

## Some Milestones: Specialist Education, Training and Assessment in Singapore\*

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### Abstract

**Singapore had its most significant milestone in 1905 when the Singapore Medical School was founded. The Academy of Medicine, founded in 1957, celebrates its Golden Anniversary in 2007. Thus, the events that influenced the development of postgraduate medicine, specialist education, training and examinations commenced rightly from 1957. These are presented chronologically. The significant roles played by the Academy, the University's Medical School and the Ministry of Health are highlighted, bearing in mind the ongoing developments in Singapore and globally over the years. To keep pace with the further developments and advances, the high gold standards in specialist training and assessment need to be refined with time. This can only be to the benefit of our patients and the community in Singapore and beyond.**

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### Prologue

First, let me thank the Master and Council, Academy of Medicine, for inviting me to speak at this celebration of the Academy's 50<sup>th</sup> Anniversary. It is indeed an incredible privilege and honour, even more so to be associated with the oration that bears the name of our founding Master – Sir Gordon Arthur Ransome.

Professor Ransome was my first Chief of Medicine when I joined his Department (Medical Unit I) at the Singapore General Hospital (or SGH) 51 years ago in July 1956. Besides his clinical prowess, he is fondly remembered for another attribute – his frequent lapses of memory. I suspect sometimes for convenience. In the course of a ward round, “Chew”, he quipped: “*May I have your stethoscope, I left mine in the office*” while his was dangling around his neck! I believe he wanted the use of my diaphragmatic chest piece for an aortic murmur – those were the days when the bell was the only norm for routine use. Ten years on, he asked me to join him in consultation to see his royal patient across the Causeway. On the way to Bukit Serene, “*Chin Hin*” he addressed me by my first name this time: “*I'm sure you know we do not send medical bills to royalty!*” I trust I had not contravened any Civil Service general orders.

A central role of the Academy has always included the advancement of postgraduate medical education and

conduct of higher professional examinations. This mission has been held dearly by Academicians since the foundation of the Academy.<sup>1</sup> A review of some significant milestones would I hope also meet with the approval of our founder Master if he were here today.

### The Early Years

Singapore had its most significant medical milestone in 1905 when the Singapore Medical School was established by the British Colonial Government. The School's standards were consistently high and by 1916, its graduates were fully recognised by the General Medical Council (GMC) of Britain for full registration.<sup>2</sup>

While the School's undergraduate curriculum followed well-established and traditional Commonwealth patterns, there were no formal postgraduate training programmes. Indeed specialist training was unheard of and the Colonial Government discouraged further postgraduate training. Dr G Haridas, the first local graduate to obtain an MRCP, was given a scholarship on the condition that he would not sit for any higher examination. Nevertheless, sit he did and passed on his first attempt in London.<sup>3,4</sup> While it was the Government's policy to discourage local doctors from pursuing postgraduate studies and qualifications, our doctors from the outset felt the need to update themselves

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professionally. Clinical meetings were organised mainly at SGH and Tan Tock Seng Hospital (TTSH) and later at the Kandang Kerbau Hospital (KKH).<sup>2</sup> The forte of the Medical School had always been bedside teaching of clinical medicine and surgery. This was conducted in the course of daily rounds and the teaching of medical students. There were a good number of teachers who, although colonial, were truly committed and dedicated to the profession and teaching. The late Dr Wong Heck Sing, a former President of the College of Family Physicians (CFPS) and Fellow of our Academy highlighted 2 such teachers, namely, Gordon Ransome and Eric Mekie, Professors of Medicine and Surgery respectively. He described them as complete doctors, imparting knowledge and skills to their local colleagues who not only succeeded them but in turn produced many more local professors and teachers for our country.<sup>5</sup>

