

# HONG KONG COLLEGE OF RADIOLOGISTS

## Higher Training (Radiology)

### Subspecialty Training in Magnetic Resonance Imaging

[This document should be read in conjunction with the *General Guidelines on Higher Training (Radiology)*]

#### 1. Introduction

- 1.1 Magnetic Resonance Imaging (MRI) is a well-established subspecialty in the context of Diagnostic Radiology.
- 1.2 MRI requires understanding in terms of the physics underlying the image formation, the performance of the hardware and software available, the limitations and the hazards, the disease processes and their appearance as well as the diagnostic impact on the management of the patients as a whole.
- 1.3 Training in MRI is classified as a technique-based subspecialty (Category B Subspecialty).

#### 2. Objectives

At the completion of the training program, trainees are able to:

- 2.1 Understand broad principles and physics of MR imaging,
- 2.2 Evaluate application of MR procedures with respect to other imaging diagnosis and clinical management options,
- 2.3 Develop technical and interpretative skill and confidence for clinical MR procedures,
- 2.4 Be familiar with MR safety rules and capable to enforce such rules in practice,
- 2.5 Know how to appreciate the related literature and apply the knowledge in caring their patients, teaching and research,
- 2.6 Understand the process of subspecialization and be able to guide one-self to further develop one's own skill in depth.

#### 3. Training requirements

##### 3.1 TRAINING CENTRE REQUIREMENTS

The pre-requisite is the presence of an on-site MR scanner. Short of this, the arrangement of sufficient sessions and workload will not be possible for both the trainees and the trainers.

##### 3.2 TRAINER REQUIREMENTS

- 3.2.1 A Subspecialty Trainer will be in-charge of the programme and guide the trainees through the training period.

3.2.2. All MRI Subspecialty Trainers should have at least 2 years of continuous experience in MR after the award of Fellow of Hong Kong College of Radiologists and are currently practising MR actively.

### 3.3. DURATION OF TRAINING

It can be taken in 6 months for in-depth training, or in 3 months for brief training.

### 3.4. DUTY SESSIONS

Clinical sessions with a minimum of 20 hours per week in the form of actual hands-on scanning of the patients are required during the subspecialty training.

### 3.5. MINIMAL NUMBER OF EXAMINATIONS REQUIRED IN 6 MONTHS

3.5.1 The core requirement:

<b><i>MRI Examination</i></b>	<b><i>RIS Coding</i></b>	<b><i>Requirement</i></b>
Brain, head & neck	8101-8127, 8199, 8601-8611	250
Body MRI	8301-8320, 8399	50
Spine MRI	8201-8210, 8299	100
Musculoskeletal MRI other than spine	8401-8431, 8499	75

3.5.2 Some of these examinations should involve specialised MR techniques. The trainees should satisfy the required exposure in at least two out of the following four groups of MR techniques.

<b><i>MRI Technique</i></b>	<b><i>RIS Coding</i></b>	<b><i>Requirement</i></b>
Cardiovascular MR	8501-8526, 8599	25
MR hydrogram, including cholangiogram, urogram, myelogram, etc.	8311, 8314, 8210	10
MR Spectroscopy	8601, 8605-8606	10
Functional MR examinations including diffusion, perfusion and brain activation	8603, 8608-8611	10

3.5.3 For ease of counting examinations directly from RIS, the present workload code framework of the Hospital Authority on MRI is to be adopted.

3.5.4 Brief training (in 3 months) still requires minimum of 20 hours hands-on sessions per week. The required number of examinations for each category will be 50% of the above.

### 3.6. CLINICAL RADIOLOGICAL CONFERENCES AND OTHER MEETINGS

The trainees should chair or present cases in MRI in at least 6 clinico-radiological meetings for a 6-month training period.

### 3.7 PRESENTATION AND PUBLICATIONS

Please refer to the General Guidelines in Higher Training.