short period of training in microbiology and was appointed Consultant Pathologist at St. Mary's Hospital, London in 1997. He returned to Hong Kong in 1998 and continued the same calling in his father's private pathology practice.

Wai-Kong's wife, Dr. Josephine Wong, is Assistant Professor in the Department of Psychiatry at HKU. They have 2 daughters, Lauren and Anna.

Perhaps, with the devoted effort of Wai-Kong and Josephine, together with the distinct heritage from the family, it may not be too long to see the emergence of two bright junior pathologists.



◀ *Dr. and Mrs. W.C. Chan spending a Christmas with their two sons, Dr. W.K. Chan (front right) and his younger brother.*

15th Annual General Meeting (AGM) 2006 and 15th T.B. Teoh Foundation Lecture

Our 15th AGM and 15th T.B. Teoh Foundation Lecture were held on 25 November, 2006. We are honoured to have Prof. H.K. Ng, a world-known expert in neuropathology, as our 15th T.B. Teoh Foundation Lecturer. Being one of the contributors to the 2007 WHO Classification of CNS Tumours, Prof. Ng shared with us first-hand information and valuable insight on this milestone in diagnostic formulation. Dr. T.B. Teoh was in the audience as always, listening attentively to the lecture.

Thirteen Fellows and 11 Members were admitted at the AGM. Our College now has 305 members on the Register, including 16 Honorary Fellows, 72 Founder Fellows, 139 Fellows, 23 Overseas Fellows, 27 Members and 28 Associates. Two new members have been elected into the College Council this year: Dr. W.H. Yung (Vice President) and Prof. Margaret Ng (Council Member). We would like to give Dr. Yung and Prof. Ng a warm welcome, and thank the two outgoing Council members Dr. Jason

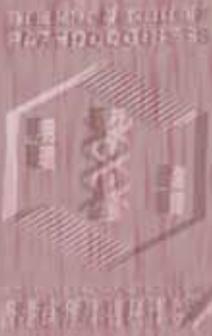
So and Dr. H.K. Mong for their hard work and contribution in the past years. At the meeting, it was also agreed that the annual subscription fee for Fellows retired from remunerable practice be further reduced to a nominal rate of HK\$100.

We take this opportunity to thank the following Fellows and Members for their enthusiastic help in the event, manning the reception and capturing images of memorable moments: Dr. K. M. Chan, Dr. Amanda Kan, Dr. Polly Lam, Dr. Ivy Luk, Dr. Ng Wing Fung, Dr. T.L. Que, Dr. Victor Tang, and Dr. Derick Yau. Our thanks are also due to Dr. Edmond Ma, the excellent Master of Ceremonies on that occasion. Last but not least, we acknowledge our AGM sponsors BioMérieux China Ltd and Becton Dickinson Asia Ltd.

With happy memories of this meeting, we look forward to seeing you at the next, our 16th, AGM on 24 November 2007!



► *Group photo of the College Council with our guests of honour.*



◀ Our President, Dr. K.C. Lee (left), welcoming Dr. T.B. Teoh (right) to the 15th T.B. Teoh Foundation Lecture.



▶ Prof. H.K. Ng captivating the audience with new information regarding the latest W.H.O. Classification of CNS Tumours.



▲ Our President (left) presenting a souvenir to Prof. H.K. Ng (right) after the impressive lecture.



▲ The President and some office bearers of the College presenting the annual report to the Fellows at the AGM.



▲ The Fellows attending the 15th AGM.



◀ Our President (right) welcoming our in-coming Vice President Dr. W.H. Yung (left), and thanking our past Vice President Dr. H.K. Mong (middle).



▶ Many attractive new College souvenirs are now on sale, including ties, scarves and crystal cubes.



College of Pathologists General Meeting



◀ New Fellows and Members of our College, getting ready for the admission ceremony.



▲ Council members and guests of honour on stage.



◀ Our President (right) presenting a souvenir to our out-going Vice President, Dr. H.K. Mong (left).



▶ Our President (left) presenting a souvenir to Dr. Jason So (right), another out-going Council member.



◀ Dr Laurence Hou (front centre) poses for the camera with a group of 'juniors' before the dinner.

▶ Fellows enjoying the dinner after the AGM.



