Training of medical laboratory technicians in Hong Kong

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In 1902, after the devastating plague in 1894, Governor Henry Blake recruited Dr William Hunter from the UK as the first government bacteriologist. A purpose-built Bacteriological Institute (BI) was opened in 1906 under Hunter's leadership and investigations to control plague were performed, including the dissection of dead rats. Initially, Hunter employed graduates from the Hong Kong College of Medicine as laboratory assistants. He trained staff and issued a Certificate of Laboratory Instruction that was recognised by the Colonial Office and some British universities.1 Hunter died in 1909 and was succeeded by Dr Harold MacFarlane in 1910. On the departure of the last serving graduate from the Hong Kong College of Medicine, Mr Kwok-tai Leung, a graduate of Queen's College, was appointed in 1912 as laboratory assistant.2

When Mr Yan-pui Szeto joined the BI as a probationary laboratory assistant in 1928, after graduating from King's College, he was coached by Leung who became chief laboratory assistant in 1930. Szeto was promoted to the grade of laboratory assistant after 2 years of on-the-job training. According to his Certificate of Competency (Fig 1), the scope of training included general laboratory methods, bacteriological, histological and serological techniques, haematology, parasitology, vaccine production and examination of water, milk, ice cream and food products. He continued his work at the BI during the Japanese Occupation.

In 1946, the BI was renamed the Pathological Institute (PI) with Dr EF Duck as government pathologist. In the same year Mr AEP Grimmo, who had worked at the Shanghai Municipal Council Laboratory for decades, joined the PI as Chief Technician (Fig 2). Grimmo had been trained at the Lister Institute of Preventive Medicine at Elstree near London in the UK.³ He was responsible for the organisation of more structured training for laboratory assistants who were required to complete 4 years of training.² They attended lectures by the senior medical technologist on different laboratory disciplines, usually after work, once or twice weekly. All students rotated through various laboratories under the supervision of senior staff. After passing a



FIG 1. This Certificate of Competency bears a registration number of 2 which probably reflects the seniority of the owner. The certificate was donated to the Hong Kong Museum of Medical Sciences by a family member of Mr Yan-pui Szeto

proficiency examination, they would be promoted to laboratory technician. For further study, they would need to go overseas. In 1952, Mr Kok-tok Leung, who had joined the BI 2 years after Szeto, went overseas for training and obtained the qualification of Associateship of the Institute of Medical Laboratory Technology (AIMLT). A regular programme of full-pay study leave to London for further training and examination for AIMLT was introduced in 1958.² From early 1960, the AIMLT qualification became a pre-requisite for promotion from Medical Laboratory



FIG 2. This group photo of staff of the Pathological Institute was taken at the front door of the Pathological Institute building, which is now the Hong Kong Museum of Medical Sciences. The occasion was the retirement of Government Pathologist Dr EF Duck (front row, middle) in 1955. Mr AEP Grimmo (front row, far right) was the Chief Medical Technologist. Mr Yan-pui Szeto (second row, fifth from right) was a senior laboratory assistant. This picture was donated to the Hong Kong Museum of Medical Sciences by a family member of Mr Yan-pui Szeto

Technician Class I to Medical Technologist. Szeto was promoted to Medical Technologist in 1961—4 years before his retirement—supported by Grimmo in recognition of his long and loyal service. Grimmo also introduced the intermediate examination of the Institute of Medical Laboratory Technology to Hong Kong in 1964 which replaced the departmental examination. When the government pathology service headquarters were relocated to Sai Ying Pun Polyclinic in 1960, it also became the main training site. The Pathological Institute, now known as old PI, produced vaccines until 1973. Grimmo, who was instrumental in the introduction of more structured training and recognition of the medical laboratory profession, retired in 1965.

In 1963, Professor James Gibson joined The University of Hong Kong as head of the Department of Pathology. He also chaired the Management Committee of Extramural Studies of the University. He introduced courses for medical laboratory technicians based on similar courses in Scotland.⁴

The Department of Extramural Studies introduced the Ordinary Certificate in Medical Laboratory Technology course and the Higher Certificate in Medical Laboratory Technology course in the early 1970s. These were 2-year part-time courses targeting laboratory workers at university and government hospital laboratories. The courses had four main modules covering Clinical Biochemistry, Medical Microbiology, Haematology and Serology, and Histopathology and Cytology. The Ordinary Certificate course was later discontinued and the Higher Certificate course renamed Higher Certificate in Medical Laboratory Science. The certificate was recognised as being equivalent to the AIMLT.

The Hong Kong Polytechnic offered a 2-year Diploma course in 1978. The first students graduated in 1980. All graduates were recruited by the Medical and Health Department as Medical Laboratory Technician II. The Diploma course was upgraded to a Higher Diploma in 1983. It was replaced by a Bachelor's degree course when the Polytechnic

became a university in 1994. In the 1980s, several Senior Medical Technologist (Training) posts were established within the PI. Their main duties were to liaise with the Senior Lecturer/Lecturer of the Polytechnic to arrange field training of students, one of the requirements of the course. These local courses and qualifications provided the basis for the introduction of local laws to regulate the profession.

The Hong Kong Government enacted the Supplementary Medical Professions Ordinance (Cap 359) in 1980 to regulate the registration of allied health professionals including laboratory technicians. The Ordinance was renamed the Allied Health Professions Ordinance on 25 July 2025, to better reflect the professions' roles and status.⁶ The Medical Laboratory Technologists (Registration and

Disciplinary Procedure) Regulations under Chapter 359A of the Laws of Hong Kong were introduced with the registration of medical laboratory technologists commencing on 1 October 1990, and disciplinary control of the profession effective from 1 August 1991. These regulations are subsidiary legislation under the Supplementary Medical Professions Ordinance.⁷ Formal qualifications approved by the Medical Laboratory Technologists Board are now required for registration and practice.⁸

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