

# PEDIATRIC RESIDENCY TRAINING IN SINGAPORE

Marion Aw

Department of Pediatrics, National University of Singapore, Singapore

## **Structured pediatric training**

Compared to our neighbors, Singapore is small, with a population of around five million. The pediatric training is a six-year program, which began in mid-1980s, and has been funded by a combination of the Ministry of Health, and the two pediatric teaching and Accreditation Council for Graduate Medical Education International (ACGME-I) accredited hospitals to produce approximately 28 residents per year.

## **Entry requirements**

Since 2013, there have been three medical schools in Singapore, two of which are joint overseas collaborations with Duke University and Imperial College, offering both four- and five-year programs to 450 undergraduates each year. Those from outside the country are entitled to apply for pediatric residency training provided that the Singapore Medical Council recognizes their qualifications.

## **Overview of pediatric training program**

Once they have completed the house-officer year, a doctor may enter the junior residency training lasting 36 months in a three-year slot. If entering during the housemanship year, the trainee is required to do eight months of pediatrics at this first stage.

Since 1993, a conjoint examination of the Singapore Master of Medicine and then UK MRCPCH is set at the third year. The next phase is the senior residency

for three years. The recently introduced written MCQ examination—80% American Academy of Pediatrics (AAP) and 20% local base—happens during this part of the training. This degree is not however recognized in the USA.

By the end of their six years, the residents sit for the exit examination, which is part portfolio and part viva. The latter lasts for one hour, during which the candidate is questioned on ethics and professionalism. Paper critique occurs at this examination as well.

For subspecialties, there are currently two on offer, neonatology and nephrology. Over the next few years, six more will be added. One extra year's training then will take place with subspecialty exit examination in addition.

## **Thirty-six months of residency**

The main foci during the junior years are general and ambulatory pediatrics. Three months of acute care and five months of in-patient service are mandatory. Rotating through neonatology, intensive care, child development, adolescent, and at least four other divisions are required. Most trainees however end up doing up to seven divisions.

## **Core rotation**

The core and elective rotation varies depending on the main teaching setting.

**1. PGY 1 rotation.** Singapore Medical Council (SMC) requires houseman

or internship to work for one year before licensing is granted. During this period, the four-month blocks of pediatrics, surgery, and medicine are allocated for. Pediatric surgery is an option for those with pediatric career ambitions.

**2. Rotation schedule: 3-year pediatric residency.** The main junior three-year training is divided into two three-month blocks. From second year onwards, students are expected to conduct supervision responsibility. An overseas elective is a popular option, where ASEAN country destinations are encouraged. Recently an MOU has been signed with Philippines.

**3. Electives.** Rotation of electives includes clinical, research, local (non-rotating unit), and overseas.

#### **Core competencies**

The questions posed to the residents always are how do they improve themselves and how do they work as a team. Do they look at system error and patient safety methodically? All this work has come about over the past two to three years. The tutors themselves try to conduct themselves in accordance with the requirements and to teach them more effectively.

#### **Other educational requirements**

Moreover, the residents are urged to work and participate in research, publishing papers, presenting in conferences, auditing, safety, and practice-based learning and improvement.

#### **Fellowship training**

Training in all subspecialties is provided. Neonatology and nephrology have gained recognition with four more on the way.

#### **Career path**

After completing the residency program, pediatricians may go on to work in hospitals or in private practice. They can also choose the academic track, which involves being a clinician educator or researcher.

#### **Additional training**

Some chooses further training overseas, while the Ministry of Health and various hospitals abroad offer bonded scholarships. In general Singapore recognizes training of pediatrics in UK, Europe, and USA. Family medicine trainees in Singapore spend four months in pediatrics, involving general and in-patient care, outpatient, emergency, and some subspecialty, particularly respiratory care.