TOPICAL UPDATE

Volume 2, Issue 1 Mar 2007

(This article is reproduced from the publication of the Education Committee, Topical Update, Volume 2, Issue 1.)

Editorial note from the Education Committee:

This is now the second year into the publication of **Topical Update – The Hong Kong College of Pathologists**. The article in this issue is contributed by the specialty of Haematology, on the subject of glucose-6-phosphate dehydrogenase deficiency, a common entity in Hong Kong. We welcome any feedback or suggestions. Please direct them to Dr. Janice Lo (e-mail: janicelo@dh.gov.hk) of the Education Committee, the Hong Kong College of Pathologists. Opinions expressed are those of the authors or named individuals, and are not necessarily those of the Hong Kong College of Pathologists. Happy reading!

Recent Perspectives in Glucose-6-phosphate Dehydrogenase (G6PD) Deficiency



Dr Edmond S K Ma
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Background

G6PD catalyzes the conversion of glucose-6-phosphate (G6P) to 6-phosphogluconate concurrent with reduction of NADP to NADPH, which in turn acts through glutathione and catalase pathways to detoxify hydrogen peroxide, thus counteracting oxidative stress to the cell. In the body, red cells are most susceptible to oxidative damage because oxygen radicals are generated continuously as haemoglobin cycles from deoxygenated to oxygenated forms, as well as being readily exposed to exogenous oxidizing agents present in the blood. Hence G6PD deficiency is a prototype cause of haemolytic anaemia due to intrinsic red cell enzyme abnormality.

Deficiency of G6PD enzyme, an X-linked recessive disorder and the commonest inherited enzymopathy in humans, is prevalent in Southern China. In Hong Kong, the prevalence of G6PD deficiency is 4.47% for males and 0.27% for females based on data generated from neonatal screening. Clinical manifestations of G6PD deficiency range from neonatal jaundice and episodic haemolysis precipitated by drugs, fava beans and infection, to the more severe cases of chronic non-spherocytic haemolytic anaemia (CNSHA) associated with Class I G6PD variants. Occasionally, neonatal jaundice if severe enough may cause death or permanent neurological damage. Furthermore, patients with CNSHA may require intermittent blood transfusions. While more than 400 G6PD variants have been characterized using

biochemical parameters, only around 129 variants have been deciphered at the molecular level [1]. Similar to inherited globin disorders, the spectrum of G6PD mutations is different between ethnic groups. The common G6PD variants previously reported in the Chinese, such as G6PD Canton (nt 1376 G→T), Kaiping (nt 1388 G→A) and Gaohe (nt 95 A→G) are associated with mild to moderate clinical severity, and are categorized as Class II – III variants.

G6PD deficiency, an X-linked recessive disorder, is the commonest inherited enzymopathy in humans.

Spectrum of G6PD variants in Hong Kong Chinese

Like other monogenic disorders, increasing knowledge on G6PD mutations paves the way for genotype phenotype studies. In the seven-year period from 1996 to 2002, a total of 181 consecutive cases of G6PD deficiency as detected by fluorescence spot test at the Haematology Laboratory of Queen Mary Hospital were accrued, in which G6PD enzyme assays were carried out and DNA samples were extracted for mutation analysis at the Department of Biochemistry, the University of Hong Kong. They comprised 139 males and 42 females. Most requests were ordered as routine screening before chemotherapy for haematological malignancies, drug prescription or marrow donation. Other indications for G6PD screening included investigation of

jaundice (including neonatal jaundice), anaemia, movement disorder and confirmation of known history of G6PD deficiency. For males with G6PD deficiency, the G6PD enzyme activity in mean \pm standard error (S.E.) is 0.72 ± 0.09 IU/gHb (reference range: 6.35 – 10.33 IU/gHb), and the corresponding values for haemoglobin (Hb) level is 12.3 ± 0.27 g/dL. For females, the G6PD enzyme activity in mean \pm S.E. is 3.57 ± 0.39 IU/gHb, and the corresponding values for Hb level is 10.8 ± 0.45 g/dL. As this cohort involved hospital patients, the G6PD enzyme activity may be affected by the degree of erythroid stress that in turn is reflected by the Hb level, since young red cells contain higher levels of G6PD than mature ones.

