1. General Aspects

1.1 In this document and all documents on “Higher Training (Radiology) : Subspecialty Training of various subspecialties”, the following interpretation applies:

- **“Subspecialty Training”** = training for knowledge and skill in a subspecialty, and not attaining training for subspecialty accreditation
- **“Trainer”** = a Fellow of the Hong Kong College of Radiologists, or equivalent
- **“Subspecialty Trainer”** = a trainer recognized by the Hong Kong College of Radiologists to be eligible to supervise the Higher Training trainees for training in specific subspecialty (see 3.10)
- **“Co-Trainer”** = a trainer recognized by the Hong Kong College of Radiologists to be eligible to supervise the Higher Training trainees for training in specific subspecialty (see 3.11)
- **“Trainee”** = a medical doctor registered as a trainee member with the Hong Kong College of Radiologists

1.2 Objectives: To complete supervised training aiming at a radiologist

(a) capable of independent practice in general radiology

(b) with initiation towards subspecialty development

(c) well versed in various imaging modalities to be an effective member of a team in the multidisciplinary approach on patient care

(d) with appropriate professional attitude

(e) motivated towards continuous professional development

1.3 The following should be stressed in higher training:

(a) Practical experience

(b) In-depth knowledge and skill

(c) Increased responsibility

(d) Independent thinking and problem solving

(e) Familiarity with the appropriate problem-orientated clinical guidelines and procedural protocols

1.4 The 2 years of Higher Training should include the following components:

(a) General Radiology Training

(b) Subspecialty Training

(c) Training in relevant attributes: management, audit, quality assurance, research, medicolegal, communication, resource application, etc.

1.5 For a broad knowledge-based exposure, the 2 years of training should comply with the following criteria:
(a) minimum of 6 months fulltime General Radiology;
(b) minimum of two Category A Subspecialty subjects;
(c) remaining period: General Radiology or Subspecialty training in any categories;
(d) minimum of 6 months in one Category A Subspecialty subject;
(e) minimum of 3 months for each one of other Subspecialty subjects.
(f) the following optional pattern is acceptable during any specified training period:

  (i) A combination of one subspecialty subject and general radiology
  (ii) A combination of two subspecialties EXCEPT that there should NOT be combination of two Category A Subspecialty subjects.
  (iii) A training period can be split into two separated periods during Higher Training, but each period must be 3 months or more in duration.

1.6 **Subspecialty Training** is categorized as follows:

1.6.1 **Category A**: well-recognized radiology subspecialties, in terms of body systems or population subgroups, or interventional procedures such as Paediatric Radiology, Musculoskeletal Radiology, Neuroradiology, Vascular & Interventional Radiology, Thoracic Radiology, Gastrointestinal & Hepatobiliary Radiology, Head & Neck Radiology, Breast Radiology and O&G Radiology.

1.6.2 **Category B**: technique-based subspecialties -- Ultrasonography, CT, MRI, Nuclear Medicine.

1.6.3 **Category C**: Subspecialties related to clinical subspecialties particularly strong at a hospital such as Transplantation Radiology, Intensive Care Imaging and Oncologic Radiology.

1.7 All training programs (General Radiology training or Subspecialty training) must be accredited by the College.

1.8 Trainees should participate actively in research projects. At least one research project must be presented at College Annual Scientific Meeting (or regional / international radiology conferences) or published / accepted for publications (in the Journal of the College or other professional journals). Training centers should facilitate trainees to participate in research projects.)

1.9 This document should be read in conjunction with the guidelines on General Radiology and various subspecialties.

2. **Higher Training: General Radiology**

2.1 The program should differ from Basic General Radiology Training, with emphasis on independent performance and supervising responsibility.
2.2 The program should be arranged with designated assignments and rotations.

2.3 Teaching activities: to clinicians, younger trainee radiologists, radiographers, nurses, medical students, etc., to attain in-depth knowledge of a subject and to improve on presentation skills.

2.4 Management of and contribution to film museum and teaching files.

2.5 Audit and quality assurance activities.

2.6 Academic radiology: research techniques, presentation skill, literature review.

2.7 Nurture of professional attitude (ethical standards, legal responsibility, professional image, contribution towards professional organizations and activities, coordination with clinical colleagues for better healthcare).

2.8 Management responsibilities and skills.

3. Higher Training: Subspecialty Training

3.1 Please note the interpretation of terminology in 1.1.

3.2 Standard format of application for accreditation should include: targets, structured program, weekly duty sessions (modality, location), other activities, expected workload, qualification and achievement of trainers, etc.

