

INTERNATIONAL LETTER  
**RHEUMATOLOGY IN SINGAPORE**  
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SINGAPORE is an island of 646 sq km and is inhabited by 3.1 million people. Chinese form the largest segment of the population (78%), Malays 14% and Indians 7%. This rich mixture of races and culture blend in the cosmopolitan city which has become known as the 'Lion City'. In its midst is a health care force of 4500 doctors and 12 800 nurses. Today there are nine trained rheumatologists serving the population of Singapore.

In the 1960s–70s, patients with rheumatic diseases were cared for by primary health physicians, internists and orthopaedic surgeons. In 1980, the need arose for a critical mass of doctors who would be specialists in treating systemic lupus erythematosus (SLE) and the arthritides. Increasingly, patients with SLE and rheumatoid arthritis came under the roof of one hospital in Singapore called the Tan Tock Seng Hospital (TTSH). Training of medical and nursing staff for the care of these patients became imperative. In 1982, the first doctor (MLB) was sent abroad to the Rheumatology Department, Hammersmith Hospital, London, to be trained under Dr Graham Hughes. This was followed by others who were placed under the tutelage of renowned rheumatologists in the UK, USA and Canada. They included professors Richard Batchelor, Mark Walport, Peter Maddison, Andrei Calin, Drs Bevra Hahn, Andrew Saxon, Murray Urowitz, Dafna Gladman, to name but a few. The team of returning doctors were skilled in clinical rheumatology and in laboratory medicine. Rheumatology was initially practised within the boundaries of general medicine, but in 1995 the Department of Rheumatology and Immunology in TTSH was firmly established.

In addition to clinical work, the department staff are busily engaged in teaching rheumatology to undergraduate and postgraduate students, and primary care physicians. Training positions for internal medicine trainees and fellows in rheumatology were made available. These positions are recognized by the Academy of Medicine and School for Postgraduate Medical Studies of the National University of Singapore.

Another important player in the rheumatological scene is the Singapore Society of Immunology, Allergy & Rheumatology. Founded in 1976, its members consist of internists, rheumatologists, orthopaedic surgeons, allied health professionals and pharmaceutical corporations. The society organizes regular scientific meetings and continuing medical education

programmes, supports research, and hosts regional and local conferences.

Alongside the medical and scientific work, efforts were made to promote patient education and awareness. The Singapore National Arthritis Foundation has become the parent to many support groups. Founded in 1983, its 800-strong membership includes patients, physicians and volunteers. The foundation publishes a quarterly newsletter, organizes educational talks for patients and has introduced a subsidy scheme for needy patients. Other support groups include the Lupus Association of Singapore, Ankylosing Spondylitis Club, Rheumatoid Arthritis Support Group, Childhood Lupus and Arthritis Group, and the Osteoporosis Society.

Research in the 1980s was in its infancy and largely limited to clinical studies. In September 1993, the Autoimmune Research Laboratory (ARL) was officially set up with a grant from the Singapore Totalisator Board. The ARL has the 3-fold aim of organizing training courses in laboratory techniques, providing accurate and specialized rheumatological-related tests, and supporting laboratory-based research. Internal and external audits of laboratory tests are performed regularly to ensure good quality control. From 1995, three major studies funded by the National Medical Research Council (Singapore) were initiated. They are: Pathogenetic factors in SLE—a study of genetic and hormonal factors in lupus patients (US\$400 000); a comprehensive study of the problem of osteoporosis in Singapore with reference to peak bone mass, lifestyle habits and genetic factors (US\$320 000); and a prospective study of the quality of life of SLE patients in Singapore (US\$140 000). These research projects resulted in a number of scientific papers and presentations at meetings [1–8]. In 1996, the Singapore Lupus Research Group was formed which spearheads the Asia-Lupus project, a long-term prospective, collaborative study of SLE involving various rheumatological centres in the Asia-Pacific region. Currently, the participating centres include Beijing, Shanghai, Hong Kong and Taipei, and other centres are expected to join in the near future.

Nursing education in rheumatology was recently incorporated in 1994. Two nurse-practitioners in rheumatology provide counselling and patient education, and assist in research in the rheumatic diseases. Vital players in the rheumatology team are the physiotherapists, occupational therapists and podiatrists. Together they provide comprehensive and effective care to the patients.

Networking with the international rheumatology community was greatly strengthened when Singapore

Submitted 4 December 1996; accepted 10 December 1996.

became the venue for the 2nd International Conference on SLE in 1989. More than 200 rheumatologists around the world met and exchanged information in the hub of Asia. Singapore will be hosting the XIX ILAR Congress of Rheumatology in June 1997. This congress promises a feast of scientific and social delights.

In the short space of 13 yr, rheumatology has developed steadily and strongly. Its strength lies in the team of dedicated doctors, nurses, therapists and orthopaedic surgeons who persevered in the face of difficulties. Singapore hopes to be a centre of training for future rheumatologists in the ASEAN (Association of Southeast Asian Nations, consisting of Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam) region and to contribute to a better understanding of the nature of rheumatic diseases. Equally important, we want to be true to our calling to deliver consistently total and effective patient care to those with rheumatic diseases.

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