Seven G6PD mutations were detected. Three common variants namely G6PD Canton, Kaiping and Gaohe (also known as Gaozhou) accounted for approximately 70% of all cases. No CNSHA or Class I variant was encountered. The G6PD enzyme activity was correlated with mutation in males and females (Table 1). In males who were hemizygous for the G6PD mutation, the enzyme activity was very low as expected. Slightly higher enzyme activities were seen in G6PD Chinese-4 (nt 392 G→T) and G6PD Chinese-5 (nt 1024 C→T), both of which showed mean enzyme activity of above 1 IU/gHb. The mean G6PD enzyme activity ranged from 2.88 – 5.2 IU/gHb in heterozygous females. Both alleles were abnormal in two female subjects: one homozygous for G6PD Canton showing an enzyme activity of 0.94 IU/gHb, and another compound heterozygous for G6PD Canton and Chinese-4 showing an enzyme activity of 0.603 IU/gHb.

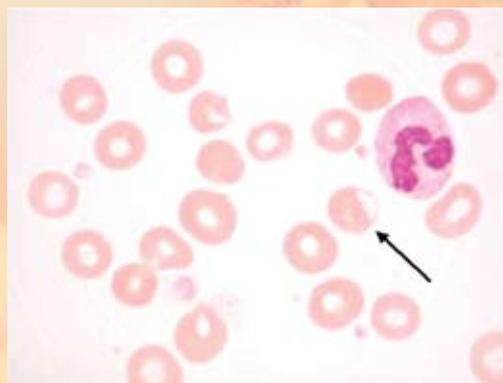


Figure 1. Peripheral blood smear showing a hemi-ghost cell (arrow) during acute G6PD haemolysis in this patient. Wright stain x 1,000

Only six subjects out of the 181 presented as acute haemolytic anaemia related to G6PD deficiency. Among five male patients with G6PD haemolysis, the precipitating factors were paracetamol overdose in suicide attempt, an infective episode, exposure to food dye and reactivation of hepatitis B infection (two patients). A 62-year old woman presented with acute haemolysis (Figure 1) after nitrofurantoin treatment for urinary tract infection. She was a heterozygous carrier of G6PD Canton with enzyme activity of 1.67 IU/gHb and her son, a 29-year old man, was confirmed to be G6PD Canton hemizygote with an enzyme level of 0.28 IU/gHb.

G6PD Canton, Kaiping and Gaohe (Gaozhou) are the three common variants of G6PD mutations in Hong Kong.

Table 1: The spectrum of G6PD mutations in Hong Kong Chinese

G6PD variant	Male subjects				Female subjects*			
	No.	Age (yrs)	Hb (g/dL)	G6PD activity (IU/gHb)	No.	Age (yrs)	Hb (g/dL)	G6PD activity (IU/gHb)
G6PD Canton (nt 1376 G→T)	40	37 \pm 4	12.8 \pm 0.5	0.43 \pm 0.09 (0 – 3.3)	16	43 \pm 5	11.0 \pm 0.5	3.19 \pm 0.82 (0.29 – 9.3)
G6PD Kaiping (nt 1388 G→A)	46	37 \pm 3	11.3 \pm 0.5	0.90 \pm 0.23 (0 – 8.6)	7	35 \pm 10	11.7 \pm 2.1	4.94 \pm 0.48 (3.05 – 6.37)
G6PD Gaohe (nt 95 A→G)	14	38 \pm 7	12.8 \pm 0.7	0.60 \pm 0.19 (0 – 2.36)	5	38 \pm 10	10.9 \pm 1.0	5.20 \pm 1.89 (0.6 – 12.1)
G6PD Viangchan (nt 871 G→A)	9	21 \pm 6	12.3 \pm 0.8	0.42 \pm 0.12 (0.02 – 1.03)	5	46 \pm 10	9.6 \pm 1.2	2.88 \pm 0.77 (0.29 – 4.98)
G6PD Chinese-4 (nt 392 G→T)	7	33 \pm 13	13.2 \pm 0.8	1.05 \pm 0.19 (0.18 – 1.82)	0			
G6PD Union (nt 1360 C→T)	4	59 \pm 15	13.5 \pm 0.7	0.22 \pm 0.13 (0.045 – 0.6)	0			
G6PD Chinese-5 (nt 1024 C→T)	2	42 (mean)	12.2 (mean)	1.95 (mean)	0			
Unknown	9				4			
Poor DNA quality	8				3			
Total	139				40			

Key: *In addition to 40 female heterozygotes, one female subject is homozygous for G6PD Canton, while another female subject is compound heterozygous for G6PD Canton and Chinese-4. Age, haemoglobin level and G6PD activity are tabulated in mean \pm standard error, with range of enzyme activity in parenthesis.

