

## **Guideline Document on Programme Organization and Training Centres- Genetics and Genomics [Paediatrics] / GGP**

1. We propose that there will be ONE training programme for the whole of Hong Kong, with a number of accredited training centres.
2. The training programme will take place in training centres under supervision of accredited trainers and supervisors, aimed at taking trainee through all the required curriculum of training in knowledge, practice and skills.
3. A training centre should be a hospital/hospital cluster/service with at least ONE trainer, and providing services and training in GGP. A trainer must have obtained FHKAM(Paediatrics) and had a Fellow of the GGP subspecialty. He/she should be in full-time employment in an accredited institution and spending more than 75% of his/her activity in the practice of the subspecialty.
4. The following hospitals/hospital clusters/services are prepared to apply for accreditation to become training centres: Hong Kong West Cluster /HKWC (QMH/TYH/DKCH) and Clinical genetic services (CGS). For the time being, training in both centres will be required (We propose that in the first 24 months of mandatory clinical training, a trainee shall have either (i) 18 months training in CGS and 6 months training in HKWC, or (ii) 18 months of training in HKWC and 6 months training in CGS). After the establishment of the Hong Kong children's Hospital, it will become the major training centre for GGP.
5. Inspection of the training centres will be conducted before the commencement of the GGP Training Program to establish the first training centre(s).
6. We propose that centres which can provide the following services be accredited for GGP training.

6a. The clinical unit should have the following facilities and workload that to be eligible for accreditation as a training centre(s) for GGP programme:

i. The unit that provides training for wide variety of medical genetic problems, including Mendelian disorders, inborn errors of metabolism, chromosomal disorders, multifactorial disorders, syndromes, congenital malformations, other birth defects and other genetically determined conditions.

ii. The trainees and trainers would dedicate at least 75 % of work in GGP. The unit should have adequate volume of patients to allow adequate training opportunity. The number of new case attendance/ consultations shall be at least 500 cases per year, including out-patient and various in-patient settings (including general paediatrics, intensive care, and sub-specialty wards). The case complexity should be mixed so that about 10% of the patients are in the highly complex, 30% in the complex categories, 30% in intermediate categories and 30 in simple

categories as enlisted in the application.

6b. Each Training Centre should have affiliated with an accredited cytogenetics and molecular genetics Laboratory and diagnostic facilities to provide clinical/laboratory combined rotation

i. The laboratory should provide laboratory service for wide variety of medical genetic problems which included both cytogenetic and molecular aspect, with genetic and genomic testing. The minimum caseload should include all the followings :

- Cytogenetic testing (like Karyotype, FISH study) for at least 200 cases per year
- Genetic testing for monogenetic disease of at least 200 cases per year (included Sanger sequencing, MLPA, southern blotting testing etc).
- Genomic testing including array comparative hybridization (aCGH) and next generation sequencing based testing (panel, exome or genome testing).

6c. Structured educational program, including grand round, journal clubs and presentations in GGP.

7. After the program has started, existing training centre(s) will be subjected to re-inspection and re-accreditation every 5 years or from time to time when the Subspecialty Board deems necessary. The institutional requirements for the GGP are subject to the review of the Subspecialty Board from time to time as necessary.

8. The Service Head or Chief of Service of a Training Centre(s) should inform the Subspecialty Board when there are any changes that may have an effect on the training program in the Training Centre.

9. Elective Modules: For the elective modules, the units providing such training should have an adequate amount of caseload and reasonable facilities that will allow the provision of meaningful and adequate training to the trainee in Genetic and Genomics. Such adequacy of both caseload and facilities will be assessed by the Subspecialty Board, possibly with the advice from the relevant professional bodies.

10. Overseas Training: Overseas training shall be conducted at a reputable Genetic and Genomics Centre. The trainee planning for overseas training shall obtain prior approval from the Subspecialty Board before embarking on the training. The trainee will have to specify such period account for clinical and/or laboratory rotation. The trainee should also need to provide details of the training program and to specify the area of training to Subspecialty Board. The overseas training centre should have a standard and caseload that is broadly equivalent to the standard for the relevant training requirement listed above.

11. The accreditation of training centres, the curriculum, and requirements of training will be reviewed by the Subspecialty Board at regular intervals. New centres fulfilling the requirements for training can applied to become accredited training centres for GGP.

**Note:** *The criteria are provisional. The External Assessor will make the final decision after her visit to the centres and after considering the overall training program in Hong Kong, irrespective of whether or not these criteria have been met.*