### The War Years

Formal medical education practically ceased during the Japanese Occupation from 1942 to 1945. With all expatriate doctors away in internment, the Occupation brought local doctors and staff in the hospitals, especially TTSH and KKH, much closer to each other, sharing the common experience of death, dreadful diseases and scarce resources. These were the only general hospitals serving the local population, administered and manned entirely by local doctors and nurses. They became centres where doctors not only discussed their patients, teaching and learning daily by the bedside but also practical policies which they felt deeply about well before and during the War, e.g., the imperative need for a unified service with the equal treatment of local and colonial doctors. The three and a half years of Japanese Occupation gave the local health team tremendous opportunities to assume full responsibility for the medical services under the most trying conditions.<sup>6</sup> Dr Benjamin Sheares, our second President, founding member and Patron of our Academy, wrote, "*The Japanese invasion caused a general awakening of the people of Malaya. In no small measure, the local graduates contributed to this awakening despite having been deliberately excluded from the higher echelons of the medical service*".<sup>2</sup>

I still remember some names of our local medical leaders. From KKH we had Dr Sheares himself, BR Sreenivasan, K Vellasamy and Tay Teck Eng; from TTSH were W Balhatchet, Clarence Smith, Benjamin Chew and ATS Chong; and from Middleton, Ernest Monteiro.<sup>2</sup> They were all colleagues and friends of Professor Ransome.

### Early Post-war Years

The War ended with the formal Japanese surrender on 2 September 1945 and Singapore came under the British Military Administration of Lord Mountbatten, Supreme

Allied Commander, Southeast Asia shortly thereafter. In April 1946, Singapore became a British Crown Colony following the dissolution of the Straits Settlements. Even with the establishment of a unified service, the pace of sending our doctors for formal specialist training was slow. A new scheme in the early post-war years was to send a limited number of doctors to Britain on scholarship for a period of 1 to 2 years to attend courses and sit for examinations but offered little or no training. Most were successful but the programme was nonetheless wasteful in some measure. They were absent from work in Singapore for months or more and were focused mainly in passing the membership or fellowship examinations of the Royal Colleges rather than acquiring new skills.<sup>4,7</sup>

### The Establishment of Postgraduate Institutions

It was inevitable that when our doctors pursued further studies, they would follow the British and Commonwealth pattern. Formal postgraduate education became organised only with the founding of the Academy of Medicine in 1957 and the establishment of the Committee of Postgraduate Medical Studies in 1961. Shortly after the foundation of the Academy, this Committee was formed as a result of a carefully prepared Memorandum sent to the Government and the University. The Committee was the predecessor of the School of Postgraduate Medical Studies, now known as the Division of Graduate Medical Studies (DGMS). Patterned on the Royal Colleges of Britain and Commonwealth but unlike these Colleges, which are responsible only for individual disciplines, the Academy embraces all specialties. These were indeed significant milestones in postgraduate education and the beginning of specialist training programmes. This was also the period when Singapore became more politically independent.<sup>4,8</sup>

In the early years of the Academy and the School, regular courses were organised for candidates preparing for qualifications awarded by the various Royal Colleges in Australasia and Britain. The Academy had always felt that Singapore should have its own professional examinations and qualifications of internationally recognised standards. Many memoranda on this matter had been sent to the Ministry of Health and the University but progress had been painfully slow.

On 8 October 1967, Deputy Prime Minister Toh Chin Chye delivered a speech in which he censured the Faculty of Medicine for not making any progress in the field of higher professional education and examinations. This was prominently reported in the Straits Times of 9 October 1967. The response by the Academy was almost immediate. I recall receiving phone calls from the Master, Dr K Shanmugaratnam, and the Assistant Master, Dr Seah Cheng Siang, proposing for an emergency Council meeting to respond to Dr Toh's speech. This was held on 11 October

and a letter was soon despatched by hand to him indicating that the Academy existed for the advancement of medical specialisation and establishment of higher professional qualifications. We also requested an opportunity for the Council to meet him. He promptly agreed and I remember vividly the morning coffee we had with him in the Conference Room at the City Hall on 4 November 1967. At this meeting Dr Toh suggested that the Academy, the Faculty and the Singapore Medical Association form a Committee under chairmanship of the Master, and jointly send a Memorandum to the Minister for Health. The Committee recommended, “*that higher professional qualifications in various clinical specialties be awarded by the University and that the School of Postgraduate Medical Studies be reconstituted to enable the Academy to participate as equal partners in the training programmes and examinations*”.<sup>7,9</sup>