G6PD deficiency in females

The majority of females with detectable G6PD deficiency are in fact heterozygous carriers of G6PD mutations, with the enzyme deficiency being manifested due to extreme lyonization. These subjects are also at risk of drug-induced haemolysis if the enzyme level is sufficiently low. The diagnosis of heterozygous females using screening tests and enzyme assays, however, is unreliable. Although most heterozygous females tend to show an intermediate G6PD activity, the range of lyonization has to be taken into account, so that normal G6PD enzyme activity does not exclude heterozygosity. Molecular analysis is the best way to be certain about the G6PD status of a female subject. Clinically, the level of activity gives a good guide to the severity of G6PD deficiency in heterozygous females. With extreme lyonization and an enzyme activity level that falls into the hemizygous range, the risk is anticipated to be the same as an affected male subject. Moreover, homozygous or compound heterozygous females will not escape detection, as their enzyme activity is very low and comparable to that seen in deficient males.

Since the skewing of X-chromosome inactivation has been reported to increase with age, an intriguing contention is that elderly females who are heterozygous for G6PD mutations may present with biochemical enzyme deficiency [2]. Importantly, these subjects will not be detectable at birth despite population based neonatal screening programmes for G6PD deficiency. To address this issue, a recent local study identified 18 G6PD heterozygotes among 173 elderly Hong Kong Chinese women with median age of 90 years [3]. Three heterozygotes were biochemically G6PD deficient with enzyme levels of 1.3, 3.6 and 4.7 IU/gHb respectively owing to skewed X-chromosome inactivation affecting the wild type allele, and at 1.73% (3/173) the prevalence in females was significantly higher than that obtained from population screening at birth. Fifteen heterozygotes, with skewing apparently affecting the mutant alleles, showed G6PD enzyme level within normal limits but still significantly lower than females not harbouring any G6PD mutation. Based on this experimental evidence, and the fact that female patients with bona fide G6PD haemolysis are encountered in clinical practice, it is therefore prudent to check the G6PD status of female subjects, at least in the elderly, before prescribing drugs with oxidizing properties at our locality.

Skewing of X-chromosome inactivation in heterozygous females increases with age. Elderly females who are heterozygous for G6PD mutations may present with biochemical enzyme deficiency.

Summary

The spectrum of G6PD mutations in Hong Kong is similar to other Chinese populations. Common G6PD variants are G6PD Canton, Kaiping and Gaohe (Gaozhou), which are of mild to moderate severity. Female heterozygotes may also present with biochemical G6PD deficiency. Due to age-related skewing of X-chromosome inactivation, elderly females who are heterozygous carriers of G6PD mutations are particularly at risk of manifesting G6PD deficiency. In addition to males, a case can be made to screen the G6PD status of females, at least in the elderly, before prescribing drugs with oxidizing properties.

Before prescribing drugs with oxidizing properties, it is prudent to check the G6PD status not only in male patients, but also in female patients (at least in the elderly).

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Call for Application for Chan Woon Cheung Education and Research Fund in Pathology

In 1991, friends, colleagues and former students of the late Dr. Chan Woon Cheung endowed a fund in his memory to promote education, training and research in Pathology. In the featured article of this issue of Newsletter, we have the opportunity to interview Dr. Chan Wai Kong, the son of Dr. W.C. Chan, and take a glimpse at the lifetime achievement of Dr. W.C. Chan.

This fund shall only be applied towards the promotion of education, training and research in Pathology, such as research grants for studies in Pathology, or grants to support training in Pathology, including passage fees and subsistence, where the training is conducted in Hong Kong or the applicant is currently working in Hong Kong. Local and overseas workers in Pathology, both members and non-members of the Hong Kong College of Pathologists, may apply for the grants for the purposes set out above.

For those who are interested, please download the application form from our College website (www.hkcpath.org) and return the completed application form to the Registrar.