3.3 The preferred duration for exposure to a subspecialty during Higher Training should be 6 months. Duration periods of 3 months or 1 year are acceptable.

3.4 Five or more duty sessions weekly specific for the subspecialty are advisable. On the average, each subspecialty session consists of 50% or more work related to that subspecialty.

3.5 For Category A Subspecialties, related application with multiple imaging modalities should be built into the program. If certain modalities are not available at the specific hospital, sessional attachment to another hospital is advisable.

3.6 For broader and more comprehensive exposure to various aspects of a subspecialty, appropriate attachment of another training centre is acceptable.

3.7 The minimum workload for each period (in terms of 6 months of training) of subspecialty training will be defined by the College in the document for each Subspecialty. Workload required for 3 months of training is 50% of the requirement, except for specific conditions laid down in the document.
3.8 Trainer: trainee ratio must be at least 1:1 at all time.

3.9 Two or more trainers are advisable for each subspecialty to ensure that during the period of subspecialty training the trainee is being supervised all the time.

3.9.1 If only one subspecialty trainer is available, then the subspecialty trainer plus a co-trainer would be acceptable.

3.9.2 One trainer should be designated to have primary responsibility for the educational content of the subspecialty area.

3.10 A **subspecialty trainer** of a program for Category A Subspecialties should have:

(a) Previous training in the subspecialty
(b) Reasonable years of experience in the subspecialty
(c) Major portion of clinical practice being in the subspecialty
(d) Related publications
(e) Related lectures / presentations
(f) Regular attendance of related subspecialty conferences in recent years.

3.11 A **co-trainer** of a program for Category A Subspecialties may not fulfill all of the requirements of a subspecialty trainer but must be able to show that he or she does satisfy some of the requirements outlined above.

3.12 All trainers and co-trainers of a program need to be approved by the College at the accreditation of that program. The training centre is responsible to report to the College any changes in the trainers of a program for consideration of approval.

3.13 **Subspecialty Clinical Radiological Conference (CRC) and other meetings**

3.13.1 Regular CRC related to Category A subspecialty, at least once every fortnight.
3.13.2 Presentation by the trainee of at least 2 cases per CRC.
3.13.3 Participation in other clinically oriented meetings are desirable, and these may be specified in the document of specific subspecialty.

3.14 **Leave** of more than 4 weeks during 6 months of training (pro rata for other periods, e.g. 2 weeks during 3 months of training) requires compensatory training in the same subspecialty to ensure sufficient period of exposure.

3.15 The **RIS coding** used in various documents conforms to the numbering system prevailing at the time of establishing the documents. The trainers and trainees should be aware of revision of the numbering system from time to time.
4. **Application Procedures**

4.1 To avoid overlapping demands, the trainee should apply to the head of the department through the training head for specific subspecialty training.

4.2 The trainee’s suitability can be evaluated by the trainer and the department head.

4.3 The application will be assessed and the training program assigned.

5. **Training Records**

5.1 The record of experience of the examinations and procedures during the training period should be kept in the prescribed logbook of the Hong Kong College of Radiologists.

5.2 Additional information can be supplied as appended sheets to the logbook where appropriate.

6. **Training Assessment**

6.1 During the supervised training, it is essential for the trainer to help the trainees in understanding their limitation and identifying areas or complex problems where they need a second opinion or help.

6.2 The trainee should have a written assessment at 3-monthly intervals of the progress during the corresponding period, recorded in the logbook and signed by the supervising trainer and the trainee. The process should ensure that training objectives are met, remedial measures are proposed and any issues in the review period are discussed.

6.3 Particular attention should be paid to record the trainee’s degree of proficiency in specific activities in order to attain independent practice.

6.4 Areas identified during the assessment process and requiring changes in the training infrastructure of the corresponding centre should be conveyed to the head of the department for consideration and implementation.

7. **Remedial Training**

7.1 If the trainee is unable to comply with the minimum requirement of number of examinations during the designated training period, this can be made up any time during the Higher Training, as long as it is supervised, documented and recorded in the same manner.

7.2 Such remedial training would not be counted to extend the duration of subspecialty training.

7.3 The supervising trainer should be aware of the necessity for compensatory training if there is a significant period of leave despite the compliance with the minimum requirement of number of examinations. (Please refer to 3.14)

8. **Accountability of Training Department**
Please refer to General Guideline on Basic Training (Radiology) item 6.