In April 1968, Dr Toh was appointed Vice Chancellor. A new statute for the School provided for it to function independently of the Faculty under a Board comprising the Vice Chancellor as Chairman, the Director and Deputy Director, 4 teachers of the Faculty, 4 members of the Academy and the Director of Medical Services. At its first meeting, Dr Toh placed on record his appreciation of the services rendered by the Committee under the chairmanship of the Academy’s Master.<sup>7,10</sup> Thus, the meeting on 4 November 1967 was historically significant and the Academy will always be grateful to Drs Toh and Shanmugaratnam for their role in establishing and placing postgraduate education and examinations in Singapore on a firm and formal foundation.

In addition to taking on the functions of the former Committee, higher professional examinations commenced in 1970 leading to the degree of Master of Medicine (or MMed) in Internal Medicine, Paediatrics, Surgery and Obstetrics & Gynaecology. Examinations in other disciplines were later added. To ensure that standards obtained would be equal to those of the Royal Colleges, external examiners from these bodies were appointed. Reciprocity was often granted and since 1986, joint examinations were also established in several disciplines (Table 1).<sup>4</sup> Of equal importance, were we without these courses and examinations, doctors seeking higher professional qualifications would have to take leave to proceed abroad, sometimes for many months or even years. Now there is no wastage of time, manpower and money for the candidate and for the country.

### Specialist Training, Certification and Assessment

In keeping with its major responsibility to maintain the highest standards of specialist practice, Fellowship of the Academy of Medicine, Singapore (FAMS) had always been based on stringent standards. This principle continues

unchanged. Apart from the possession of a higher qualification, a minimum period of accredited training of at least 5 years in a specialty and evidence of sound professional standing, character and conduct are mandatory criteria.<sup>8</sup>

With the rapid development of specialisation, it was recognised that our local MMed and its overseas equivalent qualification did not denote the completion but the beginning of advanced specialist training of a further 3 to 4 years. Thus, in 1975, a Standing Committee on Specialist Certification was formed which led to the institution of the Roll of Specialists. The committee and its specialist boards also laid criteria for basic and advanced training in accredited units in our hospitals.<sup>11</sup> This was the precursor of the present Specialist Register.

1991 was another milestone when the Joint Committee of Advanced Specialist Training (JCAST) was set up to replace the Academy’s Standing Committee, again as a tripartite partnership comprising representatives from the Academy, the Postgraduate School and the Ministry of Health. The objectives included the provision of advanced specialist training and certification and of accreditation of training posts, all of which comprised the mission of the Academy. It was further recognised the need to conduct formal exit certification and assessment by teams of both local and external assessors (Table 2).<sup>4,12</sup>

Table 1. Higher Professional Examinations of Singapore

Master of Medicine	
Internal Medicine	Psychiatry
Paediatric Medicine	Ophthalmology
General Surgery	Diagnostic Radiology
Obstetrics & Gynaecology	Public Health
Anaesthesia	Occupational Medicine
Orthopaedic Surgery	Otorhinolaryngology
Family Medicine	
Emergency Medicine	
Joint Examinations	
General Surgery	MRCS (Edin)/MMed
Ophthalmology	MRCS (Edin)/MMed
Internal Medicine	MRCP (UK)/MMed
Paediatric Medicine	MRCPC/MMed
Obstetrics & Gynaecology	MRCOG/MMed
Emergency Medicine	MRCS (Edin)/MMed

Table 2. Specialists Accreditation Board (Medical Registration Act 1997)

Basic Qualification	Conferring Body
M Med	National University of Singapore
Or Equivalent	
“Exit” Qualification	Conferring Body
FAMS	Academy of Medicine
Or Equivalent	



Fig. 1. Specialist Accreditation Board (2004-2007), Ministry of Health, Singapore