**The deadline for application submission is
31st May, 2007.**

THE SECOND TRAINEE PRESENTATION SESSION (2006)

The Education Committee introduced the 1st Trainee Presentation Session in 2005, held on the day of the College AGM. The session was well received, and thus a 2nd Trainee Presentation Session was organized and held on the day of the 15th AGM. Eight trainees from different subspecialties presented their work to a panel of five judges (Dr. H.K. Mong, Prof. Irene Ng, Dr. Jason So, Dr. Sidney Tam, and Dr. Dominic Tsang). It was a tough competition, and the judges had a hard time deciding on the winner. Eventually, the winner this year goes to..... Dr. Patricia Y.S. Fan. Congratulations, Patricia!

We are very impressed by the presentations of all participating trainees, and all of their works are of high professional standard. This session has certainly fulfilled its aim in providing an opportunity for trainees to share their research experience, and practice their presentation skills.

For those who were not able to attend the session, below is the abstract of Dr. Fan's presentation, together with her comments regarding the Trainee Presentation Session. We hope this can serve as an encouragement for all trainees and supervisors to continue to support this meaningful activity.

► Group photo of all participating trainees (back row) with the judges and the organizers (front row).



Characteristic Ber-EP4 and EMA expression in sebaceoma is immunohistochemically distinct from basal cell carcinoma

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Background: Sebaceoma is a benign skin adnexal tumor composed of, at least 50%, basaloid (germinative) cells and a lesser proportion of mature sebocytes. In some cases the tumour is

composed almost entirely of germinative cells and the morphological appearances become difficult to differentiate from basal cell carcinoma. Rarely bona fide basal cell carcinoma may display focal sebaceous differentiation. There is therefore considerable overlap between the histological features of sebaceoma and basal cell carcinoma. Previous studies have shown that Ber-EP4 is strongly expressed in basal cell carcinoma of all subtypes while epithelial membrane antigen (EMA) is only occasionally expressed in keratotic and squamoid areas.

Design: The aim of this study is to describe the immunohistochemical reactivity of the cells in sebaceoma to Ber-EP4 and EMA and investigate the utility of this panel to differentiate sebaceoma from basal cell carcinoma.

Results: Twenty four of 25 sebaceomas in this study revealed unequivocal negative expression for Ber-EP4. A single case exhibited focal Ber-EP4 staining, predominantly in mature sebocytes in less than 10% of the tumour cells. EMA was not

expressed in the germinative cells of sebaceoma but was expressed strongly in approximately 50% of mature sebocytes in all cases and highlighted the cytoplasmic vacuoles.

Conclusion: Ber-EP4, a widely used marker in histopathology, is a helpful aid in distinguishing sebaceoma and basal cell carcinoma, and EMA staining of multiple cytoplasmic vacuoles, is useful to confirm sebaceous differentiation.



▶ *Dr. Patricia Y.S. Fan presenting her findings to the judges and the audience.*



◀ *Dr. Patricia Y.S. Fan (left) receiving her prize from the President, Dr. K.C. Lee (right).*

Champion's Thought

It was my great honour to receive the Best Presentation Award at the 2006 Trainee Presentation Session organised by the Hong Kong College of Pathologists. I would like to take this opportunity to express my gratitude to all my colleagues and seniors at Queen Mary Hospital and all the collaborators involved with this article for their unswerving support and extremely helpful advice concerning the presentation.

My presentation was based on a paper "Characteristic Ber-EP4 and EMA expression in sebaceoma is immunohistochemically distinct from basal cell carcinoma" which has just been accepted by the journal "Histopathology" for publication. The article was prepared during my period of elective training in early 2006 at St. John's Institute of Dermatology in London. This was a joint project with materials being collected from three centres, St. John's Institute of Dermatology (U.K.), Warwick Hospital (U.K.) and the MD Anderson Cancer Centre (U.S.A.).

Sebaceoma is a rare benign skin adnexal tumour which can be clinically and histologically confused

with basal cell carcinoma, especially the nodular variant. As described in the presentation, the clinical implications of the diagnosis can be far reaching and serious. In this project, we were able to demonstrate the usefulness of two immunohistochemical markers, EMA and Ber-EP4, to differentiate these two entities. While my knowledge on sebaceous neoplasms was rather superficial at the beginning of this project, through literature research and analysis of the data we collected, I was able to attain a much better understanding of these entities. Certainly without the guidance from my mentors especially Dr. Eduardo Calonje and Dr. Richard Carr, the project would not be a successful one. The whole learning process was interesting and rewarding though a lot of effort was required of a beginner like me.

Finally, I would like to thank the College for awarding the prize to me as it marked a memorable moment in my training years.

Patricia Y.S. Fan
Resident Trainee, Dept of Pathology, Queen Mary Hospital

Out of the Whitecoat:

Homecoming of Another Old Friend

It was a great pleasure to have Dr Ray Lycette return to Hong Kong for a brief visit in late January this year. During his visit, which was primarily to attend the wedding of the daughter of his long-term amah, Ah Mei, Ray was able to visit many of his old haunts and meet with colleagues (as typified in this lunch photo) with whom he had worked and assisted over the years.

From 1973-76 Dr. Lycette worked at Queen Elizabeth Hospital where the laboratory received about 12,000 biopsies and performed about 1200 post-mortems, including some 700 coroner's cases annually. At the time there were only two qualified pathologists; however, the other pathologist resigned leaving him in charge of a number of junior staff, most of whom later passed the M.R.C.Path.

When his first contract ended, Dr. Lycette returned to New Zealand, but he was soon back in Hong Kong. From early 1978 until 1983, he was employed at the University of Hong Kong at Queen Mary Hospital, initially as a Clinical Pathologist and, upon his promotion some seventeen months later, as Senior Clinical Pathologist (Consultant). While he was mainly concerned with routine surgical biopsies and post-mortems, his duties also included postgraduate supervision and teaching as well as lectures and supervision of practical classes in General and Systemic Pathology for Medical and Dental Students. One of Dr. Lycette's major endeavours was to reintroduce the S.N.O.P. coding system, which had been abandoned some

years before, and also to recode the data from many years of using an inadequate system. The outcome was the availability of complete coding of both biopsies and post-mortems covering the entire post-war era (any earlier records having been lost). The department's museum had been neglected for many years, and Dr. Lycette was placed in charge carrying out a careful systematic review of the 900-odd specimens, discarding some, and rewriting much of the text accompanying each specimen. Concurrently he planned for an orderly expansion of the museum, an activity that occupied most of his non-clinical time until he retired from the university. By then there were about 2,300 specimens and the collection had a wide variety of undergraduate and postgraduate teaching material. After leaving the university he continued this work in the museum in his capacity as Honorary Lecturer.

From 1983 until 1988, Dr. Lycette was appointed Consultant Pathologist in-charge of the Hong Kong Government Institute of Pathology, which was based in the Jockey Club building in Sai Ying Pun. There were about one hundred and fifty staff of all grades, and all the main branches of pathology were represented. The Institute was also the public health laboratory for Hong Kong Island. While his duties were mainly administrative, he supervised some 2,000 biopsies and 200-300 coroner's cases each year. He was a member of the Consultant Pathologists Committee which was the controlling and planning group for Government Pathology where his specific planning task was to advise on building, equipping and staffing the laboratory for a new hospital.

On reaching the retirement age of fifty-five years, Dr. Lycette was offered another contract which he completed. Despite being offered a further renewal, he decided to return to New Zealand to be with his family. Some time later he settled in Australia.

(contributed by Dr. R.J. Collins from information supplied by Dr. R. Lycette)

▼Dr. R. Lycette (second right in front row) visiting his old friends in Hong Kong, reminiscing on the good old days. (Back row, left to right: Dr. Eric Chan, Dr. Lily Ma, Dr. Elaine Gwi, Dr. C.W. Chan; Front row, left to right: Mr. W.K. Lai, Dr. J. Ho, Dr. R. Lycette, Dr. R.J. Collins.)



Oxfam Trailwalker 2006



▲ Dr. W.M. Poon (first left) and his teammates received their certificates at the finish point of the Oxfam Trailwalker.

Hip-hip hurray to our Hon. Treasurer, Dr. W.M. Poon, who participated in the Oxfam Trailwalker event last November. He finished the whole 100-km MacLehose Trail without showing any sign of fatigue at the finish point (as clearly evidenced by the attached photo)! Other Fellows (e.g. Dr. K.W. Yan, Dr. Ng Wing Fung) have also been previous Oxfam Trailwalkers. On behalf of Oxfam, we take this opportunity to thank all Fellows who have sponsored or participated in this meaningful activity.