From left to right:

Row 1: \*Clinical Prof Raj Nambiar, \*\*Clinical Prof Ho Lai Yun, \*Prof K Satkunanatham, Prof Lee Eng Hin, \*Prof Chew Chin Hin

Row 2: Clinical A/Prof George Yeo, Dr Maurice Choo, Prof John Wong, \*Prof Chee Yam Cheng, Clinical A/Prof Peter George Manning, Dr Lau Hong Choon, \*Clinical Prof Low Cheng Hock, Dr June Lou

Not in photo: Dr Angela Chong, Prof Lee Tat Leang, Dr Tan Yew Oo

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During the last decade, even more fast moving developments in medical specialisation have taken place in Singapore and globally. To keep pace with these immense developments, the Medical Registration Act was revised in 1997. This provided for the establishment of the Specialist Accreditation Board and the Specialist Register. The chairman is the Director of Medical Services and the 3 ex-officio members are the Master, the Director, DGMS; and the President, Singapore Medical Council. Other members include senior specialists who are appointed by the Minister for Health. The Academy can take heart that no less than 5 Past Masters are members, including the Director of Medical Services (Fig. 1). The Board is assisted by the Joint Committee of Specialist Training (JCST) comprising the Master of the Academy and the Director of DGMS as co-chairmen and by specialist training committees (STCs) of the 35 recognised disciplines.<sup>4</sup> In 1999, the Academy passed a resolution granting its Fellowship to trainees on the successful completion of their training programmes, and having their names placed on the Specialist Register of the Singapore Medical Council.<sup>7</sup> Thus again, this Board, the JCST and the STCs continue to be responsible in this tripartite partnership which is so important in this relatively small community of our small island-nation.

### Epilogue

The Academy has from the early years formed 10 Chapters to represent the various disciplines. Moving onwards in 2004, 6 of these Chapters were transformed into Colleges.<sup>7</sup> In the last 3 years, they have no doubt enhanced their more independent role in the professional development of their respective specialty.<sup>13</sup>

Table 3. Committee on Postgraduate Specialist Training and Examinations

Name	Designation
Chew Chin Hin	Chairman
Chee Yam Cheng	Deputy Chairman
Raj Nambiar	Member
Lee Eng Hin	Member
Lau Hong Choon	Member
Ho Lai Yun	Member
Fock Kwong Ming	Member
Lim Shih Hui	Member
Chan Yew Weng	Member

In his keynote address in 2005 at our Medical School's Centenary Celebrations at the 39<sup>th</sup> Singapore-Malaysia Congress of Medicine, Professor K Shanmugaratnam propounded, "*the DGMS may well need to evolve further in terms of its status and structure, to meet these developments. The University is empowered to award postgraduate degrees and diplomas... However, it is the Academy of Medicine, which has a membership of more than 1800 specialists and corporate Colleges in 6 major medical specialties, which has the full professional capacity to conduct training courses and examinations in these specialties, and it is the Ministry of Health which provides the training facilities, sets the standards of specialist practice and controls the accreditation of medical specialists. Any change that may affect the conduct or regulation of postgraduate medical education and qualifications should therefore be undertaken jointly by the University, the Ministry of Health and the Academy of Medicine.*"<sup>7</sup>

I am pleased to report that indeed a Committee on Postgraduate Specialist Training and Examinations was formed this year comprising the 3 established stakeholder parties (Table 3). A clear consensus has emerged and the Academy with its constituent Colleges will be substantially involved in the conduct of higher professional examinations and FAMS will be the statutory yardstick for the successful completion of specialist training.

The high gold standards of specialist training in keeping with the Academy's mission will continue to be refined. These standards cannot be compromised with ongoing needs and developments. I am convinced that this generation of Academicians and of those to come will continue to lead the Academy to greater heights, keeping faith with the aspirations of our Founders. The Academy can only go forth from strength to strength, continuing to flourish for the next 50 years and beyond. Mr Master, Happy Golden Anniversary and Congratulations.

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