3rd HKCPATH Trainee Presentation Session The Education Committee

The Education Committee is pleased to announce that oral presentation session for trainees will be held on the day of the Annual General Meeting on 24 November 2007. This is a good opportunity for our trainees to share experience and to practise presentation skills. A prize will be given to the best presentation.

Please support this meaningful activity of our College by taking part in the presentation or by encouraging your trainee to participate. An abstract of not more than 300 words can be submitted to Dr WK Luk through e-mail (lukwk@ha.org.hk). Acknowledgement of receipt will be issued.

More details can be found in the College website (<http://www.hkcpath.org>) soon. The deadline for submission is 31 October 2007.

Change in Personnel at the College Chamber

We would like to take this opportunity to announce

the change in personnel at our College Chamber. We welcome

Miss Adrienne Yung, our new College Secretary, who will be assisted by Miss Maizie Chan, our Administrative Assistant. With great sadness, we report that our former College Secretary, Miss Bonnie Chu, passed away last December, having helped to organize our previous AGM despite her deteriorating health.

Her devotion towards her work was much appreciated and will be fondly remembered. We express our heartfelt condolences towards Bonnie's family.



THE COUNCIL OF THE HONG KONG COLLEGE OF PATHOLOGISTS (2006-2007)

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Prof. TO Ka Fai

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To The Editor:

Dear Dr Chan,

I want to let you know that the new format of the College Newsletter is very good. I like it in PDF because it can be handled electronically and generally better than in MS Word format. The design, the layout and the contents are very good.

Congratulations for doing a great job.

Regards,

Chan Suk Hung
New Zealand



It is very encouraging to receive this e-mail from Dr. S.H. Chan, one of our Founder Fellows who is currently practising in New Zealand. We shall try our best to maintain and improve the quality of our Newsletter, but continuous support and contributions from you will make it even better.
The Editorial Board



◀ *The Editorial Board in action: Dr. K. T. Loo (first left), Dr. Florence Cheung (second left), Dr. Alexander Chan (second right) and Prof. Irene Ng (first right).*

NEW BLOOD WANTED FOR OUR WRITING TEAM

Are you attracted by the new layout and style of our Newsletter? Are you prepared to contribute your time and talent to make the Newsletter even better? Are you interested in conducting interviews and writing? Are you at ease with written English? If your answers to most of the above questions are 'yes', you are the one that our writing team has been waiting for. You do not need to be a Fellow to be part of us: Associates and Members are equally welcome. We assure you that it will be a fulfilling job that can provide you with experiences outside your routine work, and increase your exposure to the different subspecialties in our College. Contact our Chief Editor directly, and become part of our team.

The Editorial Board

MEETING ANNOUNCEMENT

Histopathology Course 2007 (HKIAP)

2 June 2007

Kai Chong Tong, Prince of Wales Hospital,
Breast Pathology by Dr. I. Ellis.

<http://www.hkiap.org>

Histopathology Course co-organized by the HK College of Pathologists and HKIAP

11 August 2007

Kai Chong Tong, Prince of Wales Hospital,
Renal Pathology by Dr. C. Jennette.

<http://www.hkiap.org>

24th World Congress of Pathology and Laboratory Medicine

hosted by the College of Pathologists, Academy of Medicine, Malaysia, and the
World Association of Societies of Pathology and Laboratory Medicine (WASPaLM).

20-24 August 2007

Sunway Lagoon Resort in Petaling Jaya, a suburb of Kuala Lumpur.

<http://www.waspalm2007.org>

Histopathology Course 2007 (HKIAP)

25 June 2007

Shaw Auditorium, Prince of Wales Hospital,
Cytopathology by Dr. D. Chhieng.

<http://www.hkiap.org>

Annual Scientific Meeting 2007 (HKIAP)

20-21 October 2007

Shaw Auditorium, Prince of Wales Hospital, **Dermatopathology** by Dr. B. Smoller
and **Gynaecological Pathology** by Dr. J. Prat.

<http://www.hkiap.org>

**15th Annual General Meeting
of the Hong Kong College of Pathologists.
24 November 2007, the HKAM Jockey Club Building**